

## jHIS v 6.1

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## Introduction

jHIS is a system designed to provide comprehensive service of public and non-public health care institutions in the management of patient data and staff, planning work schedules of staff and using the surgeries, arranging and operating outpatient and home visits, patient's cabinet service (doctor's surgery, ambulance, emergency helicopter of medical service, point of donations), settlements with the NFZ, patients and work places of patients.

## **Assumptions**

Assumptions about the functioning of the jHIS system:

- History of all data changes (with the exception of dictionary data) is recorded
- The data are deleted from the database logically rather than physically (deleted data is recoverable)
- Access to specific functionality of the application by the logged user depends on his permissions called roles (the role is a set of predefined privileges, each of which provides access to a specific element of the system)
- Fields that fill in the forms is required are surrounded by a blue border
- The system operates on a web browser Mozilla Firefox and Google Chrome

## Login

To use the application, launch the browser, in the address bar enter the address and go to the entered address. Then you see the login page to the system jHIS.



Access to the application requires an individual login username and password. Logins and passwords are given by system administrator. After entering the login and password and click "log" one of the following pages is displayed:

> re-login page with information about the incorrect login username / password (this means that you made a mistake when entering username / password - in this case, enter the correct

username and password and then click "login")

- form of change the password if the user's password has been changed more than 30 days ago (in this case, enter in the form of your current password and twice repeated new password, which you want to use, and then confirm by pressing the button- then the password will be changed and you can log in to application with the new password, the new password must fulfill the following requirements of security policy: it must be at least 8 characters, must contain lowercase and uppercase letters and numbers or special characters, must be different from the most recently used passwords at least by three characters, must be different from each of the three most recently used passwords by at least one character)
- home page of application specific to the logging user if the log was properly

#### Homepage of application includes:

- header repeated on each side of the system, and in it:
  - system's logo click on the logo takes you to the user's homepage (regardless of the page the user is currently in when he clicks on the logo)
  - menu allowing access to each system's functionality
  - links to language versions enables switching between different language versions of the user's interface
  - o user's login
  - icon of access to the Nemo-Q queuing system (if the jHIS system has been integrated with the Nemo-Q queuing system)
  - icon of warnings of impending expiration date of password to the accounts of the eWUS
  - o icon of messages only if there are messages addressed to the user
  - link that allows logging out of applications
- > content specific to the logged user
  - list of cautions about ending of expiry dates of vaccines if user has privilege to be warned about ending of expiry dates of vaccines and if there exist expiring vaccines and/or list of cautions about ending of means for bailouts if such a situation takes place
  - o logged user start page or empty page if logged user does not have start page defined
- footer repeating on each side of the system, and in it:
  - system's name and version click on the name of the system opens a window with information about the changes introduced in previous versions of the system
  - link to jHDR medicinal product repository
  - o logo of jPALIO technology if you click on the logo in a new window / tab, the browser will open the software manufacturer's website

The application consists of the following functional modules whose names are corresponding to the positions of menu:

- > Account
- **Administration**
- > Registration

- > Staff
- > Visits
- Surgery
- > NHF
- > Hospital
- > CTC

The "Account" module is available for every logged user, regardless of their permissions. The availability of other modules for registered users is dependent on its permissions.

## Languages

The system has different language versions of the user interface. To switch between language versions use links with language codes visible in the page header (e.g. PL - Polish, EN - English). A link to the currently used language version is displayed in an enlarged font.

## **System versions**

This documentation describes jHIS system in full range of its functionality. Depending on licence bought, range of functionalities may by narrower than described within this documentation.

Basic version of iHIS system includes the following modules and functionalities:

- Account password change and reading messages from system administrator
- Administration system configuration except for rehabilitation module configuration, jHQ queuing system configuration and jERP system integration mechanisms configuration, management of organizational structure except for specification of parameters and rehabilitation surgeries for clinics and equipment, privileges management, users management, notifications management, dictionaries management except for rehabilitation services catalog and occupational medicine dictionaries, browsing log of unauthorized access attempts, browsing history of data changes is system, management of eWUŚ access accounts, commercial services price lists management
- Registration new patients creation, management of active and inactive patients data except
  for history of employment, browsing lists of patients declarations, browsing general register,
  registration book and visits book, browsing lists of realized and unrealized payments, cash
  withdrawals, price lists browsing, management of external staff and units, management of
  bailouts, messager
- Staff medical staff data management except for specifying rehabilitation surgeries non-realized by staff, staff and equipment timetables planning with units distance management, prescription pools management, staff contracts management
- Visits arrangement and service of planned and extra visits, including theirs canceling and completion of insurance data
- Surgery configuration of surgery room including list of preferred drugs and ordered diagnostic examinations, EHR access configuration, document templates and form templates

definition, general surgery room without eyes diagram and teeth diagram and patient / tool sets specification while referring to surgery / operation, browsing statistics of surgery module

• NHF – ICD-9 and ICD-10 dictionaries management

Basic version may be extended with the following modules and functionalities:

- NHF visits and diagnostic examinations coding according to National Health Fund guidelines, services and diagnostic examinations management, exporting, importing and browsing data of communicates exchanged between jHIS system and National Health Fund system, management of National Health Fund services dictionary
- CTC servicing of admissions to the care and treatment center, stays in the care and treatment center, including the creation of menus, extracts from the care and treatment center, viewing the history of stays in the care and treatment center
- Rehabilitation configuration of rehabilitation module for the whole system and possibility to specify parameters and surgeries for clinics and equipment, rehabilitation services catalog management, specifying non-realized surgeries for staff, planning and service of rehabilitation surgeries, therapeutical surgery room
- Occupational medicine occupational medicine dictionaries management, patient employment history, planning and service of occupational medicine, occupational medicine books
- Stomatology teeth diagram for stomatological surgery room
- Ophthalmology eyes diagram for ophthalmological surgery room
- Collection facility collection facility service
- MARCEL mechanisms of integration of jHIS system with MARCEL system servicing diagnostic laboratories i.a. ALAB Laboratoria Sp. z o.o. (integration based on HL7 Version 2.3 protocol; functionality possible to use only with collection facility service)
- Nemo-Q mechanisms of integration of jHIS system with Nemo-Q queuing system
- Hospital management of dictionaries of patient / tool sets, planning and service of operations (admission room, on-day ward, operational block), filling and browsing hospital books, patient / tool sets specification while referring to surgery / operation
- eLab mechanisms of integration of jHIS system with eLab system servicing diagnostic laboratories i.a. Diagnostyka Sp. z o.o. (integration based on WebService and HL7 CDA protocol; functionality possible to use only with collection facility service)
- Thermometers mechanisms for monitoring internet thermometers, registering temperature measurements, notifying about temperature deviations and thermometer working inconsistencies
- Fiscal printers mechanisms for printing receipts on online fiscal printers
- Portal for patients internet portal allowing patients to arrange visits themselves and to cancel visits with functionalities for management of contents displayed within portal and verification of patients internet registration applications
- Portal for institutions internet portal that allows institutions to individually arrange employees for occupational medicine visits
- Vaccinations management of dictionaries of stores, suppliers and vaccines, supplies of vaccines, interstore transfers, destroying and warnings about expiring vaccines, issuing orders for vaccinations, vaccination facility service

- Benefits management of dictionaries of stores, suppliers and benefit realization means, supplies of means, interstore transfers, destroying and warnings about expiring means, issuing and realization of orders for benefits
- Resources management of dictionaries of stores and suppliers, supplies of resources, interstore transfers, destroying and warnings about expiring resources, determining the demand for resources in the implementation of commercial services
- Interactions management of dictionary of interaction agents, drug interactions database management, interactions detection and presentation within surgery room
- jHQ built-in queuing system named jPALIO Hybrid Queuer
- jERP mechanisms for integrating the jHIS system with the jERP financial and accounting system in the field of transferring data from contractors and primary invoices from jHIS to jERP
- ZnanyLekarz mechanisms for integrating the jHIS system with the ZnanyLekarz service in the scope of publishing free dates from the jHIS system on the ZnanyLekarz service and recording visits arranged via the ZnanyLekarz service in the jHIS system

## Messages

Within the system there is the ability to send various types of messages and notifications to users. If there are any messages addressed to the logged user, in the header of the page appears in the icon of message. If there are unread messages, an arrow on the icon of message is orange.



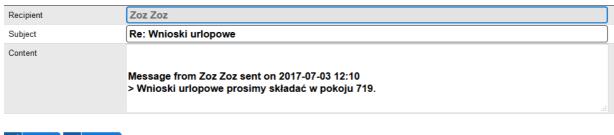
If there are messages addressed to the user who is logged but all messages have been read, then the arrow on the message icon is green.



After clicking on the message icon, it opens a page with messages addressed to the logged user. Each unread message has an orange background, read messages have a gray background. Each message displays "Reply" and "Delete" buttons.



After clicking "Reply" button there opens new window with form allowing to send reply to the message.



Send X Close

After clicking "Delete" button the message disappears from the list of displayed messages.

## Fiscal printers

The jHIS system has been integrated with Novitus Online fiscal printers in the field of receipt printing. For users who have authorization to service payments, a fiscal printer selection icon is displayed in the upper right corner of the window, on which receipts issued by the logged in user will be printed. If the logged in user has not yet selected a fiscal printer, the icon has a white background.



If the logged in user has already chosen a fiscal printer, the icon has an orange background.



After clicking on the fiscal printer selection icon, a new window opens with a list of available printers. By each of selectable printers there is a "Choose" button.



After clicking the "Choose" button for a given printer, the system remembers it as the printer used by the logged in user. The printer selected in this way is highlighted in orange and the "Resign" button is displayed next to it.

# Choose fiscal printer to print receipts No. Fiscal printer name Model Cash number Choose 1 Novitus DEON (stanowisko 1) Novitus Online 1 Resign

X Close

Clicking "Resign" causes the printer to no longer be selected as the printer used by the logged in user.

From the moment when a certain printer is selected by the user to print receipts, each receipt issued will be automatically printed on the selected printer.

## Nemo-Q

jHIS system has been integrated with the Nemo-Q queuing system. For users with access to Nemo-Q, in the jHIS system in the top right corner of the window (with username) is displayed an icon with the letter "Q" opening in a new window queuing system's panel.



After clicking on this icon, a window of queuing system's panel is displayed. There is the login form in the window to the queuing system, where a queuing system and position can be selected. After selecting the position, jHIS system checks in the Nemo-Q system whether the position requires a login and if required system displays additional fields to select a user and provide the password. In both cases, after completing the form, press the "Login" button.

position does not require authorization

position requires authorization

After logging, the form of recalling tickets is displayed. If there was any ticket already invoked, his number appears on the form. From the form it is possible to recall another ticket, to re-recall recently caused ticket and to recall any already served or still pending ticket (after selecting from the list and press "Call" button under the list). When recalling a ticket, on the form there is displaying a number of called ticket and above the form there is relevant information about the maneuver, and the display of queuing system also displays the number of called ticket (which also flashes and the queuing system emits a beep).

#### Wywołano następny bilet



From the form, you can log out of the queuing system and close the window. Closing the window without logging off from queuing system does not result in breaking the connection to the queuing system - the re-opening of the window (or click on the icon "Q" with the user name in the top right corner of the jHIS system's window) shows the form of calling ticket with visible recently called number.

#### **ATTENTION!**

• If you recall tickets by the jHIS system then you should completely abandon the use of the WinPanel application (which is part of the Nemo-Q). Using the jHIS system from some positions and some from the WinPanel applications can lead to incompatibility of users' sessions and as a result to errors in the jHIS software activity.

## jHQ

If the logged in user has the privilege to use the jHQ queuing system and the jHIS system configuration is enabled visibility icons for calling tickets within the jHQ queue system, then at the top of the page (next to the user's login) the icon with the jHQ system logo is displayed.



Clicking this icon opens a new window for calling tickets for service posts. The window displays a

list of buttons corresponding to the jHQ queuing system instance names. First, you should click the button with the name of the queuing system instance you will use.



After selecting the instance, a list of buttons with the names of posts defined within the selected jHQ queuing system instance will be displayed. To choose a post which the user will use, click the button with its name.



After selecting the post, a button will be displayed for calling up tickets to the post. The button is navy blue if any tickets are waiting to be called, and gray if there are no waiting tickets.



Click the above button to call patient waiting in queue.

Clicking on the "Next ticket" button results in calling by the queuing system the next of the waiting ticket numbers (and therefore displaying its number on the display at the post) and displaying its number in the window for calling tickets (or displaying the message NONE if no ticket is waiting for a call).



The window for calling tickets should be kept open all the time to recall successive numbers of tickets to the post.

## Account

Every logged user has access to the module "Account", where were made available functionalities of changing his own password and access to a list of messages addressed to the logged user.

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## Change password

Using the "Change Password" functionality in the menu of "Account" application, logged user has the ability to change his own password currently used to access the application. To change your password, enter your current password and new password twice repeated to the form. The new password must meet the following requirements of security policy:

- > must have at least 8 characters
- must contain lowercase and uppercase letters, numbers and special characters
- must be different from the most recently used passwords of at least three characters
- must differ from each of the three most recently used passwords of at least one character

After completing the form and pressing the "Change Password", system verifies the correctness of data entered to the form. If verification is successful, then the password is changed and displays information about successful password change. If the verification fails, you will see an error message informing about incorrect filling out the form (indicating the type of irregularity). In this situation, you must fill out the form again according to the information contained in the message and try to change your password.

After changing the password will be valid for 30 days.

## Messages

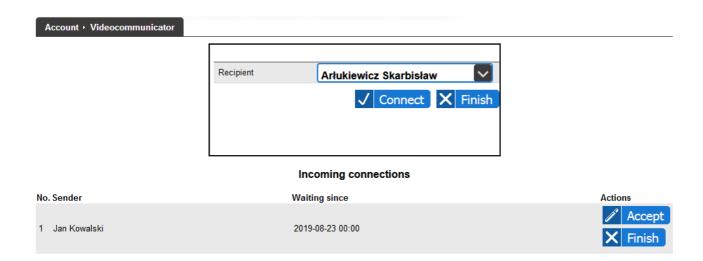
Using the "Messages" functionality in menu of "Account" application logged user has access to the list of messages addressed to him. The same list is available by clicking on the message icon in the header of the page.

Each unread message has orange background, read messages have gray background. Each message displays the "Delete this message" button. After reading and deleting the message will be not display again (will disappear from the messages list).

## Videocommunicator

By using the "Videocommunicator" functionality in the "Account" menu, the logged in user has the option of video communication with other system users. After selecting this functionality, one sees a list of users with the button for making an outgoing call to the selected user and a list of incoming calls to the logged in user with buttons to answer the call.

To connect to another user, select the user from the drop-down list and click "Connect".



Depending on the system configuration, a chat window will open with the option of switching to video communication mode or video communicator window. If the system has been configured in such a way that the chat window opens, then at the bottom of the window there is a field for entering the text messages to be exchanged (the message is sent after clicking the Enter button on the keyboard) and a field for sending files (the file is sent after selecting the file from the disk; the progress bar indicates the file transfer progress). Next to the field for entering exchanged text messages there is a "VIDEO" button enabling switching the messenger into the video communication mode.

10:32:28: Dzień dobry

10:32:49: Czy endoskop z pracowni przy ul. Lazurowej został już naprawiony?

10:33:37: Tak, naprawa została zakończona.

10:33:49: Kiedy będzie można odebrać urządzenie?

10:34:01: W godzinach 14:00-16:00

10:34:03: Dziękuję



If the system has been configured in such a way that the chat window opens and the "VIDEO" button is clicked in it, or if the system has been configured in such a way that the video communicator window opens, then the video communicator window will open in which one will be able to video chat, text chat and transfer files. Its left upper part displays interlocutor name and

surname and the image from the interlocutor camera (if the indicator next to the interlocutor's name is red, it means that the interlocutor has not turned on the video communicator yet, if it is green, then the interlocutor has established a connection), the upper right displays the name, surname and image from the own camera of logged user (as will be seen by the interlocutor), in the bottom there is a chat and a field to enter exchanged text messages (sending a message follows after clicking Enter on the keyboard) and a field for transferring files (the file is sent after the file is selected from the disk; the progress bar indicates the progress of the file transfer). The connection within videocommunicator is established automatically after turning on the videocommunicators by both sides. To start video communication, you need a Firefox 61+, Chrome 67+, Opera 67+ or Safari 12+ browser.



To answer a waiting call made by another user, click the "Accept" button on such a call. The video communicator window will be opened, which is identical to the one used to make the connection. After finishing the conversation one should close the video communicator window and click "Finish" on the received call – then it will then disappear from the list of waiting calls.

## **Administration**

The "Administration" module is used to configure and monitor the system and to manage permissions and users.

## **Configuration**

The "Configuration" functionality in "Administration" menu allows the administrator to change the

#### value of following system's constants:

- The number of records per page for paged tables in all tables displayed in the application divided into pages, for each page will be presented the number of rows not exceeding the value specified in this parameter
- The maximum number of records in the search results for special tables this parameter defines the maximum number of records that can be displayed in tables presenting data which can be a lot; parameter is used to limit the amount of search results if the number of search results exceed the value of this parameter, then the system will ask you to narrow down your search criteria to limit the number of search results
- Insurance verification in eWUŚ determines whether the communication of jHIS and eWUŚ systems to verify eligibility for the benefits of patients is on or off; parameter is important in case of failure of eWUŚ system if the eWUŚ system stops responding then turn off the communication of the jHIS system with the eWUŚ system to not overload the jHIS system and to users of the system jHIS receive information that the system eWUŚ does not work therefore they should take patients declaration of insurance (when the failure of the eWUŚ system will be removed, communication of jHIS system with the eWUŚ system should be re-enable)
- Version of rehabilitation module determines which version of the rehabilitation module is used in the system in the standard version, it is possible to plan terms of each surgery separately (each surgery from one day = separate term), in a simplified version, it is possible to plan terms of groups of surgeries (all surgeries from the day = one term)
- Default type of a visit in simplified version of the rehabilitation module default kind of visit chosen by the system (with the possibility of change if necessary) at appointing rehabilitation surgeries in a simplified version of the rehabilitation module
- Default rehabilitation conditions within the simplified rehabilitation module default conditions of rehabilitation surgeries chosen by the system (with the possibility of change if necessary) at appointing rehabilitation surgeries in a simplified version of the rehabilitation module
- Price valuation mode within the simplified rehabilitation module the way of price valuation for commercial surgeries in a simplified version of the rehabilitation module (manual – person who plan surgeries by himself chooses commercial services; automatic – services from pricelist are chosen automatically on a basis of links between these services and rehabilitation benefits created in the dictionary of commercial services)
- Possibility of visits appointing inside surgery parameter specifying whether doctor using surgery module should have possibility to register patient for scheduled and extra visits himself
- Number of days before eWUŚ account expiry to notify user parameter specifying how many days before eWUŚ password expiry system should notify user that password is going to expire and due to this fact user should remember to change this password to extend eWUŚ account validity
- Number of days before estimated end of prescription numbers to notify doctor parameter specifying how many days before estimated exhausting of prescription numbers system should notify the doctor about necessity to import more prescription numbers to the system
- Minimal time delay between two consecutive identical notifications sent by sms time (in minutes) that system should wait before sending again the same as recently notification

- about deviations of temperature reported by thermometer or failure of power / network / thermometer
- > Default diagnostic laboratory laboratory chosen automatically as default one while realizing orders for diagnostic examinations
- > Locking to see patients without authorizations (applies to BHC) parameter specifies whether lack of required authorizations within patient card is to lock patient service at surgery room in case of non-commercial visits in Basic Healthcare
- Visibility of tickets calling icon within jHQ queuing system parameter determining whether the icon for calling tickets for registration under the use of the jHQ queuing system is to be visible to authorized users
- Visibility of patients calling icons within jHQ queuing system a parameter defining whether the icons for calling patients to the surgery rooms under the use of the jHQ queuing system are to be visible to medical personnel
- Visibility of visit numbers within jHQ queuing system a parameter defining whether the system should display visit numbers in messages ending the process of arranging visits within the jHIS system and the portal, in messages presenting visit statuses in the portal, on lists of patients appointed for a visit to the jHIS system, on the visits summary print issued to the patient as confirmation of the visit appointment (knowledge of the numbers of visits is necessary to activate the option of confirming the arrival of patients for the use of the jHQ queuing system)
- Visibility of tickets calling icon within Nemo-Q queuing system parameter determining whether the icon for calling tickets for registration under the use of the Nemo-Q queuing system is to be visible to authorized users
- Next primary invoice order number order number to be given to the next (nearest) primary invoice to be issued in the jHIS system (in case the mechanisms of integration with the jERP system are turned off); modifying the value of this parameter enables shifting invoice numbering (eg starting numbering from a specific number in the situation of continuing numbering started in another system, starting numbering from 1 with the beginning of a new year, etc.); one should be careful when modifying this parameter, therefore its value will be changed by the system only if the checkbox by this parameter is checked
- Next corrective invoice order number order number to be given to the next (nearest) corrective invoice to be issued in the jHIS system (in case the mechanisms of integration with the jERP system are turned off); modifying the value of this parameter enables shifting invoice numbering (eg starting numbering from a specific number in the situation of continuing numbering started in another system, starting numbering from 1 with the beginning of a new year, etc.); one should be careful when modifying this parameter, therefore its value will be changed by the system only if the checkbox by this parameter is checked
- Automatically mark past unhandled visits as unrealized parameter enabling the system to automatically mark past unhandled visits as unrealized by the system
- Automatically cancel outdated diagnostic examination orders parameter enabling the mechanism of automatic cancellation of overdue (older than 30 days) diagnostic examination orders
- Hide permanent residence address tab in new patient addition form parameters enabling to hide the tab "Registered address" in new patient form

- Hide European Union address tab in new patient addition form parameters enabling to hide the tab "Home Address in UE" in new patient form
- > Hide workplace tab in new patient addition form parameters enabling to hide the tab "Workplace data" in new patient form
- Hide other informations tab in new patient addition form parameters enabling to hide the tab "Other" in new patient form
- Unit is relevant when checking whether patient has declaration in BHC parameter specifying how the system is to verify the patient's declaration when making an appointment in primary care the value 'yes' means that the system is to check whether the patient has a declaration made in the unit to which he is recorded for the visit, the value 'no' means that the system is to check whether the patient has a declaration made at any unit
- Send e-prescription access codes to patients by SMS parameter determining whether the system is to automatically send patients (not using the Internet Patient Account) SMS messages with access codes to issued e-prescriptions
- Term IN THE MORNING in relation to CTC roughly corresponds to hour determination of the approximate time in the context of "IN THE MORNING" in the context of administration of medicines in a care and treatment institution
- > Term AT NOON in relation to CTC roughly corresponds to hour determination of the approximate time in the context of "AT NOON" in the context of administration of medicines in a care and treatment institution
- > Term IN THE EVENING in relation to CTC roughly corresponds to hour determination of the approximate time in the context of "IN THE EVENING" in the context of administration of medicines in a care and treatment institution
- Address for ZnanyLekarz service to send notifications information field (cannot be edited) containing the address to which the ZnanyLekarz service should send notifications about visits, provided that the mechanisms of integration of the jHIS system with the ZnanyLekarz service are enabled
- > Login for integration mechanisms to autorize in ZnanyLekarz service login (or "client id") which the jHIS system is to authorize on the ZnanyLekarz website, provided that the integration mechanisms of the jHIS system with the ZnanyLekarz site are enabled
- Password for integration mechanisms to autorize in ZnanyLekarz service password (or "secret") which the jHIS system is to authorize on the ZnanyLekarz website, provided that the integration mechanisms of the jHIS system with the ZnanyLekarz site are enabled
- Hours of automatic eWUŚ query hours in which the system will automatically check in the eWUŚ system the insurance status of patients appointed for today's visit
- Service provider's system identifier assigned by the payer ZOZ information system identifier assigned by the NFZ and passed in the attribute **id-inst-nad** of tag **komunikat** of XML messages exchanged with the NFZ
- Payer's system identifier assigned by the payer NFZ's information system identifier assigned by the NFZ; unused (now no longer transmitted in XML messages exchanged with the NFZ), preserved due to backwards compatibility
- Internal identifier of service provider system internal identifier of ZOZ information system transmitted in attributes **nfz:info-aplik-nad** and **nfz:info-kontakt-nad** of **komunikat** tag and in attribute **nfz:info-kontakt** of **swiadczeniodawca** of the XML messages exchanged with the NFZ
- Service provider's internal identifier ZOZ internal identifier passed in the attribute **kod-swd** of **komunikat** and **komorka** tags in the UMX file of contract with the NFZ

- Provider's data to be placed on the invoice for the NFZ ZOZ data placed on invoices issued for the NFZ
- Recipient's data to be placed on the invoice for the NFZ data of NFZ branch placed on invoices issued for the NFZ
- Buyer's data to be placed on the invoice for the NFZ NFZ data placed on invoices issued for the NFZ
- Provider name to be placed on the e-invoice for the NFZ healthcare company name to be placed on the e-invoice for the NFZ
- Provider NIP to be placed on the e-invoice for the NFZ healthcare company NIP to be placed on the e-invoice for the NFZ
- Provider REGON to be placed on the e-invoice for the NFZ healthcare company REGON to be placed on the e-invoice for the NFZ
- Provider street, house and flat to be placed on the e-invoice for the NFZ healthcare company office street, house and flat to be placed on the e-invoice for the NFZ
- Provider postal code to be placed on the e-invoice for the NFZ healthcare company office postal code to be placed on the e-invoice for the NFZ
- Provider locality to be placed on the e-invoice for the NFZ healthcare company office locality to be placed on the e-invoice for the NFZ
- Provider phone to be placed on the e-invoice for the NFZ healthcare company phone to be placed on the e-invoice for the NFZ
- Recipient name to be placed on the e-invoice for the NFZ PD NHF name to be placed on the e-invoice for the NFZ
- Recipient NIP to be placed on the e-invoice for the NFZ PD NHF NIP to be placed on the e-invoice for the NFZ
- Recipient REGON to be placed on the e-invoice for the NFZ PD NHF REGON to be placed on the e-invoice for the NFZ
- Recipient street, house and flat to be placed on the e-invoice for the NFZ PD NHF office street, house and flat to be placed on the e-invoice for the NFZ
- Recipient postal code to be placed on the e-invoice for the NFZ PD NHF office postal code to be placed on the e-invoice for the NFZ
- $\rangle$  Recipient locality to be placed on the e-invoice for the NFZ PD NHF office locality to be placed on the e-invoice for the NFZ
- Recipient phone to be placed on the e-invoice for the NFZ PD NHF phone to be placed on the e-invoice for the NFZ
- Buyer name to be placed on the e-invoice for the NFZ NHF name to be placed on the e-invoice for the NFZ
- Buyer NIP to be placed on the e-invoice for the NFZ NHF NIP to be placed on the e-invoice for the NFZ
- Buyer REGON to be placed on the e-invoice for the NFZ NHF REGON to be placed on the e-invoice for the NFZ

- Buyer street, house and flat to be placed on the e-invoice for the NFZ NHF office street, house and flat to be placed on the e-invoice for the NFZ
- Buyer postal code to be placed on the e-invoice for the NFZ NHF office postal code to be placed on the e-invoice for the NFZ
- Buyer locality to be placed on the e-invoice for the NFZ NHF office locality to be placed on the e-invoice for the NFZ
- Buyer phone to be placed on the e-invoice for the NFZ NHF phone to be placed on the e-invoice for the NFZ
- The default service code for visits in POZ code of service from the POZ's agreement with the NFZ, which by default should be a hint for a doctor at realization of visit
- The default place of issue of the invoice for the patient default place of issue of the invoice for commercial services for the patient (or the patient's workplace)
- Seller's name to be placed on the invoice for the patient
- address of the seller to be placed on the invoice for the patient address of the seller to be placed on the invoice for commercial services for the patient (or the patient's workplace)
- Seller's NIP to be placed on the invoice for the patient seller's NIP to be placed on the invoice for commercial services for the patient (or the patient's workplace)
- Sellers NIP display format on the invoice for the patient a way of separating (or not separating) the digits of the NIP number by placing it on the patient's invoice
- Seller's REGON to be placed on the invoice for the patient seller's REGON to be placed on the invoice for commercial services for the patient (or the patient's workplace)
- Seller's BDO to be placed on the invoice for the patient seller's BDO to be placed on the invoice for commercial services for the patient (or the patient's workplace)
- Seller's bank name to be placed on the invoice for the patient seller's bank name to be placed on the invoice for commercial services for the patient (or the patient's workplace)
- Seller's account number to be placed on the invoice for the patient seller's account number to be placed on the invoice for commercial services for the patient (or the patient's workplace)
- \rightarrow Identifier of region within jERP system
- \rightarrow Identifier of user responsible for documents within jERP system
- \rightarrow Identifier of invoice initial state within jERP system
- \rightarrow Identifier of operation type for invoice within jERP system
- Code of invoice initial state within jERP system
- Code of invoice status within jERP system
- Code of invoice position status within jERP system
- Code of payment type of CASH within jERP system
- Code of payment type of CARD within jERP system
- Code of payment type of TRANSFER within jERP system

- Code of payment type of check within jERP system
- Code of designation of invoice payment status within jERP system
- Year of PKWiU classification used currently within jerp system
- > Symbol of unit of measure within jERP system
- > Symbol of numbering group within jERP system
- Code of VAT rate of 'zw.' within jERP system
- Code of VAT rate of '0%' within jERP system
- Code of VAT rate of '5%' within jERP system
- Code of VAT rate of '8%' within jERP system
- Code of VAT rate of '23%' within jERP system
- > SMTP server address through which notifications will be sent via email
- SMTP server port number through which notifications will be sent via email
- \rightarrow login to the SMTP server through which notifications will be sent via email
- password to the SMTP server through which notifications will be sent via email
- > email address on the SMTP server through which notifications will be sent by email to be used as the sender's address
- ) iHIS system administrator's email to which system messages will be sent
- > SMSAPI login to send notifications via SMS
- > SMSAPI password for sending notifications via SMS
- > sender's name defined in SMSAPI to be used when sending notifications via SMS

Besides setting the values for the system's constants in the configuration of application administrator can also enter the following graphic files:

- > logo ZOZ to reports logo of the healthcare facility used in the header of reports generated by the system
- praphic to footer of reports- graphics used in the footer of reports generated by the system
- > prescription's background background of print of prescription; unused, retained for backwards compatibility
- background of recommendations for the patient background of print of recommendations issued by a doctor during the visit
- background of referral to a specialist / hospital background of print of referral to a specialist or hospital
- *background of referral for spa treatment background of print of referral for spa treatment;* unused, retained for backwards compatibility
- vaccination calendar a graphic presenting the currently valid vaccination calendar

Systems's constants and graphics must be entered before making the application available to use by users. They can be modified while using the application. Changing the system constants and logos

occurs through entering values to the form and approve the changes.

## **Organizational structure**

The organizational structure consists of two branches representing separate functionalities:

- > administration units
- > medical care

#### **Administration units**

After selecting the "Administration units" functionality from the "Administration" menu and the "Organizational structure" submenu, there is displayed search engine of administration units with an additional button for adding a new administration unit.

After clicking on the button for adding a new administration unit displays the form for adding a new unit. The units form the structure of the tree – each unit may (but need not) have one parent entity.

After completing the form of adding administration unit, press "Add" to save the information into the database.

To modify or remove administration unit, it should be found by using the search engine. Administration units are searched by name. In the browser, you can type part of the name (capitalization does not matter). After pressing the "Search" button, there are displayed, in the form of a tree branch, administration units meeting the search criteria with all subordinate units or there is displayed a message about the lack of such of units. If there are units meeting search criteria, then in the search results, when you hover your mouse over any unit, there are displayed "Edit" and "Delete" buttons.

Pressing the "Edit" button displays a form with the data of administration units, where you can enter and save the changes in the unit's data. Pressing the "Delete" button will display the form with read-only data of administration unit, allowing to remove the unit. Removing the unit from the organizational structure of administration is possible only when there is no child of the unit and there is not any user assigned to the unit.

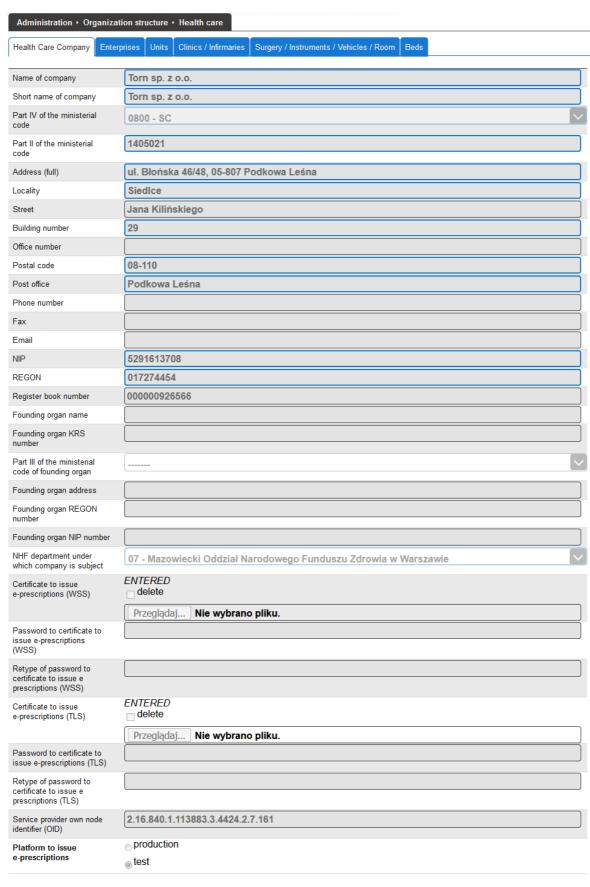
#### Medical care

After selecting the "Medical care" functionality from the "Administration" menu in the "Organizational structure" submenu, there is displayed six tabs corresponding to each level of the organizational structure:

- \rightarrow Health Care Company
- > Enterprises
- **Units**
- > Clinics / Infirmaries
- > Surgery / Instruments / Vehicles / Rooms
- > Beds

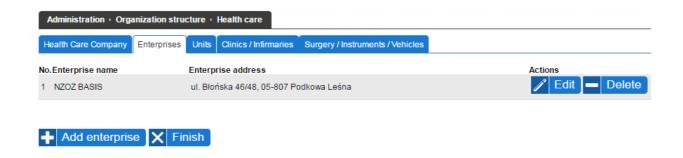
from which opened is "Health Care Company" tab.

In the "Health Care Company" tab are available data of healthcare facility and its founding organ. By default, data are displayed in read-only mode. To modify the data of the Health Care Company, press "Edit Data" button (you will be then switched to edit mode) and then make changes in form and confirm with "Update" button. To enable doctors to issue e-prescriptions on a healthcare company, it is important to enter e-prescription certificates in the form, specify passwords for them, and provide the service provider's own node identifier ID (OID) and choose an e-prescription platform.





In the "Enterprises" tab you can see a list of all the enterprises in the health care facility. For each of them there are two buttons: "Edit" (mode of editing enterprise) and "Delete" (mode of deleting enterprise). Below the list of clinics is available a button to add a new enterprise.



To add an enterprise press "Add company" button under the list of enterprises. Then will be shown a form of adding a new enterprise. Please fill out the form and save the data by pressing button of adding the company.

#### **ATTENTION!**

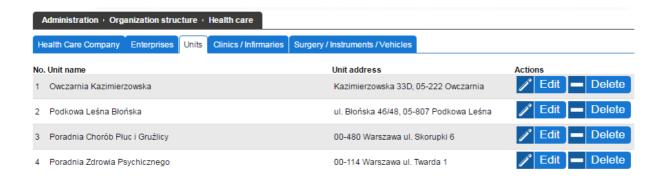
\rightarrow In the system there can be only one enterprise with that REGON number (REGON number of all enterprises must be unique).

To modify the data of enterprises press "Edit" button at the appropriate enterprise from the list. You will see a form of enterprise data of the structure identical to the form of adding a new enterprise. Form of enterprise's data allows you to enter and save the changes to the data.

To delete a company press "Delete" button at the appropriate enterprise from the list. You will see a form of enterprise's read-only data, allowing to remove the enterprise. The removal of the enterprise is only possible if there is no unit assigned to the enterprise.



In the "Units" tab you can see a list of all units of the healthcare facility. At each clinic, there are two buttons: "Edit" (mode of editing units) and "Delete" (mode of deleting units). Below the list of units, there is a button of adding a new unit.



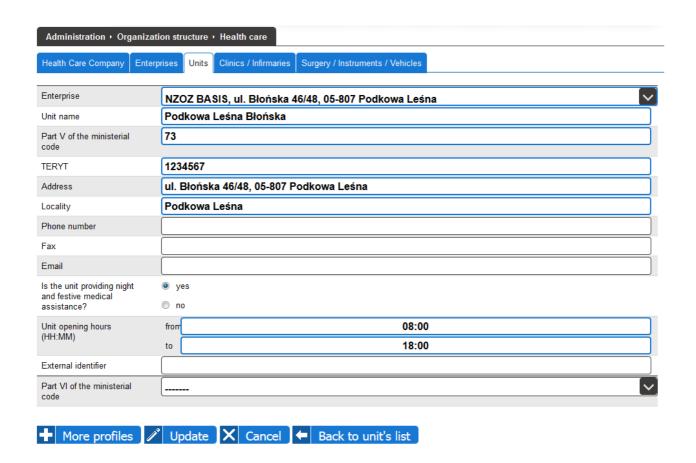
To add a unit, press "Add unit" under the list of units. You will see a form of adding a new unit. You have to fill in a form (at least the mandatory fields). External ID's field is not used, it has been retained for backwards compatibility. If the integration mechanisms of the jHIS system with the ZnanyLekarz website are enabled and given unit does function on the ZnanyLekarz website, then in the field "Facility in ZnanyLekarz service" one should indicate the facility that corresponds to the given on ZnanyLekarz website. For the unit you can enter any number of profiles (profile of unit is determined by the VI part of ministerial code) - using the button "More profiles" you can view any number of fields to entering profiles. After filling the form, save the data by pressing add the unit button.

#### **ATTENTION!**

In the system there can be only one unit identified by a particular V part of the ministerial code (V part of the ministerial code of all units must be unique).

To edit the unit's data, press the "Edit" button at the appropriate unit from the list. You will see the form of unit's data with identical structure to the form of adding a new unit. Form of unit's data allows you to enter and save the changes of the data.

To delete a unit press the "Delete" button at the appropriate unit from the list. You will see the form of read-only data of unit that allows to remove unit. Removal of the unit is only possible if there is no clinic / ward assigned to the unit, any user assigned to the unit, nor any declaration made at the unit.



In the "Clinics / Infirmaries" tab there is a search engine of clinics / infirmaries. Searching of clinics / infirmaries is possible by its name and address and the name and address of the unit in which the clinic / infirmary is located. In every field of search engine you can enter any part of the name or address, the size of the letters does not matter. After entering the search criteria and press the "Search" button under the search engine displays a list of clinics / infirmaries that meet your search criteria. At each clinic / infirmary on the list there are buttons "Edit" and "Delete". Under the search engine there is also a button adding a new clinic / infirmary.

To add a clinic / infirmary, press the "Add a new clinic / ward" button under the search engine. You will see a form of adding a new clinic / infirmary. The clinic short name is used to monitor contracts with NHF. You must fill in a form (at least the mandatory fields) and also point to in which unit this clinic / infirmary is located. It is possible to attach to the form a text file with a description of the rules of using clinic / infirmary. External ID's field is no longer used, it has been preserved due to backwards compatibility. If the integration mechanisms of the jHIS system with the ZnanyLekarz website are enabled and given clinic does function on the ZnanyLekarz website, then in the field "Address in ZnanyLekarz service" one should indicate the address that corresponds to the given on ZnanyLekarz website. For rehabilitation clinics can be specified limits (the maximum number) of treatments realized in the clinic. For clinic / infirmary you can enter any number of profiles (profile of clinic is formed by a pair composed of IX and X part of ministerial code) - using the button "More profiles" you can view any number of fields to enter further profiles. When entering the VIII, IX and X parts of the ministerial code, after entering at least two characters (code or name) in the field, a list of hints is displayed - the correct code should be selected from the list of hints. The address of the clinic (if it is the same as the details of the unit in which the clinic operates) can be

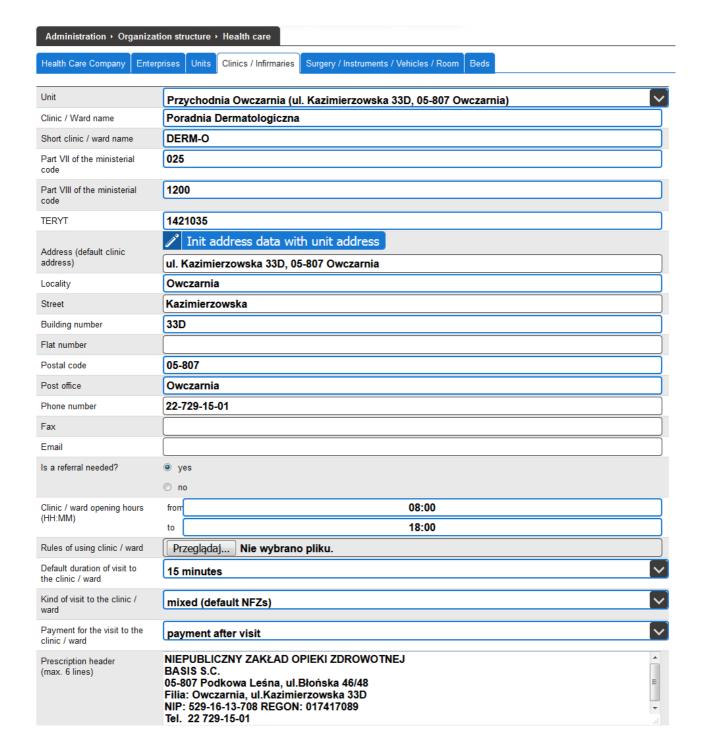
quickly filled in by clicking the "Initialize address data with unit address" button. After filling the form, save the data by pressing the button of adding the clinic / infirmary.

#### **ATTENTION!**

- \rightarrow In the system there can be only one clinic / infirmary with particular VII and VIII part of the ministerial code.
- Opening hours of clinic / infirmary have an impact on the temporary spread of schedule of personnel work or equipment in the clinic. After planning schedules in the clinic / infirmary will not be able to narrow its working hours if already scheduled appointments would be planned outside the new working hours.
- After planning schedules will not be able to change the type of visits in the clinic / infirmary.

To edit the clinic / infirmary, press the "Edit" button at the appropriate clinic / infirmary on the list of clinics / infirmaries (in the results). You will see a data form of clinic / infirmary of identical structure to the form of adding a new clinic / infirmary. Form of data of clinic / infirmary allows you to enter and save changes to these data.

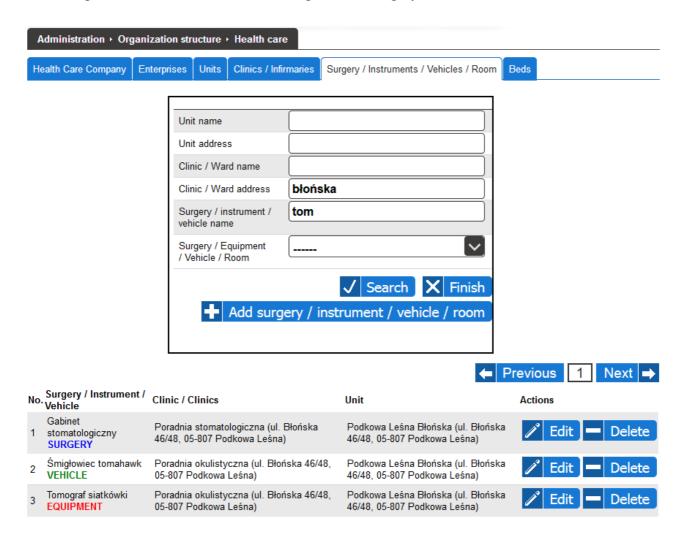
To delete a clinic / infirmary, press the "Delete" button at the appropriate clinic / infirmary on list of clinics / infirmaries (in the results). You will see a form of read-only data of clinic / infirmary that allows to remove clinic / infirmary. Removal of clinic / infirmary is only possible when there is no surgery / instrument / vehicle assigned to the clinic / infirmary, nor has any schedule established in the clinic / infirmary, or there is no entry to the queue waiting for the clinic / infirmary, nor has imported any contract with the NFZ associated with this clinic / infirmary, nor any services realized in the clinic / infirmary.



Maximal pumber of	
Maximal number of rehabilitation services per	
referral in the	
circumstances of day center	
Maximal number of	
rehabilitation services per	
referral in the circumstances of	
ambulatory	
Maximal number of	
rehabilitation services per referral in the	
circumstances of home	
Maximal number of	
individual rehabilitation	
services realized daily per therapist	
Maximal number of non- individual rehabilitation	
services realized	
simultaneously per therapist	
Number of beds - ordinary	
bed	
Number of beds - beds of	
intensive care	
Number of beds - beds of	
intensive cardiac supervision	
Number of beds - bed for newborns	
Number of beds - incubator	
Number of beds - intensive care beds	
Number of beds - bed of	
intensive care burns	
Number of beds - beds of	
intensive toxicological care	
Number of beds - newborns	
intensive care bed	
Number of beds -	
continuous care bed for newborns after artificial	
ventilation	
Number of beds - indirect	
care bed for newborns who	
do not require respiratory support	
Number of beds - bed of	
non-invasive mechanical	
ventilation	
Number of dialisys stations	
Number of daycenter places	
Part IX and X of ministerial	
code	
♣ More profiles	
/ Update X Cand	cel
فالتفويها ويستنبسون	التناقب المتناقب المت

In the "Surgery / Instruments / Vehicles / Rooms" tab there is a search engine of available surgeries, instruments, vehicles (ambulances, helicopters of air medical rescue, boats of water rescue) and

hospital rooms. You can search by name of surgery / instrument / vehicle / room, the name and address of the clinic / ward where the surgery / instrument / vehicle / room is functioning and the name and address of the unit where the surgery / instrument / vehicle / room is located. In every field of search engine you can enter any part of the name or address, the size of the letters does not matter. It is also possible refinement only to instrument, only to surgeries, only to vehicles or only to rooms. After entering the search criteria and press the "Search" button under the search engine displays a list of surgeries / instruments / vehicles / rooms that meet your search criteria. At each surgery / instrument / vehicle / room on the list there are buttons: "Edit" and "Delete". Under the search engine there is also a button of adding the new surgery / instrument / vehicle / room.

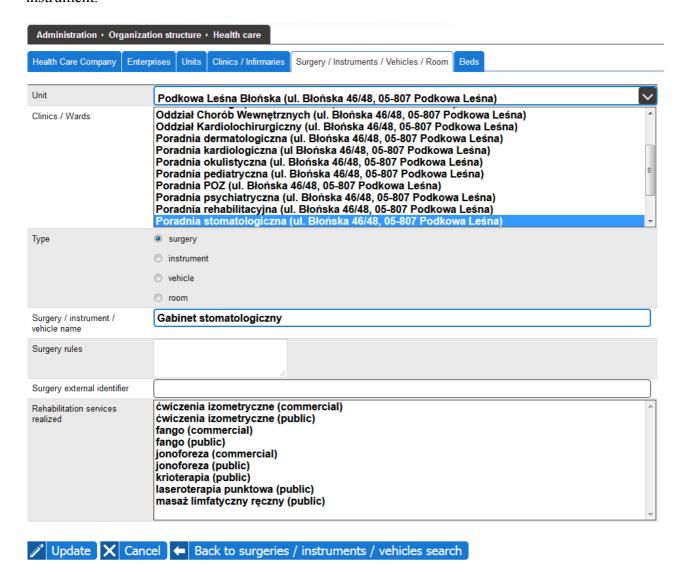


To add a surgery / instrument / vehicle / room, press "Add new surgery / instrument / vehicle / room" button under the search engine of surgeries / instruments / vehicles / room. You will see a form of adding a new surgery / instrument / vehicle / room. You must fill in a form (at least the mandatory fields) and also point to in which unit and then in which clinic / clinics / infirmary / infirmaries this particular surgery / instrument / vehicle / room is functioning. For the surgery / instrument it is also possible to describe how to prepare the patient for an appointment in the surgery / surgery on the instrument. External ID's field is not used, it has been retained for backwards compatibility. When adding rehabilitation equipment there should be pointed rehabilitation services realized using this equipment (must be remembered that if the equipment supports multiple patients at the same time it should not be entered into the system as a single equipment but as several pieces of equipment e.g. physical equipment of UGUL type should be entered into the system as several logical apparatus - UGUL to exercises in hanging, UGUL to

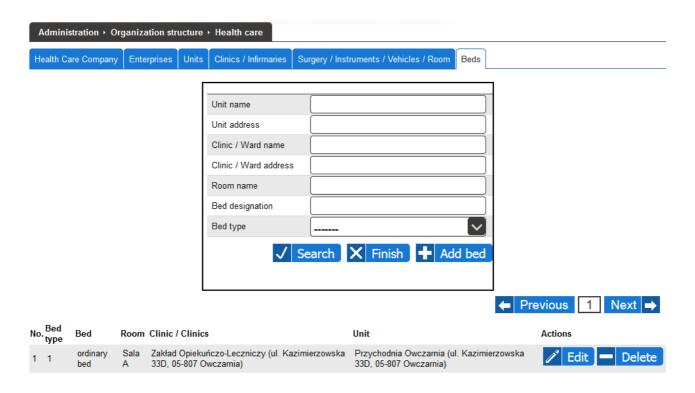
exercises in lying, etc., but in case of cabins the situation is reversed - one cabin is several apparatuses, but because the cabin can only operate one patient at a time, so cabin should be in the system one equipment with a greater range of services from the catalog). After filling the form, save the data by pressing the button of adding surgery / instrument / vehicle / room.

To modify the data of surgery / instrument / vehicle / room you have to press the "Edit" button at the appropriate surgery / instrument / vehicle / room on the list of surgeries / instruments / vehicles / rooms (in the results) under the search engine. You will see a form of the surgery / instrument / vehicle / room data having an identical structure to the form of adding the new surgery / instrument / vehicle / room. This form allows you to enter and save changes to data of surgery / instrument / vehicle / room.

To remove the surgery / instrument / vehicle / room, press "Delete" button at the appropriate surgery / instrument / vehicle / room on the list of surgeries / instruments / vehicles / rooms (in the results) under the search engine. You will see a form of the surgery / instrument / vehicle / room read-only data enabling removal of the surgery / instrument / vehicle / room. Removal of the surgery / vehicle / room is only possible when there is no schedule, where will be planned visit to this surgery / vehicle / room. Removal of the instrument is possible only if there is no schedule planned for the instrument.



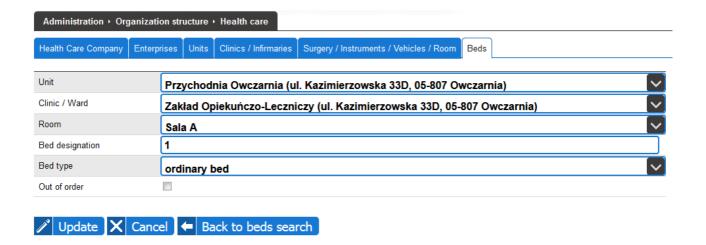
In the "Beds" tab there is a search engine of available beds within hospital rooms / care and treatment institution rooms. You can search by bed designation, bed type, name of room where bed is located, the name and address of the clinic / ward where the room is functioning and the name and address of the unit where the clinic / ward is located. In every field of search engine you can enter any part of the name or address, the size of the letters does not matter. After entering the search criteria and press the "Search" button under the search engine displays a list of beds that meet your search criteria. At each bed on the list there are buttons: "Edit" and "Delete". Under the search engine there is also a button of adding new bed.



To add a bed, press "Add bed" button under the search engine of beds. You will see a form of adding a new bed. You must fill in a form (at least the mandatory fields) including to point in which unit and then in which clinic / infirmary and further in which room this particular bed is functioning. If the bed is temporarily unavailable (for reasons other than being occupied by the patient), check the box "out of order". After filling the form, save the data by pressing the button of adding bed.

To modify the data of bed you have to press the "Edit" button at the appropriate bed on the list of beds (in the results) under the search engine. You will see a form of the bed data having an identical structure to the form of adding the new bed. This form allows you to enter and save changes to data of bed.

To remove the bed, press "Delete" button at the appropriate bed on the list of beds (in the results) under the search engine. You will see a form of the bed read-only data enabling removal of the bed.



# **Privileges**

Access to particular functionality of application provides a predefined set of privileges resulting from the scope of application's functionality. The administrator can create groups of privileges, named the roles that will be further assigned to the users of the application.

For rights management there is "Privileges" functionality in the "Administration". To ensure transparency, the roles have structure of tree. At each of the roles in the tree (with the exception of the "System Administrator" role) when you hover the mouse, buttons "Edit Role" and "Delete part" are visible, and below tree there is the "Add role" button. The role of "Administrator" is predefined and gives you access to all the functionality of the system, including the menu "Administration" (this is the only role that provides access to this menu, no other role does not provide access to this menu).

To add a new role, press "Add role" button under the tree of roles. You will see a form of adding the role. To indicate the privileges constituting that role, hold down the Ctrl key on your keyboard while clicking the mouse on the appropriate privileges to select. In addition, a list of all selected privileges displays informative below the form. After filling the form, save the data by pressing adding role button.

To edit data of the role press "Edit Role" button at an appropriate role in the tree of roles. You will see a form of data of the role with structure identical to the form of adding new role. Form of role's data allows you to enter and save changes to these data. Checking / unchecking the privileges of the role effects making / receiving these privileges to all users with a particular role. Changes of permissions are not visible (effective) for logged users - become effective at the start of a new session (when you log back into the system) of the user.

To remove the role press "Delete role" button at an appropriate role in the tree of roles. You will see a form of read-only data of role, allowing the removal of role. Removal of the role results in receiving all its privileges to users with this role. Removal of the role is not visible (effective) for logged users - becomes effective at the start of a new session (when you log back into the system) of the user.

## **Users**

The system administrator has the ability to manage users having access to the system: adding new users, modify user data, and lock / unlock user access to the system. Removing users is not possible.

To management of users there is "Users" functionality in the "Administration" menu. At the home page of management of users functionality there is search engine of users and a button of adding a new user. Search of users is possible by any combination of the following criteria:

- name first name or part of name of the user; capitalization does not matter
- > surname surname or part of surname of the user; capitalization does not matter
- > login login or part of user's login; capitalization does not matter
- > status user's status (active or blocked)
- > role role which the user has
- \rightarrow unit administration unit

After entering the search criteria and pressing the search button under the search engine displays a list of users that meet your search criteria. At each of user at the list there is "Edit" button enabling to enter the edit of user's data.

,

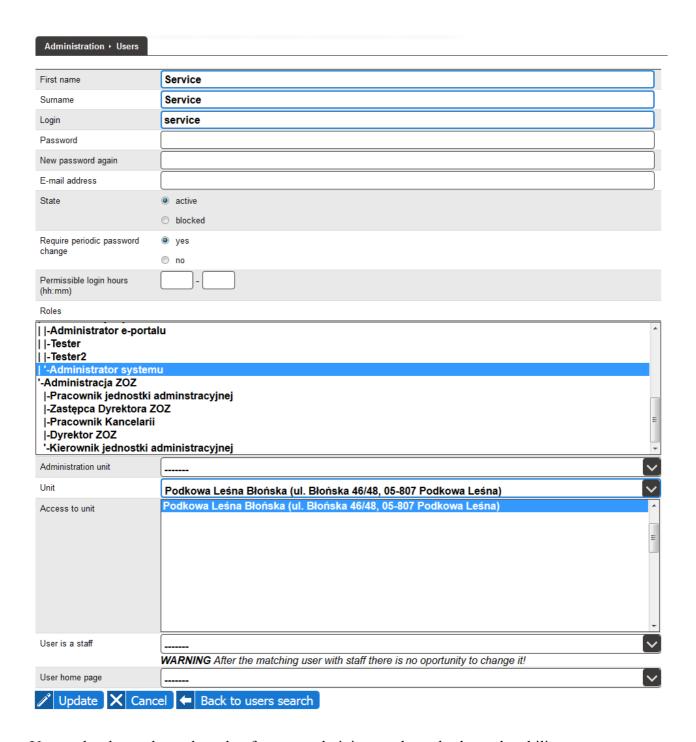
To add a new user press the "Add new user" button at the users' search engine. You will see a form of adding a user. Each user must have a unique login and password that meets the following requirements of security policy:

- password must consist of at least 8 characters
- password must contain lowercase and uppercase letters, numbers and special characters
- password must be different from the most recently used passwords by at least three characters
- password must differ from each of the three most recently used passwords by at least one character

If for the creating user will be indicated "active" status then he will be able to login to the system, otherwise he will not have access to the system until the administrator unlocks his account. If for created user will be marked require periodic password changes, then every 30 days the system will force the user to statutory change his password. If for created user permissible login hours are specified then he will be able to log into system only within these hours. User may have one or more roles. To select more than one role, press the Ctrl key on the keyboard and by clicking the mouse on the names of roles select the appropriate roles. For the user, it should be selected unit where he works and clinics to which he has access ( setting visits, visits encoding and management of services). If the user will have access to more than one unit, press the Ctrl key on your keyboard and by clicking the mouse on the names of units select the appropriate units. If user is a staff then you should pair him with the right person from medical staff, but you have to remember that there is no possibility that the same person from the medical staff had more than one account in the system

and after setting user associations with a staff and appointing first visit to this staff there is no longer possible change this association! (If the change of staff with user association was possible, it can lead to situations that the user after such a change could edit medical history recorded by another staff.) You can also specify user's home page, which is the first page that will be open after logging by user to the system.

To modify, lock or unlock a user account, press "Edit" button at the appropriate user in the user list (in the results) under the search engine. You will see a form of editing user's data of the structure identical to the form of adding a new user. To change the user password enter the new password twice in the "Password" and "Repeat password" fields (leaving these fields blank means that at the time of saving user's data, password is not changed, the user will use the existing password). To lock / unlock the user you have to make a change in the "Status" field. Giving the user's role is not visible (effective) for logged users - becomes effective at the start of a new session (when you log back into the system) of the user. After making changes, save them by pressing the "Update" button.



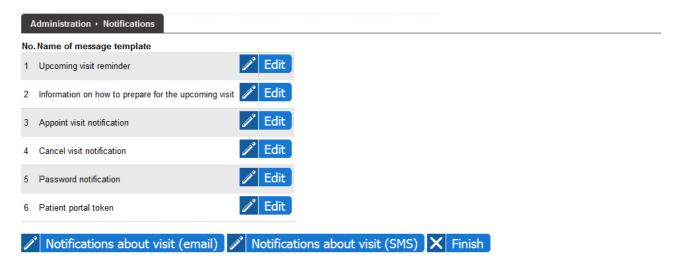
Users who do not have the role of system administrator but who have the ability to manage users with permissions not wider than their own also have the ability to use this functionality, but to a limited extent. They can only manage users who have identical roles as the logged in user and users who have subordinate roles to the roles of the logged in user and users who do not have any roles.

# **Notifications**

The system allows defining and sending notifications to patients. Notifications are sent by SMS and / or e-mail, depending on the settings saved in the patient card. Notifications are not sent immediately, but getting to the queue, where they are collected and sent in bulk.

There is defined 6 kinds of notifications in the system:

- Upcoming visit reminder notification sent to the patient number of hours before the visit (determined at the stage of implementation of the system), reminding about upcoming visit and contain information about the visit.
- Information on how to prepare for the upcoming visit notification sent to the patient number of hours before the visit (determined at the stage of implementation of the system), containing information on how to prepare for their visit. If for the visit there is not defined any information about how to prepare for their visit, such notification is not sent.
- Appoint visit notification notification sent to the patient at the time of saving (making an appointment) his visit, summarizing saving and containing information about the visit.
- Cancel visit notification notification sent to the patient at the time of cancelation of his visit with the information that the visit was canceled.
- Password notification notification is sent to patient when new password for internet registration is generated (this takes place when adding new patient with marked option "Access to internet registration" and when clicking button "Generate and send new password" in "Contact" tab within the card of patient which has marked option "Access to internet registration")
- Token for the portal for patients notification sent to the patient on request containing a link providing access to online registration without logging in (after pressing the "Generate a new token for online registration" in the "Contact" tab in the patient card which has the option "Access to online registration selected")



To view or edit the content of any of the defined notifications, select from the "Administration" menu "Notifications" functionality and then from a table of notification select "Edit" button located in the line corresponding to the notification. At displayed page you will can edit the contents of the notifications separately for SMS and e-mail channels. As a reminder of the upcoming visit, you can additionally specify one or two delivery times (how many hours before the visit the system should send notification). If the sending of a given notification is to be stopped, the field "Inactive (not sent)" should be marked on the form. After entering / modifying data, save them by clicking the "Update" button.

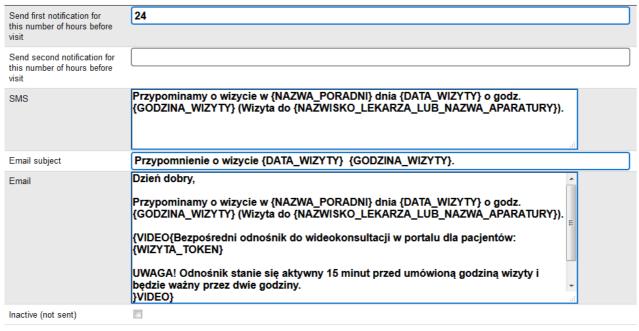
#### Administration . Notifications

#### Upcoming visit reminder

Notification text includes predefined variables:

- {DATA\_WIZYTY} Visit date
- {GODZINA\_WIZYTY} Time visit
- {NAZWA\_PORADNI} Clinic name
- {ADRES\_PORADNI} Clinic address
- {TELEFON\_PORADNI} Clinic phone
   {NAZWA\_PRZYCHODNI} Unit name
- . {ADRES\_PRZYCHODNI} Unit address
- {NAZWISKO\_LEKARZA\_LUB\_NAZWA\_APARATURY} Doctor's surname or name of instrument
- {SPOSOB\_PRZYGOTOWANIA} Way to prepare for a visit
- {NAZWA\_ZOZ} Name of company ZOZ
- {HASLO} Patient password
- {WIZYTA\_TOKEN} Token (link) to access visit in portal for patients without logging (valid since fifteen minutes before visit through two hours)
- {PORTAL\_TOKEN} Token (link) to access portal for patients without logging (valid for 24 hours)
- {VIDEO{ ... }VIDEO} Any content placed between these tags will be placed within notification only for visits realized in videoconsultation mode

These variables in messages will be replaced by correct information about the visit.





When defining the content of the notification you can use the system-defined tags that in the real notification will be replaced with the corresponding values they represent. All tags are inscriptions wrote in capital letters and in curly brackets. When using these tags you have to keep in absolute accordance to the characters of variable's name. The system tags are defined as follows:

- \rangle \{\text{DATA\_WIZYTY}\} \tag \text{will be replaced with the date of visit}
- \ \{\text{GODZINA WIZYTY}\} \tag \text{will be replaced with the time of visit}
- \(\)\ \{\NAZWA\_PORADNI\} \tag \text{will be replaced with the name of clinic, where the visit is to take place
- \(\rightarrow\) \{ADRES\_PORADNI\} tag will be replaced with the address of clinic, where the visit is to take place
- \rangle \{\text{TELEFON\_PORADNI}\} \tag \text{will be replaced with the phone of clinic, where the visit is to take place}

- \rangle \{\text{NAZWA\_PRZYCHODNI}\} \text{tag will be replaced with the name of unit, where the visit is to take place
- \rangle \{ADRES\_PRZYCHODNI\} tag will be replaced with the address of unit, where the visit is to take place
- \ \{\text{NAZWISKO\_LEKARZA\_LUB\_NAZWA\_APARATURY}\} \text{tag will be replaced with the surname of doctor associated with a visit or the name of the instruments, if the visit is a procedure for instruments
- \( \{\scription \text{SPOSOB\_PRZYGOTOWANIA} \} \text{tag will be replaced with a description of the preparation for the visit this is an integrated description of how to prepare for a visit for the surgery / instrument for a specific type of visit (if there is not specified any information about how to prepare for the visit, there will be inserted "None" value)
- \ \ \{\text{NAZWA\_ZOZ}\} \tag \text{will be replaced with the name of the healthcare facility}
- \(\rightarrow\) HASLO\ tag will be replaced with patient password for internet registration
- \ \{\text{WIZYTA\_TOKEN}\}\ \text{ the tag will be replaced with a token (link) providing access to the site visit for patients without logging in, which will be valid from fifteen minutes before the visit for two hours
- \rangle \{PORTAL\_TOKEN\}\ the tag will be replaced with a token (link) providing access to the portal for patients without logging in, which will be valid for 24 hours
- VIDEO {...} VIDEO} content placed between these tags will be included in the notification only for visits carried out in the video-consultation mode

After entering the contents, they should be saved using the "Update" button.

If notifications regarding visits for certain clinics should not be sent, click the "Notifications for visit (email)" or "Notifications for visit (SMS)" (depending on the notification sending channel) visible under the notifications list. This will open a new window with a list of clinics where one should select the clinics for which notifications should NOT be sent by the given channel and save the data by clicking the "Save" button.

Select clinics for which notifications about visits should NOT be sent by email

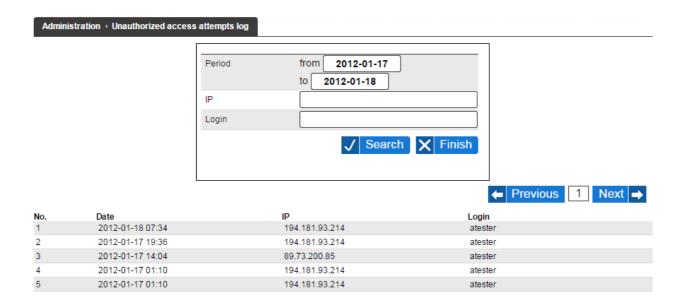
Owczarnia Kazimierzowska (Kazimierzowska 33D, 05-222 Owczarnia)				
Poradnia zdrowia psychicznego				
Podkowa Leśna Błońska (ul. Błońska 46/48, 05-807 Podkowa Leśna)				
■ Blok operacyjny				
■ Blok operacyjny 2				
□ Izba przyjęć				
Poradnia dermatologiczna				
Poradnia kardiologiczna				
□ Poradnia okulistyczna				
Poradnia pediatryczna				
Poradnia POZ				
Poradnia stomatologiczna				
Pracownia fizykoterapii				
Zespół Ratownictwa				
Save X Close				

# **Diaries**

The functionalities from the "Diaries" submenu in the "Administration" menu are used for browsing various types of logs collected in the system.

# Unauthorized access attempts log

Any attempt of unauthorized access to applications through the entering of incorrect login and / or password is registered. As part of the application's monitoring, administrator of the application, by the "Unauthorized access attempts log" functionality from "Diaries" submenu of the "Administration" menu, has access to the log of unauthorized access attempts, which can be filtered by time of incident, the IP address of the computer from which an attempt was made to log on and by the entered login name. After the entering the restrictions in the filter and press the "Search" button, there is displayed a paged table of events that meets the criteria of the filter. Presented are: time of the event, the computer's IP address and entered login. By default, the events are arranged in order from the most recent to the oldest, but the display order can be changed by clicking on the header of the corresponding column of the table with a list of events. Events' list presents the following information: date of the event, the computer's IP address and entered login.

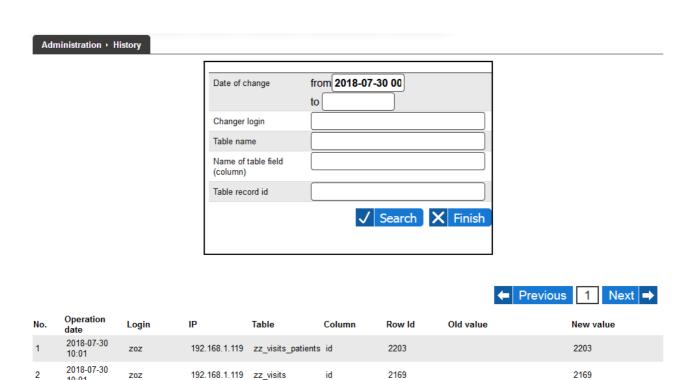


## **History**

Any changes to the data made by users of the application are recorded in history of changes. The administrator of the application through the "History" functionality of "Diaries" submenu in the "Administration" menu has access to the register of these changes with the possibility of filtering and browsing. It is possible to filter by any combination of the following criteria:

- \rangle date of change period in which the change was made (from ... to ...)
- > changer login name of user, who made a change
- > table name the name of the database table in which the change was made; when you enter a name of table, hints are displayed
- name of table field (column) name of the column (field), which value has been changed; when you enter a name of field, hints are displayed
- table record id row's (record's) identifier that has been modified

After the entering restrictions in the filter and pressing the button, there is displayed a paged table of registered changes that meet the filter's criteria. By default, changes are displayed in order from most recent to the oldest, but the display order can be changed by clicking on the corresponding column of the header of the table with the list of changes. In the list of changes are presented the following information: the date of change, the login of changer, the name of table, the name of fields (columns) in the table, the ID of record in the table, the value before the change, the value after the change is blank and the value after the change is the same as the record identifier, it means making a new record in the table. If the field on which the change was made is the "status" field and the value before the change is "N" and the value after the change is "D" then it means the removal (logical) of the record from the table.



## **Loging history**

Each loging of the user into the system and loging out of the system is recorded in the database. The application administrator through the "Loging history" functionality from the "Diaries" submenu under the "Administration" menu has access to the register presenting the user loging history. After selecting this functionality, a search engine is displayed that allows narrowing the scope of information sought to a particular period in which the loging occurred, a specific user login, a specific IP address from which the loging occurred, and also to the list of currently logged users. After entering the search criteria and clicking the "Search" button, the search engine displays the loging history with the indication of the user login, loging date, logout date and IP address from which the loging was made.

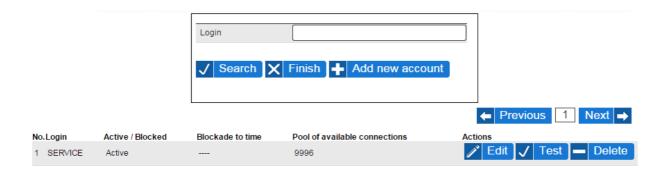


		← Previous 1 2 3 4	5 608 609 Next →
No. User	Login date	Logout date	IP address
1 zoz	2018-09-27 08:37		79.185.63.177
2 zoz	2018-09-26 08:10	2018-09-26 16:05	95.49.195.246
3 zoz	2018-09-25 08:16	2018-09-25 16:03	95.49.236.16
4 zoz	2018-09-24 08:26	2018-09-24 15:57	95.49.145.106
5 zoz	2018-09-14 15:50	2018-09-14 15:51	89.64.2.138
6 zoz	2018-09-13 16:50	2018-09-13 19:11	89.64.2.138
7 zoz	2018-09-13 16:09	2018-09-14 00:28	89.64.2.138
8 zoz	2018-09-07 08:27	2018-09-07 15:39	79.185.59.158
9 zoz	2018-09-06 12:02	2018-09-06 15:50	79.185.209.99
10 zoz	2018-09-06 08:28	2018-09-06 12:02	79.185.209.99

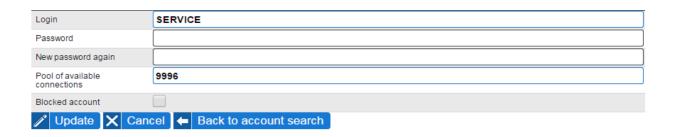
# eWUŚ accounts

the jHIS system has a built-in communication with the electronic Verification of Eligibility of Beneficiaries system (polish eWUŚ) serving to verify patient insurance based on the patient's social security number (or his legal guardian). eWUŚ system requires authentication, so the authentication data must be stored in the jHIS system. To accounts management by means of which the jHIS system will be authorized in eWUŚ, is used "eWUŚ accounts" functionality in the "Administration" menu. This functionality allows you to add, edit, delete and testing of previously established account on the NFZ SZOI portal. From each account can be made 10,000 queries per day (limit of eWUŚ system), and therefore if the expected daily number of inquiries about insurance is higher there should be entered the data of correspondingly higher amount of accounts to the jHIS system.

After selecting the "eWUŚ accounts" functionality, displayed search engine lets you search for the accounts by login name (capitalization does not matter). At the search button there is also a button which displays the form of adding a new account.



After specifying search criteria and pressing the "Search" button, a list of entered accounts is displayed (if any were made). At each account are buttons for editing and deleting accounts as well as a button to test whether the account is functioning properly - when pressed, there is displayed a message informing you of the account 's status.



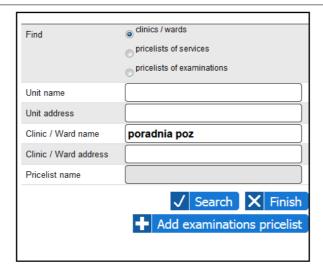
When you edit an account it is possible to lock it. If the account is locked, system will not use it for authorization in eWUŚ (until the account will be unlocked).

Every 30 days in the NFZ SZOI is required to change passwords for the accounts used for authentication in eWUŚ. By changing the password in the NFZ SZOI system remember to update it also in jHIS system. If they are nearing the eWUŚ account password expiration, the system jHIS in the header of the page displays a warning icon - when you hover your mouse over this icon appears detailed information which password will expire and for how many days.



## **Pricelists**

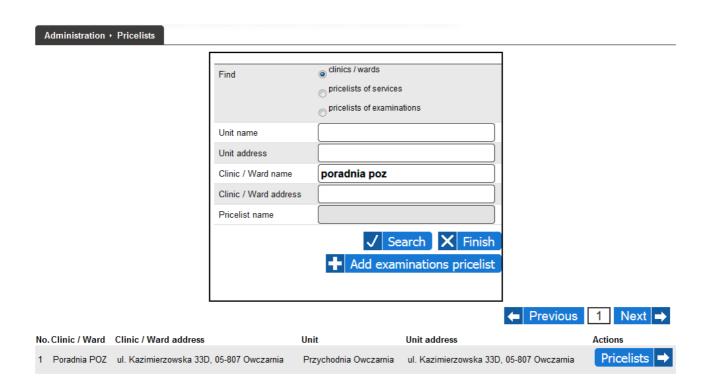
For commercial services provided by the health care facility and diagnostic examinations performed by healthcare center are defined pricelists. Pricelists for services are defined separately for each clinic, for diagnostic examinations pricelists are defined independently from clinic. To manage pricelists is "Pricelists" functionality in the "Administration". After choosing this functionality there appears search form of clinics / pricelists. Beside of the possibility of searching clinics / pricelists within the search form there is button for pricelists addition available.



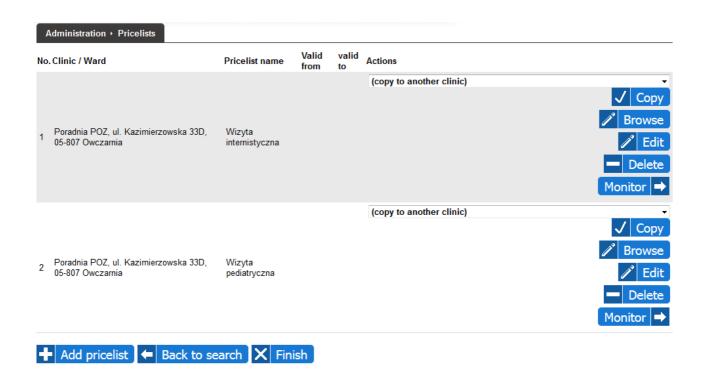
The first step in creating pricelist of services is to find the right clinic. You can search based on any combination of the following criteria (capitalization does not matter):

- \rightarrow unit name, where the clinic is (not available when searchig for pricelists of examinations)
- \rightarrow unit address, where the clinic is (not available when searchig for pricelists of examinations)
- clinic name (not available when searchig for pricelists of examinations)
- clinic address (not available when searchig for pricelists of examinations)
- pricelist name (not available when searching for clinics / wards)

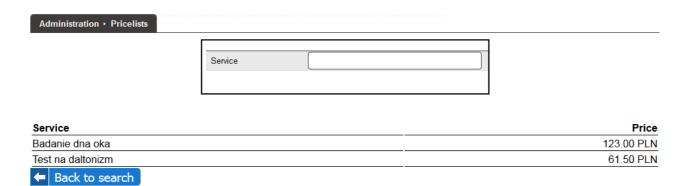
After marking option "clinics / wards" within the field of "Find" and specifying the criteria and pressing the "Search" button, there is displayed a list of clinics that meet the search criteria or message about lack of such clinics. At each clinic, there is "Pricelists" button which directs to the second step of the process of creating pricelists for the clinic.



After pressing the "Pricelists" button, there is displayed a list of pricelists in selected clinic. At each pricelist there are buttons to browse, copy, edit, delete and monitor the realization of the agreement which is represented by this pricelist and below the list there is a button to add a new pricelist.



The "Browse" button allows for quick browsing of pricelist contents. After clicking this button there appears list of services within the pricelist and the field that allows for narrowing of this list. By writing part of service name within this field, system narrows down services list to these containing the entered part within name.



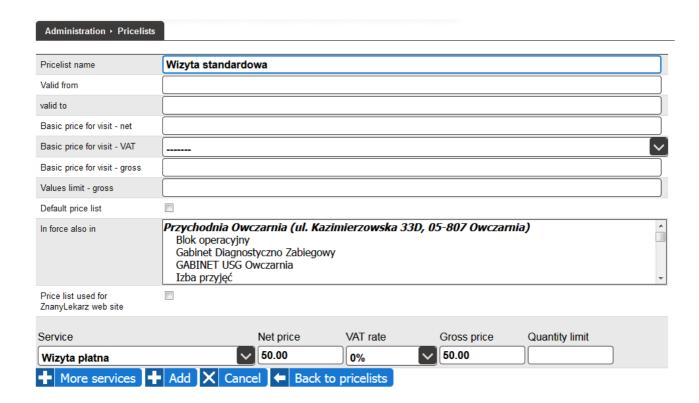
The "Copy" button allows you to quickly create a copy of the pricelist - when pressed, the system asks for a name for the copy of pricelist and then creates a new pricelist with the given name representing a copy of pricelist at which you pressed the "Copy" button. If no clinic has been selected in the drop-down list above the "Copy" button, then a copy of the price list is created in the same clinic, and if another clinic is selected in the drop-down list, a copy of the price list is created in the indicated clinic. A copy of the price list always appears in one counseling center (if additional clinics have been indicated in the copied price list, in which the price list also applies, they are ignored when copying).

The "Add pricelist", "Edit" and "Delete" buttons are linking to the pricelist's form. In the pricelist's form you can indicate the period of its validity. If you enter only the start date of period, then the pricelist will be valid on any day from that date. If you enter only the end date of the period, then the pricing will be valid on any day ending on that date. If you do not enter the duration of the pricelist, it will be valid always. In rehabilitation clinics pricelist marked as default is automatically selected at planning the rehabilitation, if it is enabled simplified version of the rehabilitation module and if the mode of an automatic valuation of the price for surgeries is turned on.

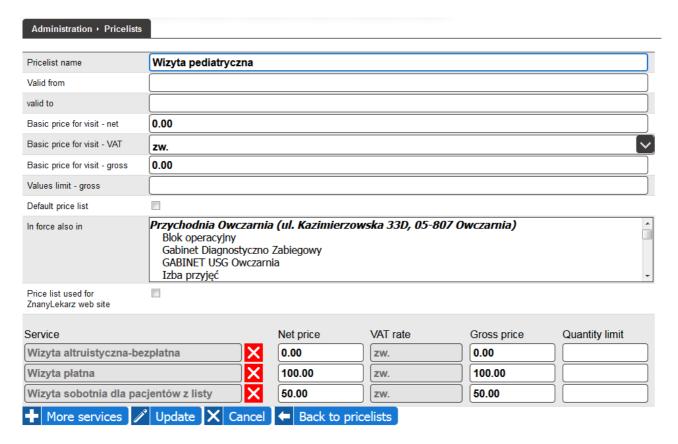
If the integration mechanisms of the jHIS system with the ZnanyLekarz website are enabled and the given price list is to be valid on the ZnanyLekarz website, then the "Price list used for ZnanyLekarz web site" website should be checked. Each clinic can have only one price list marked in this way. In addition, if a service appears in two different price lists marked in this way, both must have the same price.

In pricelist you can define the basic price for a visit to the clinic (in particular, the price may equal zero) and the prices of particular services. When entering the net price, gross price is completed automatically according to the selected VAT rate and vice versa - when entering the gross price, net price is completed automatically according to the selected VAT rate. When changing the VAT rate, gross price updates automatically according to the entered net price and selected VAT rate. In addition, in the pricelist you can set a limit on the value of the agreement which is represented by a pricelist and limits of the amount of particular services (values of limits are not mandatory). The limits do not block the possibility of providing services from pricelist, but only allow you to monitor the status of execution of the agreement, which is represented by the pricelist. In the form, you can also indicate other clinics where the given pricelist is to apply.

Placed under the form, the "More services" button lets you add more items to the pricelist.



In case of pricelist modification the form looks a little bit different – by positions existing within the pricelist there is no possibility to change service and VAT rate, there is however button with mark "×" allowing to remove the given position. So if it is necessary to change service or VAT rate of the given position then one has to remove this position and using the button "More services" has to add new position with desired values.



After entering the data, they should be saved (by pressing the "Add" button for adding new pricelist or by clicking "Update" button if you edit the pricelist created earlier).

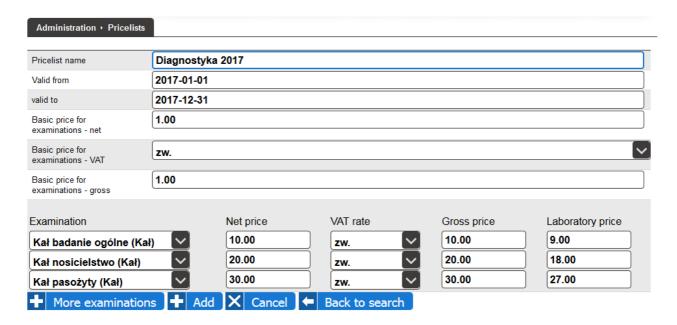
The "Monitor" button, visible at every pricelist from the list of pricelists, lets you view the status of execution of the agreement, which is represented by the pricelist. When you press this button there is displayed information about the execution of the agreement in relation to limit of its values and information about the number of provided services in relation to the limits of their number according to their status at the moment. If the value of realization is greater than the limit of values, then it is highlighted in red. Similarly, the number of providing of service greater than the limit of values is highlighted in red.



Creation of new pricelist for diagnostic examinations is performed by using the button "Add examinations pricelist" visible within the search form. After clicking this button system displays pricelist form. Within the form of pricelist one can specify period of its validity (periods of validity of examinations pricelists cannot overlap). If you enter only the start date of period, then the pricelist will be valid on any day from that date. If you enter only the end date of the period, then the pricing will be valid on any day ending on that date. If you do not enter the duration of the pricelist, it will be valid always.

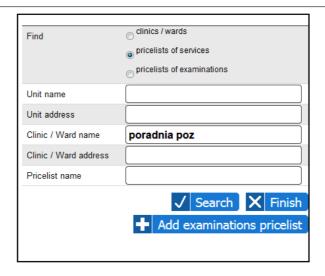
Within the pricelist one specifies basic price for a single order (possibly zero) and prices of particular examinations. When entering the net price, gross price is completed automatically according to the selected VAT rate and vice versa - when entering the gross price, net price is completed automatically according to the selected VAT rate. When changing the VAT rate, gross price updates automatically according to the entered net price and selected VAT rate. Moreover within the pricelist one can specify laboratory price, which is a price that healthcare center has to pay to diagnostic laboratory that performs diagnostic examinations (this value is for supervision purposes only).

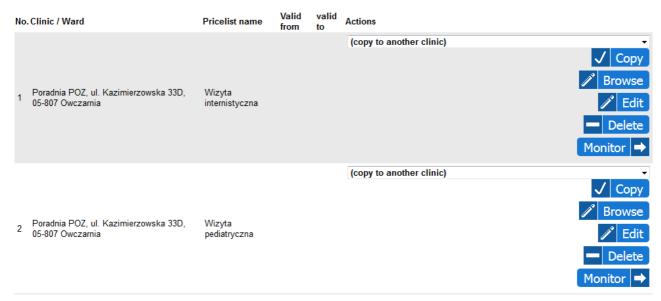
Button "More examinations" placed below the form allows to add subsequent positions to pricelist.



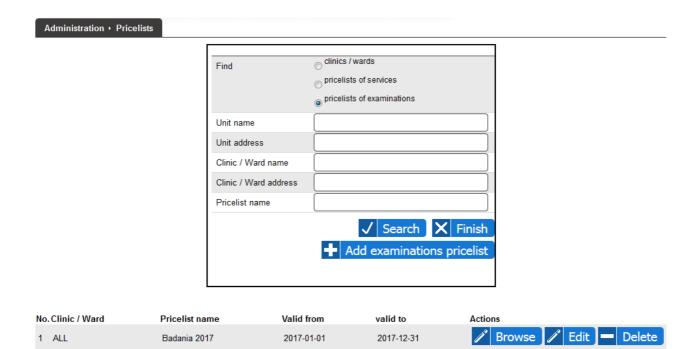
After entering data, one has to save then (with the button "Add" if adding new pricelist or with the button "Update" while modifying pricelist created earlier).

To find already defined pricelist for commercial services one can use one of two options – find and choose the clinic for which pricelist has been defined (as described in the beginning of this chapter) or find pricelist itself. In the second case ona has to choose option "pricelists of services" within "Find" field and enter seach criteria (it can be unit / clinic data as well as pricelist name or part of its name). After entering criteria and clicking "Search" button, there appears list of pricelists for commercial services with buttons "Browse", "Copy", "Edit", "Delete", "Monitor" by each of then which act exactly the same way as described previously within this chapter.

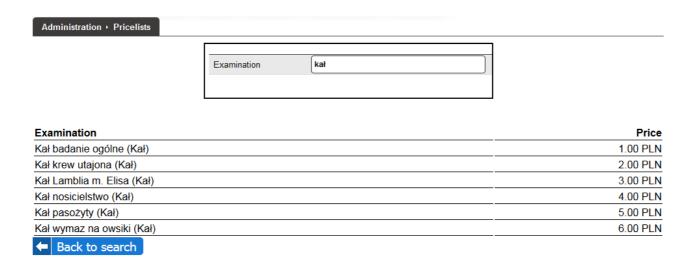




To find already defined pricelist for diagnostic examinations on has to mark option "pricelists of examinations" within the field of "Find" in search form and enter searching criteria (pricelist name or part of its name). After entering criteria and clicking "Search" button there appears list of pricelists of diagnostic examinations and by each of them with buttons "Browse", "Edit" and "Delete".



The "Browse" button allows for quick browsing of pricelist contents. After clicking this button there appears list of examinations within the pricelist and the field that allows for narrowing of this list. By writing part of examination name within this field, system narrows down examinations list to these containing the entered part within name.



"Edit" and "Delete" buttons direct to form of pricelist such as described by creation of new pricelist but filled with data. In case of first of these buttons it is possible to enter and save changes to pricelist, in case of the second one it is possible to confirm intention to delete pricelist.

# **Occupational medicine**

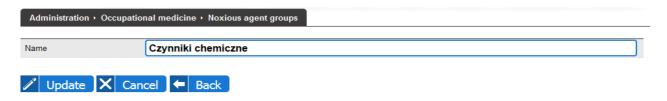
Within the system there is functionality for management of dictionaries used generally to fill choice lists while planning occupational medicine visits and while registering patient employment history.

### Noxious agents groups

This dictionary allows to enter names of noxious and strenuous agents groups specified in the list of methodological guidelines specified in the Regulation of the Minister of Health in the matter of carrying out medical examinations of workers, the scope of preventive health care over employees and medical certificates issued for the purposes set out in the Labor Code. After choosing the functionality of "Noxious agents groups" from submenu "Occupational medicine" in menu "Administration" there appears list of noxious and strenuous agents. Next to each position on the list there are visible buttons allowing for modification and removal of the given position, under the list there is a button allowing for addition of new position.



By clicking the button of "Add" empty form is displayed, while clicking the button of "Edit" displays form filled with the data of chosen group of noxious or strenuous agents in change mode, and clicking the button of "Delete" displays form filled with the data of chosen group of noxious or strenuous agents in read only mode.



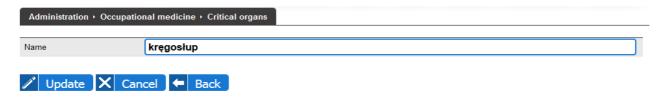
To add group of noxious or strenuous agents one has to enter its name within the form and confirm it with the button "Add". To modify data of noxious or strenuous agents group one has to change its name within the form and confirm it with the button "Update". To remove group of noxious or strenuous agents onr has just to click the button of "Delete" within the form to confirm it.

## Critical organs

This dictionary allows to enter names of critical organs specified in the list of methodological guidelines specified in the Regulation of the Minister of Health in the matter of carrying out medical examinations of workers, the scope of preventive health care over employees and medical certificates issued for the purposes set out in the Labor Code. After choosing the functionality of "Critical organs" from submenu "Occupational medicine" in menu "Administration" there appears list of critical organs. Next to each position on the list there are visible buttons allowing for modification and removal of the given position, under the list there is a button allowing for addition of new position.



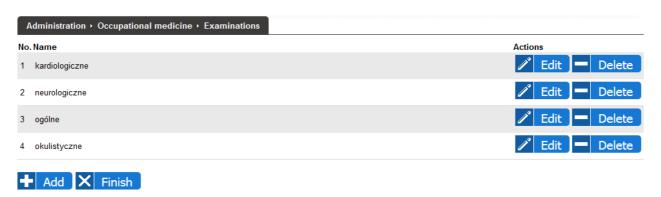
By clicking the button of "Add" empty form is displayed, while clicking the button of "Edit" displays form filled with the data of chosen critical organ in change mode, and clicking the button of "Delete" displays form filled with the data of chosen critical organ in read only mode.



To add critical organ one has to enter its name within the form and confirm it with the button "Add". To modify data of critical organ one has to change its name within the form and confirm it with the button "Update". To remove critical organ one has just to click the button of "Delete" within the form to confirm it.

### **Examinations**

This dictionary allows to enter names of examinations specified in the list of methodological guidelines specified in the Regulation of the Minister of Health in the matter of carrying out medical examinations of workers, the scope of preventive health care over employees and medical certificates issued for the purposes set out in the Labor Code. After choosing the functionality of "Examinations" from submenu "Occupational medicine" in menu "Administration" there appears list of examinations. Next to each position on the list there are visible buttons allowing for modification and removal of the given position, under the list there is a button allowing for addition of new position.



By clicking the button of "Add" empty form is displayed, while clicking the button of "Edit" displays form filled with the data of chosen examination in change mode, and clicking the button of "Delete" displays form filled with the data of chosen examination in read only mode.



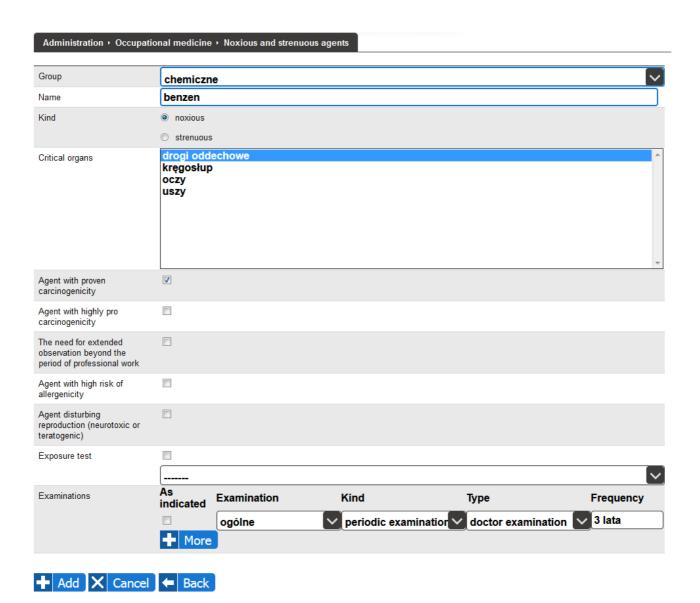
To add examination one has to enter its name and possibly indicate the corresponding commercial service within the form and confirm it with the button "Add". To modify data of examination one has to change its name within the form and confirm it with the button "Update". To remove examination one has just to click the button of "Delete" within the form to confirm it. The commercial service indicated by the examination will be automatically selected from the price list when planning the occupational medicine visit at which the examination is to be performed.

## Noxious and strenuous agents

This dictionary allows to enter names of noxious and strenuous agents specified in the list of methodological guidelines specified in the Regulation of the Minister of Health in the matter of carrying out medical examinations of workers, the scope of preventive health care over employees and medical certificates issued for the purposes set out in the Labor Code. After choosing the functionality of "Noxious and strenuous agents" from submenu "Occupational medicine" in menu "Administration" there appears tabs corresponding to particular groups of noxious and strenuous agents (defined in th dictionary "Noxious agents grups" as described previously) and within each tab there is a list of noxious and strenuous agents. Next to each position on the list there are visible buttons allowing for copying, modification and removal of the given position, under the list there is a button allowing for addition of new position.



By clicking the button of "Add" empty form is displayed, while clicking the button of "Edit" displays form filled with the data of chosen noxious or strenuous agent in change mode, and clicking the button of "Delete" displays form filled with the data of chosen noxious or strenuous agent in read only mode. Clicking the "Copy" button displays a window asking for the name under which the copy of the agent is to be saved, and after entering this name and confirming with the "OK" button, a new agent with the given name and definition identical to the copied agent is created.



To add noxious or strenuous agent one has to choose group to which agent belongs, fill its name, specify whether it is noxious agent or strenuous agent, choose critical organs which agent acts to and occupational medicine examinations that should be performed to employee / student exposed to act of the given agent. One marks and marks off critical organs while keeping Ctrl button pressed down od keyboard and clicking on their names. For each examination one has to choose name, kind, type and also (optionally) specify frequency of its performance. By default one row is displayed to enter one examination. To enter more examinations one has to use the button of "More", which clicked results in displaying additional row to enter examination. Rows left unfilled are ignored while saving data. After entering all data in form, one has to confirm them with the button of "Add". The same way on enters changes to data of noxious or strenuous agent confirming them finally with the button named "Update". To remove noxious or strenuous agent one has just to click the button of "Delete" in the form.

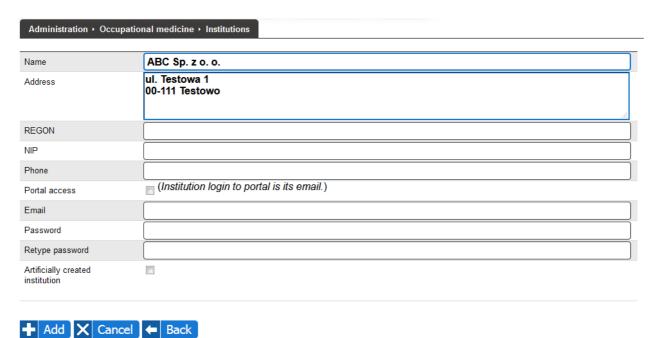
### Institutions

This dictionary allows to enter names and addresses of institutions which employes / students will pass through occupational medicine examinations. After choosing the functionality of "Institutions" from submenu "Occupational medicine" in menu "Administration" there appears list of institutions. Next to each position on the list there are visible buttons allowing for modification and removal of

the given position and for contracts management, under the list there is a button allowing for addition of new position.



By clicking the button of "Add" empty form is displayed, while clicking the button of "Edit" displays form filled with the data of chosen institution in change mode, and clicking the button of "Delete" displays form filled with the data of chosen institution in read only mode.



To add institution one has to enter its data within the form and confirm it with the button "Add" (in order to provide the institution with access to the internet portal, enter the email address, which will be the login, and password). To ensure the possibility of conducting occupational medicine examinations for persons applying for their own request that is, to create a generic set of positions independent of the institution, the institution should be marked as created artificially (for such institution it will not be possible to define contracts). To modify data of institution one has to change its data within the form and confirm it with the button "Update". To remove institution one has just to click the button of "Delete" within the form to confirm it.

To go to the institution's contract management functionality, click the "Contracts" button next to the institution in the list. Then a list of contracts will be displayed and with each of them the buttons:

- Copy allows you to quickly create a copy of the contract
- Edit allows you to edit the contract data
- Delete allows you to delete the contract
- Print allows you to download a PDF file with the content of the contract to be printed
- Settlement allows you to view and print the status of the contract with the amounts of

payment for the execution of this contract

Under the list of contracts, the "Add contract" button is visible, allowing the addition of a new contract.



To add new contract one has to click the button "Add contract". After clicking "Add contract" button, there is displayed a form to add a new contract, where next to the basic data of contract can be entered also its content and the position corresponding to the terms of settlement of the contract. Entering content is done by using an editor that allows text formatting (change font size, alignment, bold, italic, underline, strikethrough, subscript, superscript), the creation of bullets (numbered and unnumbered), insert symbols and tables on the principle such as editors like OpenOffice, LibreOffice or Microsoft Word. Placing tag {X} in the content of the contract will cause that on the print of the contract this tag will be replaced by automatically generated entries corresponding to particular positions of the contract. In the form of adding a contract, you should indicate employees along with the positions and ranges of occupational medicine which the contract covers. To add an employee one should select a post with the range of occupational medicine (the posts and appropriate ranges of occupational medicine must be defined before - see next chapter!) And then in the field with a green background start to enter the employee (patient) data - it may be the name (size letters is irrelevant), name (case insensitive), PESEL and / or date of birth in YYYY-MM-DD format and then the system will display persons with matching data on the hints list - the correct person should be selected by clicking on the hints list. In this way, you can enter any number of persons. Each person entered in this way displays a checked box - if any of the persons was added by mistake, then this field should be unmarked before saving the data and the person will be omitted when saving. In the form of adding the contract it is possible to define any number of contract's positions of two types:

- positions of the contract in relation to commercial visits
- positions of the contract in relation to commercial services

Positions of the contract in relation to commercial visits determine the rate by which the institution will pay for carrying out the commercial visits realized that meet certain conditions. The rates can be defined as the amount per visit (payment depends on the number of occupational medicine visits carried out for employees of the institution), the amount per hour (payment is dependent on the duration of the visits carried out for employees of the institution), percent per visit (payment is a percentage of fee for occupational medicine visit caried out for employees of the institution), the formula for the visit (payment depends on the fee for the occupational medicine visit carried out for employee of the institution and calculated according to a defined pattern). For each rate can specified the conditions under which the payment should be implemented according to the rate. Conditions can be defined as any combination of the following criteria:

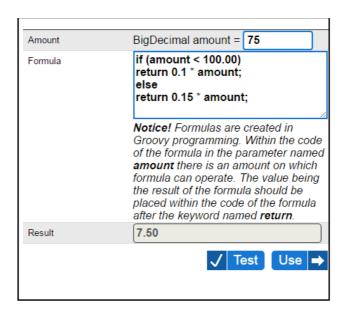
• place - identification of place means that the payment of the specified rate will be implemented only for visits carried out in the specified place

- specialty identification of specialty means that the payment of the specified rate will be implemented only for the visits carried out in a given specialty clinics
- visit kind identification of the kind of visits means that the payment of the specified rate will be implemented only for realized visits of particular kind (scheduled, additional)
- visit type identification of the type of visits means that the payment of the specified rate will be implemented only for realized visits of particular type; a list of possible types of visits to select is only available when you select specialty
- procedure identification of the procedure code (ICD-9) means that the payment of the specified rate will be implemented only for realized visits where staff done the procedure of the particular code
- days identification of the type of days means that the payment of the specified rate will be implemented only for the visits carried out in the indicated days (weekdays, weekends, certain day of the week, holidays, specified day); when the rate is applying to visits realized a certain date there should be given a specific date which such situation is concerning
- hours identification of the hours means that the payment of the specified rate will be implemented only for the visits carried out in certain hours

Positions of the contract in relation to commercial services determine the rate by which the institution will pay for carrying out the commercial services that meet certain conditions. The rates can be defined as the amount per service (payment depends on the number of services realized during occupational medicine visits for employees of the institution), percent per service (payment is a percentage of fee per service realized during occupational medicine visits for employee of the institution), the formula for the visit (payment depends on the fee for the service realized during occupational medicine visits for employees of the institution and calculated according to a defined pattern). For each rate can be specified conditions under which the payment should be implemented according to the rate. Conditions can be defined as any combination of the following criteria:

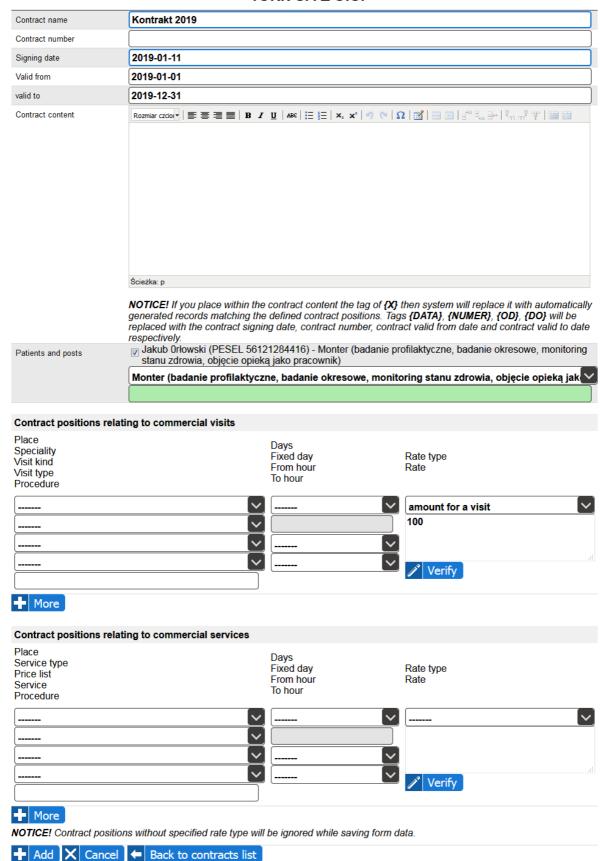
- place identification of place means that the payment of the specified rate will be implemented only for services carried out in the specified place
- service type identification of the type of service means that the payment of the specified rate will be implemented only for service realized in clinics of particular type;
- price list identification of price list means that the payment of the specified rate will be implemented only for the realized services selected from the indicated price list
- service identification of the service code means that the payment of the specified rate will be implemented only for realized services having this service code under contracts with the NFZ.
- procedure identification of the procedure code (ICD-9) means that the payment of the specified rate will be implemented only for services realized during the visits when staff done the procedure with particular code
- days identification of the type of days means that the payment of the specified rate will be implemented only for the services carried out in the indicated days (weekdays, weekends, certain day of the week, holidays, specified day); when the rate is applying to services realized a certain date there should be given a specific date which such situation is concerning
- hours identification of the hours means that the payment of the specified rate will be implemented only for the services carried out in certain hours

The rates defined as an amount or a percentage are floating-point numbers determined with an accuracy of up to two places after the decimal point. The rates defined as formula (for commercial visits and services) are created as ports of the source code in the Groovy programming language (http://www.groovy-lang.org/documentation.html). In the content of formula in the parameter called **amount** is available the amount of the fee for the visit / service for which the formula can operate. The value representing the result of the formula should be placed in the content of the formula after the **return** keyword. At any field of rate allows the entering the formula there is the "Verify" button. This button becomes active when you select a formula as a kind of rates and makes it easier to create and test formulas. Click on this button opens a new window with a field for entering a formula and a field to enter the test amount. To ensure proper operation of the formula, after entering the test amount and content of the formula, click "Verify" button. If the content of the formula is not a valid code in the Groovy programming language, the system reports an error, and if it is a valid code in the Groovy programming language then in the "Result" field will be the result of calculation of the formula using a specified test amount. Entering any amendments to the content of the formula and re-test for different test amounts you can make sure of the correctness of created formula. Clicking on "Use" button closes the test formula and the final content of the formula is automatically inserted into the data form of contract.



In the data form of contract for each of the two types of positions there is also available a "More" button, which the next click displays the next lines in the form to enable the introduction of more positions of the contract. Positions of the contract does not have to be exclusive - you can define multiple positions of the contract under which there will be calculated payment for the same visit / service (eg. The definition of the rate for each commercial visit and rates for each commercial service will mean that for each commercial visit will be calculated payment basing on the first rates and additionally for each commercial service realized during this visit will be calculated additional value of payments by second rate). This solution allows you to build multiple mechanisms of provision calculation.

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After entering all the data, save them by clicking the "Add" button. Contract position that does not have specified the type of rates are skipped at saving data. After saving, the data form of the contract is empty again allowing the entering the next contract. To cancel entering another contract, click "Back to the list of contracts." Added contract becomes visible on the list of contracts of staff.

If there is a need for a new contract, which will be slightly different from the existing one, then the easiest way is to create a copy of an existing contract and then modify the data of that copy. To create a copy of the contract, click "Copy" button at the contract list. There will appear a window asking you to enter the name of a copy of the contract.



After entering the name of a copy of the contract and confirming by pressing "OK" button on the list of contracts will appear a newly created copy. A copy differs from the original contract only name. To modify its other data one has to click button "Edit" by this copy.

If you want to modify the contract data, click "Edit" at the contract list. There will appear the data form of the contract the same as at adding a new contract, but filled with data. After making changes (editing data of contract has the same rules as at adding a new contract), save them by clicking the "Save" button below the form.

If there is need to remove the contract, click the "Delete" button at the contract list. There will be displayed the data form of contract identical as at editing contract data but in read-only mode. Pressing the "Delete" button below the form removes the contract from the system.

To print the contract, click "Print" button at the contract list. It opens the PDF document with the contents of the contract to print. Placing in the content of the contract the tags {DATA}, {NUMER}, {OD} and {DO} will automatically replace them by the date of signing the contract, contract number, date of contract beginning and end date of the contract. If the content of the contract has placed {X} marker, it is replaced by automatically generated entries corresponding to particular positions of the contract.

To check the status of the contract click "Settlement" button at the contract on the list. You will see a table with the list of positions of the contract. For each position there are given:

- realization conditions
- rate, according to which there is calculated value of the payment due to staff by realization of visits / services that meet specified conditions
- value of payment to be taken from institution by realization of visits / services that meet specified conditions

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### **Umowa 2019**



Lp. Realization conditions	Rate	Value	Details
1 NFZ VISITS Place: Podkowa Leśna Błońska (ul. Błońska 46/48, 05-807 Podkowa Leśna)	50.00 PLN for a visit		0.00 PLN Details
2 COMMERCIAL VISITS Place: Podkowa Leśna Błońska (ul. Błońska 46/48, 05-807 Podkowa Leśna)	100.00 PLN for a visit		0.00 PLN Details
TOTAL			0.00 PLN

NOTICE! Within formulas amount is charge for visit / service.



At each position of the contract in the table there is "Details" button allows you to view (in new window) realized visits / services that make up the amount of the payment.

In the case of positions of the contract relating to commercial visits, in details for each visit there are visible date, type, clinic, visit cost, rate and value of the payment for realization of the visit.



\_\_\_\_

X Close

In the case of positions of the contract relating to commercial services, in details for each service there are visible date, type, clinic, service name, quantity, unit price, rate and value of the payment for realization of the visit.



NOTICE! Within formulas amount is charge for visit / service taken from patient.



Above the table showing the status of realization of the contract there is a form to display the status of realization of the contract at any time. To view the status of realization of the contract in a given period in the form should be set border dates of the period and press the "Display" button - then a

table showing the status of realization of the contract will be limited to visits / services provided in a given period. Preview of the status of realization of the contract in any period is applicable in case of monthly periods of the contract settlement.

Under a table showing the status of realization of the contract there is the "Print" button, which clicked opens a PDF document presenting the state of realization of the contract, parted into particular positions and with details of visits / services realized under the position of the contract.

### **Posts**

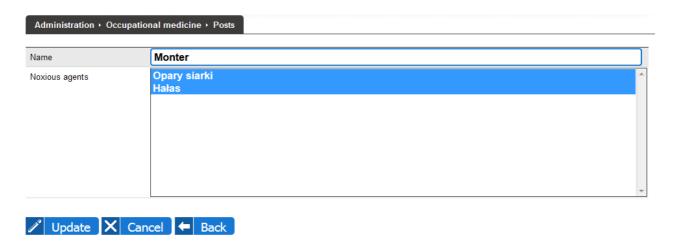
This dictionary allows to enter data of posts / courses, on which work / study takes place with exposure to noxious or strenuous agents. After choosing the functionality of "Posts" from submenu "Occupational medicine" in menu "Administration" there appears list of institutions previously defined, which employes / students will pass through occupational medicine examinations. Next to each institution there is a button allowing to choose the given institution.



By clicking the button of "Choose" there appears list of posts / courses within the chosen institution. Next to each position on the list there are visible buttons allowing for modification and removal of the given position and button for defining occupational medicine examination, under the list there is a button allowing for addition of new position.



By clicking the button of "Add" empty form is displayed, while clicking the button of "Edit" displays form filled with the data of chosen / course post in change mode, and clicking the button of "Delete" displays form filled with the data of chosen post / course in read only mode.

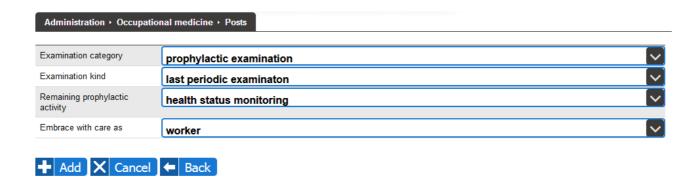


To add post / course one has to enter its name within the form and choose noxious agents that work / study on a given post / course is exposed to, and then confirm it with the button "Add". To modify data of post / course one has to change its name and/or noxious agents within the form and confirm it with the button "Update". To remove post / course one has just to click the button of "Delete" within the form to confirm it.

To define which occupational health medicine examination should be carried out on a given post (which is necessary for defining contracts - see the previous chapter!), click the "Examinations" button at a given post on the posts list. Then a list of occupational medicine ranges will be displayed with the buttons that allow modification / deletion of each range and a button enabling the definition of visits within which the examinations will be carried out, under the list there is a button available to add a new range.



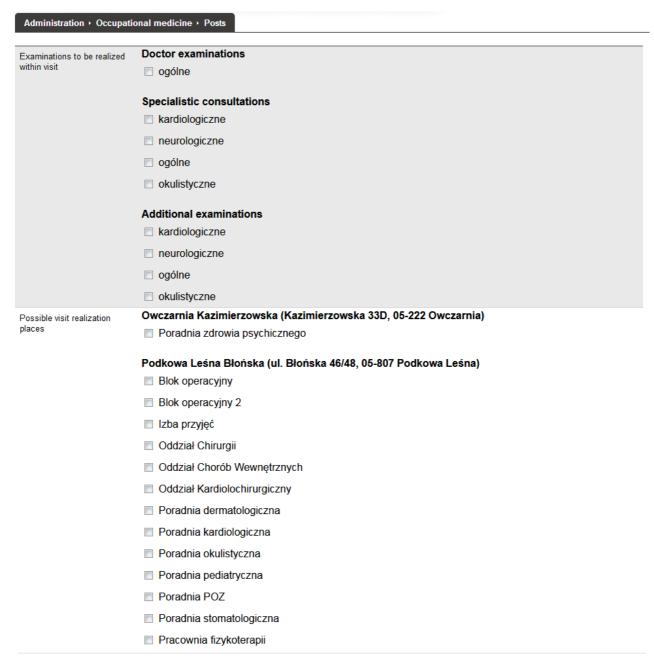
To add a new range of occupational medicine to a given post, click the "Add" button. The form for adding the range of occupational medicine will be displayed. After filling in, the data should be confirmed with the "Add" button.



To modify the details of the range of occupational medicine, click the "Edit" button for the given range of occupational medicine on the list. The form identical to that of adding a new range will be displayed, except that it is filled with the modified range data. After making modifications, they must be confirmed with the "Update" button. To remove the range of occupational medicine, you should click the "Delete" button in the given range of occupational medicine on the list. A form identical to that of the modification of the range of occupational medicine will be displayed, except that it is displayed in read-only mode. The intention to delete the range should be confirmed with the "Delete" button. To define occupational medicine visits from a given range, click on the "Visits" button in the given range of occupational medicine on the list. A list of the definitions of occupational medicine visits will be displayed. The definition of an occupational medicine visit consists of the determination of which examination / examinations will be carried out during the visit and in which clinic / clinics the visit may be carried out. At each visit definition, you can see buttons that allow you to modify and delete a given definition, there is a button under the list that allows you to add a new visit definition.



To add a new definition of the occupational medicine visit, click the "Add" button. The form for adding the visit definition will then be displayed (by default, all tests resulting from noxious and arduous agents specific to a given post are selected in it). After filling in, the data should be confirmed with the "Add" button.





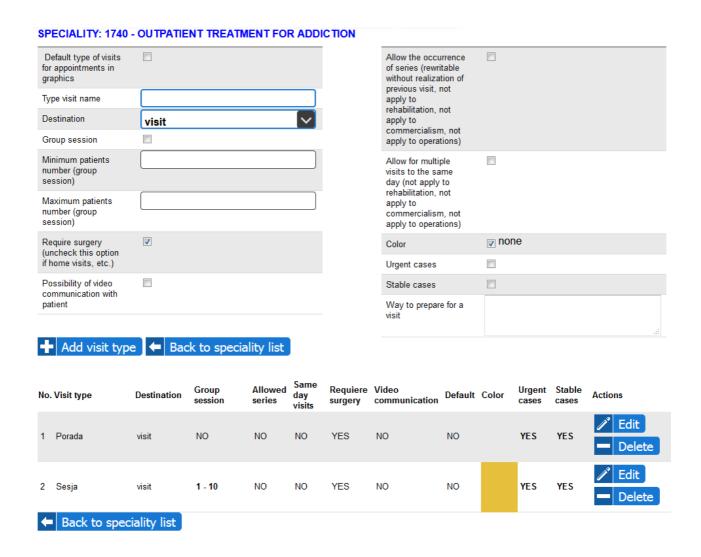
To modify the details of the visit definition, click the "Edit" button for the given definition of the visit in the list. The form identical to the one in the case of adding a new visit definition will be displayed, except that it is filled with the modified visit definition data. After making modifications, they must be confirmed with the "Update" button. To delete the visit definition, click the "Delete" button for the given definition of the visit in the list. The form identical to that of the visit definition modification will be displayed, except that it is displayed in read-only mode. The intention to delete the visit definition should be confirmed with the "Delete" button.

# **Dictionaries**

In the system, there is dictionaries management functionality, typically used to fill in drop-down lists if forms, which appear in various places of the system.

#### Visit types

Types of visits are used to classify visits (eg. first-time, standard, etc.), and also to specify the criteria for entry to visit (eg. session, home). Dictionary of visits' types is available by selecting the "Visit types" functionality from the "Dictionaries" submenu in the "Administration" menu, which displays a list of all the clinics' specialty occurring in the organizational structure of the healthcare facility. After choosing specialty is displayed a form of adding a new type of visit and below, there is the list of all defined for a given specialty types of visits and at each of them, there is a button to edit or delete this type of visit.



For each of the types of visits you can specify the following parameters:

- Destination determines whether a type of visit is used for planning visits or for planning operations (default selection is "visit")
- Group session By default, all visits are individual (it is possible to sign up only one patient to visit), but if you select the "Group session" then for a visit you will be able to sign up more than one patient
- Minimum patients' number if the "Group Session" field is checked then you must specify the minimum number of patients who have to be signed up for a visit so it can be executed
- Maximum patients' number if the "Group Session" field is checked then you must specify

the maximum number of patients who can be signed up for a visit

- Require surgery option is selected by default. For outpatient visits must be specified surgery in which the visit is done; deselect this option for home visits
- Possibility of video communication with patient selecting this option allows to enable the video-consultation mode of the patient using the jHIS system portal with a doctor using the surgery module in the jHIS system; the option is not available for group sessions
- Allow the occurrence of series in the case of NFZ's visits by default system operating in such a way that the patient can be signed up in just one visit to the specialization (for the next, it will be able to sign only when the first one will be done, it will be canceled or the date passes); checking the "Allow the occurrence of series" allows you to sign up for more than one NFZ's visit (but every at other day); The field does not matter in case of commercial visits, at which records have no restrictions, neither in case of operations.
- Allow for multiple visit to the same day checking this box next to the former allows you to make records for more than one NFZ's visit without limitation (so you can arrange any number of such visits, both on different days and on the same day); The field does not matter in case of commercial visits, at which records have no restrictions, neither in case of operations.
- Color allows to specify a color, that slots and the visit of that type will be highlighted in graphics and timetables; By default, the type of visit is not highlighted (is checked "none" option, which can be deselected and then there will be displayed a field of selecting color from the palette)
- Virgent cases at reporting to the NFZ first free dates for urgent cases (in the context of reporting waiting lists) will be taken into account only dates with types of visits at which selected this option
- > Stable cases at reporting to the NFZ first free deadlines for stable cases (in the context of reporting waiting lists) will be taken into account only terms from types of visits at which selected this option

Type the visit marked as the default will be automatically selected when planning dates of admissions in work's graphics of staff and equipment (with the possibility of changing to another if there is more than one type of visit).

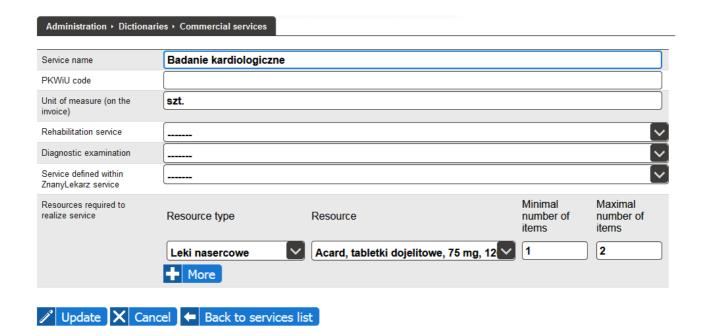
To modify the type of visits, press "Edit" button at them - the form of adding a type of visits on top of the page changes to a form of editing selected type of visit – so just make changes and save them by pressing the "Update visit type" button. It is also possible on the basis of a particular type of visits to create a new type of making changes and confirm them by pressing the "Add visit type" button.

#### **Commercial services**

Dictionary of commercial services is defining a list of services provided for consideration by a health care facility. After selecting the "Commercial services" functionality from the "Dictionaries" submenu in the "Administration" menu, there is displayed a list of defined services, and at each of these, there are buttons for editing or deleting. Below the list, there is a button of adding a new service.

Administration + Dictionaries + Commercial services			
No. Service name	PKWiU code	Unit of measure	Actions
1 Badanie dna oka		szt.	
2 Ćwiczenia izometryczne		szt.	Edit
3 Diagnostyka oka		szt.	Edit
4 EEG		szt.	Edit
5 EKG			Edit
+ Add service X Finish			

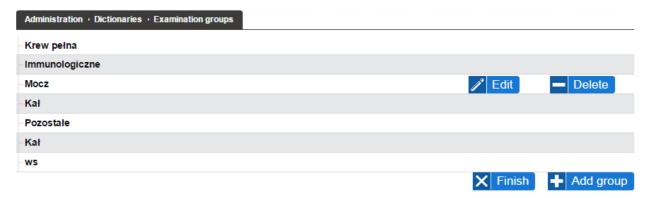
Each of these buttons leads to a form of service's data, where you can specify its name, PKWiU code and the unit of measure used when issuing invoices for the realization of the service. If in the configuration of application is set a simplified version of the rehabilitation module with automatic price valuation for the surgeries (see the "Configuration" section), then for each of the services provided in rehabilitation outpatient should be indicated to which surgery from a catalog of rehabilitation services corresponds the commercial service that is necessary for automatically determining price of rehabilitation surgery. If commercial service is identical to diagnostic examination then one has to specify corresponding diagnostic examination (realization of such service during visit leads to include service price in visit price and to generate order for the corresponding diagnostic examination but without accounting payment for that examination). If the integration mechanisms of the iHIS system with the ZnanyLekarz website are enabled and the given service operates on the ZnanyLekarz website, then in the field "Service defined within ZnanyLekarz service" service should indicate the service corresponding to the given on ZnanyLekarz website. For the service, it is also possible to specify the resources necessary for its implementation. For each resource, specify the minimum and maximum number of pieces required to provide the service. By default, one row is displayed with fields for entering one resource. To enter more resources, use the "More" button, which each subsequent click will display the next row with fields for entering the next resource. Rows in which all fields for entering resource data will be left blank will be ignored when saving data. NOTICE! Defining the resources necessary to perform the service will cause that the doctor in order to close a commercial visit will have to indicate the appropriate resources and in order for them to be able to do so, they will have to be put into store beforehand.



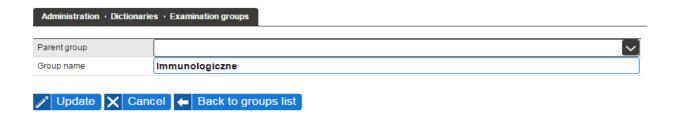
After completing the form or entering changes to the form, data must be confirmed by the button.

### Diagnostic examination groups

The system allows you to define diagnostic examinations which doing will be able to order by the doctors working in health care institution. These tests for readability can be grouped. The "Diagnostic examination groups" functionality from the "Dictionaries" submenu in the "Administration" menu allows you to define groups of examinations. After selecting this functionality, there is displayed a tree of examination's groups. Below the tree, there is button of adding a new group, and at each item in the tree when you hover the cursor over them, there are displayed the buttons of editing or deleting the group.



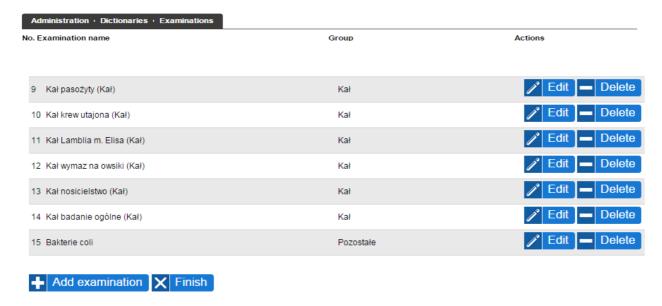
Each of these buttons directs to the form of group's data.



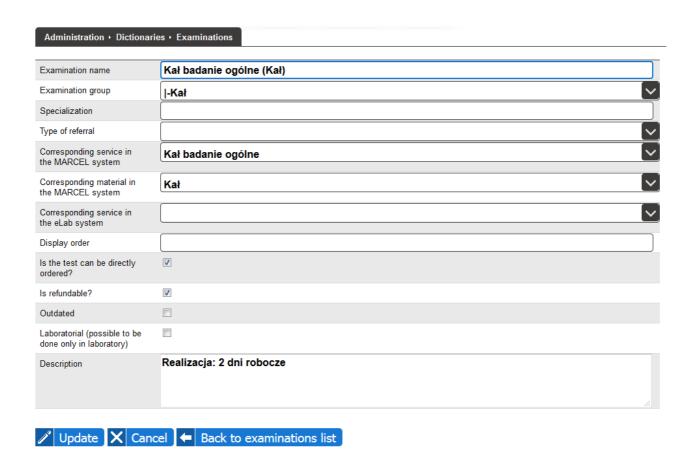
After completing the form or entering changes to the form, data must be confirmed by the button.

#### **Diagnostic examinations**

To define examinations ordered by the doctors of the healthcare facility, there is "Diagnostic examinations" functionality from the "Dictionaries" submenu in the "Administration" menu, which presented a list of defined examinations. At each examinations from the list, there are edit and delete buttons and below the list is button of adding a new examination.



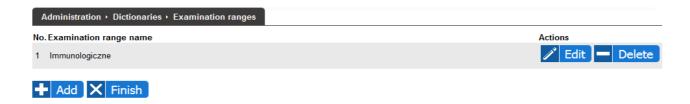
Each of these buttons directs the examinations' data form.



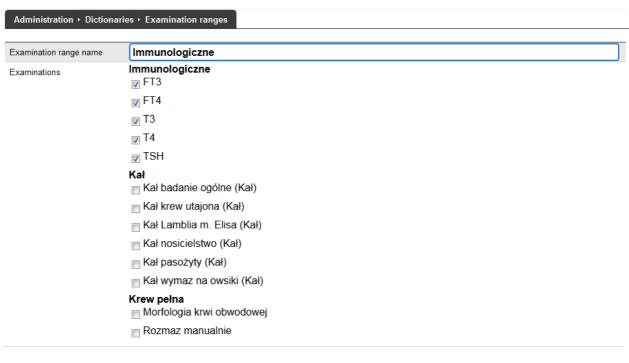
In the form, examination can be assigned to the one of previously defined groups. Furthermore, you can select one of the predefined types of referral (when ordering, the examinations assigned to different types of referrals will be printed on separate prints). If the jHIS system has been configured to communicate with the MARCEL system, then the examination should indicate the corresponding service and material in the MARCEL system. If the jHIS system has been configured to communicate with the eLab system, then the examination should indicate the corresponding service in the eLab system. In addition one can enter within the form a number of examination on list of examinations (examinations are displayed in order of these numbers and if they don't have numbers specified, then they are displayed in alphabetical order). If the test cannot be ordered by doctors (eg. additional examinations is always carried out by a laboratory together with a specific examination ordering by doctors), deselect the appropriate option in the form. If examination is refunded one has to mark an appropriate option within the form. If examination is outdated (is is no more realized by laboratories), then one has to mark option "Outdated" - system will not allow to order such an examination any more. If examination (including sampling) is possible to be done only in laboratory one has to mark option "Laboratorial". After completing the form, or make changes you have to save the data by button specified to the particular form.

#### Diagnostic examination ranges

The "Diagnostic examination ranges" functionality from the "Dictionaries" submenu in the "Administration" menu allows you to manage ranges of ordered examinations. Ranges are visible as additional tabs of diagnostic examnations ordering form within surgery room. After selecting this functionality, there is displayed a list of examinations ranges with "Edit" and "Delete" buttoon next to each of them and below the list there is "Add" button visible.



Each of these buttons directs to the form of group's data.



Within the form one specifies range name and examinations the given range contain. After completing the form or entering changes to the form, data must be confirmed by the button appropriate for the given form.

#### Rehabilitation services

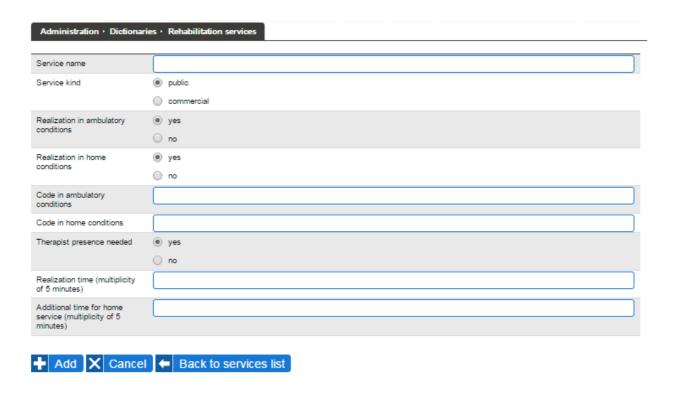
The "Rehabilitation services" functionality from the "Dictionaries" submenu in the "Administration" menu is used to manage the dictionary of types of rehabilitation services. After selecting this functionality there is displayed a list of defined rehabilitation services and at each of these there are "Edit" and "Delete" buttons, and under the list there is visible the "Add service" button.

lo.	Service name	kind	Realization in ambulatory conditions	Realization in home conditions	Code in ambulatory conditions	Code in home conditions	Therapist presence needed	time	Additional time for home service [minutes]	Actions
1	ćwiczenia izometryczne	commercial	yes	yes	-	-	yes	15	30	<ul><li>✓ Edit</li><li>Delete</li></ul>
2	ćwiczenia izometryczne	public	yes	yes	5.11.01.0000070	5.11.04.0000070	yes	15	30	<ul><li>✓ Edit</li><li>Delete</li></ul>
3	fango	commercial	yes	no	-		no	5		<ul><li>✓ Edit</li><li>Delet</li></ul>
4	fango	public	yes	no	5.11.01.0000081	-	no	5	-	<ul><li>✓ Edit</li><li>Delete</li></ul>
5	jonoforeza	commercial	yes	yes	-	-	no	20	50	<ul><li>✓ Edit</li><li>Delete</li></ul>
8	jonoforeza	public	yes	yes	5.11.01.0000025	5.11.04.0000025	no	20	50	<ul><li>✓ Edit</li><li>Delete</li></ul>
7	krioterapia	public	yes	no	5.11.01.0000055	-	no	15	-	<ul><li>✓ Edit</li><li>Delete</li></ul>
В	laseroterapia punktowa	public	yes	yes	5.11.01.0000043	5.11.04.0000043	no	10	40	<ul><li>✓ Edit</li><li>Delete</li></ul>
9	masaż limfatyczny ręczny	public	yes	yes	5.11.01.0000085	5.11.04.0000085	yes	10	40	<ul><li>Edit</li><li>Delet</li></ul>

To add a new service, click the "Add service". There will be displayed the data form of service and in it:

- service name
- service kind NFZ's services and commercial services are defined independently
- realization in ambulatory conditions determines whether the service can be realized in an ambulatory conditions
- realization in home conditions determines whether the service can be done at home
- code in ambulatory conditions service code realized in ambulatory conditions from a contract with the NFZ (only for NFZ services realized in ambulatory conditions)
- code in home conditions service code realized in home conditions from a contract with the NFZ (only for NFZ services realized in home conditions)
- therapist presence needed determines whether during the entire service there is required the constant presence of a therapist with the patient (if is required then therapist will not be able to execute other treatments during the surgery)
- realization time duration of treatment including the preparation and change of equipment for the next ones (it has to be a multiple of 5 minutes)

 additional time for home service - extra time required for access to the patient's home to realize the surgery and return after surgery to the healthcare facility (it has to be a multiple of 5 minutes)



After completing the form, save the data by clicking the "Add" button.

To modify the data of service, click "Edit" button at the service from the list. There will be displayed a completed data form of service, the same as for adding a new service. After entering the changes, data should be saved by clicking the "Update" button.

To delete a service, click the "Delete" button at the service from the list. There will be displayed a completed data form of service, the same as for adding a new service, but in read-only mode. To confirm deletion of service, click the "Remove" button.

#### **REGON numbers database**

To create the REGON numbers database there is "REGON numbers database" functionality in the "Dictionaries" submenu in the "Administration" menu, where is presented a list of REGON numbers entered into the database. At every REGON number on the list there is the corresponding name of entity and the buttons of removing or editing the entity and below the list is a button adding a new REGON number.

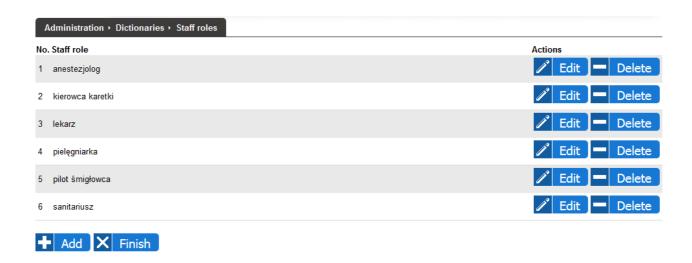


Each of mentioned buttons directs to form of REGON number.

After completing the form or making changes save data by button specific to particular form.

#### Staff roles

The "Staff roles" functionality from the "Dictionaries" submenu in the "Administration" menu is used to manage the dictionary of roles of medical and non-medical staff involved in treatment activities. After selecting this functionality, there is displayed a list of defined roles of staff and at each of these there are "Edit" and "Delete" buttons and under the list there is "Add" button.



Each of these buttons directs to the form of name of the staff role.

After completing the form or entering changes, save data by button specific to its form.

#### **Stores**

The functionality of "Stores" from submenu "Dictionaries" within menu "Administration" is intended to manage dictionary of stores functioning within the health care company. After choosing this functionality there appears list of stores and by each of them there are buttons "Edit" i "Delete". Under the list of stores there is a button "Add".



To add new store one has to click the button "Add". Then system displays form for store data. After entering data one has to save them by clicking the button "Add".

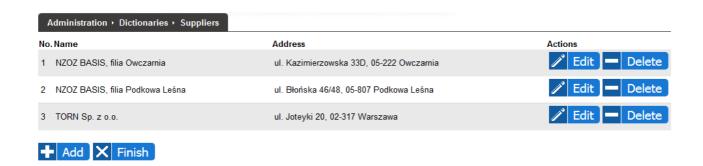


To modify store data one has to click the button "Edit" by the given store within the list. Then system displays form identical as one used to add new store except that it is filled with data of given store. After making changes one has to save data by clicking the button "Update".

To delete store one has to click the button "Delete" by the given store within the list. Then system displays form identical as one used to edit store data except that it is displayed in read only mode. Intention of store deletion one has to confirm by clicking the button "Delete".

### **Suppliers**

The functionality of "Suppliers" from submenu "Dictionaries" within menu "Administration" is intended to manage dictionary of suppliers that supply the health care company. After choosing this functionality there appears list of suppliers and by each of them there are buttons "Edit" i "Delete". Under the list of suppliers there is a button "Add".



To add new supplier one has to click the button "Add". Then system displays form for supplier data. After entering data one has to save them by clicking the button "Add".

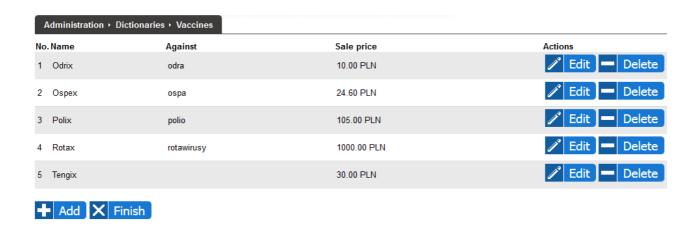


To modify supplier data one has to click the button "Edit" by the given supplier within the list. Then system displays form identical as one used to add new supplier except that it is filled with data of given supplier. After making changes one has to save data by clicking the button "Update".

To delete supplier one has to click the button "Delete" by the given supplier within the list. Then system displays form identical as one used to edit supplier data except that it is displayed in read only mode. Intention of supplier deletion one has to confirm by clicking the button "Delete".

#### **Vaccines**

The functionality of "Vaccines" from submenu "Dictionaries" within menu "Administration" is intended to manage dictionary of vaccines. After choosing this functionality there appears list of vaccines and by each of them there are buttons "Edit" i "Delete". Under the list of vaccines there is a button "Add".



To add new vaccine one has to click the button "Add". Then system displays form for vaccine data. After entering data one has to save them by clicking the button "Add".

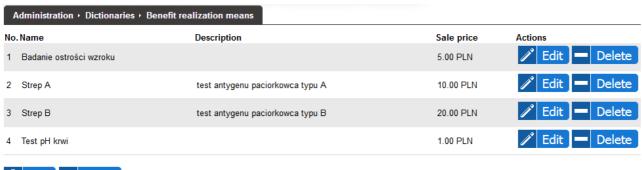


To modify vaccine data one has to click the button "Edit" by the given vaccine within the list. Then system displays form identical as one used to add new vaccine except that it is filled with data of given vaccine. After making changes one has to save data by clicking the button "Update".

To delete vaccine one has to click the button "Delete" by the given vaccine within the list. Then system displays form identical as one used to edit vaccine data except that it is displayed in read only mode. Intention of vaccine deletion one has to confirm by clicking the button "Delete".

#### **Benefit realization means**

The functionality of "Benefit realization means" from submenu "Dictionaries" within menu "Administration" is intended to manage dictionary of means used for realization fo commercial benefits. After choosing this functionality there appears list of means and by each of them there are buttons "Edit" i "Delete". Under the list of means there is a button "Add".





To add new means one has to click the button "Add". Then system displays form for means data. In the form, next to the data of the means, it is possible to enter the possible results of benefits provided using the given means - by default, one field is displayed to enter one result; to display more fields, use the "More" button; fields left blank will be ignored when saving data. After entering data one has to save them by clicking the button "Add".



To modify means data one has to click the button "Edit" by the given means within the list. Then system displays form identical as one used to add new means except that it is filled with data of given means. After making changes one has to save data by clicking the button "Update".

To delete means one has to click the button "Delete" by the given means within the list. Then system displays form identical as one used to edit means data except that it is displayed in read only mode. Intention of means deletion one has to confirm by clicking the button "Delete".

#### **Documentation storage places**

The functionality of "Documentation storage places" from submenu "Dictionaries" within menu "Administration" is intended to manage dictionary of places of storage of paper medical documentation. After choosing this functionality there appears list of storage places and by each of them there are buttons "Edit" i "Delete". Under the list of storage places there is a button "Add".



To add new storage place one has to click the button "Add". Then system displays form for storage place data. After entering data one has to save them by clicking the button "Add".



To modify storage place data one has to click the button "Edit" by the given storage place within the list. Then system displays form identical as one used to add new storage place except that it is filled

with data of given archive. After making changes one has to save data by clicking the button "Update".

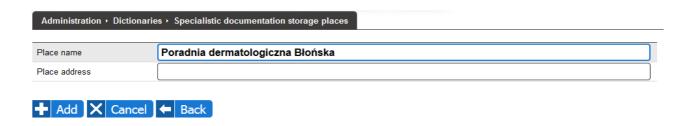
To delete storage place one has to click the button "Delete" by the given storage place within the list. Then system displays form identical as one used to edit storage place data except that it is displayed in read only mode. Intention of storage place deletion one has to confirm by clicking the button "Delete".

#### **Specialistic documentation storage places**

The functionality of "Specialistic documentation storage places" from submenu "Dictionaries" within menu "Administration" is intended to manage dictionary of places of storage of paper specialistic medical documentation. After choosing this functionality there appears list of storage places and by each of them there are buttons "Edit" i "Delete". Under the list of storage places there is a button "Add".



To add new storage place one has to click the button "Add". Then system displays form for documentation storage place data. After entering data one has to save them by clicking the button "Add".



To modify storage place data one has to click the button "Edit" by the given storage place within the list. Then system displays form identical as one used to add new storage place except that it is filled with data of given archive. After making changes one has to save data by clicking the button "Update".

To delete storage place one has to click the button "Delete" by the given storage place within the list. Then system displays form identical as one used to edit storage place data except that it is displayed in read only mode. Intention of storage place deletion one has to confirm by clicking the button "Delete".

#### **Documentation archivization places**

The functionality of "Documentation archivization places" from submenu "Dictionaries" within menu "Administration" is intended to manage dictionary of places of archivization of paper medical documentation. After choosing this functionality there appears list of archivization places and by each of them there are buttons "Edit" i "Delete". Under the list of archivization places there is a button "Add".



To add new archivization place one has to click the button "Add". Then system displays form for archivization place data. After entering data one has to save them by clicking the button "Add".



To modify archivization place data one has to click the button "Edit" by the given archivization place within the list. Then system displays form identical as one used to add new archivization place except that it is filled with data of given archive. After making changes one has to save data by clicking the button "Update".

To delete archivization place one has to click the button "Delete" by the given archivization place within the list. Then system displays form identical as one used to edit archivization place data except that it is displayed in read only mode. Intention of archivization place deletion one has to confirm by clicking the button "Delete".

#### **Interaction agents**

The functionality of "Interaction agents" from submenu "Dictionaries" within menu "Administration" is intended to manage dictionary of agents drug interact to. After choosing this functionality there appears list of agents and by each of them there are buttons "Edit" i "Delete". Under the list of agents there is a button "Add".



To add new agent one has to click the button "Add". Then system displays form for agent name. After entering name one has to save it by clicking the button "Add".



To modify agent name one has to click the button "Edit" by the given agent within the list. Then system displays form identical as one used to add new agent except that it is filled with name of given agent. After making changes one has to save name by clicking the button "Update".

To delete agent one has to click the button "Delete" by the given agent within the list. Then system displays form identical as one used to edit agent name except that it is displayed in read only mode. Intention of agent deletion one has to confirm by clicking the button "Delete".

#### **Absence types**

The functionality of "Absence types" from submenu "Dictionaries" within menu "Administration" is intended to manage dictionary of staff absence types and equipment unavailability types used to state staff absence or equipment unavailability within timetables. After choosing this functionality there appears list of absence types and by each of them there are buttons "Edit" i "Delete". Under the list of absence types there is a button "Add".



To add new absence type one has to click the button "Add". Then system displays form for absence type name. After entering name one has to save it by clicking the button "Add".

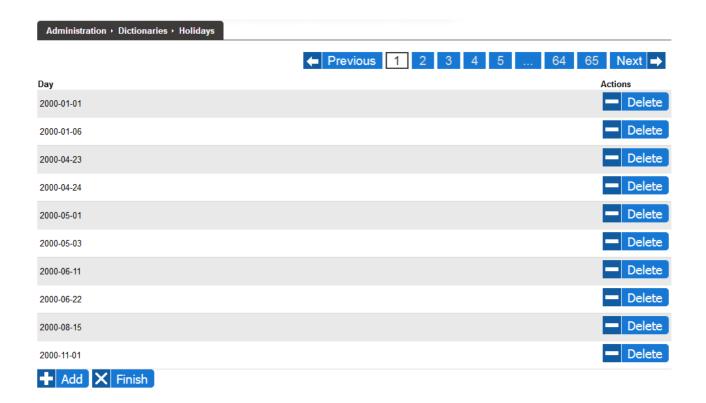


To modify absence type name one has to click the button "Edit" by the given absence type within the list. Then system displays form identical as one used to add new absence type except that it is filled with name of given absence type. After making changes one has to save name by clicking the button "Update".

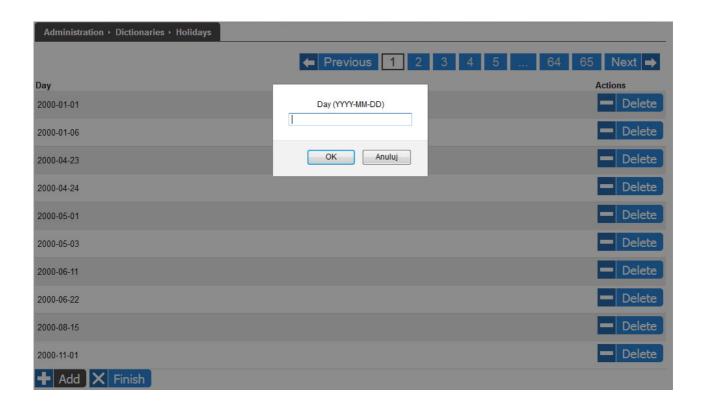
To delete absence type one has to click the button "Delete" by the given absence type within the list. Then system displays form identical as one used to edit absence type name except that it is displayed in read only mode. Intention of absence type deletion one has to confirm by clicking the button "Delete".

#### **Holidays**

The functionality of "Holidays" from submenu "Dictionaries" within menu "Administration" is intended to manage dictionary of holidays (this is not for saturdays and sundays) used within staff and equipment timetables. After choosing this functionality there appears list of holidays and by each of them there is a button "Delete". Under the list of holidays there is a button "Add". The dictionary is filled by default with the list of holidays for the years 2000-2049.



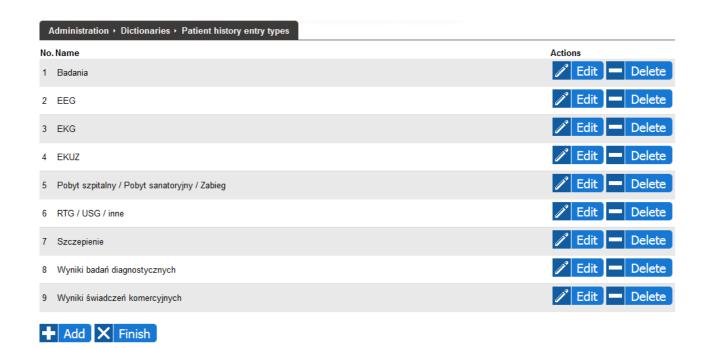
To add new holiday one has to click the button "Add". Then system displays window with field to enter the date of holiday. After entering the date one has to save it by clicking the button "OK".



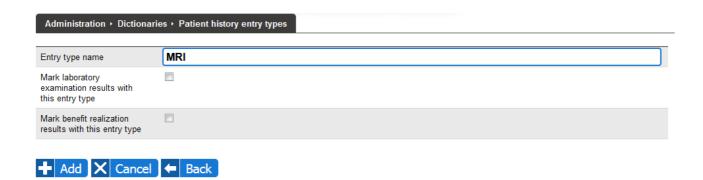
To delete holiday one has to click the button "Delete" by the given holiday within the list. Then system displays window with request for confirmation of intention to delete holiday. Intention of holiday deletion one has to confirm by clicking the button "OK".

#### Patient history entry types

The "Patient history entry types" functionality from the "Dictionaries" submenu in the "Administration" menu is used to manage a dictionary of types of information collected in the form of attachments in the "History" tab in the patient's card. After selecting this functionality, a list of information types is displayed, with "Edit" and "Delete" buttons next to each one. The "Add" button is displayed below the list of information types.



To add a new type of information, click the "Add" button. The information type data form will then be displayed. In the form, enter the name of the type of information, in addition, if the results of diagnostic examinations received electronically from the laboratory are to automatically go to patient cards and be associated with a given type of information, the "Mark laboratory examination results with this entry type" box should be additionally checked, similarly if the results of commercial benefits are to automatically go to patient cards and be associated with a given type of information, one should additionally check the "Mark benefit realization results with this entry type "box, finally save the data by clicking the "Add" button.



To modify data type information, click the "Edit" button next to the type of information on the list. A form identical to the one for adding the type of information will be displayed, except that it is filled with the data of the selected type of information. After making changes, save them by clicking the "Update" button.

To delete a type of information, click the "Delete" button next to the type of information on the list. Then the form will be displayed which is identical to the one for data type editing, except that it is displayed in read-only mode. The intention to delete the type of information should be confirmed by clicking on the "Delete" button.

**NOTICE!** The results of diagnostic examinations can be associated with only one type of information, therefore checking the box "Mark laboratory examination results with this entry type"

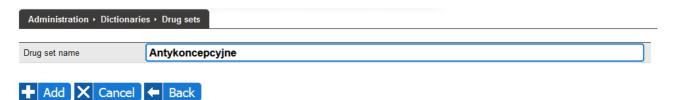
for a given type of information will automatically uncheck this box for all other types of information. The results of commercial benefits can be associated with only one type of information, therefore checking the "Mark benefit realization results with this entry type" box for a given type of information will automatically uncheck this box for all other types of information.

#### **Drug sets**

The "Drug sets" functionality from the "Dictionaries" submenu in the "Administration" menu is used to define drug collections as subsets of the general drug database. The drug collections created are subject to resource management mechanisms. After selecting this functionality, a list of defined drug sets is displayed and next to each of them the "Contents", "Edit" and "Delete" buttons (last two only for sets that are not predefined), and the "Add" button is available under the list.



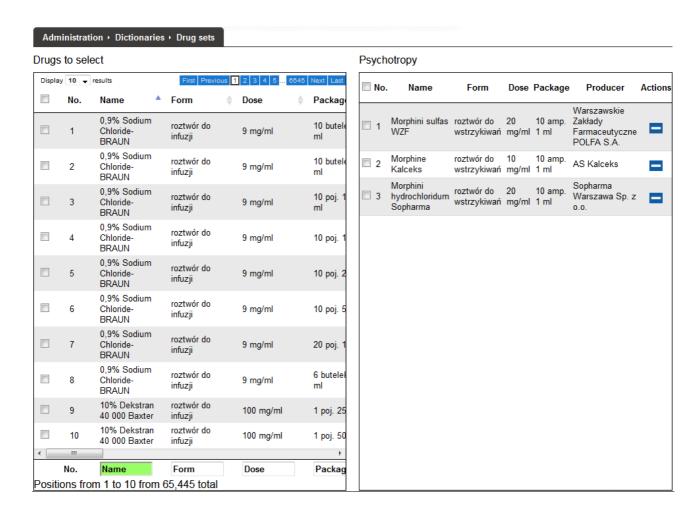
To add a new set, click the "Add" button. Then a form will be displayed in which you should enter the name of the set and save the data by clicking the "Add" button.



To modify the data of a set, click the "Edit" button next to the set in the list. A form identical to the one when adding the set will be displayed, except that it is filled with the data of the selected set. After making changes, save them by clicking the "Update" button.

To delete a set, click the "Delete" button next to the given set on the list. A form identical to that in the case of set data editing will be displayed, except that it will be displayed in read-only mode. The intention to delete a set should be confirmed by clicking the "Delete" button.

To be able to manage the contents of a set, click the "Contents" button next to the set in the list. A view with two columns will then be displayed. The left column is a list of all drugs on the basis of which you can create a set. The right column is a list of the drugs that make up the set.



In the left column by default are displayed all available drugs. At each drug are presented the following information:

- name
- form
- dose
- package
- producer
- repayment
- is this drug authorized for marketing
- is this contraceptive drug
- drug
- group of precursors
- category of availability
- international name
- characteristic if the drug has a characteristic then in the field of characteristic is displayed a button with the down arrow "to download the PDF file with the characteristic of the drug
- replacements at every drug there is the "Display" button, which allows to display

#### replacements for a particular drug

Pressing the button of displaying replacements at any drug switches the view from the list of drugs to the list of replacements for this drug. In the upper part of the window there is displayed additional information about which drug's replacements are currently displayed ant at this information is "×" sign. Clicking on the "×" ends displaying of replacements and restores the previous view of drugs.

Repla	Replacements for drug ACCUPRO 20 X						
Displa	Display 10 ▼ results First Previous 1 2 3 4 5 6 7 Next Last						
	No.	Name ^	Form	Dose	Packa		
	1	ACCUPRO 10	TABL. POWL.	0,01 G	30 TAI		
	2	ACCUPRO 10	TABL. POWL.	0,01 G	100 TA		
	3	ACCUPRO 10	TABL. POWL.	0,01 G	30 TAI		
	4	ACCUPRO 10	TABL. POWL.	0,01 G	50 TAI		
	5	ACCUPRO 20	TABL. POWL.	0,02 G	50 TAI		
	6	ACCUPRO 20	TABL. POWL.	0,02 G	30 TAI		
	7	ACCUPRO 20	TABL. POWL.	0,02 G	100 TA		
	8	ACCUPRO 20	TABL. POWL.	0,02 G	30 TAI		
	9	ACCUPRO 40	TABL. POWL.	0,04 G	28 TAI		
	10	ACCUPRO 40	TABL. POWL.	0,04 G	56 TAI		
4					-		
	No.	Name	Form	Dose	Packa		
Positions from 1 to 10 from 63 total							

The list of drugs displayed in the left column can be narrowed by entering a part of the name, form, package, producer, international name in the fields visible at the bottom of the column and / or selecting the appropriate values from the drop-down lists also visible at the bottom of the column. When entering a part of the name, form, package, producer, international name and / or selecting values from drop-down lists, the system automatically displays only these medicines that meet the search criteria. To add a drug to the set, place the mouse pointer on the drug (in the left column), press the left mouse button and holding down the left mouse button to drag the cursor to the right column and then release the mouse button. In this way the drug is moved from the left to the right column, so it is moved to set. At the drugs in the left column there are visible fields that allow to select drugs. They are used to possible to add many drugs at once to set. To add several medications at once to the set, simply select it in the left column, hover the mouse over any of these medicines, press the left mouse button and holding down the left mouse button to drag the cursor to the right column and then release the mouse button. In this way drugs are moved from the left to the right column, so are moved to the set. Above the list of drugs in the left column there is also visible checkbox for selecting / deselecting quickly all visible medicines. By clicking in turn on the headers of columns under the list of drugs it is possible to sort them alphabetically by the column (subsequent clicks are changing the sort order from ascending to descending and vice versa). At the top of the left column there is also displayed a navigation pane uses to change the amount of drug visible on one screen as well as switching between successive screens if the drugs do not fit on one.

In the right column is displayed the set of drugs. At every drug there is a button with the sign "-" enabling the removal of the drug from the set. At all the medicines there are also visible fields that allow selection of drugs. They are used to possible to delete multiple medicines at once from the set. After selecting at least one drug, at the bottom of the right column there is the "Delete selected"

button allows the removal of all of the selected drugs from the set. Above the list of drugs in the right column there is also a checkbox for selecting / deselecting quickly all visible medicines. The order of medicines in the right column can be changed on the basis of drag and drop. To move the drug in the right column to another location you should move the mouse cursor to a drug, press the left mouse button and holding down the left mouse button to drag the cursor to another location of right column and then release the mouse button and the drug will be moved to the indicated place.

#### Predefined drug collections:

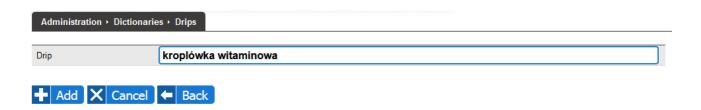
• CTC drugs - medicines that will be used in a care and treatment institution; the number of items in the delivery of such drugs should be determined by the number of doses (e.g. number of tablets) because of the way they will be dispensed

#### **Drips**

The "Drip" functionality from the "Dictionaries" submenu in the "Administration" menu is used to define the types of drips. Drips are subject to resource management mechanisms. After selecting this functionality, a list of defined drips is displayed, with "Edit" and "Delete" buttons next to them, and the "Add" button is available under the list.



To add a new type of drip, click the "Add" button. A form will then be displayed in which the drip name should be given and the data saved by clicking the "Add" button.



To modify the drip data, click the "Edit" button next to the drip type on the list. A form identical to the one for adding a drip will be displayed, except that it is filled with the details of the selected drip. After making changes, save them by clicking the "Update" button.

To remove the drip, click the "Delete" button next to the drip type on the list. Then the form will be displayed which is identical to the one used for editing drip data, except that it is displayed in read-only mode. The intention to remove the drip should be confirmed by clicking on the "Delete" button.

#### Hygenic materials

The "Hygienic materials" functionality from the "Dictionaries" submenu in the "Administration" menu is used to define types of hygienic materials and disposable accessories. Hygienic materials are subject to resource management mechanisms. After selecting this functionality, a list of defined hygienic materials is displayed, with "Edit" and "Delete" buttons next to them, and the "Add" button is available under the list.



To add a new type of hygienic material, click 'Add'. Then a form will be displayed in which you should enter the name of the hygienic material and save the data by clicking the "Add" button.



To modify hygienic material data, click the "Edit" button next to the hygienic material type in the list. A form identical to the one for adding hygienic material will be displayed, except that it is filled with the data of the selected hygienic material. After making changes, save them by clicking the "Update" button.

To remove hygienic material, click the "Delete" button next to the type of hygienic material on the list. Then the form will be displayed, identical to the one used for editing hygienic material data, but displayed in read-only mode. The intention to remove hygienich material should be confirmed by clicking on the "Delete" button.

# Nemo-Q

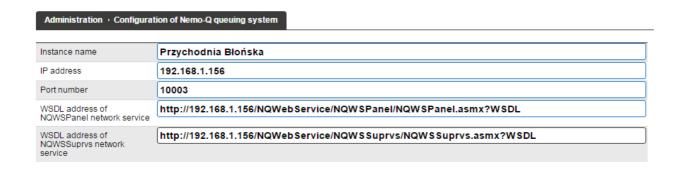
The jHIS system is prepared for cooperation with the Nemo-Q queuing system. Cooperation is possible simultaneously with multiple instances of queuing system (eg. if the jHIS system is working in a healthcare institution having several branches and in each branch operates separate the Nemo-Q queuing system). The "Nemo-Q" functionality from the "Administration" menu is used to configure access to specific instances of queuing system. After selecting this function there is a list of already defined instances of queuing systems (if any is already defined), and at each of them there are buttons:

- Test checks whether the connection with queuing system is physically possible
- Status displays statistics of queuing system (the availability of a button depends on the configuration of the Nemo-Q system)
- Edit displays an edit form of the instance of queuing system
- Delete displays a delete form of the instance of queuing system

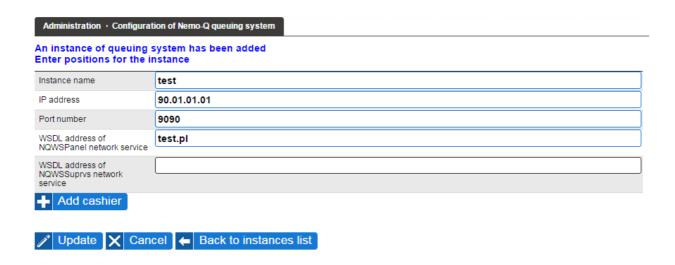
Below the list is the "Add" button for displaying the form of adding a new instance of queuing system.



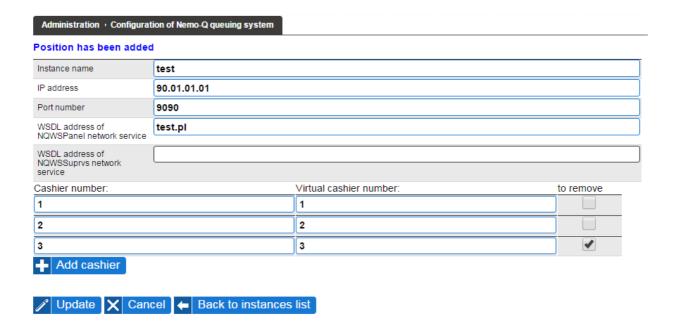
To add a new instance of queuing system, use the "Add" button. When pressed, it displays a form for adding a new instance of queuing system, which should be completed and confirmed by pressing "Add" button. The instance's name is typically the name of the location.



After adding a new queuing system, system's data form automatically switches to editing mode to allow the entering positions operating in the queuing system



By clicking "Add cashier" system will prompt you to enter position's number and then to enter the position's virtual number. After entering, below data form of queuing system there will be shown the data of the added positions. You can add any number of positions, but you have to remember that they must correspond to positions configured in the Nemo-Q system.



If you need to modify the data of queuing system or any of the positions you should make changes in form and confirm them by clicking "Update" button. If you need to remove the position or positions, you should point checkbox at those positions, in the column "To remove" and confirm it by clicking "Update" button.

To modify data of an existing instance of queuing system you should click the "Edit" button at the appropriate instance from the list of instances of queuing system. You will see a form of edition, the same as described above.

To remove an instance of queuing system you should click the "Remove" button at the appropriate instance from the list of instances of queuing system. You will see a data form of instance of queuing system in read-only mode - clicking the "Delete" button under the form approves the

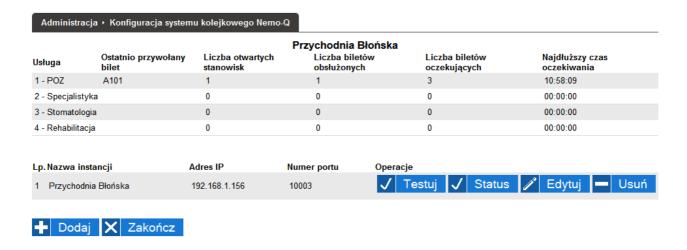
removal of the instance of queuing system.

After adding a new instance of queuing system or modifying an existing instance you should to be sure check its availability. For this purpose use the "Test" button at the appropriate instance from the list of all instances. When pressed, the jHIS system tries to connect to the IP address on a given port, and checks whether the address WSDL is available and displays the appropriate message about the availability or unavailability of the instance of queuing system.



If the system jHIS reports that the instance of queuing system is not available, it means that either the data of that instance were wrongly entered (as such should be corrected) or queuing system was not configured properly (which should be corrected in the Nemo-Q queuing system).

To view statistics of particular instance of queuing system, use the "Status" button at the appropriate instance from the list of all instances. When pressed, the corresponding statistics are displayed (if for this instance is defined WSDL address of NQWSSuprvs network service).



In the statistics for each type of ticket existing in queuing system, the following information are displayed:

- Number of recently called ticket of particular type
- Open cashiers number (serving patients at a time) able to serving patients with tickets of the particular type
- Serviced tickets number (of patients) in main queue

- Waiting tickets number (of patients) in main queue
- Longest waiting time (of patients ticket) in main queue

# jHQ

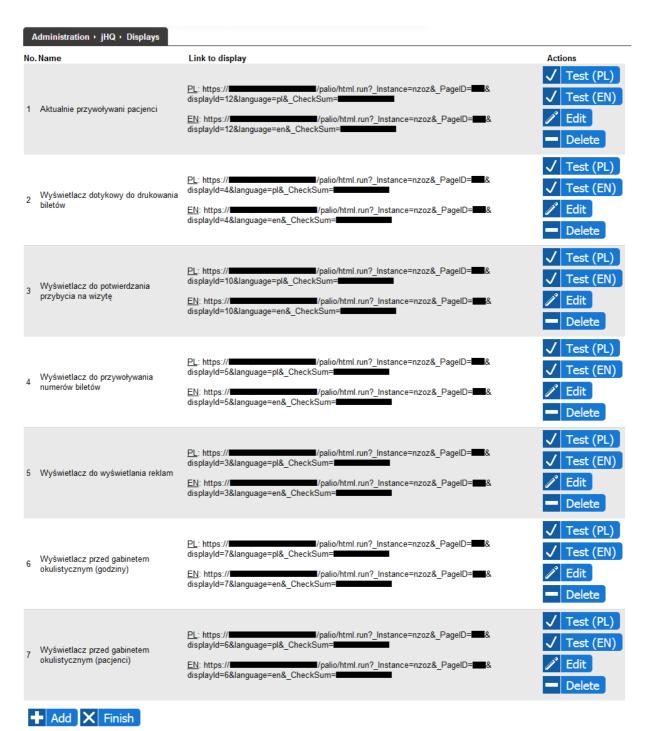
jHIS (jPALIO Hybrid Queuer) is a queuing system embedded in jHIS that enables comprehensive patient traffic management and information content management for patients. Logically, the jHQ system is operated from the level of the jHIS system by the administrator. Physically, the jHQ system can consist of any devices with a display (in the case of printing tickets and confirming the arrival for a visit display must have a touch screen), Firefox or Chrome web browser and access to the server where the jHIS system is installed (these can be all-in-one computers, PC sticks + monitors, tablets, ...). For each of these devices, the jHIS system defines the displayed content to which the jHIS system generates a link. After placing such a link in the browser window of the proper device and enabling full-screen mode in the browser, the device is ready to work under the control of the jHQ queuing system. The range of content that can be displayed is as follows:

- information slides information graphics for patients (eg health promotion, clinic plan, current information, advertisements)
- working hours of staff in the surgery room the names of the staff and working hours in a given surgery room today
- patients appointed to the surgery room a list of patients appointed for a visit to a given surgery room today with admission status
- ticket printing ticket printing buttons (it is required that the device on which the buttons are to be displayed has a touch screen and a configured connection with the ticket printer)
- ticket numbers numbers of tickets called
- confirmation of arrival for the visit entering the ID of appointed visit in order to confirm the arrival for visits (it is required that the device on which the buttons should be displayed has a touch screen)
- patients currently called to surgery rooms a list of patients called to specific surgery rooms at a given moment (eg all surgery rooms in the clinic, all surgery rooms on a given floor, etc.)

It is possible to indicate several ranges of content to be displayed on single device: in this case contents are changed cyclically according to the defined schedule. If only one content range is to be displayed on one device, then it is possible to specify the refresh time of the displayed content.

#### **Displays**

The functionality "Displays" from the submenu "jHQ" in the "Administration" menu is used to define the contents of displays operating within the jHQ queuing system. After selecting this functionality, a list of defined displays is displayed, with "Test" (in the same language version as jHIS system user interface), "Edit" and "Delete" buttons next to each of them. By each display there is also link presented, which should be copied and placed in the browser window on the device that supports the display. An "Add" button is displayed under the list of displays.



To add a new display, click "Add" button. Then a form of adding a display will be displayed where one should enter its name, indicate the method of displaying names and surnames of patients on the lists of patients appointed to the surgery rooms (eg full name and full name, full name and first letter of the surname, initials, ...), define colors used to display different content (default colors are pre-filled) and click "Add" button.

## Administration → jHQ → Displays

Name	Wyświetlacz do wyświetlania reklam
Number of initial patient name letters displayed	all
Number of initial patient surname letters displayed	all
Font color for patients lists	
Background color for patients lists	
Font color for hours of admission	
Background color for hours of admission	
Font color for called ticket numbers	
Background color for called ticket numbers	
Font color for printing tickets screen	
Background color for printing tickets screen	
Button label color for printing tickets	
Button background color for printing tickets	
Font color for visit arrival confirmation screen	
Background color for visit arrival confirmation screen	
Input field font color for visit arrival confirmation screen	
Input field background color for visit arrival confirmation screen	
Input field border color for visit arrival confirmation screen	
Button label color for visit arrival confirmation screen	
Button background color for visit arrival confirmation screen	
Confirm button label color for visit arrival confirmation screen	
Confirm button background color for visit arrival confirmation screen	
Reject button label color for visit arrival confirmation screen	
Reject button background color for visit arrival confirmation screen	
Font color for screen with currently called patients list	
Background color for screen with currently called patients list	



After clicking the "Add" button, the system will automatically switch to the edit mode of the display content, where in addition to the data available in the form of adding a display, there is a section for defining the screens presented on the display. One or more screens can be defined for each display. Screen definition consists of its contents and display / refresh time. If one screen is defined for one display, it will be displayed continuously, the view will be refreshed at the given time. Refreshing aims to update the screen content, eg screens presenting the numbers of the tickets called or the list of patients appointed to the surgery room must be refreshed as the numbers of the tickets called and statuses of the patients change over time, therefore the content of such screens must be refreshed (updated). In the case of screens displaying buttons for printing tickets or information slides, refreshing is unnecessary - in such cases, the time should be given sufficiently long that refreshing will not take place.



To add a new screen, click the green "+" button. This will open a new window with the screen adding form, in which you should indicate the screen content, specify its display / refresh time in seconds and save the data by clicking the "Add" button.



To remove the screen, click the red "×" button and confirm your intention by clicking "OK" in the window asking for confirmation.

If several screens have been defined for the display, the order in which they are displayed can be changed by moving them with clicking the blue buttons with the up or down arrow symbols.

The contents and times for already entered screens can be modified in the "Screens" section of the display data form, keeping in mind that after the modification is made, save them by clicking the "Update" button.

To modify the display data, click the "Edit" button on the display in the list. The display edit form with its data will be displayed. You can make changes to the form as described in the previous paragraph. The changes should be saved by clicking the "Save" button.

To remove the display, click the "Delete" button on the display in the list. The form will then be displayed with display data in read-only mode. The intention to delete the display should be confirmed by clicking the "Delete" button.

To check what the content of the display looks like, click "Test" on the display in the list. This will open the current display in the new window. For info slides, the graphic is displayed in the center of the screen. If the image size is larger than the screen size, the image is automatically scaled so that it fits on the screen. If the image does not occupy the entire screen, then the rest of the screen is filled with the background color defined for the slide.



In the case of working hours of staff in the surgery room for each person working today in a given surgery room, on the screen there are presented the hours of admission along with an indication of the clinic in which the admissions at given hours in a given surgery room are realized. The font size for the presentation of the admission hours is automatically selected in such a way that the information on working hours fills up as much space as possible on the screen in its entirety.

# **GODZINY PRZYJĘĆ**

# **OLGA BARON**

08:00-12:00 (Poradnia okulistyczna)

# Alina Kamińska

12:00-16:00 (Poradnia okulistyczna)

In the case of a list of patients appointed to the surgery room, the screen displays the admission statuses, times of visits and personal details of the patients appointed for visits, and under the list of patients there are explanations of the individual statuses of admissions. The admission statuses have the form of icons that differ in symbol and background color. The following admission statuses

exist:

- did not show up the patient did not show up for the visit and the visit was marked as "unrealized"
- served the patient did show up for the visit and the visit was marked as "completed"
- in the surgery room the patient is currently in the surgery room, his visit is in progress
- expects the patient expects (or should expect) an appointment in front od the surgery room
- please register for registration the patient has not completed all the required formalities, therefore, before the visit should go to registration to complete
- please enter the surgery room the patient is asked to enter the surgery room for an appointment; the icon of this status is the only one that blinks so that it is easily visible to the patient on the display, at the same time there is a sound signal (the sound is played only in the case of the Firefox browser and lasts 3 seconds, so the screen display / refresh time should not be shorter than 3 seconds for the sound to be played in its entirety)

Patients' personal information can be presented in various forms of full name or only its initial letters and full name or only its initial letters according to the definition of the display (eg full name and first letter of the surname, patient's initials, ...). The size of the font for presenting the list of patients is automatically selected in such a way that the list of patients fills up as much space on the screen as possible.

# **PACJENCI**

08:00 - Paweł 0.

× 08:15 - Jakub 0.

→ 08:30 - Dionizja A.

∞ 08:45 - Renata A.

9:00 - Adam A.

# **OBJAŚNIENIA**

× nie stawił się

obsłużony

🗴 w gabinecie

∞ oczekuje

prosimy o zgłoszenie do rejestracji

🦊 prosimy o wejście do gabinetu

In the case of ticket printing, buttons with the names of ticket types are presented on the screen, and touching (on the touch screen) of the appropriate button results in printing a patient ticket on the appropriate printer. The buttons are arranged on the screen in such a way that everyone occupies the entire width of the screen and all take up the entire height of the screen and the font size of the labels on the buttons is automatically selected in such a way that each entire string fits on the button in one line. In the current version of the system, the "Standard printer" ticket printing interface has been programmed allowing to print tickets on a traditional default printer for a given device. In the case of the "Standard printer" interface it is suggested to use on the device on which the buttons for printing tickets will be displayed, the Chrome browser running in such a way that when the ticket

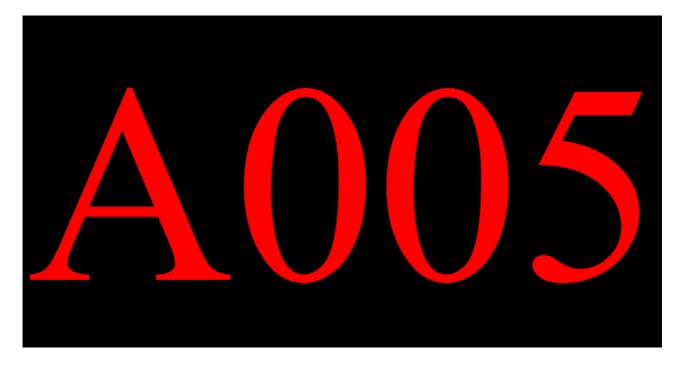
printing button is touched, printing was performed immediately without previewing the printout and printing properties window. In order for the Chrome browser to work in such a way, all chrome processes should be terminated with the task manager and then the browser should be launched with the following command (paying attention to two spaces before the --disable-print-preview option):

" $C:\Pr$  gram Files (x86) $\lceil$  Google $\rceil$  Chrome $\rceil$  Application $\rceil$  chrome.exe" --disable-print-preview --kiosk-printing

# POZ

# Specjalistyka

In the case of ticket numbers, the font size used to display the ticket number is automatically selected in such a way that the ticket number fills up as much as possible on the screen. Each time the ticket number changes on the screen (that is, when the next ticket number is called) the number on the screen flashes for three seconds and there is a sound signal (the sound is played only in the case of the Firefox browser and lasts 3 seconds, so the screen display / refresh time should not be shorter than 3 seconds for the sound to be played in its entirety)



In the case of confirmation of arrival at the visit, buttons with numbers are displayed on the screen to enter the number of an appointment and the "OK" and "×" buttons, the first of which allows you to confirm the visit of a given number (after entering it) and the second allows you to start entering the number from scratch (in the case of a mistake during its introduction). If the visibility of the visit numbers within the jHQ queuing system is enabled in the jHIS system configuration, then the number of the visit appears each time in the message confirming visit appointment and in the visit details window for each patient registered for the visit and in the summary printout of the visit for the patient, therefore it should be communicated to the patient immediately after arranging the visit. After entering the visit number and confirming it with the "OK" button (by touching the buttons on the touch screen), the appropriate message is displayed instead of the entered number (informing about the success or failure of registering the confirmation of arrival), which disappears after three seconds.

# Proszę wprowadzić numer wizyty a następnie nacisnąć przycisk OK w celu potwierdzenia przybycia



# 13221

In the case of patients currently called to the surgery rooms, the screen displays a list of visiting hours along with personal details of patients referred to at the given moment by medical staff to the surgery rooms from a specific collection (eg all surgery rooms in the clinic, all surgery rooms on a given clinic floor, etc.) and by each patient's name there displays the name of the surgery room to which the patient is being called. Patients' personal information can be presented in various forms

of full name or only its initial letters and full name or only its initial letters according to the definition of the display (eg full name and first letter of the surname, patient's initials, ...). The size of the font for presenting the list of patients is automatically selected in such a way that the list of patients fills up as much space on the screen as possible. Such a screen may be useful for patients waiting in one waiting room for visits to various surgery rooms - in such a situation, on one screen, information is visible which patient at which moment to which surgery room is being called.

# PACJENCI PROSZENI DO GABINETÓW

08:30 - Dionizja A. ⇒ Gabinet okulistyczny

### **Instances**

The "Instances" functionality from the "jHQ" submenu in the "Administration" menu is used to define jHQ queuing system instances. Essentially, the jHQ system instance is related to its location (eg queuing system in a specific unit). After selecting this functionality, a list of the queuing system instances is displayed and the "Edit" and "Delete" buttons are displayed for each of them. Below the list of instances, the "Add" button is displayed.



To add a new instance, click "Add" button. The form for adding an instance will be displayed, where you should enter its name and click "Add" button.

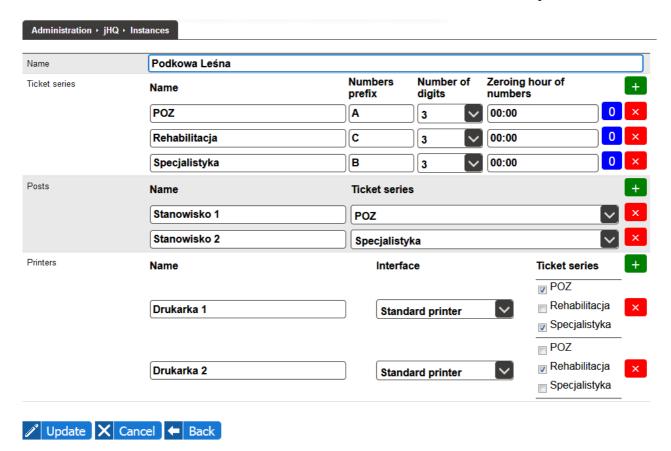


After clicking the "Add" button, the system will automatically switch to the instance editing mode with sections to be entered

- types of printed tickets (eg registration for BHC, specialist registration, registration for children, ...)
- registration posts from which tickets will be called
- printers that will be used to print tickets

Each of the above sections is organized in a similar way: the green "+" button allows you to add a new item to the section: type of tickets / position / printer, red "×" button allows you to remove the element: type of tickets / position / printer at which it is located. To add a new type of tickets / position / printer, click the green "+" button in the appropriate section. Then the system will display windows, asking step by step for entering the new item data. In the case of ticket types, the ticket

number of a given type is created by concatenating the prefix (entered in the "Number prefix" field) with the subsequent ticket number (automatically generated) completed with zeros to the specified number of digits (indicated in the "Number of digits" field) and ticket numbering starts again from day to day at the time specified in the field "Reset number time" (if the time is not given, then the numbering of tickets will be continuous, continuing each day with the numbering from the previous day). You can manually reset the ticket numbering at any time by clicking the blue "0" button on the ticket type and confirming your intention to reset. In the case of posts, the type of tickets called from a given post is indicated. In the case of printers, an interface is defined which indicates the mechanism of communication with the printer and indicates the types of tickets that will be printed on a given printer. In addition to adding and removing types of tickets / posts / printers, their data visible on the form can be modified and the modifications confirmed with the "Update" button.

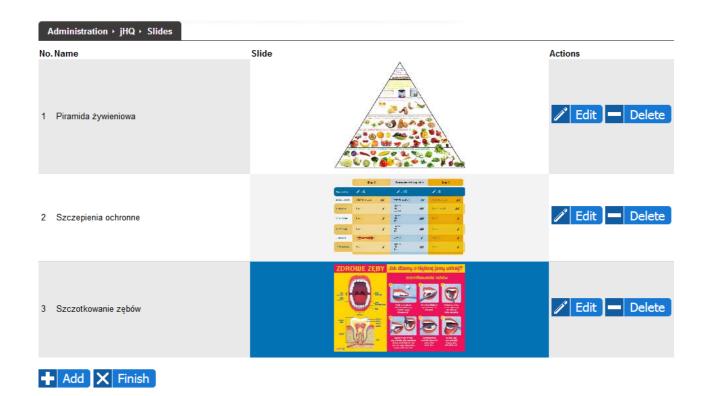


To modify the details of the queuing system instance, click the "Edit" button for the given instance in the list. The instance edit form with its data will be displayed. You can make changes to the form as described in the previous paragraph. The changes should be saved by clicking the "Save" button.

To delete an instance, click the "Delete" button for the given instance in the list. The form with the instance data is then displayed in read-only mode. The intention to delete an instance should be confirmed by clicking the "Delete" button.

### **Slides**

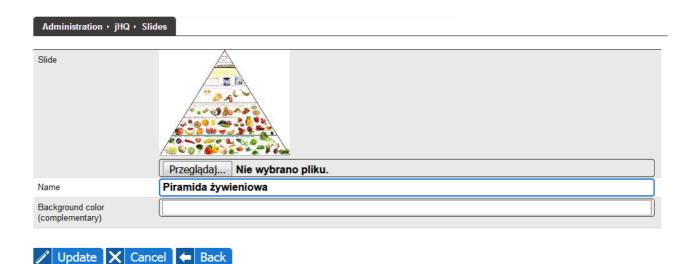
The "Slides" functionality from the "jHQ" submenu in the "Administration" menu is used to manage information slides (graphics) displayed on the devices that make up the jHQ queuing system. After selecting this function, a list of thumbnails is displayed and the "Edit" and "Delete" buttons are displayed next to each of them. The "Add" button is displayed under the slide list.



To add a new slide, click "Add" button. Then a form for adding a slide will be displayed where you should choose a slide graphic file from the disk, enter the name of the slide and choose the complementary background color (this color will be used as the background color of the browser window if the slide does not occupy the entire window). After entering the data into the form, save it by clicking the "Add" button.



To modify the slide, click "Edit" next to the slide in the list. The slide editing form will be displayed with its thumbnail and data. In the form, you can change the image file, name of the slide and complement the background color. The changes should be saved by clicking the "Save" button.



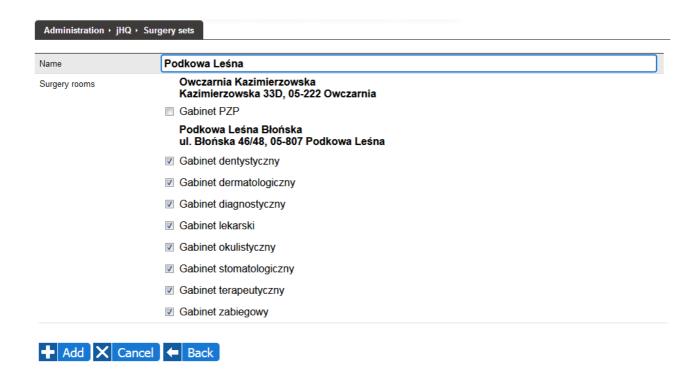
To delete a slide, click the "Delete" button for the given slide in the list. The form with the thumbnail and slide data will be displayed in read-only mode. The intention to delete the slide should be confirmed by clicking the "Delete" button.

# **Surgery sets**

The "Surgery sets" functionality from the "jHQ" submenu in the "Administration" menu is used to define collections of surgery rooms used for collective call of patients in the jHQ queuing system. Defining a group of surgery sets allows to later define a screen on which the personal details of patients referred to all surgery rooms from a given group will be presented. After selecting this functionality, a list of surgery sets is displayed, with "Edit" and "Delete" buttons next to each of them. An "Add" button is displayed under the list of surgery sets.



To add a new set of surgeries, click "Add" button. A form for adding a set of surgeries will be displayed, where the name of the set should be given and the surgery rooms included in it should be indicated. After entering the data into the form, save it by clicking the "Add" button.



To modify the set of surgerues, click the "Edit" button for a given set of surgeries in the list. The form for editing the surgery set with its data will then be displayed. In the form you can change the name of the surgery set and the range of surgery rooms included in it. The changes should be saved by clicking the "Save" button.

To remove a surgery set, click the "Delete" button by a given set of surgeries in the list. The form with the data of the surgery set will be displayed in read-only mode. The intention to delete the surgery set should be confirmed by clicking the "Delete" button.

# **Thermometers**

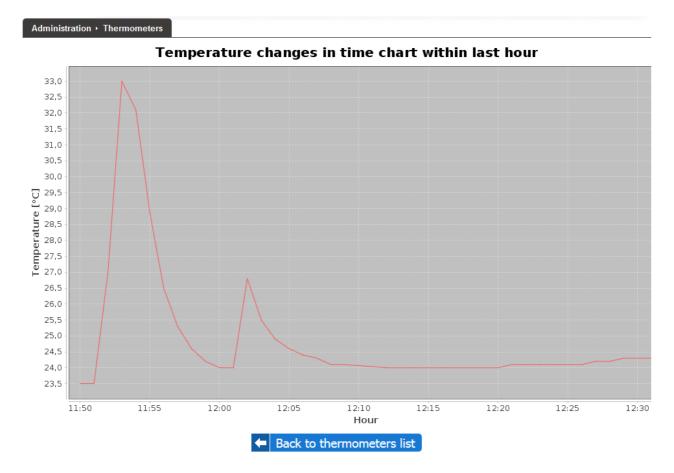
Within jHIS system there are implemented mechanisms for reading temperatures from internet thermometers (currently TME thermometers are implemented). Temperature registration is made automatically every 30 seconds. Functionality "Thermometers" from menu "Administration" allows for management of thermometers being monitored. After choosing this functionality there appears list of thermometers being monitored and by each one of them there are the following buttons:

- Monitor allows to view registered temperature changes within last hour for a given thermometer
- Edit allows to modify thermometer data
- Delete allows to remove thermometer
- Report allows to generate report as chart of temperature changes within arbitrarily chosen month

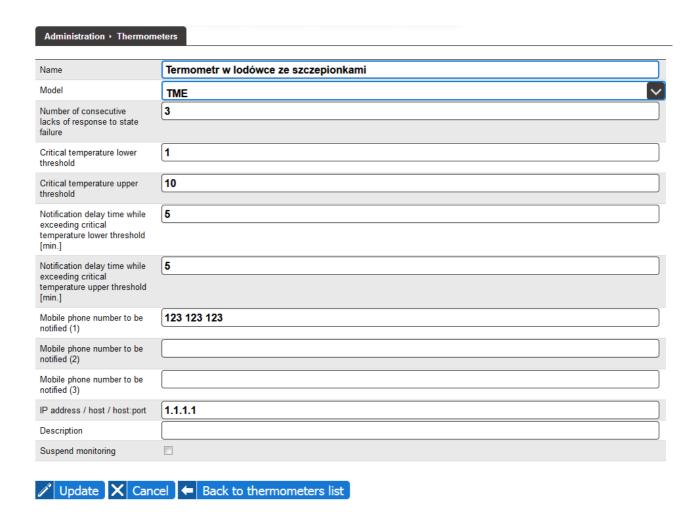
Under the list of thermometers there is button "Add" allowing to add new thermometer.



After clicking the button of "Monitor" there appears a chart of temperature changes during last hour.



After clicking button "Add", "Edit" or "Delete" there appears form of thermometer data (in case of thermometer addition it is empty, in case of thermometer data modification it is filled with thermometer data that can be modified, in case of thermometer deletion it is filled with thermometer data and displayed in readonly mode).



Within the form one has to specify thermometer name (pointing out its localization) and to choose model. If IP address or host or host with port is specified then thermometer will automatically be monitored and temperatures registered with it will be saved into system database. If critical temperature lower threshold is set, then temperature fall below this threshold will act with sending notification to specified mobile phone numbers. If delay time while exceeding critical temperature lower threshold is set then notification is sent if excess of critical temperature below lower threshold is not set or is set to zero, then notification is sent immediately after occurrence of excess of critical temperature below lower threshold. If delay time while exceeding critical temperature upper threshold is set then notification is sent if excess of critical temperature above upper threshold keeps through that time. If delay time while exceeding critical temperature upper threshold is not set or is set to zero, then notification is sent immediately after occurrence of excess of critical temperature above upper threshold is not set or is set to zero, then notification is sent immediately after occurrence of excess of critical temperature above uppse threshold. Moreover if the attempt to read the temperature from the thermometer fails so many times in turn as indicated in the field "Number of consecutive lacks of response to state failure", then a notification about power failure / network / thermometer is sent.

After clicking "Report" button, form with list of periods within which thermometer was monitored is displayed. After choosing period and clicking button "Generate" under the form, there appears link, which when clicked allows to download and print report in PDF format with chart of temperature changes within the selected period and table of temperature measurements every day of the month at 8:00 and 17:30 hours.

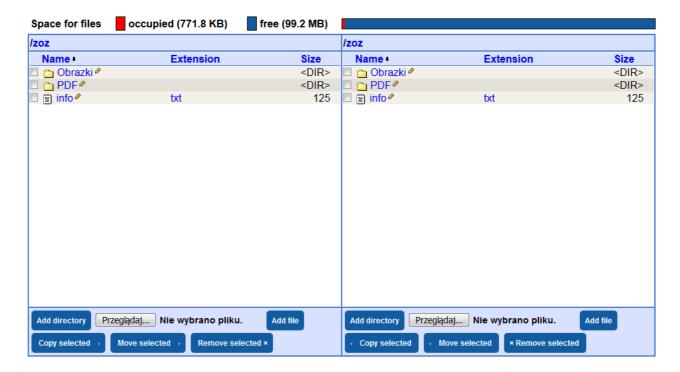


# **Portal**

Functionalities in "Portal" submenu within "Administration" menu are for management of media and contents displayed within internet portal for patients and within internet portal for institutions.

# Media

Functionality of "Media" in submenu "Portal" within menu "Administration" is to manage media placed within the contents displayed in internet portal for patients and in internet portal for institutions. After selecting this functionality there appears manger of logged user files. Manager allows to move around directory structure and to browse directories contents, and for addition, renaming, copying, moving and removing directories and files. Above the manager there is an information about volume of allocated and free space for files. Manager consists of two panels left and right. Within each of them there is content of virtual home directory of logged user. At the top part of each panel there is a path to directory currently presented within the given panel – by clicking directory names within the path one can quickly move to these directories to display theirs contents. Below the path there is a header of the table presenting contents of currently presented directory – by clicking on captions "Name", "Extension", "Size" visible within this header one can change order of appearance of directory contents in order of names, extensions and sizes and by clicking again on the same caption one can switch between ascending and descending order. Default order of appearance is ascending by name. For the record directories are always displayed before files. By clicking on directory name within any panel, one can display contents of this directory within this panel. Within each of subdirectories there is a position of "[..]", which when clicked allows to display contents of parent directory (directory within which the given subdirectory is located). By clicking on file name one can open the given file or save it to computer disk. Within the bottom part of each panel there are buttons that allow to perform operations of addition, renaming, copying, moving and removing directories and files.



To add new directory one has to move (within any of two panels) into directory within which new directory is to be created and then to click the button "Add directory" visible at the bottom of the given panel. A prompt for name of directory appears then. After entering directory name and confirming, within the given panel new directory appears.

To add new file one has to move (within any of two panels) into directory within which new file is to be created, then to click "Browse..." button visible at the bottom of the given panel and choose file from computer disk, after than one has to click button "Add file" visible beside. Within the given panel there appears new file then.

To rename directory/file one has to click pencil icon at the end of directory/file name. A prompt for new name appears then (filled with current name by default). After entering new name and confirming, name of directory/file changes within the given panel.

To copy directories/files one has to mark within one of two panels these ones, that are to be copied (checkbox fields visible in front of directories/files icons are designed for this purpose) and within the second panel one has to move into the directory where marked directories/files are to be copied. After that within first of two panels one has to click the button "Copy selected" and after confirmation the marked directories (with their contents) and marked files are copied to the directory visible within the second panel.

To move directories/files one has to mark within one of two panels these ones, that are to be moved (checkbox fields visible in front of directories/files icons are designed for this purpose) and within the second panel one has to move into the directory where marked directories/files are to be moved. After that within first of two panels one has to click the button "Move selected" and after confirmation the marked directories (with their contents) and marked files are moved to the directory visible within the second panel.

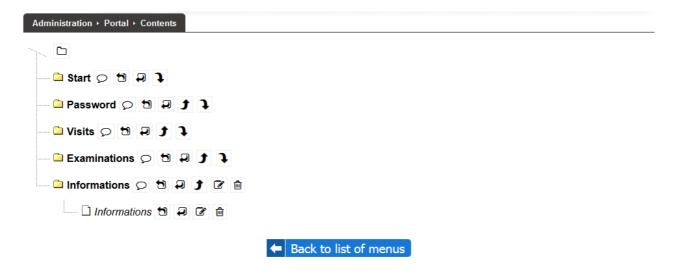
To remove directories/files one has to mark within one of two panels these ones, that are to be removed (checkbox fields visible in front of directories/files icons are designed for this purpose) and then one has to click the button "Remove selected" visible at the bottom of the given panel. Confirmation window appears then. After confirming the marked directories (with their contents) and marked files are removed disappears from the panel.

### Treści

Functionality of "Contents" in submenu "Portal" within menu "Administration" is to manage contents displayed within internet portal for patients and in internet portal for institutions. After selecting this functionality there appears list of internet portal menus and by each of them there is a button "Manage".



After clicking "Manage" button by the given menu there appears structure of the chosen menu presented as tree of pages (positions contained within menu; emphasized with directory icon) and articles that are the contents of these pages (coursive with document icon). Positions of "Start", "Password", "Visits" and "Examinations" are predefined, they correspond to permanent positions of portal menu and cannot be removed. One should not add articles within "Password", "Visits" and "Examinations" pages, because they will not be displayed within these pages as contents of these pages are specific functionalities. Other positions are created by the user.



By each of pages/articles there is a row of icons (meaning of each icon appears in a tooltip when moving mouse cursor over the icon):

- Add page adds new page (menu position) as the last one
- Add page before the given adds new page (menu position) placing it before the page (menu position) by which the icon is placed
- Add page after the given adds new page (menu position) placing it after the page (menu position) by which the icon is placed

- Add article opens new window allowing to add new article as the last one on the page by which the icon is placed
- Add article before the given opens new window allowing to add new article before the article by which the icon is placed
- Add article after the given opens new window allowing to add new article after the article by which the icon is placed
- Move up changes the order of pages (menu positions) / articles within the page in the way that it moves the page (menu position) by which the icon is placed before the page (menu position) hitheto preceding it or it moves the article by which the icon is placed before the article hitheto preceding it
- Move down changes the order of pages (menu positions) / articles within the page in the way that it moves the page (menu position) by which the icon is placed after the page (menu position) hitheto following it or it moves the article by which the icon is placed after the article hitheto following it
- Change name changes name of the page (menu position) by which the icon is placed
- Edit opens new windowthat allows to edit data and content of the article by which the icon is placed
- Delete removes the page (menu position) by which the icon is placed including articles contained on the page or removes the article by which the icon is placed

To add new page (menu position) one has to click one of icons "Add page", "Add page before the given" or "Add page after the given" depending on which place of menu the given page (menu position) is to be placed. A prompt for the name of page (menu position) appears then. After its entering and confirmation, new page (menu position) appears within the tree of pages and articles.

To change page name (menu position) one has to click icon "Change name" placed by the given page (menu position). A prompt for the name of page (menu position) appears then. After its entering and conformation, page (menu position) with changed name will appear within the tree of pages and articles.

To remove page (menu position) including articles one has to click icon "Delete" by the given page (menu position). Confirmation window appears then. After confirmation removed page (menu position) with articles disappears from the tree of pages and articles.

To add new article within the page one has to click icon "Add article", "Add article before the given" or "Add article after the given" depending on which place of page the given article is to be placed. New window with form allowing to enter data and content of article opens then. After filling the form, saving it and closing the window, new article appears within the tree of pages and articles.

To modify the given article one has to click icon "Edit" placed byt the given article. New window with form allowing to change data and content of article opens then. After entering changes, saving them and closing the window, modified article appears within the tree of pages and articles.

To remove article one has to click icon "Delete" placed by the given article. Confirmation window appears then. After confirmation removed article disappears from the tree of pages and articles.

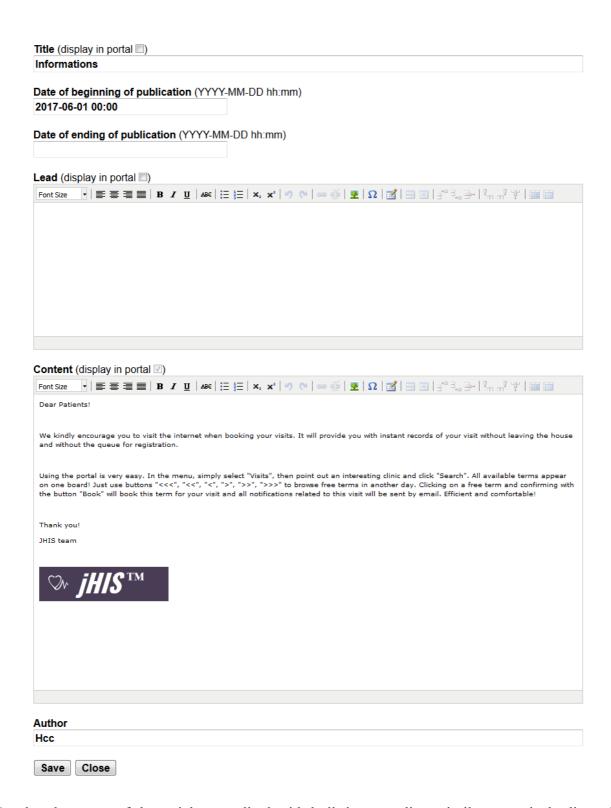
To change order of appearance of pages (menu positions) / articles one has to use icons "Move up" and "Move down" designed for this purpose.

Article addition/edition form allows to enter the following data:

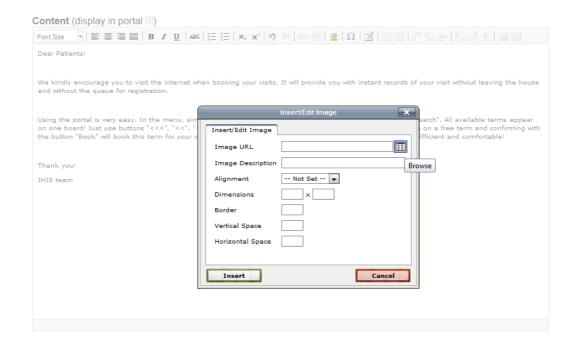
• title – article title, it cannot be empty, if title is not supposed to display within the portal one

has to mark off the field "display in portal"

- date of beginning of publication data and hour when article is to be published within the portal, it cannot be empty, for new articles is it set as current by default, entering future date causes that article will not be displayed till this date
- date of ending of publication date and hour when article is to disappear from the portal, it can be empty, if it is empty then article will be displayed forever (if it is not removed), if it is not empty then artifle will be displayed till this date and then it will disappear from the portal
- lead article lead, if by the lead the field of "display in portal" will be marked, then within the portal there will be displayed the lead and link "More" that allows to display full content of article, else immediately full content of article will be displayed within the portal
- content full content of the article
- author name of author of article



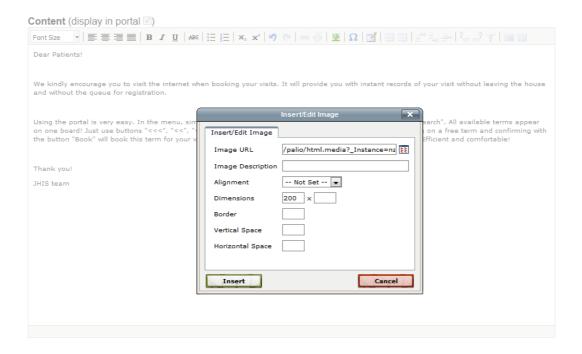
Lead and content of the article are edited with built-in text editor, similar to typical editors from office suites, that allows to format contents (font size, alignment, bolding, slanting, underlining, striking through, superscript, subscript) and to insert lists, images, links, tables and symbols. Usage of editor is intuitive, inserting of images and links may require some comment.



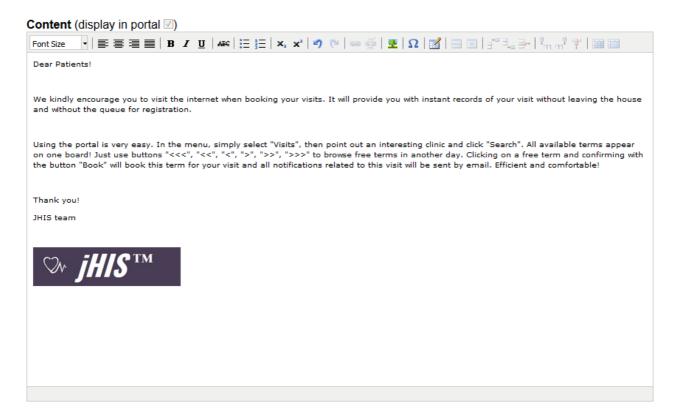
When inserting images, after clicking icon "Insert/edit image" new window with image parameters appears. Similarily when inserting links after clicking icon "Insert/edit link" new window with link parameters appears. Within this window, by the field "Image URL" when inserting image and by the field "Link URL" when inserting links there is a button "Browse". Clicking on this button opens browser of user files (uploaded by file manager described in previous chapter). This browser allows to insert images from user files to article contents.



To intert image or link to file one has to find the desired file within directory structure (by clicking on directories on can move into them) and then has to click black right arrow placed by image / file name. Then browser of files disappears and within the field of "Image URL" / "Link URL" there appears link to chosen image / file.



After entering rest of data and clicking "Insert" button, image / link appears in article content.



# **NOTICE!**

• To provide proper display of images and proper working of links to user files one has to configure the environment so that server where jHIS system is installed be visible for the server where internet portal for patients and portal for institutions is installed.

After entering data ane content of article one has to save it by clicking the button "Save" visible at the bottom of the form and after finishing the work on the article one has to click the button "Close"

also visible at the bottom of the form.

Article with data and content as shown in previous graphics above will be displayed within the portal as shown below.

### Dear Patients!

We kindly encourage you to visit the internet when booking your visits. It will provide you with instant records of your visit without leaving the house and without the queue for registration.

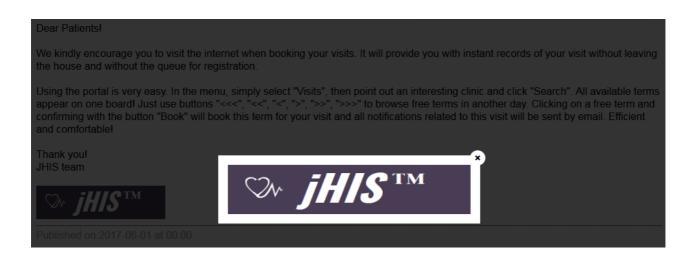
Using the portal is very easy. In the menu, simply select "Visits", then point out an interesting clinic and click "Search". All available terms appear on one board! Just use buttons "<<<", "<<", "<", ">>", ">>", ">>", ">>" to browse free terms in another day. Clicking on a free term and confirming with the button "Book" will book this term for your visit and all notifications related to this visit will be sent by email. Efficient and comfortable!

Thank you! JHIS team



Published on 2017-06-01 at 00:00

Images within contents of articles displayed within the portal, after clicking are displayed in full screen.



Enlarged image can be closed by clicking within any place of browser window.

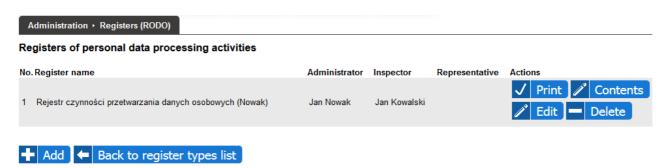
# **Registers (RODO)**

The functionality of "Registers (RODO)" is intended to manage registers of personal data processing activities and catgories for processing personal data introduced in connection with the entry into force of Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of individuals with regard to the processing of personal data and on the free movement of such data (RODO). After choosing this functionality there appears list of types of registers and by each of them there is a button "Choose".

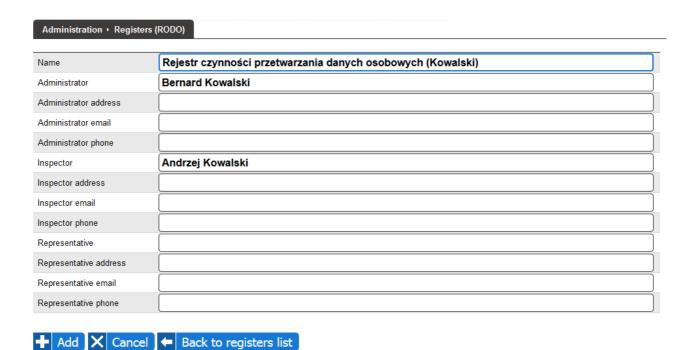




By clicking "Choose" button by the given type of registers there appears list of registers of the specified type and by each of them there are buttons "Print", "Contents", "Edit", "Delete" and below the list of registers there is a button "Add".



To add new register one has to click the button "Add". After that there appears form for addition of new register, which one has to fill and save data by clicking the button "Add".



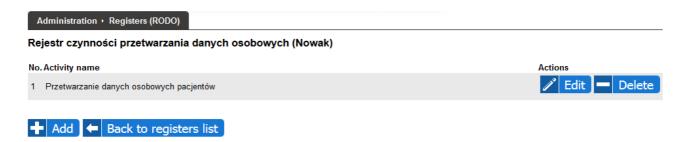
To modify register data one has to click the button "Edit" by the given register within the list. Then there appears form of register filled with its data. Register data can be modified then and after that one has to save them by clicking the button "Save".

To remove register one has to click the button "Remove" by the given register within the list. Then there appears form of register filled with its data in read only mode. Intention to remove register one

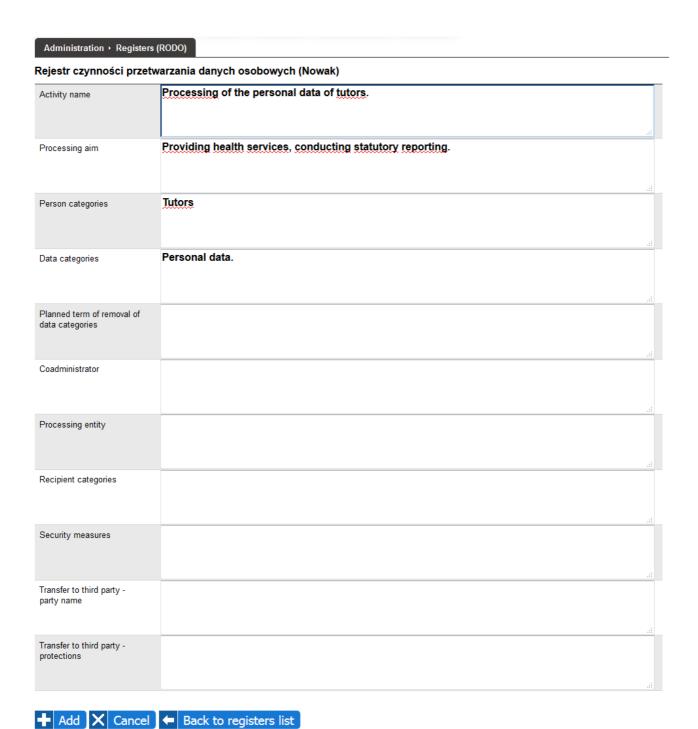
has to confirm by clicking button "Remove".

To download and print register one has to click the button "Print" by the given register within the list. Then there appears window to download PDF file with register contents, which can be saved to disc and/or printed.

To manage register contents one has to click the button "Content" by the given register within the list. Then there appears list of entries within the register and by each of them there are buttons "Edit" and "Delete", while under the list of entries there is a button "Add".



To add new entry to the register one has to click the button "Add". Then there appears form for addition of new entry. After entering data one has to save them by clicking the button "Add".



To modify data of entry within register one has to click the button. Edit" by the gi

To modify data of entry within register one has to click the button "Edit" by the given entry within the list. Then there appears form of entry filled with its data. These data can be modified and after that one has to save them by clicking the button "Save".

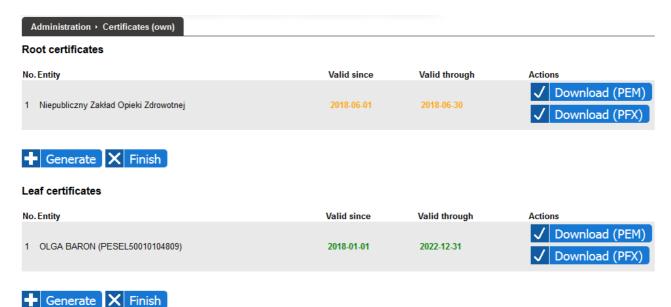
To remove entry one has to click the button "Delete" by the given entry within the list. Then there appears form of entry filled with its data in read only mode. Intention to delete entry one has to confirm by clicking the button "Delete".

# **Certificates (own)**

The functionality of "Certificates (own)" is intended to generate certificates for signing electronic medical records. After selecting this functionality, two lists of certificates are displayed:

- root certificates healthcare facility certificates used to sign leaf certificates
- leaf certificates medical staff certificates used to sign electronic medical records

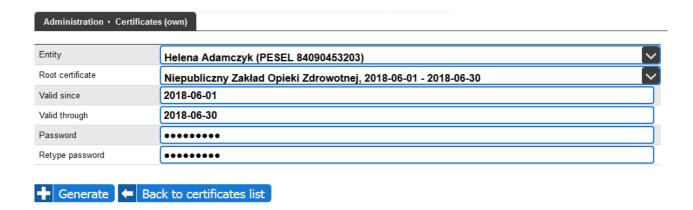
Each certificate is given its validity period. If more than 30 days remain until the end of the certificate's validity period, the validity period is displayed in green, if less than 30 days - in orange, if the certificate is not valid - in red. In addition, by each certificate there are buttons that allow to download the certificate in two formats: PEM and PFX. Under each of the certificate lists, the "Generate" button is visible to generate a new certificate.



To generate root certificate one has to click the "Generate" button under the list of root certificates. The certificate data form will then be displayed. The entity is filled automatically and immutable (it is a health care facility). One has to enter the validity period of the certificate and password and then confirm with the "Generate" button.



To generate leaf certificate one has to click the "Generate" button under the list of leaf certificates. The certificate data form will then be displayed, which must be filled and confirmed with the "Generate" button.



# Fiscal printers

The jHIS system has implemented communication mechanisms with online fiscal printers in the field of receipt printing (currently Novitus Online fiscal printers are supported). The "Fiscal printers" functionality from the "Administration" menu allows you to manage fiscal printers connected to the system. After selecting this functionality, a list of fiscal printers appears and for each of them the "Edit" (enabling modification of fiscal printer data) and "Delete" (enabling removal of a fiscal printer) buttons. Under the list of fiscal printers there is a "Add" button for adding a new fiscal printer.





After clicking "Add", "Edit" or "Delete" button the fiscal printer data form is displayed (in the case of the addition it is empty, in the case of editing it is filled with fiscal printer data that can be modified, and in the case of deletion it is filled with printer data fiscal and displayed in read-only mode).



To add a printer, complete the form and save the data by clicking the "Add" button. To modify printer data, make changes to the form and save them by clicking "Save" button. To delete a printer, click "Delete" button in the form.

**NOTICE!** Each fiscal printer connected to the system should have configured headers and footers of receipts and the following VAT rates: A - 23%, B - 8%, C - 5%, D - 0%, E - exemption.

# Service mode

Functionality "Service mode" is used to switch the system between service mode and normal mode. The service mode is used to carry out maintenance and repair activities, during which the users can not use the system. Switching to the service mode results in an immediate logout of all logged-in users from the system (except for the user switching to service mode) and blocking access to the system for all users until normal mode is restored (except for the user switching to service mode).

To switch the system to the service mode, select the "Service mode" function from the "Administration" menu and click the "Switch into service mode" button.

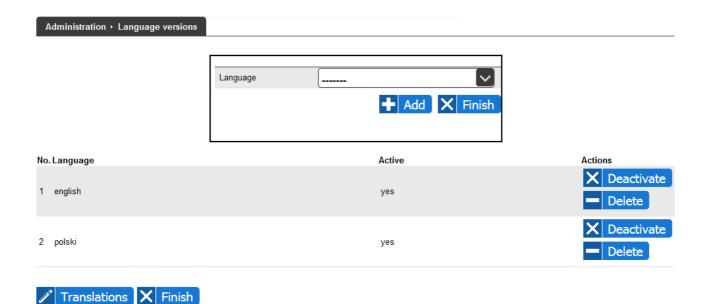


In service mode, the emphasized phrase "SERVICE MODE!" appears in the header of every page of the system. If the system is in service mode, then to restore the normal operating mode, select the "Service mode" function from the "Administration" menu and click the "Restore normal mode" button.



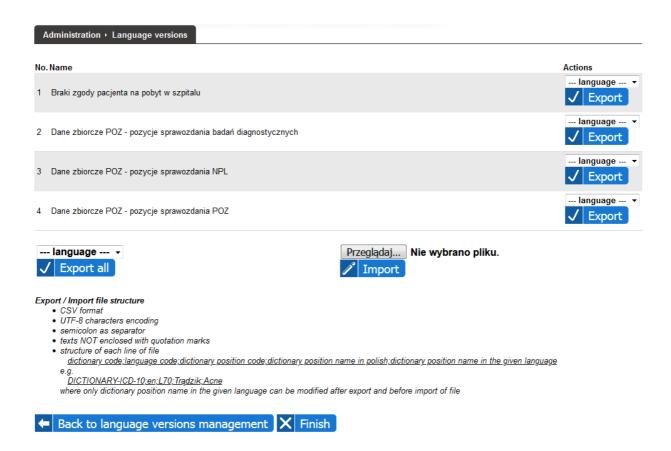
# Language versions

The "Language versions" functionality is used to manage the language versions of the user interface and constant dictionaries used in the system. After selecting this functionality, the form for adding language versions is displayed with a list of language versions defined below. Each language version has "Deactivate" buttons (if the language version is active) or "Activate" (if the language version is inactive) and the "Delete" button. Below the list of language versions there is also the "Translations" button that allows you to go to the translation management page.



To add a new language version, select a language from the list and then click "Add". The language version added will appear as active in the list below the form. Active language versions are displayed in the header of each page of the jHIS system enabling the logged in user to switch between them. In order for the language version to stop being displayed in the page headers, it must be deactivated by clicking the "Deactivate" button next to the given language version on the list. The inactive version can be reactivated at any time by clicking the "Activate" button for the given language version on the list. Until user interface translations are introduced for a given language version, it is possible to remove it from the system by clicking the "Delete" button next to the given language version on the list.

To go to the translation management page, click the "Translations" button. A list of multilingual dictionaries will then be displayed. Each dictionary has a form for exporting translations of a given dictionary in the selected language version to a CSV file, while an identical form is available below the list of dictionaries to export translations of all dictionaries in the selected language version to a CSV file. After selecting the language version and clicking the "Export" button, the system generates a CSV file and allows you to save it to your computer. Such a file can be opened in any program that supports spreadsheets and entered translations into it. The data in the first four columns in the file must not be changed, only the data in the fifth column and thus the translation in a given language can be supplemented / modified. After completing / modifying translations from a CSV file, such file should be imported into the system using the form visible under the list of dictionaries. In this form, indicate the CSV file and click "Import". The system will then import the completed / modified translations from the specified CSV file.



It is not possible to manage user interface translations from the system level, as these translations are an integral part of the system source code.

# Registration

The "Registration" module is intended especially for registration workers and is used to manage patients' data and to print the registration books and book of receptions.

# New patient

In a situation, when new patient comes to the registration and his data are not yet in the system, enter the data into the system using the "New Patient" functionality from "Registration" menu.

### ATTENTION!

Always before adding a new patient, you should be sure that this patient is not yet in the system. To check whether the patient is already or still is not in the system, you should use the search engine of patients described in the "Patients (active card)" section.

New patient's form consists of the following tabs:

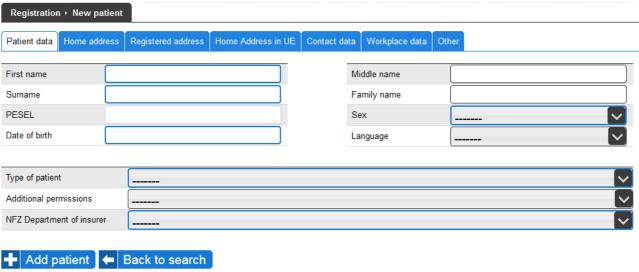
- > Patient data
- > Home address
- > Registered address
- > Home address in UE
- > Contact data

- Workplace data
- > Other

Between tabs you can switch by clicking the mouse cursor on it. Saving data of added patient (the "Add Patient" button) can be done only after completing the required data on all tabs.

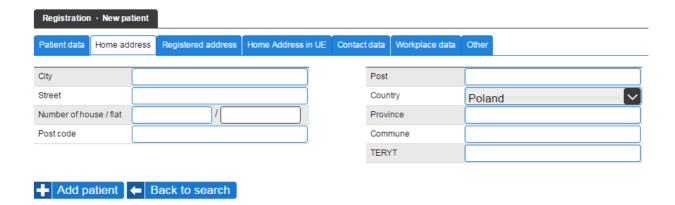
## Patient data

In the form of patient's data, there are personal and identification data of patient. In case of patients having PESEL number, after entering the PESEL number, fields sex, date of birth and type of patient are filled automatically. If you enter invalid PESEL number, frame around the field turns red.



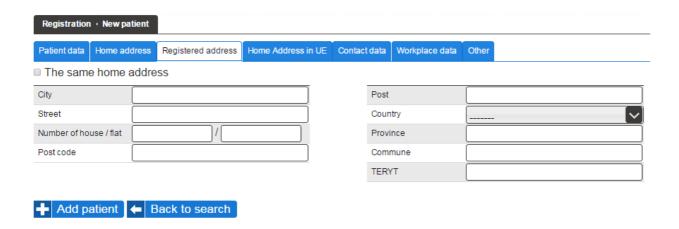
### Home address

Home address of the patient is mandatory to fill in address of residence in Poland. Postal code can be entered either with or without a dash (the system will automatically change its format by adding a dash between the second and third digit). After entering the correct post code, then country, province, commune and TERYT fields are filled in automatically. When entering the city and name of commune, there are displayed hints. When selecting commune from a list of suggestions, then TERYT is filled in automatically.



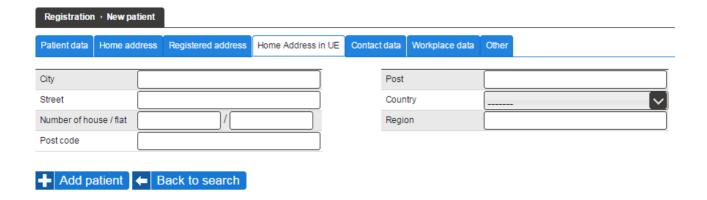
# Registered address

When completing the registered address, there are identical mechanisms as for home address. If the patient's registered address is the same as the home address of the patient, then in a very simple way you can copy data from home address to registered address by selecting in the "Registered address" tab "the same home address" field.



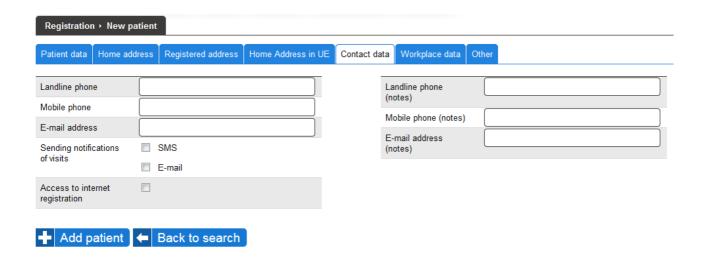
## Home address in UE

Home address in the European Union is important for patients insured under the provisions of coordination. At its fulfillment, there are not used hints nor automatic additions.



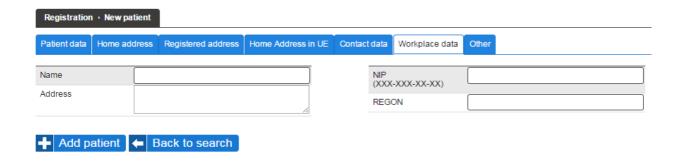
### Contact data

Contact details are telephone numbers and e-mail address of patient together with any comments regarding this data (e.g. "mother's phone number"). Here you can also select by which channels the patient wishes to receive notifications of visits (SMS, e-mail), if the patient wants to receive any notification. Fill in the contact information is not mandatory, but if a patient wishes to receive notification via SMS, the mobile phone number will become mandatory and by analogy, if the patient wishes to receive notification by e-mail, then entering e-mail address will be mandatory. If by the two channels, then entering either the phone number as the e-mail address will be required. Also within contact data one can mark whether patient wishes to have access to internet registration (internet registration gives possibility to patient for arranging visits himself). Marking this option one also has to enter patient e-mail address, which will be used as his login for internet registration. If option "Access to internet registration" is marked, then while saving patient data there will be password for internet registration automatically generated and sent to patient e-mail address. When entering a mobile phone number, it automatically selects the "SMS" option and when entering an email address, the "E-mail" option in the "Sending notifications of visits" field (this check can obviously be deleted, the system only suggests the option of sending notifications).



# Workplace data

If the patient will be under treatment in a healthcare institution at the expense of your employer, then the workplace's data should be entered, which will be used to invoicing.



## Other

In this tab you can specify the patient's type (eg. VIP).

# **Patients (active cards)**

In a situation when there is a need to verify, update, modify or supplement personal, identification, contact, or insurance data, or any declarations, referrals, authorizations, warnings, additional information, annexes about health and disease history of the patient or verification / acceptance / reimbursement of patient's payments, use the "Patients (active cards)" functionality in the application's "Registration" menu. After selecting this functionality, the search engine of patients is displayed.

It is possible to find the patient by any combination of the following criteria:

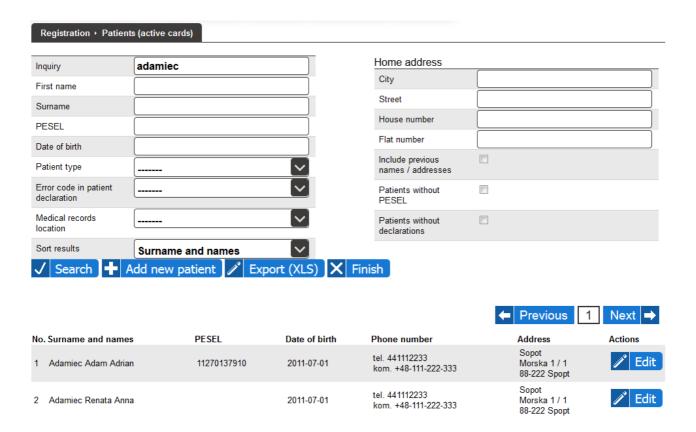
- inquiry in the field you can enter any data identifying of the searched patient the system will try to match data entered in this field to the beginning of the name, the beginning of any member of surname, PESEL number and the date of birth of the patient; capitalization does not matter
- first name in the field you can enter the first name or the beginning of the name of searched patient; capitalization does not matter
- > surname in the field you can enter the surname or the beginning of the surname of searched patient; capitalization does not matter
- PESEL in the filed you can enter PESEL number of searched patient; after entering PESEL number and going to the next field of search form, there is verification of entered PESEL number - if entered PESEL is invalid then the frame of PESEL number's field turns red
- date of birth in the field you can enter the date of birth of searched patient; after clicking on the birth date's field, there is displayed a calendar of date selection
- patient type in this field you can choose the type of patient
- > error code in patient's declaration in the field you can specify the error's code in the patient's declaration (to find patients with a declaration with a specific error code)
- > medical records location location of paper medical records of patient

- home address in fields you can enter: the name or the beginning of name of city, the name or the beginning of the street name, house number, flat number of searched patient; capitalization does not matter
- include previous names/addresses When you select this option at searching, system will also take into account previous names and addresses of the patient (if they were changed, eg. surname may have been changed in the system after patient's marriage, the address might have changed in the system after changing the place of residence by the patient)
- Patients without PESEL when this option is selected, at search the system will consider only the patients who do not have a PESEL number
- Patients without declarations when this option is selected, at search the system will consider only patients who do not have the declaration (withdrawn declarations are not consider)

After entering the search criteria and pressing the "Search" button there may be three situations:

- if there is no active patient meets all entered search criteria, then the search engine will display a message about the lack of patients meeting these criteria
- if there is exactly one active patient meets all entered search criteria or the one owning a card of scanned number, it will automatically switch to the card of that patient
- if there is more than one active patient meets all criteria entered in the search form, then the search engine will display a list of found patients, and at each of them there is a button to go to edition of patient's card

In addition, below the search engine there is an extra button "Export (XLS)" which clicked downloads the XLS file with a list of patients that meet the search criteria.



If the search engine does not find a patient with this criteria, it means that such patients is not yet in the system. Then you must add a new patient using the "New Patient" functionality from "Registration" menu or using the "Add new patient" visible in search engine (both of these functionalities are the same).

If there is only one patient meets the criteria or if there is more than one such patient and at proper patient was pressed the "Edit" button, then there is displayed the card of this patient, consisting of the following tabs:

,	
$\rangle$	Contact
$\rangle$	Insurance
$\rangle$	Declarations
$\rangle$	Referrals
$\rangle$	Authorizations
$\rangle$	Cautions
$\rangle$	Information
$\rangle$	History
$\rangle$	Payments
$\rangle$	Documents
$\rangle$	Visits
$\rangle$	Employment
$\rangle$	Drugs
$\rangle$	EHR
$\rangle$	Stays
$\rangle$	Printouts
$\rangle$	Parameters
$\rangle$	Prescriptions
$\rangle$	CTC

> Patient

# **Patient**

In the "patient" tab there is a form with personal and identification data of the patient. Above the form, there are information icons. The number of icons depends on the patient data. The scope of the icons is following:

> juvenile patient – by this icon marked are patients up to 18 years of age and patients after 18 years of age having special permission to use the clinic for children

>	notorious not setting yourself up for a visit - by this icon marked are patients who failed to appear for at least 3 consecutive appointments
>	entered declaration to family doctor – by this icon marked are patients having entered (still not send to the NFZ) a declaration to family doctor
	L
>	entered declaration to nurse – by this icon marked are patients having entered (still not send to the NFZ) a declaration to nurse
	P
>	entered declaration to midwife – by this icon marked are patients having entered (still not send to the NFZ) a declaration to midwife
	0
>	entered declaration from the scope of school medicine – by this icon marked are patients having entered (still not send to the NFZ) a declaration from the scope of school medicine
	S
>	sent to the NFZ declaration to family doctor – by this icon marked are patients having sent to the NFZ (still not verified) a declaration to family doctor
	L
>	sent to the NFZ declaration to nurse – by this icon marked are patients having sent to the NFZ (still not verified) a declaration to nurse
	P
$\rangle$	sent to the NFZ declaration to midwife – by this icon marked are patients having sent to the



sent to the NFZ declaration from the scope of school medicine – by this icon marked are patients having sent to the NFZ (still not verified) a declaration from the scope of school medicine

S

> sent to the NFZ declaration to family doctor, which declaration was already active – by this icon marked are patients having sent to the NFZ (still not verified) a declaration to family doctor, which declaration was already active



> sent to the NFZ declaration to nurse, which declaration was already active – by this icon marked are patients having sent to the NFZ (still not verified) a declaration to nurse, which declaration was already active



> sent to the NFZ declaration to midwife, which declaration was already active – by this icon marked are patients having sent to the NFZ (still not verified) a declaration to midwife, which declaration was already active



> sent to the NFZ declaration from the scope of school medicine, which declaration was already active – by this icon marked are patients having sent to the NFZ (still not verified) a declaration from the scope of school medicine, which declaration was already active



> sent to the NFZ declaration to family doctor, which declaration was already rejected – by this icon marked are patients having sent to the NFZ (still not verified) a declaration to family doctor, which declaration was already rejected



> sent to the NFZ declaration to nurse, which declaration was already rejected – by this icon marked are patients having sent to the NFZ (still not verified) a declaration to nurse, which declaration was already rejected



> sent to the NFZ declaration to midwife, which declaration was already rejected – by this icon marked are patients having sent to the NFZ (still not verified) a declaration to midwife, which declaration was already rejected



> sent to the NFZ declaration from the scope of school medicine, which declaration was already rejected – by this icon marked are patients having sent to the NFZ (still not verified) a declaration from the scope of school medicine, which declaration was already rejected



active declaration to family doctor - by this icon marked are patients with active (accepted by the NFZ) declaration to family doctor



active declaration to nurse - by this icon marked are patients with active (accepted by the NFZ) declaration to nurse



active declaration to midwife - by this icon marked are patients with active (accepted by the NFZ) declaration to midwife



active declaration from the scope of school medicine - by this icon marked are patients with

active (accepted by the NFZ) declaration from the scope of school medicine



> rejected declaration to family doctor - by this icon marked are patients with declaration to family doctor rejected by the NFZ



> rejected declaration to nurse - by this icon marked are patients with declaration to nurse rejected by the NFZ



> rejected declaration to midwife - by this icon marked are patients with declaration to midwife rejected by the NFZ



> rejected declaration from the scope of school medicine - by this icon marked are patients with declaration from the scope of school medicine rejected by the NFZ



> necessity to update patient's data - by this icon marked are patients with declaration in unit where declared staff no longer works



there are warnings about patient (person or treatment) - by this icon are marked patients who has entered warnings in the "Warnings" tab; Simply click on the icon to go automatically to the "Warnings" in the patient's card in order to see the details



type of patient – marked by this information are patients classified to a particular type, e.g. VIP patients



patient registered by the ZnanyLekarz website - check / complete his data - this icon is used to mark patients added to the jHIS system when making an appointment via the ZnanyLekarz website, whose data should be checked / supplemented by registration on the day the patient arrives



patient registered by the ZnanyLekarz website - this icon is used to mark patients added to the jHIS system when making an appointment via the ZnanyLekarz website, whose data has been checked / supplemented by registration on the day the patient arrives



When you hover the mouse over each of the icons there is a hint of what each icon means.

In addition, for patients having PESEL number (or PESEL number of tutor for neonates) above the form is displayed information about the patient's today insurance status in the eWUŚ - if the patient is insured, the information about it is green, but if the patient is not insured or have problems in communication with eWUŚ, relevant information is displayed in red. In addition to information about insurance, there may also be information about quarantine the patient.

The form allows you to enter changes in patient's data. After entering PESEL number, if PESEL number is invalid, frame around the field turns red, and if it is correct, then the fields date of birth, sex and type of patient will automatically be filled (if you have not filled them before entering PESEL number).

Above the form there is a button of issuing statements about the patient's insurance issued to the patient to sign in case of a wrong answer of eWUŚ system. The statements have PDF format..

#### **OŚWIADCZENIE NR 11**

#### o przysługującym świadczeniobiorcy prawie do świadczeń opieki zdrowotnej

I. Składający oświadczenie												
1. Imię i nazwisko		Adam	Adam Powiadamialski									
2. Adres zamieszkania		ulica A	∖aa				nr dor	nu 12		nr mie	szkania	
		kod i r	niejscov	vość 00-	643, Wa	arszawa	(Śródm	ieście)				
3. Numer PESEL (jeżeli zosta	ł nadany)	6	5	0	1	2	3	6	7	9	1	2
Dokument potwierdzający tożsamość	rodzaj	[ ] dowód osobisty [ ] paszport [ ] prawo jazdy										
	seria i numer											
II. Treść oświadczenia												
Posiadam prawo do korzystar	nia ze świadczer	ń opieki	zdrowot	nej finar	sowany	ch ze śi	rodków	publiczn	ych			
Podpis osoby składającej o	świadczenie		2. Data (rrrr/mr 2014/0	n/dd)	ia oświa	adczenia	a	– wyp	ełniane świadcz	enia świ tylko w p enie nie ania świa	orzypadl jest skła	ku adane
								od (rrrr/m	do ım/dd)	(rrr	r/mm/do	d)

In turn under the form are following buttons:

- > Save save changes and remain in the "Patient" tab of patient's card
- Save and exit Save changes and return to the search engine of patients
- Cancel undo the changes and remain in the "Patient" tab of patient's card
- Back to patients search back to search engine of patients without saving changes

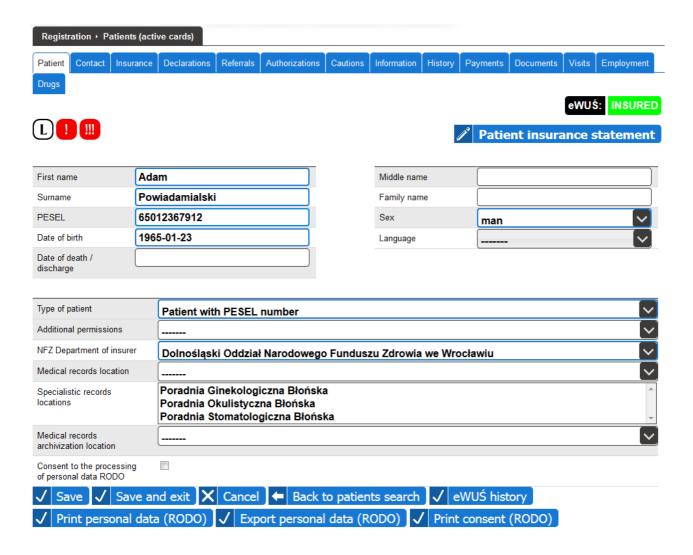
Independently from used saving button before saving data to a database system verifies their correctness. In case of irregularities displays an error message indicating what should be corrected in the form. In case of such message data in the form should be corrected according to the message and retry to save. Correct saving ends with a message about the successful completion of the operation and displays patient's data form (when to save the data is used "Save" button and form has not entered date of death of the patient), or displays a message about the successful completion of the operation and search engine of patients (when to save the data is used the "Save and exit" button or when to save data is used the "Save" button and form has entered the date of death of the patient). In the situation when the form has entered date of death of the patient, the patient will automatically become inactive and entering further modifications to his card is not possible.

Additionally, under the form, the "eWUŚ history" button is shown, presenting the history of checking for patient insurance in the eWUŚ system. After clicking this button, a new window opens with a list of checking dates and statuses.

No. Operation date	Query result
1 2015-03-03 10:00	INSURED
2 2015-03-04 10:00	INSURED
3 2015-03-06 10:00	INSURED



In connection with the entry into force of Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of individuals with regard to the processing of personal data and on the free flow of such data (RODO), buttons meeting the requirements of the Regulation are placed at the bottom of the tab. Button "Print personal data" allows to print for patient request his personal data that are processed within the system. Button "Export personal data" allows to export patient personal data into interoperable format (HL7 CDA) to transfer them to another entity. Button "Print consent (RODO)" allows to print consent to the processing of personal data to be signed by patient (after signing the consent, one has to state that fact by marking the field "Consent to the processing of personal data (RODO)" within the form and saving data).



#### Contact

In the "Contact" tab is a form with address and contact data of the patient.

The form allows you to enter three addresses: (residence in Poland, permanent residence, residence in the European Union), three contact information (phone number, mobile phone number, e-mail address) and two channels of notifications for the patient.

Home address of the patient is mandatory to fill in the address of residence in Poland. Post code can be entered either with or without a dash (then the system will automatically change its format by adding a dash between the second and third digit). After entering the correct post code, country,

province, commune and TERYT fields are filled in automatically. When entering the city and name of commune, there are displayed hints. When selecting commune from a list of suggestions, TERYT is filled automatically.

When completing the registered address, there are identical mechanisms as for home address. If the patient's registered address is the same as the home address of the patient, then in a very simple way you can copy data from home address to registered address by selecting in the "Registered address" tab "the same home address" field.

Home address in the European Union is important for patients insured under the provisions of coordination. At its fulfillment, there are not used hints nor automatic additions.

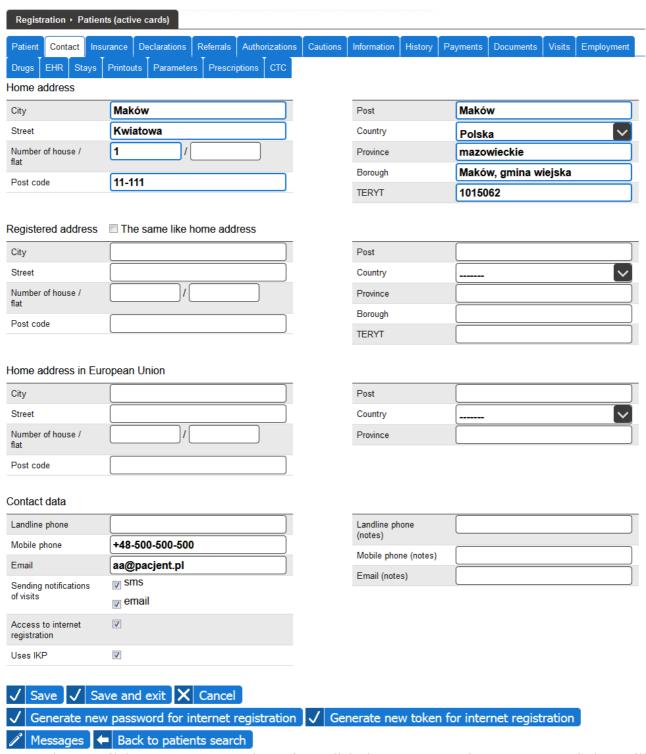
Contact details are telephone numbers and e-mail address of patient together with any comments regarding this data (e.g. "mother's phone number"). Here you can also select by which channels the patient wishes to receive notifications of visits (SMS, e-mail), if the patient wants to receive any notification. Fill in the contact information is not mandatory, but if a patient wishes to receive notification via SMS, the mobile phone number will become mandatory and by analogy, if the patient wishes to receive notification by e-mail, then entering e-mail address will be mandatory. If by the two channels, then entering either the phone number as the e-mail address will be required. Also within contact data one can mark whether patient wishes to have access to internet registration (internet registration gives possibility to the patient for arranging visits himself using internet). Marking this option one has also to enter patient e-mail address, which will be used as login for internet registration. After marking option "Access to internet registration" (if it has not been marked) and saving data one has to use the button "Generate and send password for internet registration" to generate and send to patient e-mail address new password for internet registration.

If the patient uses the Internet Patient Account, then the "Uses IKP" box should be checked, which will be an indication for the doctor issuing e-prescriptions that there is no need to print paper versions of e-prescriptions to the patient.

In turn under the form are following buttons:

- Save save changes and remain in the "Contact" tab of patient's card
- Save and exit Save changes and return to the search engine of patients
- Cancel undo the changes and remain in the "Contact" tab of patient's card
- Generate and send password for internet registration generates and sends to patient address e-mail new password for internet registration
- Generate a new Internet registration access token generate and send to the patient's e-mail address a new token (link) enabling temporary access to the Internet registration without logging in
- Messages sending an email / SMS message to the patient and previewing sent messages
- Back to patients search back to search engine of patients without saving changes

Independently from used saving button before saving data to a database system verifies their correctness. In case of irregularities displays an error message indicating what should be corrected in the form. In case of such message data in the form should be corrected according to the message and retry to save. Correct saving ends with a message about the successful completion of the operation and displays patient's data form (when to save the data is used "Save" button), or displays a message about the successful completion of the operation and search engine of patients (when to save the data is used the "Save and exit" button).



To send an email / SMS message to the patient, click the "Messages" button. A new window will open with a form for sending messages. The form has fields for writing an email (if the patient has an email address) and SMS (if the patient has a mobile number). After entering the content of the message and clicking the "Send" button, it is sent to the patient. Below the form, a list of all messages sent to the patient from this level is displayed.

SMS	
Email subject	
Email content	ti



#### Messages sent

No.	Sending date		Sender login		Channel	Message
1 2019-02-05 13:2	5	ZOZ		SMS		Test
2 2019-02-05 13:2	5	ZOZ		email		Test Test test test

#### **Insurance**

In the "Insurance" tab is a form to add a patient's new insurance document and under it there is a list of all the patient's insurance documents (if any were made) with access to the data form of each of them by clicking on the information bar about the document.

To add a new insurance document in the form of adding insurance document you have to specify the type of insurance and complete at least all fields surrounded by dark blue bold frame (depending on the type of insurance different fields are required). In the fields of dates of issue and validity of the insurance, value are selected from the calendars - after clicking on the date field appears a calendar allowing you to select the correct date. Patient's NIP should be entered without dashes (numbers only). In case of the name of the commune there are displayed hints: typing the name of the commune (after typing the first 3 letters) there is displayed a list of communes having typed part of the name - proper commune should be selected by clicking the mouse on the list of hints. With a choice of commune, appropriate TERYT will be automatically selected.

Under the form of adding a new insurance document, there are following buttons:

- Add adding document and remain in the "Insurance" tab of patient's card
- Add and exit adding document and return to the search engine of patients
- Cancel undo the changes entered to the form (clean the form) and remain in the "Insurance" tab of patient's card
- Back to patients search back to search engine of patients without adding a document

Independently from used adding button before adding document to a database system verifies their correctness. In case of irregularities displays an error message indicating what should be corrected in the form. In case of such message data in the form should be corrected according to the message and retry to add a document. Correct adding document ends with a message about the successful completion of the operation, displays empty form of adding insurance document and under this

there is a list of all patient's insurance documents, including this one already added (when to add the data is used "Add" button), or displays a message about the successful completion of the operation and search engine of patients (when to add the documents is used the "Add and exit" button).

Below the form of adding a new insurance document, there is a list of all patient's insurance documents. For each document is shown the information bar with basic document's data: a kind of insurance, date of issue, beginning of the validity, expiration date. To modify any of these documents, click on the information bar about the selected document. After clicking, under the bar of information will develop a full form with the data of document at identical structure and rules of filling like a form of adding a new document. Under the form of data of the document, there are buttons:

- Save save changes and remain in the "Insurance" tab of patient's card
- > Save and exit Save changes and return to the search engine of patients
- Cancel undo the changes and remain in the "Insurance" tab of patient's card
- Back to patients search back to search engine of patients without saving changes

Independently from used saving button before saving data to a database system verifies their correctness. In case of irregularities displays an error message indicating what should be corrected in the form. In case of such message data in the form should be corrected according to the message and retry to save. Correct saving ends with a message about the successful completion of the operation, displays empty form of adding insurance document and under this there is a list of all patient's insurance documents, including this one already added (when to save the data is used "Save" button), or displays a message about the successful completion of the operation and search engine of patients (when to save the data is used the "Save and exit" button).

#### **Declarations**

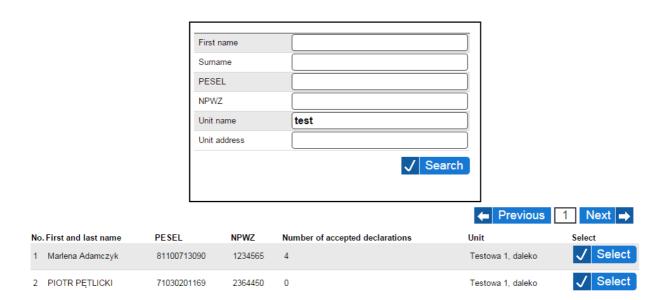
In the "Declarations" tab, there is a form of adding patient's new declaration and under it, there is a list of all the declarations made by the patient (if any have been filed) with access to the data of each of them by clicking on the information bar about the declaration.

Form of adding a new declaration allows you to enter the four declarations at the same time (family doctor, nurse, midwife, nurse of school medicine) if they differ only in staff and possibly the unit. To enter a new declaration (or a set of new declarations) in the form of adding the declaration should be specified staff depending of the type of entered declaration and filled at least all bold fields surrounded by a blue frame. To select staff, click the window icon located at the field of staff. Then will open a new window with the search engine of staff. Searching of staff is possible according to any combination of the following criteria:

- first name in the field you can type in the name or the beginning of the name of the staff; capitalization does not
- > surname in the field you can type in the surname or the beginning of the surname of the staff; capitalization does not
- > PESEL in the field you can type in the PESEL number of staff
- NPWZ in the field you can type in the number of license to practice of the doctor

After entering the search criteria and pressing the "Search" button, under the search engine will

display a list of staff matching entered search criteria (or a message of lack of staff meets the search criteria). At every person from staff, there is displayed the "Select" button.



After pressing the "Select" button, window of searching is closed and the selected staff appears in the field of staff in form of adding a new declaration (to remove selected staff from the field, click the brush icon at the field).

In the "School REGON" field you can start typing in the REGON number or the name of the school if they have been defined in the REGON numbers database - the system will display a list of suggestions helps you to select the correct REGON number. After entering the post code, there is automatically filled post office, country, province, commune and TERYT. After selecting the country "Poland" when filling in the province and commune there are displayed hints: when typing province there is displayed a list of provinces containing typed fragment of the name - the appropriate province should be selected by clicking the mouse on the list of suggestions; typing the name of the commune (after typing the first 3 letters) there is displayed a list of communes containing typed fragment of the name - proper commune should be selected by clicking the mouse on the list of hints. With a choice of commune, there will be automatically selected appropriate TERYT.

Under the form of adding a declaration, there are following buttons:

- Add adding declaration and remain in the "Declaration" tab of patient's card
- Add and exit adding declaration and return to the search engine of patients
- Cancel undo the changes entered to the form (clean the form) and remain in the "Declaration" tab of patient's card
- Back to patients search back to search engine of patients without adding a document

Independently from used adding button before adding declaration to a database system verifies their correctness. In case of irregularities displays an error message indicating what should be corrected in the form. In case of such message data in the form should be corrected according to the message and retry to add a declaration. Correct adding declaration to database ends with a message about the successful completion of the operation, displays empty form of adding declaration and under this there is a list of all patient's declarations, including this one already added (when to add the

declaration is used "Add" button), or displays a message about the successful completion of the operation and search engine of patients (when to add the declaration is used the "Add and exit" button). The patient may have only one other than withdrawn declaration of particular type, and therefore at the addition of the patient's new declaration all the declarations of the same type, except for that of the most recent date is automatically withdrawn (changing status to "withdrawn").

Below the form of adding the declaration there is displayed a list of all the declarations of the patient sorted by status in the following order: active, sent, entered, rejected or withdrawn. For each declaration there is information bar with basic declaration's data: a kind of declaration, unit where it was entered, declared medical staff, the date of entering and status of declaration (highlighted by color). Declarations may have the following statuses:

- > entered new declaration entered to the system (blue)
- sent declaration sent to the NFZ (yellow); if the declaration before sending had the "active" status, then at the "sent" status there will appear an additional annotation in green color; if the declaration before sending had "rejected" status, then at the "sent" status there will appear an additional annotation in red
- > active declaration accepted by the NFZ (green)
- > rejected declaration rejected by the NFZ (red)
- withdrawn declaration withdrawn by ZOZ (no highlight)

To access data of any entered declaration, click on the information bar about selected declaration. After clicking, under the bar information will develop a full form with the data of declaration and a list of problems reported by the NFZ relating to the declaration (if declaration has been rejected by NFZ). Declaration's data form has a similar structure as the form of adding the declaration, whereby:

- form contains data of a single declaration, so there is information about the type of declarations and only one filed of selecting staff and one of selecting unit
- only data of declaration with the status "entered" can be modified (the system does not allow modify the declaration with any other status displaying data form of such a declaration in read-only mode)
- type of declaration cannot be changed under any circumstances (the system does not allow you for change by blocking the field of type of declaration)

In the list of problems reported by the NFZ (if any have been reported) is placed date of reporting the problem, the scale of the problem (error, warning, information), problem code and description of the problem. Depending on the severity of the problem there are various colors of highlight:

- > red in case of errors
- > orange for warnings
- > green for information.

Under the data form of selected declaration may be the following buttons (depending on the status of the declaration):

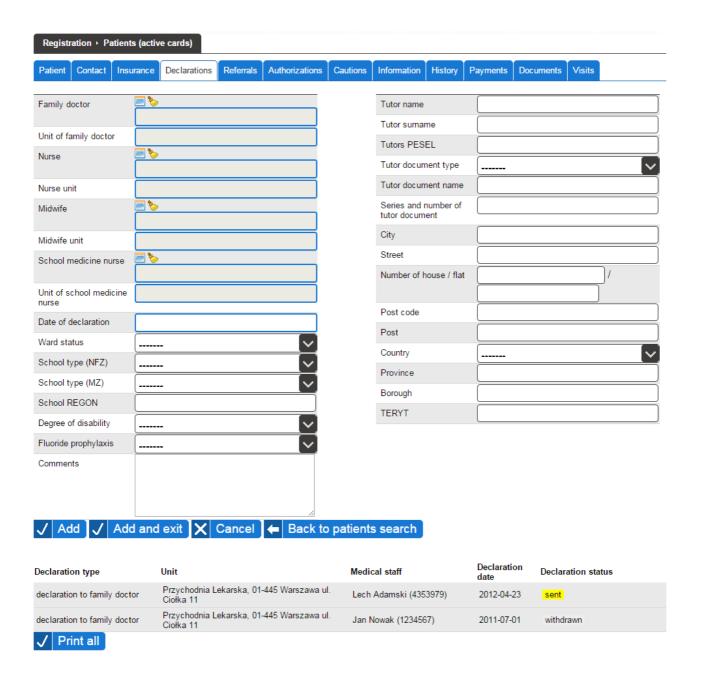
- > Print open/download a PDF file with declarations' data to print; button is available independently of the status of declaration
- Save save changes and remain in the "Declarations" tab in patient's card; button is available only when the declaration has status "entered"

- Save and exit save changes and return to the search engine of patients; button is available only when the declarations has status "entered"
- Cancel withdrawn the changes and remain in the "Declarations" tab of patient's card
- Withdraw withdraw the declaration (declaration's status will change to "withdrawn") and remain in the "Declarations" tab of patient's card; button is available when the declaration has status "entered", "sent", "active" or "rejected"
- Use data to new declaration start creating a new declaration with pre-filled data of declaration at which this button is located; button is available when the declaration has status "entered", "sent", "active" or "rejected"
- Back to patients search back to the search engine of patients without saving changes

The "Use data to new declaration" button begins operation of inserting the patient's new declaration - after pressing this button declaration's data at which this button is located will be copied to the form of adding new declaration. The user can modify/supplement it (if it is necessary) and write thereby creating a new declaration.

Independently from used saving button before saving data to a database system verifies their correctness. In case of irregularities displays an error message indicating what should be corrected in the form. In case of such message data in the form should be corrected according to the message and retry to save. Correct saving ends with a message about the successful completion of the operation, displays empty form of adding declaration and under this there is a list of all patient's declarations, including this one already added (when to save the data is used "Save" button), or displays a message about the successful completion of the operation and search engine of patients (when to save the data is used the "Save and exit" button).

Below a list of all the declaration there is the "Print all" button allows to print all types of patient's declarations on a single form.



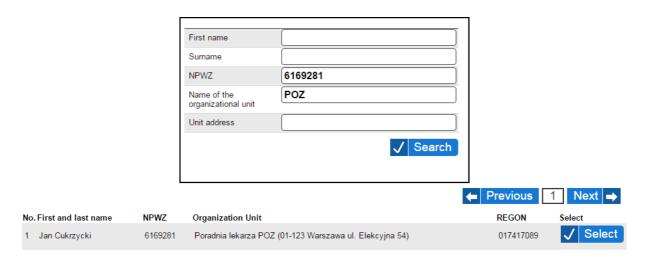
## Referrals

In the "Referrals" tab there is a form of adding patient's new referral and under it there is a list of all referrals issued for the patient (if any were issued) with access to data of each of them by clicking the information bar about referral.

To enter a new referral, in form of adding a new referral, at least all fields with bold dark blue frame have to be completed. In the fields of dates of issue and validity of referral values are selected from the calendars - after clicking on the date field, calendar appears allowing you to select the correct date. In the case of ICD-10 codes of diagnoses, there are displayed hints: when typing code, part of the name or short name of code (in brackets) there is displayed a list of diagnoses containing typed part of the name, code or identified by entered short name - appropriate diagnosis' code must be selected by clicking the mouse on the list of suggestions. If the doctor issuing the referral exists in the database of the healthcare facility, then the fields "Healthcare provider type", "Referring doctor name", "NPWZ of referring doctor", "referring doctor unit", "REGON of referring doctor unit", "

VII part of the ministerial code of referring doctor unit" and "VIII part of the ministerial code of referring doctor unit" can be filled automatically by clicking the "insert doctor and unit data from database" and then find a doctor with his unit using the search engine in the new window and confirm your selection by pressing the "Select" button at the referring doctor. Searching of doctors and units is possible by any combination of the following criteria:

- > First name the beginning of the first name of the referring doctor (capitalization does not matter)
- > Surname the beginning of the surname of the referring doctor (capitalization does not matter)
- NPWZ the number of license to practice of referring doctor
- Name of the organizational unit the beginning of the name of the clinic where referring doctor works (capitalization does not matter)
- \rightarrow Unit address the address of clinic where referring doctor works (capitalization does not matter)



When you click "Select" button, window is closed and the doctor's and unit's data are inserted into the form of adding a referral.

Under the form of adding a new referral are available following buttons:

- Add add a referral and remain in the "Referrals" tab of patient's card
- Add and exit add a referral and return to search engine of patients
- Cancel erase the data entered into the form (clear form) and remain in the "Referrals" tab of patient's card
- Back to patients search back to the search engine of patients without adding any document

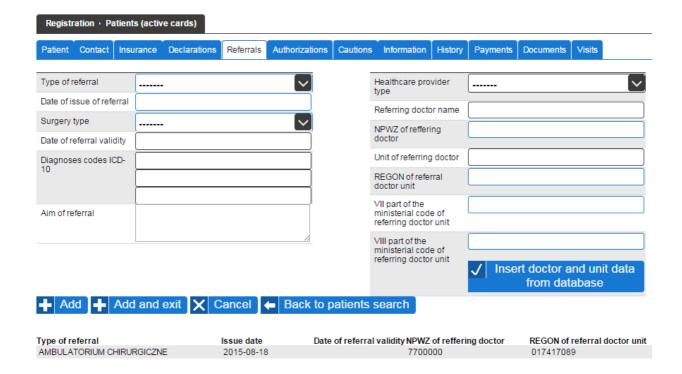
Independently from used adding button before adding declaration to a database system verifies their correctness. In case of irregularities displays an error message indicating what should be corrected in the form. In case of such message data in the form should be corrected according to the message and retry to add a referral. In case of incorrect (non-existent) NPWZ number of referring doctor and/or incorrect (non-existent) REGON number of referring doctor's unit, the system warns about this, but still allows you to add such referral (practice shows that NPWZ and REGON are often

difficult to correctly read from stamps on the referral, but despite of this referral has to be entered to the system). Correct adding referral to database ends with a message about the successful completion of the operation, displays empty form of adding referral and under this there is a list of all patient's referrals, including this one already added (when to add the referral is used "Add" button), or displays a message about the successful completion of the operation and search engine of patients (when to add the referral is used the "Add and exit" button).

Below the form of adding a new referral there is displayed a list of all referrals issued for the patient. For each referral there is information bar with basic data of referral: a type of referral, NPWZ number of referring doctor, REGON number of referring doctor's unit, date of issue, date of validity. To modify any of these referrals, click on the information bar about the selected referral. After clicking, under the bar information will develop a full form with the referral's data of the same structure and rules of filling as form of adding a new referral. In addition, the form displays information about the status of the referral. Under the data form of the selected referral are located buttons:

- Save save changes and remain in the "Referrals" tab of patient's card
- > Save and exit Save changes and return to the search engine of patients
- Cancel undo the changes and remain in the "Referrals" tab of patient's card
- Back to patients search back to search engine of patients without saving changes

Independently from used saving button before saving data to a database system verifies their correctness. In case of irregularities displays an error message indicating what should be corrected in the form. In case of such message data in the form should be corrected according to the message and retry to save. In case of incorrect (non-existent) NPWZ number of referring doctor and/or incorrect (non-existent) REGON number of referring doctor's unit, the system warns about this, but still allows you to add such referral. Correct saving ends with a message about the successful completion of the operation, displays empty form of adding referral and under this there is a list of all patient's referrals, including this one already added (when to save the data is used "Save" button), or displays a message about the successful completion of the operation and search engine of patients (when to save the data is used the "Save and exit" button).



## **Authorizations**

In the "Authorizations" tab there is a form of adding a new authorization issued by the patient (with the possibility of adding a few authorizations for the same person at the same time or number of authorizations in which the patient does not authorize anyone). In this form there is a list of all the authorizations issued by patient (if any have been issued) with access to the data of each of them by clicking on the information bar about authorization.

To enter a new authorization in the form of adding a new authorization/authorizations, select the type of authorization. If a patient issue several types of authorizations for the same person or several types of authorizations in which the patient does not authorize anyone, then you can immediately select several types of authorizations. There are four types of authorizations:

- > statement authorizing to obtain information about the state of health of the patient and provided medical services
- > statement authorizing to obtain medical records

In date of authorization field, the value is selected from the calendar - after clicking on the date field, calendar appears allowing you to select the correct date. The patient may authorize either a specific person or not authorize anyone. If you do not authorize anyone check box in the form indicating on it. If he authorizes a specific person, please fill in all the data fields of that person surrounded by dark blue bold frame. After entering the post code, there is automatically filled post office, country, province, commune, TERYT. After selecting the country "Poland" when entering the province and commune there are displayed hints: typing province displays a list of provinces containing typed part of the name - the appropriate province should be selected by clicking the mouse on the list of suggestions; typing the name of the commune (after typing the first 3 letters) displays a list of communes containing typed part of the name - proper commune should be selected by clicking the mouse on the list of hints, with a choice of commune, there will be automatically selected TERYT appropriate for it. If authorized person is also a patient of ZOZ then instead of entering the data, you can use the "Insert other patient data" button. When you press this button opens a window with the search engine of patients where you can find authorized person and

pressing the "Insert patients data" puts its data to authorization form.



The "Insert patients data" button closes the search window of patients and fills in the form of adding authorization / authorizations by data of this patient as an authorized person.

Under the form of adding a new authorization/authorizations, there are available following buttons:

- Add add an authorization / authorizations and remain in the "Authorizations" tab of patient's card
- Add and exit add an authorization / authorizations and return to search engine of patients
- Cancel erase the data entered into the form (clear form) and remain in the "Authorizations" tab of patient's card
- Back to patients search back to the search engine of patients without adding any authorization / authorizations

Independently from used adding button before adding authorization / authorizations to a database system verifies their correctness. In case of irregularities displays an error message indicating what should be corrected in the form. In case of such message data in the form should be corrected according to the message and retry to add an authorization / authorizations. Correct adding authorization / authorizations to database ends with a message about the successful completion of the operation, displays empty form of adding an authorization / authorizations and under this there is a list of all patient's authorizations, including this one / ones already added (when to add the authorization / authorizations is used "Add" button), or displays a message about the successful completion of the operation and search engine of patients (when to add the authorization / authorizations is used the "Add and exit" button).

Below the form of adding a new authorization there is a list of all authorizations issued by patient. For each authorization there is information bar with basic authorization's data: type of authorization, date of authorization, authorized person, state. To modify any of these authorizations, click on the information bar about authorization. After clicking, under the information bar will develop a full form with the data of authorization of the same structure and rules as form of adding a new authorization (with limited choice of the type of authorization to one option). Under the authorization's data form, there are buttons:

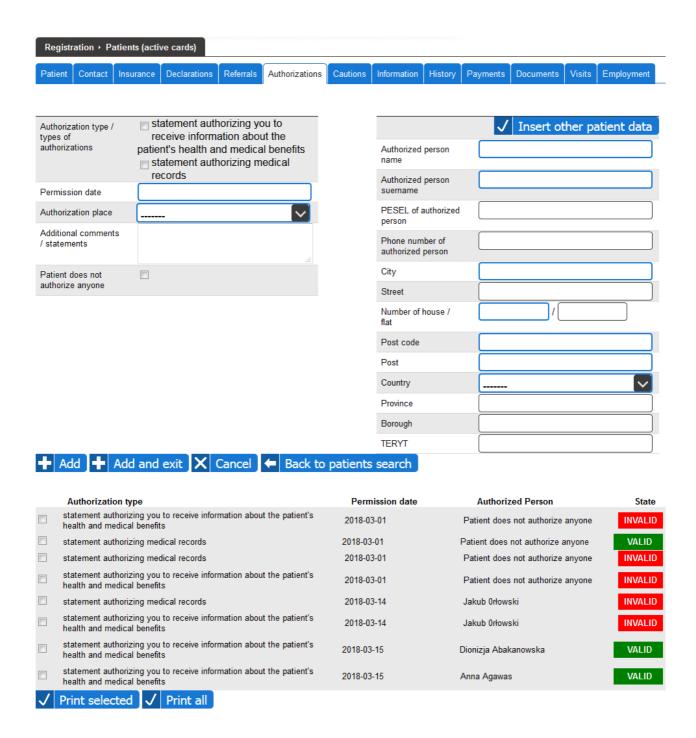
- Save save changes and remain in the "Authorizations" tab of patient's card
- Save and exit save changes and return to the search engine of patients
- Cancel undo the changes and remain in the "Authorizations" tab of patient's card

- Back to patients search back to search engine of patients without saving changes
- > Print print authorization
- \ Invalidate invalidate authorization

Independently from used saving button before saving data to a database system verifies their correctness. In case of irregularities displays an error message indicating what should be corrected in the form. In case of such message data in the form should be corrected according to the message and retry to save. Correct saving ends with a message about the successful completion of the operation, displays empty form of adding authorization/authorizations and under this there is a list of all patient's authorizations, including this one/ones already added (when to save the data is used "Save" button), or displays a message about the successful completion of the operation and search engine of patients (when to save the data is used the "Save and exit" button).

Below the list of all authorizations issued by patient there are additional buttons:

- Print selected opens ready to print document with a list of authorizations issued by patient which has been selected in the list of authorizations
- > Print all opens ready to print document with a list of all the authorizations issued by patient Each authorization has state of valid or invalid. Authorization can be invalidated by clicking the button "Invalidate" within the form of the given authorization. Authorizations ar also invalidated automatically:
  - when adding new authorization within which patient does not authorize anyone, all other authorizations of the same type are invalidated
  - when adding new authorization within which patient authorizes specified person, all other authorizations of the same type within which patient does not authorize anyone are invalidated
  - when modifying data od valid authorization in the way that patient does not authorize anyone, all other authorizations of the same type are invalidated
  - when modifying data od valid authorization in the way that patient sauthorize specified person, all other authorizations of the same type within which patient does not authorize anyone are invalidated



#### **Cautions**

In the "Cautions" tab there is a form of adding a new warning about treatment or person of the patient and under it there is a list of all the cautions about treatment or person of the patient (if any typed) with access to data of each of them by clicking the information bar about the caution.

To enter a new caution ona has to enter its content and possibly one to mark whether that warning is to be displayed for doctors in surgery room next to patient name (significant cautions marked this manner will be visible for doctors within the surgery room before doctor starts patient service).

Under the form of adding new cautions there are following buttons:

Add – add a caution and remain in the "Cautions" tab of patient's card

- Add and exit add a caution and return to search engine of patients
- Cancel erase the data entered into the form (clear form) and remain in the "Cautions" tab of patient's card
- Back to patients search back to the search engine of patients without adding any document

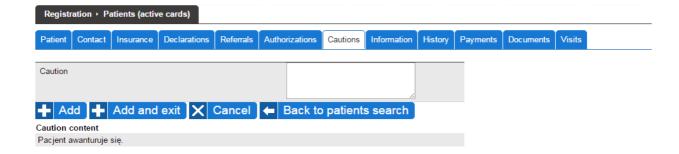
Independently from used adding button before adding caution to a database system verifies their correctness. In case of irregularities displays an error message indicating what should be corrected in the form. In case of such message data in the form should be corrected according to the message and retry to add a caution. Correct adding caution to database ends with a message about the successful completion of the operation, displays empty form of adding a caution and under this there is a list of all patient's cautions (about treatment or person), including this one already added (when to add the caution is used "Add" button), or displays a message about the successful completion of the operation and search engine of patients (when to add the caution is used the "Add and exit" button).

Below the form of adding a new caution, there is a lists all patient's cautions (about treatment or person). For every warning there is information bar with the contents of the cautions. To modify any of these, click on the information bar about the caution. After clicking, under the information bar will develop a full form with the contents of the caution. Under the form of the selected caution there are buttons:

- Save save changes and remain in the "Cautions" tab of patient's card
- Save and exit save changes and return to the search engine of patients
- Cancel undo the changes and remain in the "Cautions" tab of patient's card
- Delete remove caution and remain in the "Cautions" tab of patient's card
- Delete and exit remove caution and return to the search engine of patients
- Back to patients search back to search engine of patients without saving changes

Independently from used saving button before saving data to a database system verifies their correctness. In case of irregularities displays an error message indicating what should be corrected in the form. In case of such message data in the form should be corrected according to the message and retry to save. Correct saving ends with a message about the successful completion of the operation, displays empty form of adding caution and under this there is a list of all patient's cautions, including this one already modified (when to save the data is used "Save" button), or displays a message about the successful completion of the operation and search engine of patients (when to save the data is used the "Save and exit" button).

To remove the caution, use one of the "Delete" or "Delete and exit" buttons under the form of the caution. When you press the button, you will be prompted to confirm the deletion and the deletion will take place after the confirmation.



#### Information

In the "Information" tab there is a form with the following additional information about the patient:

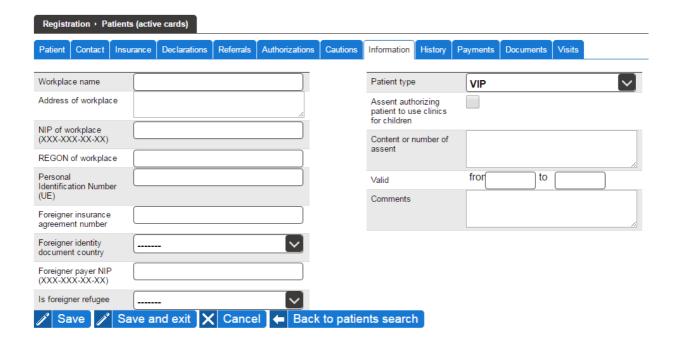
- \ workplace data
- > Personal Identification Number (UE) Patient ID in the European Union
- > Foreigner insurance agreement number this number is used to identify the foreigner who does not have your social security number but having a contract for voluntary health insurance at referring POZ declaration of such foreigner to the NFZ
- Foreigner identity document country the name is used to identify the foreigner who does not have your social security number and who does not have health insurance contract at referring POZ declaration of such foreigner to the NFZ
- Foreigner payer NIP this number is used to identify the foreigner who does not have your social security number and who does not have health insurance contract at referring POZ declaration of such foreigner to the NFZ
- Social security number and who does not have health insurance contract at referring POZ declaration of such foreigner to the NFZ
- patient type membership of the patient to a specific group
- assent authorizing patient to use clinics for children check that the patient has an assent authorizing him to use the clinic for children together with the content and duration of the assent
- > comments any additional comments about patient

Under the form, there are following buttons:

- Save save changes and remain in the "Information" tab of patient's card
- Save and exit save changes and return to the search engine of patients
- Cancel undo the changes and remain in the "Information" tab of patient's card
- Back to patients search back to search engine of patients without saving changes

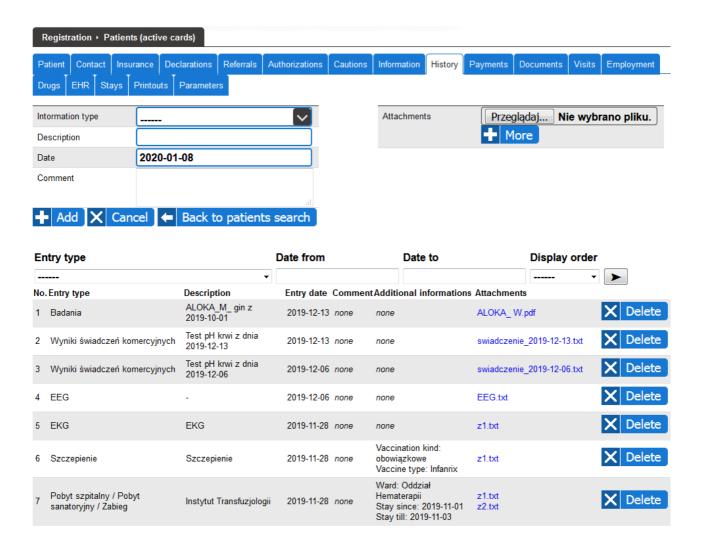
Independently from used saving button before saving data to a database system verifies their correctness. In case of irregularities displays an error message indicating what should be corrected in the form. In case of such message data in the form should be corrected according to the message and retry to save. Correct saving ends with a message about the successful completion of the operation, displays form of patient's additional information (when to save the data is used "Save" button), or displays a message about the successful completion of the operation and search engine

of patients (when to save the data is used the "Save and exit" button).



# History

There is a form in the "History" tab that allows you to enter documentation of events from the patient's health and illness history in the form of attachments. After selecting this functionality, a form for adding information to the patient's health and illness history and a list of information already entered in the patient's health and illness history together with a filter enabling narrowing the contents of this list to the items that meet the criteria specified in the filter is displayed.



To add new information to the patient's health and disease history, select the type of information in the form at the top of the tab, fill in the data necessary for the type of information (after selecting the type of information, the form changes to the type appropriate for the type of information), and select attachments. By default, one field is displayed on the form to select one attachment. If there is a need to select more attachments, then use the "More" button - each click will result in displaying the next field enabling the selection of the next attachment (fields left blank will be ignored when saving). In the case of cytological tests, one should additionally indicate by whom the given test was ordered - cytological tests with the indicated person are automatically displayed to gynecologists in the doctor's office. After entering the completed form, save the data by clicking the "Add" button. The added information will appear in the list at the bottom of the tab.

On the list of information entered into the patient's health and disease history, all information entered by default is displayed, along with links to attachments that allow you to download and view them. In order to view the attachment, the user's computer must be installed with software that supports the format in which the attachment was saved, e.g. for most image formats (including DICOM) it may be an IrfanView browser with the IrfanViewPlugins package. The scope of data displayed in the said list can be limited to information of a specific type from a specific period by using the filter visible above the list. Also the order of displaying data in this list can be changed using the same filter. To limit the range of data displayed in the list and / or change the order in which they are displayed, enter the desired criteria in the filter and click the ">" button.

In the list of information entered into the patient's health and disease history, a "Delete" button appears next to each entry to delete information entered in the patient's card by mistake.

# **Payments**

In the "Payments" tab there is a list of patient's payments for commercial visits (including rehabilitation cycles planned using packages), for diagnostic examinations and for vaccinations divided into the following sections:

- outstanding payments payments for visits, surgeries, treatment cycles and hospital stays waiting on the issuance of a bill (invoice, receipt) or a positive correction (the patient used to have to make payment or surcharge) and invoices waiting for payment
- > unpaid invoices invoices for visits, surgeries, treatment cycles and hospital stays for which no payment has been contributed yet or partial payment has been contributed
- vunpaid receipts receipts for visits, surgeries, treatment cycles and hospital stays for which no payment has been contributed yet or partial payment has been contributed
- overpayments invoices and receipts for visits, surgeries, treatment cycles and hospital stays requiring issue a downward correction (meaning for the healthcare facility the need to return the payment)
- > realized payments paid invoices and receipts for visits, surgeries, treatment cycles and hospital stays
- payments for diagnostic examinations realized and outstanding payments for diagnostic examinations

  payments

  pa
- payments for vaccinations realized and outstanding payments for vaccinations
- payments for benefits realized and outstanding payments for commercial benefits
- bailouts bailouts accepted to the patients and possibility of bailouts acceptance to the patient

These, from above sections, which do not contain any information are not displayed.



## **Outstanding payments**

No. Term visit	Visit type	Clinic / Ward	Staff / Instruments	Due	Actions
1 2017-04-01 12:00	zwykła	Poradnia okulistyczna, ul. Błońska 46/48, 05-807 Podkowa Leśna	Olga Baron	100.00	) Waiting for the payment
2 2017-04-01 13:00	zwykła	Poradnia okulistyczna, ul. Błońska 46/48, 05-807 Podkowa Leśna	Olga Baron	20.00	Waiting for the payment
3 2017-04-01 16:00	zwykła	Poradnia okulistyczna, ul. Błońska 46/48, 05-807 Podkowa Leśna	Olga Baron	123.00	<ul> <li>Bailout</li> <li>Paid in cash</li> <li>Paid with card</li> <li>Receipt</li> <li>Invoice on patient</li> <li>Invoice on workplace</li> </ul>
4 2017-04-01 15:00	zwykła	Poradnia okulistyczna, ul. Błońska 46/48, 05-807 Podkowa Leśna	Olga Baron	369.00	Correcting invoice

## **Unpaid invoices**

ı	No. Term visit	Visit type	Clinic / Ward	Staff / Instruments	Invoice	Actions
	1 2017-04-01 13:00	zwykła	Poradnia okulistyczna, ul. Błońska 46/48, 05-807 Podkowa Leśna	Olga Baron	✓ View	Payment amount: 20.00 Payment type: cash vayment date: 2017-12-28

## **Unpaid receipts**

No. Term visit	Visit type	Clinic / Ward	Staff / Instruments	Receipt	Actions
1 2017-04-01 1 12:00	zwykła	Poradnia okulistyczna, ul. Błońska 46/48, 05-807 Podkowa Leśna	Olga Baron	√ View	Payment amount: 100.00 Payment type: cash ▼ Payment date: 2017-12-28  Paid
2 2017-04-01 14:00	zwykła	Poradnia okulistyczna, ul. Błońska 46/48, 05-807 Podkowa Leśna	Olga Baron	✓ View	Payment amount: 200.00 Payment type: cash value: 2017-12-28  Paid

## **Overpayments**

N	o. Term visit	Visit type	Clinic / Ward	Staff / Instruments	Document	Correction	Cause of correction	Actions
1	2017-04-01 08:00	zwykła (not realized)	Poradnia okulistyczna, ul. Błońska 46/48, 05-807 Podkowa Leśna	Olga Baron	Paragon	-123.00	Visit did not take place	Correcting receipt
2	2017-04-01 10:00	zwykła (not realized)	Poradnia okulistyczna, ul. Błońska 46/48, 05-807 Podkowa Leśna	Olga Baron	Faktura VAT nr 000106/2017	-123.00	Visit did not take place	Correcting invoice

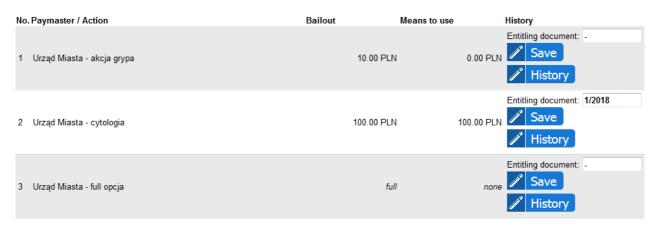
## Realized payments

No	. Term visit	Visit type	Clinic / Ward	Staff / Instruments	Document	Preview
1	2017-04-01 08:00	zwykła	Poradnia okulistyczna, ul. Błońska 46/48, 05-807 Podkowa Leśna	Olga Baron	Paragon	✓ View
2	2017-04-01 09:00	zwykła	Poradnia okulistyczna, ul. Błońska 46/48, 05-807 Podkowa Leśna	Olga Baron	Paragon	✓ View
3	2017-04-01 09:00	zwykła	Poradnia okulistyczna, ul. Błońska 46/48, 05-807 Podkowa Leśna	Olga Baron	Paragon korygujący	✓ View
4	2017-04-01 10:00	zwykła	Poradnia okulistyczna, ul. Błońska 46/48, 05-807 Podkowa Leśna	Olga Baron	Faktura VAT nr 000106/2017	✓ View
5	2017-04-01 11:00	zwykła	Poradnia okulistyczna, ul. Błońska 46/48, 05-807 Podkowa Leśna	Olga Baron	Faktura VAT nr 000107/2017	✓ View
6	2017-04-01 11:00	zwykła	Poradnia okulistyczna, ul. Błońska 46/48, 05-807 Podkowa Leśna	Olga Baron	Faktura korygująca VAT nr 000109/2017	✓ View
7	2017-04-01 14:00	zwykła	Poradnia okulistyczna, ul. Błońska 46/48, 05-807 Podkowa Leśna	Olga Baron	Paragon	✓ View
8	2017-04-01 15:00	zwykła	Poradnia okulistyczna, ul. Błońska 46/48, 05-807 Podkowa Leśna	Olga Baron	Faktura VAT nr 000110/2017	✓ View

## Payments for diagnostic examinations

No. Order date	Ordering doctor	Due	Actions
1 2017-04-05 14:48	Olga Baron		7.00 <b>View</b>
2 2017-04-05 14:49	Olga Baron		47.00 <b>View</b>
3 2017-04-05 14:49	Olga Baron		10.00 <b>View</b>

#### **Bailouts**



← Back to patients search

At outstanding payments there can be following buttons:

Bailout – button to accept bailout for visit / order

- Paid in cash button of fast recording of payment in cash
- Paid with card button of fast recording of payment with credit card
- Receipt issuing a receipt to be printed on a computer printer
- \ Invoice on patient button of issuing invoice on patient
- \rightarrow Invoice on workplace button of issuing invoice on patient's workplace
- Correcting invoice button of issuing correcting invoice of earlier issued invoice (available if the invoice was paid before the visit and during the visit were made services for a larger amount so surcharge is required)
- Correcting receipt button of issuing correcting receipt of earlier issued receipt (available if the receipt was paid before the visit and during the visit were made services for a larger amount so surcharge is required)

In the case of outstanding payments for which the invoice was issued but payment was not yet done, there are not displayed any buttons, but only information of the content: "Waiting for the payment of an invoice".

The "Bailout" button is used for accepting bailouts to the given visit / order. This button is visible only by these visits / orders for which no bailout has been accepted yet. Button is not visible by rehabilitation cycles planned using package (in such case discount defined within the package is an eqivalent of bailout). After clicking this button new window opens up amd within it there displays table which rows describes paymasters / actions that grant bailouts while columns describes positions to be paid. By each paymaster / action there is information about available means (means left to be used; this value is emphasized with red color when means are ending) and about amount of bailout that is vested in the patient. By each position to be paid there is quantity and unit price presented. User should specify here which positions to be paid from which paymaster / action means are to be funded. Radio fields are made so that in case of mistaken marking one can unmark the given field by clicking it once again. After marking appropriate bailouts one has to click the button "Save" to accept the desired bailouts. System automatically accounts appropriate bailout amounts to marked position to be paid preserving to the following rules:

- bailout amount is gross amount
- full bailout is vested in the patient only once (it can be accepted for a single visit / order)
- bailout with specified amount is vested in the patient only once within the given amount but the amount can be divided into separate visits / orders of the patient
- bailout amount and bailout net amount must fulfill the following relations:

```
kjd = z2(kjdn * (1 + vat / 100))

cjp - kjd = z2((cjpn - kjdn) * (1 + vat / 100))
```

where

z2(...) - rounding value to two decimal places

cip – unit price of position to be paid

kjd – bailout unit amount

cjpn – unit net price of position to be paid

kjdn – bailout unit net amount

vat – VAT rate

ijp – quantity of units of position to be paid

of which given are cip, cipn, vat, ijp.

While accepting bailout system decreases amount of available means within the given paymaster / action by the value of kjd \* ijp. (Amount of means available within the given paymaster / action can also be automatically increased what takes place in the following situations: removing from order a vaccine / examination for which bailout has already been accepted, automatic canceling of order for vaccinations for which bailout has already been accepted, canceling or marking as unrealized a visit for which bailout has already been accepted, decreasing multiplicity or marking as unrealized a commercial services for which bailout has already been accepted.)

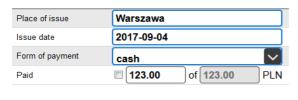
#### Point out poitions to be funded by the particular actions / paymasters

Position Action / Paymaster	Badanie dna oka (1 × 123.00 PLN)
Urząd Miasta - akcja grypa available means: 947.00 PLN bailout: 10.00 PLN	©
Urząd Miasta - full opcja available means: 9983.00 PLN bailout: full	©
Urząd Miasta - szczepienia ochronne available means: 9900.00 PLN bailout: 100.00 PLN	•
Urząd Miasta - zbadaj wzrok available means: 49558.80 PLN bailout: 50.00 PLN	•



The "Paid in cash" and "Paid with card" buttons are used for fast saving of payment, which is in fact saving in the system the receipt issued with default values and without printing. When you click "Paid in cash" / "Paid with card" button it opens for the moment a new window with a message about the saving payment, and after a while, the window disappears.

The "Receipt" button opens a window to issue a receipt to be printed on a computer printer. In the window of issuance a receipt is displayed a form by default filled with data.

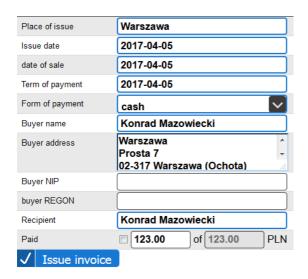


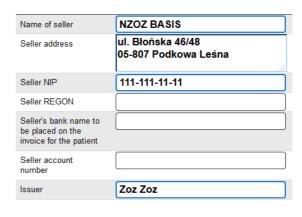


✓ Issue receipt

One should verify and fill in the missing data. If at the issuing of receipt there is charged (fully or partially) payment for it then one should also check "Paid" box and enter paid amount (within the field there is full amount put by default). After pressing the "Issue receipt" button, there is created printing of receipt (in PDF format), and displayed a link allowing you to download it and print.

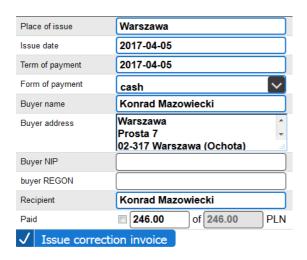
The "Invoice on patient" and "Invoice on workplace" buttons are opening a window of issuing an invoice, which is by default filled with data (depending on used button, the buyer will be patient or the patient's workplace).

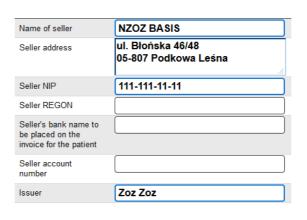




One should verify and fill in the missing data. If at the issuing of invoice there is charged (fully or partially) payment for it then one should also check "Paid" box and enter paid amount (within the field there is full amount put by default). After pressing "Issue invoice" there is created printing of invoice (in PDF format), and displayed a link allowing you to download it and print.

The "Correcting invoice" button opens a window of issuing a correction invoice, which is by default filled with data. If the original invoice was issued on the patient, the correction will be issued on the patient, and if it was issued on the patient's workplace, so correcting invoice will be issued on it.





One should verify and fill in the missing data. If at the issuing of correction invoice there is charged (fully or partially) payment for it then one should also check "Paid" box and enter paid amount (within the field there is full amount put by default). After pressing "Issue correction invoice" there is created printing of correction invoice (in PDF format), and displayed a link allowing you to download it and print.

The "Correcting receipt" button opens a window to issue a correction receipt, which is by default filled with data.





One should verify and fill in the missing data. If at the issuing of receipt there is charged (fully or partially) payment for it then one should also check "Paid" box and enter paid amount (within the field there is full amount put by default). After pressing "Issue correction receipt" there is created printing of correction invoice (in PDF format), and displayed a link allowing you to download it and print.

If there are receipts (original and corrective) issued but not paid or partially paid, then in the "Payments" tab appears in section "Unpaid receipts", where it is available to preview each of receipts (the "View" button) and where one should uncheck payment when such entered indicating the amount, form and date of payment and clicking "Paid" button (within the amount field there is full amount put by default). It is also possible to issue an invoice to the receipt. If the invoice for the receipt has not yet been issued, then next to the "View" button are visible the buttons "Invoice to receipt on patient" and "Invoice to receipt on workplace" enabling issuing the invoice to the receipt, and if the invoice for the receipt was issued, then next to "View" button, you can see the "Invoice to receipt" button that allows you to download and print the issued invoice. To issue an invoice to receipt on patient, click the "Invoice to receipt on patient" button. Then a new window will be displayed with the invoice issuing form for the receipt, filled with data by default. You need to verify the data and fill in the missing ones. After pressing the "Issue invoice to receipt" button, an invoice print is created for the receipt (in PDF format) and a link is displayed to download and print it





✓ Issue invoice to receipt

To issue an invoice to receipt on patient's workplace, click the "Invoice to receipt on workplace" button. Then a new window will be displayed with the invoice issuing form for the receipt, filled with data by default. You need to verify the data and fill in the missing ones. After pressing the "Issue invoice to receipt" button, an invoice print is created for the receipt (in PDF format) and a link is displayed to download and print it.

Place of issue	PODKOWA LEŚNA
Issue date	2019-11-08
Issuer	Zoz Zoz

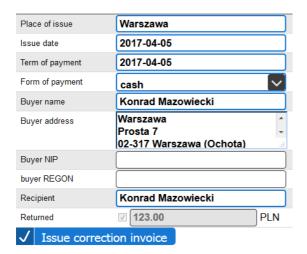
Buyer name	Agaba Sp. z o.o.				
Buyer address	ul. Piwna 7 07-007 Piwowary				
Buyer NIP	6772373649				
buyer REGON					
Recipient					

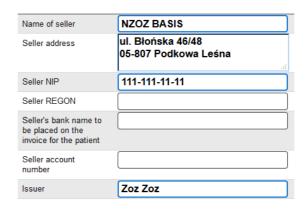
## ✓ Issue invoice to receipt

If there are invoices (original and corrective) issued but not paid or partially paid, then in the "Payments" tab appears in section "Unpaid invoices", where it is available to preview each of invoices (the "View" button) and where one should uncheck payment when such entered indicating the amount, form and date of payment and clicking "Paid" button (within the amount field there is full amount put by default).

In a situation when charges for a visit was made before the visit and during the visit were made services for less amount, then the overpayment should be given to the patient (or the patient's workplace if the fee per visit was done on the basis of the invoice issued for the workplace of the patient). Overpayments appear in the "Payments" tab in the "Overpayments" sections. At each of them there is "Correction invoice" or "Correction receipt" button (depending on what kind of document was the original bill).

The "Correcting invoice" button opens a window of issuing a correction invoice, which is by default filled with data. If the original invoice was issued on the patient, the correction will be issued on the patient, and if it was issued on the patient's workplace, so correcting invoice will be issued on it.





One should verify and fill in the missing data. System assumes that while issuing correcting invoice overpayment is returned to patient (or to patient workplace) and that's why "Returned" field is marked (and it cannot be marked off), also amount to be returned is given. After pressing "Issue correction invoice" there is created printing of correction invoice (in PDF format), and displayed a link allowing you to download it and print.

The "Correcting receipt" button opens a window to issue a correction receipt, which is by default filled with data.







One should verify and fill in the missing data. System assumes that while issuing correcting receipt overpayment is returned to patient and that's why "Returned" field is marked (and it cannot be marked off), also amount to be returned is given. After pressing "Issue correction receipt" there is created printing of correction invoice (in PDF format) and displayed a link allowing you to download it and print.

The section of "Realized payments" contains a list of bills (invoices and receipts – original and corrective), which have been paid. At each account there is the "View" button allows you to view the bill (in PDF format)a nd in the case of receipts, additionally buttons for issuing / previewing invoices for receipts, as described in the section "Unpaid receipts".

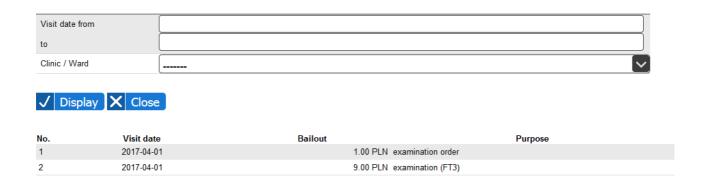
The section of "Payments for diagnostic examinations" contains list of diagnostic examinations orders for which payment is realized as well as these for which payment has not been realized yet. By each order for which payment is realized there is a button "View" which when clicked it allows to see preview of issued bill (in PDF format) and in the case of receipts, buttons for issuing / previewing invoices for receipts are additionally displayed, as described in the section "Unpaid receipts". By each order for which invoice or receipt was issued but payment has not been contributed yet there is a form that allows to enter payment note, which function the same way as described in sections "Unpaid invoices" and "Unpaid receipts". By each order for which no bill has been issued yet there are buttons: "Bailout", "Paid in cash", "Paid with card", "Receipt", "Invoice on patient", "Invoice on workplace", which function the same way as described in section "Outstanding payments" or "Correcting receipt" / "Correcting invoice" button, which function the same way as described in section "Overpayments".

The section of "Payments for vaccinations" contains list of vaccination orders for which payment is realized as well as these for which payment has not been realized yet. By each order for which payment is realized there is a button "View" which when clicked it allows to see preview of issued bill (in PDF format) and in the case of receipts, buttons for issuing / previewing invoices for receipts are additionally displayed, as described in the section "Unpaid receipts". By each order for which invoice or receipt was issued but payment has not been contributed yet there is a form that allows to enter payment note, which function the same way as described in sections "Unpaid invoices" and "Unpaid receipts". By each order for which no bill has been issued yet there are buttons: "Bailout", "Paid in cash", "Paid with card", "Receipt", "Invoice on patient", "Invoice on workplace", which function the same way as described in section "Outstanding payments" or "Correcting receipt" / "Correcting invoice" button, which function the same way as described in section "Overpayments".

The section of "Payments for benefits" contains list of benefits orders for which payment is realized as well as these for which payment has not been realized yet. By each order for which payment is realized there is a button "View" which when clicked it allows to see preview of issued bill (in PDF format) and in the case of receipts, buttons for issuing / previewing invoices for receipts are additionally displayed, as described in the section "Unpaid receipts". By each order for which invoice or receipt was issued but payment has not been contributed yet there is a form that allows to enter payment note, which function the same way as described in sections "Unpaid invoices" and

"Unpaid receipts". By each order for which no bill has been issued yet there are buttons: "Bailout", "Paid in cash", "Paid with card", "Receipt", "Invoice on patient", "Invoice on workplace", which function the same way as described in section "Outstanding payments" or "Correcting receipt" / "Correcting invoice" button, which function the same way as described in section "Overpayments".

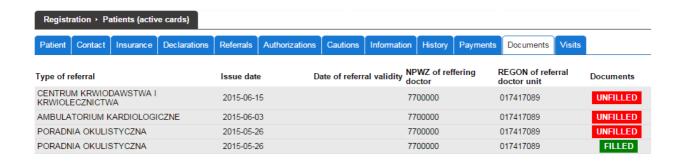
The section of "Bailouts" contains list of paymasters / actions that grant bailouts and by each of them there is bailout amount and information about means available to use within the given amount for the given patient, the "Entitling document" field to enter the number of the document entitling patient to use the given bailout and the "Save" button to save this number (the patient may use only those bailouts for which the number of the entitling document has been entered) and the "History" button to view the history of granting a given bailout to the patient. After clicking the "History" button by a given fund, a new window opens with a filter that allows narrowing the history of granting bailouts to a given period and clinic. After entering the criteria into the filter and clicking the "Display" button, a table is presented with the dates, amounts and purposes of the awarded bailouts.



#### **Documents**

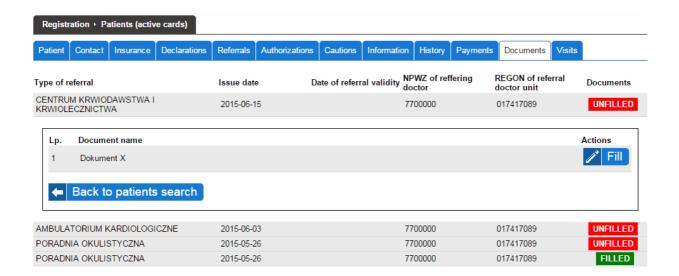
In the "Documents" tab there is a list of documents which the patient has to sign deciding for surgery/operation (both already filled documents as well as documents to be completed). The tab displays a list of patient's referrals and for each of them there is information about the status of documents related to this referral:

- UNFILLED (red) if there is at least one document that has not been filled yet
- FILLED (green) if all documents are filled

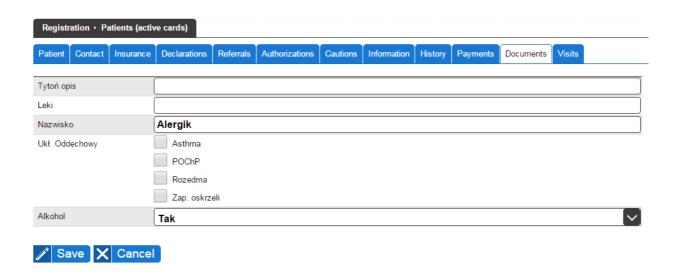


When you click in the gray bar with information about the referral, there is a list of documents associated with this referral. At each unfilled document there is the "Fill" button to view the form of

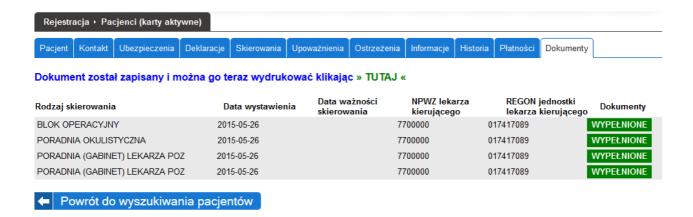
filling the document and at each filled document there is "View" button allows you to view a document in PDF format and print it.



When you click "Fill" button at the document to fill, the form displays data dependent on the template of the document with the "Save" button used to save data after their entering to the form. The text fields in such form have a built-in content filling control indicator: if the content entered in the text field takes up less than 90% of the space allocated to it in the document template, then the background of the text field is white, if it takes 90% to 95% of the space - the background changes to yellow, if it occupies between 95% and 100% space - the background changes to orange, if it takes more than 100% space - the background changes to red.



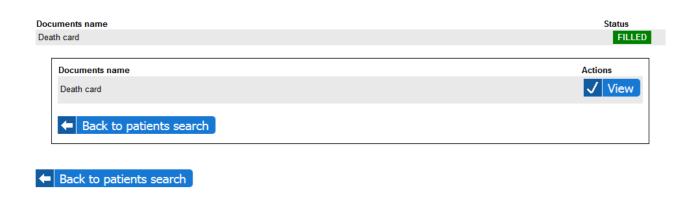
After entering and saving the data there is once again displayed the list of patient's referrals with statuses of related documents. For convenience, you do not to have to look for just completed document with appropriate referral. At the top of the page along with information of saved data of document there is displayed a link to view the document in PDF format and print it.



In addition to documents related to referrals, a list of other documents related to the patient is displayed at the bottom of the tab. Currently, this is one document:

death card

The method of filling, opening and printing these documents is identical to those described for documents related to referrals.



## **Visits**

In the "Visits" tab there is a list of all patient's visits in chronological order from most recent to oldest. For each visit there is displayed:

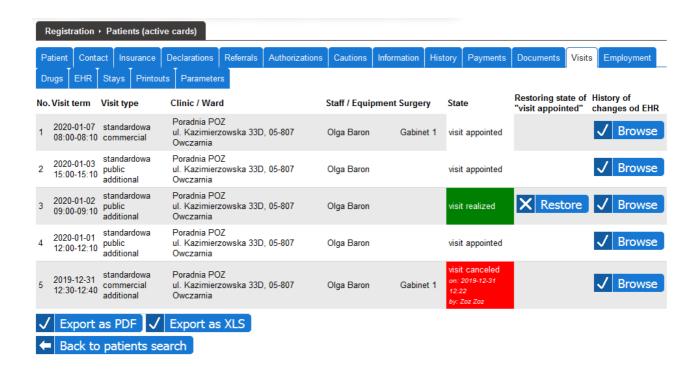
- date of the visit
- type of visits, kind of visit, whether is it additional visits, or is it an urgent visit
- clinic, where visit was planned
- staff realizing the visit or instruments to which the visit has been planned
- surgery where visit was planned
- state of visit (in the case of canceled visits, the date, the requestor and the reason for the cancellation if provided)

States of visits for greater readability are highlighted by colors:

• visit appointed - white

- visit realized green
- visit unrealized purple
- visit canceled red
- visit to canceled pink

For users with appropriate privileges there is also displayed in the list of visits a column with buttons of restoration of state "visit appointed" for visits in "visit realized" or "visit unrealized" states. In the unlikely event that the visit is mistakenly marked as "visit realized" or "visit unrealized", then clicking at the "Restore" button you can restore the state of visit to "visit appointed". The mechanism of restoration refers only to the NFZ's visits for which the services have not been shown yet to settle with the NFZ and to commercial visits for which no financial documents have been issued. It is important to notice that when visit for which bailout was accepted obtains state "visit unrealized" then accepted bailout is returned to the pool of means for bailouts – restoring state of such visit does not restore the bailout for this visit!



For users who have the right to view the history of changes in the patient's electronic health records, the "History of changes of HR" column with additional preview buttons for changes introduced by the doctors in the patient's electronic health records during the visit and also after the visit is displayed on the list.



After clicking the "Browse" button in the "History of changes of EHR" column at the selected visit, a new window opens with a list of changes made.

Pacjent Agnieszka Abacka

Poradnia POZ, ul. Kazimierzowska 33D, 05-807 Owczarnia

Lekarz Olga Baron Termin wizyty 2019-10-01 15:00

No.	Operation	Operation object	Field changed	Field value before change	Field value after change		Operation performer	Operation performer IP address
1	dodanie	Rodzaj przedmiotu: dokument utworzony na podstawie szablonu dokumentu Nazwa dokumentu: Zalecenia (dzne poziomy) Rodzaj dokumentu: zalecenie				2019-10-17 11:04:34	ZOZ	5.184.42.229
2	usunięcie	Rodzaj przedmiotu: dokument utworzony na podstawie szablonu dokumentu Nazwa dokumentu: Zalecenia (różne poziomy) Rodzaj dokumentu: zalecenie				2019-10-17 11:04:45	ZOZ	5.184.42.229
3	dodanie	Rodzaj przedmiotu: dokument utworzony na podstawie szablonu dokumentu Nazwa dokumentu: Zalecenia (czar poziomy) Rodzaj dokumentu: zalecenie				2019-10-17 11:04:45	ZOZ	5.184.42.229
4	dodanie	Rodzaj przedmiotu: dokument utworzony na podstawie szablonu dokumentu Nazwa dokumentu: MZL-1 zaśwadczenie lekarskie Rodzaj dokumentu: skerowanie / druk dla pacjenta				2019-10-17 11:05:05	ZOZ	5.184.42.229
5	dodanie	Rodzaj przedmiotu: formularz utworzony na podstawie szablonu formularza Nazwa formularza: chory pediatra Rodzaj formularza: wywiad				2019-10-17 12:49:33	ZOZ	5.184.42.229
6	dodanie	Rodzaj przedmiotu: formularz utworzony na podstawie szablonu formularza Nazwa formularza: mleko pediatra Rodzaj formularza: wywiad				2019-10-17 12:56:04	ZOZ	5.184.42.229
7	dodanie	Rodzaj przedmiotu: pole formularza utworzonego na podstawie szablonu formularza Nazwa formularza: mleko pediatra Rodzaj formularza: wywiad Nazwa pola: 1 Wartość w polu: Dieta bezmleczna z powodu alergii na białko mleka krowiego.				2019-10-17 12:56:04	zoz	5.184.42.229
8	modyfikacja	Rodzaj przedmiotu: formularz utworzony na podstawie szablonu formularza Nazwa formularza: mieko pediatra Rodzaj formularza: wwwiad	nazwa	mleko-pediatra	mleko pediatra	2019-10-17 12:56:15	ZOZ	5.184.42.229

The list of changes includes the type of operation performed on electronic health records (addition, modification, deletion), the object of the operation (on which the operation was performed), in the case of a modification operation, the field whose value has been changed with the value before and after the change, date of execution of operation, login of the operation performer, IP address of the computer from which the operation was performed.

At the bottom of the tab you can see the "Export as PDF" and "Export as XLS" buttons that allow you to download the patient's visit list as PDF and XLS files respectively.

# **Employment**

In the "Employment" tab there is a form allowing to add employment / education of patient and below the form there is history of patient employment / education (if entered) with access to data of each employment / education by clicking on a belt with informations about employment / education.

To enter new employment / education one has to fill at least all fields with navy border within the form of addition of new employment / education. Within the fields of periods an dates values are selected from calendars — by clicking within data field there appears calendar allowing to choose the correct date. Under the form of addition of new employment / education there are the following buttons:

- Add addition of employment / education with staying inside "Employment" tab of patient card
- Add and exit addition of employment / education and return to patients search form
- Cancel clearing data entered into the form with staying inside "Employment" tab of patient card
- Back to patients search return to patients search form

Independently from used adding button before adding employment / education to a database system verifies their correctness. In case of irregularities displays an error message indicating what should

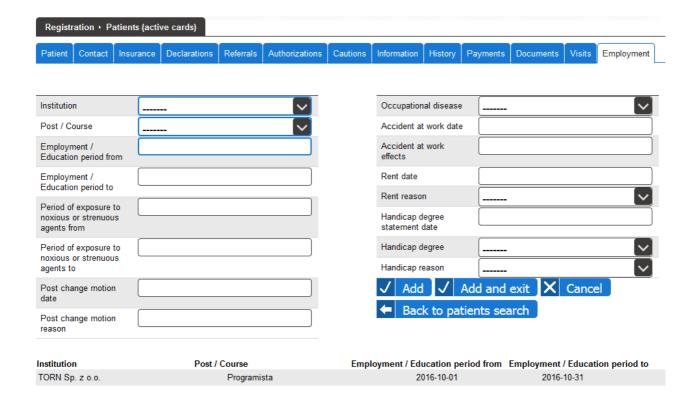
be corrected in the form. In case of such message data in the form should be corrected according to the message and retry to add an employment / education. Correct adding employment / education to database ends with a message about the successful completion of the operation, displays empty form of adding an employment / education and under this there is a list of all patient's employments / educations, including this one / ones already added (when to add the employment / education is used "Add" button), or displays a message about the successful completion of the operation and search engine of patients (when to add the employment / education is used the "Add and exit" button).

Below the form of adding a new employment / education there is a list of all employments / educations entered. For each employment / education there is information bar with basic data of employment / education: name of institution, name of post / course and period of employment / education. To modify any of these employments / educations, click on the information bar about employment / education. After clicking, under the information bar will develop a full form with the data of employment / education of the same structure and rules as form of adding a new employment / education. Under the employment / education data form, there are buttons:

- Save save changes and remain in the "Employment" tab of patient's card
- Save and exit save changes and return to the search engine of patients
- Cancel undo the changes and remain in the "Employment" tab of patient's card
- > Delete delete employment / education and remain in the "Employment" tab of patient's card
- Delete and exit delete employment / education and return to the search engine of patients
- Back to patients search back to search engine of patients without saving changes

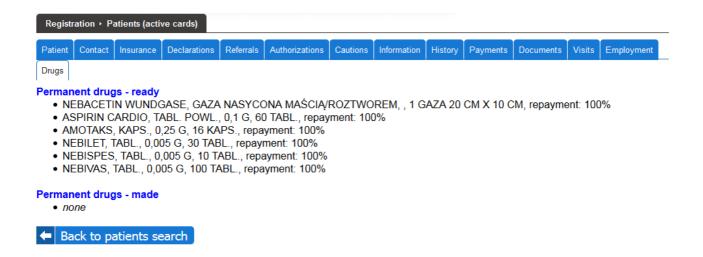
Independently from used saving button before saving data to a database system verifies their correctness. In case of irregularities displays an error message indicating what should be corrected in the form. In case of such message data in the form should be corrected according to the message and retry to save. Correct saving ends with a message about the successful completion of the operation, displays empty form of adding employment / education and under this there is a list of all patient's employments / educations, including this one/ones already added (when to save the data is used "Save" button), or displays a message about the successful completion of the operation and search engine of patients (when to save the data is used the "Save and exit" button).

To delete employment / education one has to use one of the buttons "Delete" or "Delete and exit" under the form of the given employment / education. After clicking one of these buttons there will be displayed request to confirm the deletion and after confirmation deletion will take place.



#### **Drugs**

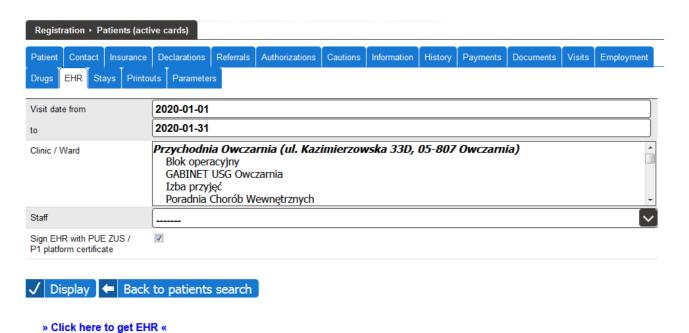
In the "Drugs" tab there is a list of patient permanent drugs divided into ready drugs and made drugs (list is created automatically on the basis of patient visits).



#### **EHR**

The "EHR" tab allows for quick access to the patient's electronic health records. In order to get access to the patient's electronic health records, one should specify desired criteria within the filter such as the date range of appointments and / or indicate one or more clinics from which the documentation is of interest to us and / or specify doctor who has realized visit and then click the "Display" button. A link will then be displayed enabling to download (in the form of a single PDF

file) the patient's electronic health records from a given period and / or clinics. If it is expected that the PDF file with electronic health records to be digitally signed with the logged in user's certificate (previously downloaded from the PUE ZUS platform or P1 platform and imported into the jHIS system), then before pressing the "Display" button, the field of "Sign EHR with PUE ZUS / P1 platform certificate" should be checked in the form.



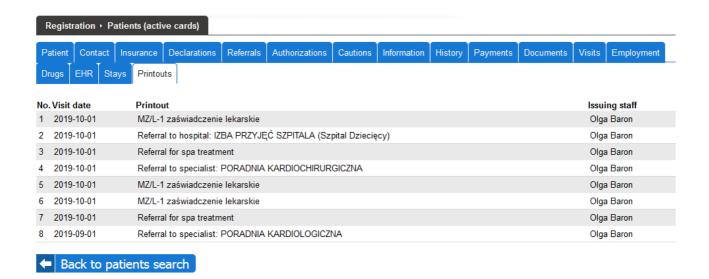
#### **Stays**

The "Stays" tab allows quick access to the history of patient's hospital stays. After selecting this tab, a list of all (completed and ongoing) hospital stays of the patient is displayed, and each of them shows the "Treatment history" button whose clicking allows you to download a full history of patient treatment in a PDF file during a given hospital stay.



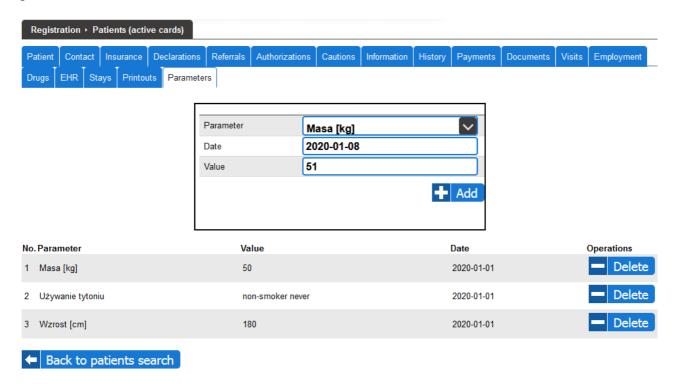
#### **Printouts**

The "Printouts" tab allows you to quickly view what printouts were issued to the patient during medical visits via the "Referrals" tab in the visit window within doctor surgery.



#### **Parameters**

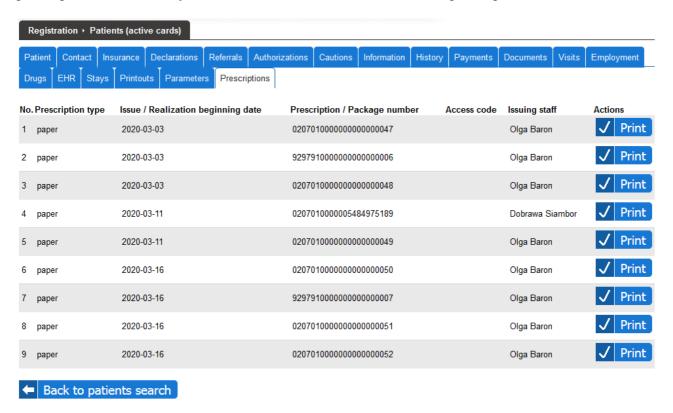
The "Parameters" tab allows you to enter basic patient parameters (such as weight, height, etc.) into the patient card. A tab is displayed in the form that allows you to enter the values of individual parameters into the patient's card along with the date when the value was registered. After selecting the parameter, the date field is filled with the current date by default. Depending on the type of the parameter, its value must be entered or selected from the dictionary. Finally, the data should be saved by clicking the "Add" button. Below the form for adding parameters, a list of registered parameters is displayed and each of them has a "Delete" button that allows you to delete a given parameter.



#### **Prescriptions**

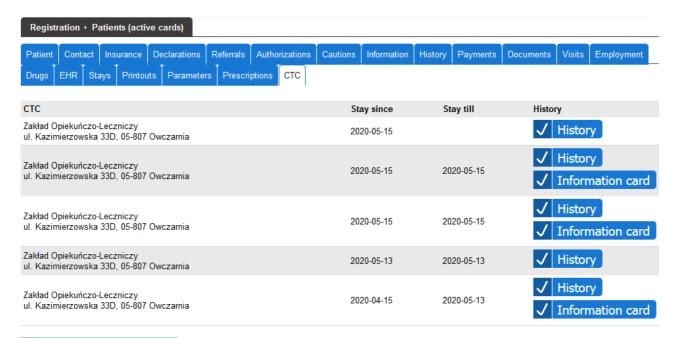
The "Prescriptions" tab allows you to quickly view the list of prescriptions (paper and electronic)

issued to the patient whose expiration date has not yet expired. After selecting this tab, a list of prescriptions is displayed with the prescription type, date of issue / execution, number, access code (in the case of e-prescriptions) and issuing staff. There is also the possibility of printing a prescription, which is why the "Print" button is visible next to each prescription.



#### **CTC**

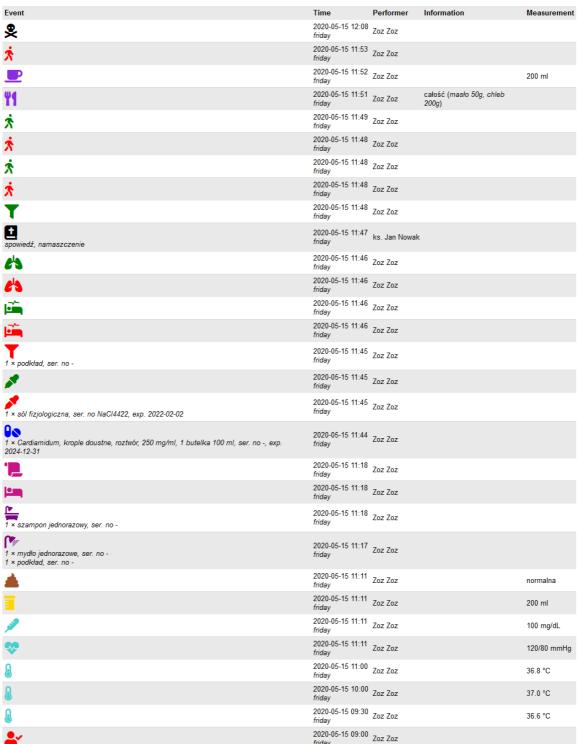
The "CTC" tab provides access to the patient's history of stays in CTC. After selecting this tab, a list of all patient stays in CTC is displayed. Each time you see the "History" button, and for completed stays, you can also see the "Information card" (if you have been discharged) and "Death card" (if you have filled out the patient's death card).



#### Back to patients search

To view the history of the patient's stay in the care and treatment institution, click the "History" button for the given stay. A new window will then open allowing you to search for events that occurred during the patient's stay. The functionality of this window is identical to that described in the "CTC" chapter in the "Stays" subsection, the only difference is the inability to edit and delete events.







To download for inspection or print an information card (PDF file), click the "Information Card" button for a given stay.

To download or view a death card (PDF file), click the "Death card" button for the given stay.

### **Patients (inactive cards)**

The data of all died patients, who used to use the services of a healthcare facility are available in "Patients (inactive cards)" functionality in the menu of "Registration" application. After selecting this functionality there is displayed the search engine of patients.

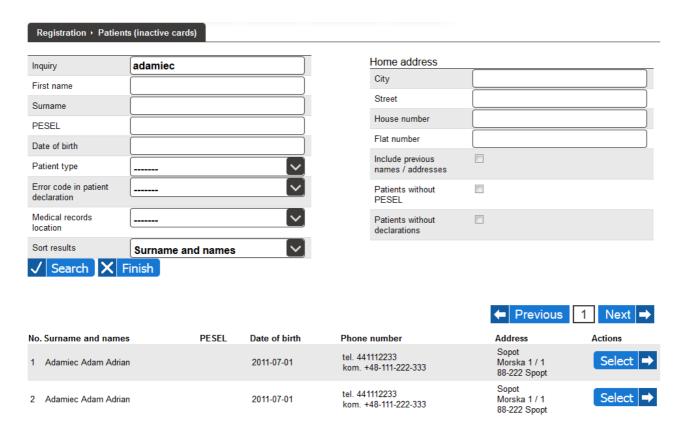
It is possible to find the patient by any combination of the following criteria:

- inquiry in the field you can enter any data identifying of the searched patient the system will try to match data entered in this field to the beginning of the name, the beginning of any member of surname, PESEL number and the date of birth of the patient; capitalization does not matter
- first name in the field you can enter the first name or the beginning of the name of searched patient; capitalization does not matter
- > surname in the field you can enter the surname or the beginning of the surname of searched patient; capitalization does not matter
- PESEL in the filed you can enter PESEL number of searched patient; after entering PESEL number and going to the next field of search form, there is verification of entered PESEL number - if entered PESEL is invalid then the frame of PESEL number's field turns red
- date of birth in the field you can enter the date of birth of searched patient; after clicking on the birth date's field, there is displayed a calendar of date selection
- patient type in this field you can choose the type of patient
- > error code in patient's declaration in the field you can specify the error's code in the patient's declaration (to find patients with a declaration with a specific error code)
- medical records location location of paper medical records of patient
- home address in fields you can enter: the name or the beginning of name of city, the name or the beginning of the street name, house number, flat number of searched patient; capitalization does not matter
- include previous names/addresses When you select this option at searching, system will also take into account previous names and addresses of the patient (if they were changed, eg. surname may have been changed in the system after patient's marriage, the address might have changed in the system after changing the place of residence by the patient)
- Patients without PESEL when this option is selected, at search the system will consider only the patients who do not have a PESEL number
- Patients without declarations when this option is selected, at search the system will consider only patients who do not have the declaration (withdrawn declarations are not consider)

After entering the search criteria and pressing the "Search" button there may be three situations:

if there is no inactive patient meets all entered search criteria, then the search engine will display a message about the lack of patients meeting these criteria

- if there is exactly one inactive patient meets all entered search criteria or the one owning a card of scanned number, it will automatically switch to the card of that patient
- if there is more than one inactive patient meets all criteria entered in the search form, then the search engine will display a list of found patients, and at each of them there is a button to go to patient's card

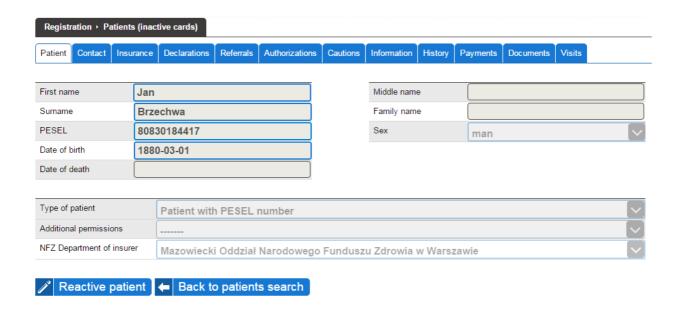


Card of inactive patient consists of the following tabs:

- > Patient
- > Contact
- > Insurance
- > Declarations
- > Referrals
- Authorizations
- **Cautions**
- **\>** Information
- > History
- **>** Payments
- > Documents
- > Visits

- **Employment**
- > Drugs
- > EHR
- **Stays**
- > Printouts
- > Parameters
- > Prescriptions
- > CTC

Tabs have exactly the same content as the corresponding tabs in the case of active patients, but data presented here are only for viewing (without editing). If the patient has by mistake entered date of death, he can be restored from inactive to active patients by pressing the "Reactivate patient" at the bottom of each tab of the patient's card (unless patient with the same PESEL number as the one you are trying to reactivate has been entered into the system). At the time of reactivation, patient returns to the search of patients, because the patient's card is no longer inactive and should not be visible in "Patients (inactive card)" functionality.



### **Patients (internet applications)**

The functionality of "Patients (internet applications)" within "Registration" menu is intended to verify internet registration orders of patients. After choosing this functionality there appears full list of applications of patients that want to register themselves to use portal. Full data of its application are displayed (so there was no need to move to application details to make its assessment). By each application there are two buttons: "Accept" and "Reject".



To accept application one has to click the button "Accept" by this application. Clicking this button leads to create active patient card with data from application, to mark this patient as one using portal and receiving notifications by email and to send access passwort for portal to patient email. After acceptance application disappears from the list.

To reject application one has to click button "Reject" by this application. After rejection application is ignored and disappears from the list.

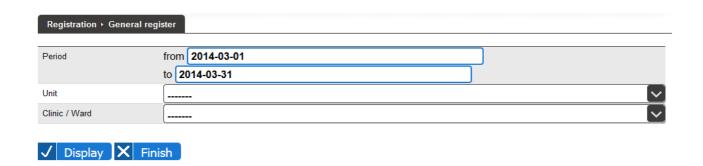
System can be also configured to allow for automatic verification of applications. If automata to verify applications is turned on, then applications fulfilling the following criteria are automatically verified positively and are accepted:

- name comes from names database and matches sex
- second name (if specified) comes from names database and matches sex
- surname comes from surnames database (created upon the basis of polish PESEL register) and matches sex
- locality matches postal code, borough and province (upon the basis of postal code database)
- borough matches province (upon the basis of TERYT database)
- PESEL (if specified) matches birth date and sex

Other application must be verified manually.

### General register

"General register" functionality in "registration" menu allows to create on-demand and print general register of health care facility. After selecting this functionality there is displayed a form to specify the criteria for the content of the expected register. It is necessary to identify the period which the register should include and optionally the register can be narrowed to a specific clinic/ward and unit.



After specifying the criteria and pressing "Display" button, there is displayed a general register in form of PDF document. It contents the following information:

- > entry number (to insert after the printing)
- date and hour of visit
- > name, surname and address of patient
- > PESEL and birth date
- name, surname and PWZ number of provider the service
- > codes of ICD-10 recognitions specified in the visit
- > code of contract product (scope of service)
- code of unit products (services)
- > ministerial kind of service
- advice type (medical office, home)
- admission mode (with referral ,without referral)

General register
Date of generation of report: 2016-07-27 10:58

#### Information about report

Period	2014-03-01 - 2014-03-31
Unit	-
Clinic / Ward	-

No.	Entry no.	date h.	First and last name Address	Pesel b. date	Provider of service PWZ	ICD10	contr. prod. uni. prod.	serv. kind advice type	addm. mode
1		2014-03-01 08:00	Bożydar Bakłażanowski Warszawa, 28	81101010103 1981-10-10			-		without ref.
2		2014-03-01 08:15	Marzena Antosiewicz Opole, Opolska 3 / 4	11111122222 1990-09-01					without ref.
3		2014-03-01 09:00	Bożydar Bakłażanowski Warszawa, 28	8110101013 1981-10-10	Helena Abakus 8800000	J11 S02.5 Y00.0 J11 J11 Y11 K11 G12.8 S02.5 J11 G11 Y00 J00	07.0000.218.02 51.300.2322050 51.300.2315020 51.300.2315020 51.300.2317010 51.300.2312010 51.300.2312020 51.300.2312020 51.300.2312020 51.300.2315020 51.300.2303010 51.300.2303010 51.300.2303010 51.300.2303010 51.300.2303010 51.300.2303010	3.4 medical office	without ref.
4		2014-03-01 09:30	Marzena Antosiewicz Opole, Opolska 3 / 4	11111122222 1990-09-01	Helena Abakus 8800000	J11 J11 Y00 J11	07.0000.218.02 5.13.00.2301010 5.13.00.2301010 5.13.00.2301021 5.13.00.2301010	3.4 medical office medical office medical office medical office	without ref.

# Registration book

"Registration book" functionality in the "registration" menu allows you to create on-demand and print the registration book of the healthcare facility. After selecting this functionality there is displayed the form for specifying the criteria determining the content of the registration book. It is necessary to identify the period of book's validity and also optionally you can narrow down the book to a specific unit, clinic and doctor.



After specifying the criteria and pressing the "Display" opens register book in the form of a PDF document, which should be printed and stored in paper form for audit purposes. The registration book contains the following information:

After specifying the criteria and pressing the "Display" button registration book is opened in the form of a PDF document, which should be printed and stored in paper form for audit purposes. The registration book contains the following information:

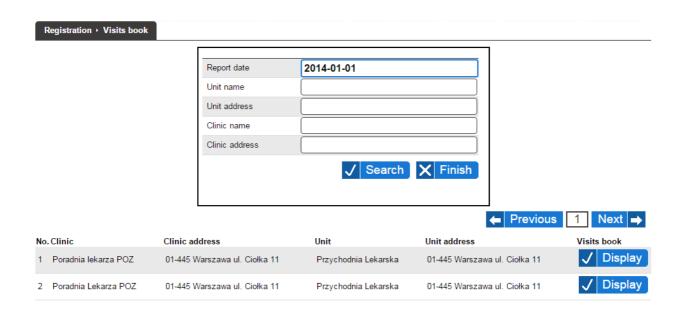
- > entry number (to enter after printing)
- date and hour of visit
- irst name, last name and address
- > PESEL and birth date
- > first name, surname and PWZ of staff providing service
- > codes of ICD-10 diagnosis pointed at visit
- > codes of ICD-9 procedures made at the visit
- \rightarrow \text{title of privilege (U agreement with NFZ)}
- > multiplicity of services
- > JGP group (empty field)
- > contract product's code (range of services)
- \rangle unitary product's code (services)
- > ministerial kind of service
- > type of advice (surgery, home)
- admission mode (with referral, without referral)
- > PWZ of referring staff (in case of admission with referral mode)
- REGON of unit of referring staff (in case of admission with referral mode)
- Date of referral (in case of admission with referral mode)
- codes of ICD-10 diagnosis with referral (in case of admission with referral mode)
- > comments (empty field)

	nform	prmation about report														
	Period	iod 2014-01-01 - 2014-01-31														
	Unit															
	Clinic	nic -														
	Docto	r	-													
	No.	Entry no.	date h.	First and last name Address	Pesel b. date	Provider of service PWZ	ICD10	ICD9	tit. of priv.	multi p.	JGP gr.	contr. prod. uni. prod.	serv. kind advice type	PWZ ref	ref date ref. ICD10	comments
ı						PWZ								ref. unit REGON	ret. ICD10	
	1		2014-01-03 00:00	Aaaalaaaa Aaaalaaaa Posiadaly, Jasna 1 05-319 Ceglów	88080888882 1988-08-08	Olga Baron 7700000	J11 J11		U	1.00		02.1450.001.02 5.30.00.0000012 5.30.00.0000021	4.4 medical office medical	7777772 017417089	ref. 2014-01-01	

#### Visits book

The "Visits book" functionality in the "Registration" menu allows to view and print the visits' books of particular clinic of healthcare facility. Visits' book are created automatically every night (including data from the previous day). It is possible to configure the jHIS system to generate visits' books with a delay (eg. three days).

After selecting the "Visits book" functionality there is displayed a search engine of visits' books, in which you have to indicate the report's date and optionally you can specify the search criteria of clinic (it is possible to search by part of the name and address of the clinic and the part of the name and address of the unit where the clinic is located. Capitalization at searching does not matter). After specifying the criteria and pressing the "Search" button there is displayed a list of clinics for which for specified day the visit's book was created.



At each clinic there is displayed the "Display" button which pressed opens the visits' book in the form of a PDF document with the ability to print. Visits' book contains the following information:

- \rangle date of patient's application
- > patient's PESEL number
- > series and number of patient' identity card
- > patient's home address

- > name and surname of providing service
- > professional title of providing service
- > specializations of providing service
- > NPWZ of providing service
- \(\right\) kind of providing service (visit's type)
- first name and surname of person making entry

Lp.	Termin zgłoszenia pacjenta	lmię i nazwisko pacjenta	Numer PESEL pacjenta	Seria i numer dokumentu tożsamości pacjenta	Adres zamieszkania pacjenta	lmię nazwisko udzielającego świadczenia	Tytuł zawodowy udzielającego świadczenia	Specjalizacje udzielającego	Numer prawa wykonywania zawodu udzielającego świadczenia	Rodzaj udzielonego świadczenia	lmię i nazwisko osoby dokonującej wpisu
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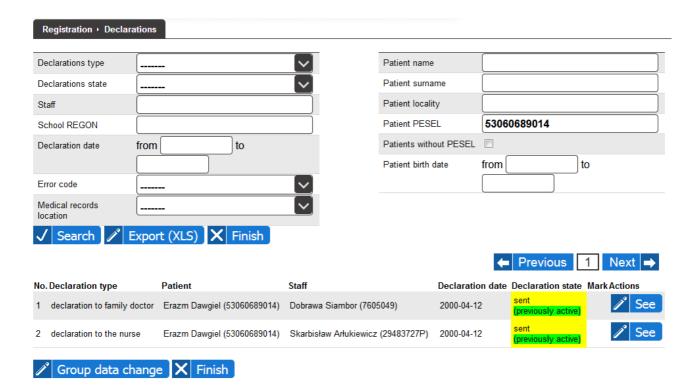
### **Declarations**

"Declarations" functionality in the "Registration" menu is used to manage patients declarations. After selecting this functionality there is available a search engine that helps search the declaration of the following criteria:

- declarations type
- declarations state
- staff in the field you can enter NPWZ, PESEL, name, surname of declared staff
- school REGON in the field you can start typing a REGON number or the name of the school where the declaration is made, and if such a REGON or school is defined in the REGON numbers database, the system will display a list of hints and will help choose the right one
- declaration date in the field you can enter a period when there were made statements, which user is interested in; if you enter only the start date of period, then the system will display all the declarations submitted from that day until the present; if you enter only the end date of period, then the system will display the declarations made since the beginning of operation of the system to that day.
- error code field allows to search the declaration of a specific error code reported by the NFZ for the declaration
- medical records location unit where paper medical records of patients are stored
- patient name in the field you can type name or its beginning; caps does not matter
- patient surname in the field you can type surname or its beginning; caps does not matter
- patient locality in the field you can type name of locality of residence address or its beginning; caps does not matter
- patient PESEL in the field you can type PESEL or its beginning
- patients without PESEL checking this box will display only the declaration of patients without PESEL number
- patient birth date in this field you can enter the range of patients' birthdays

After entering the search criteria and pressing the "Search" button there will be displayed a list of

declarations that meet search criteria. In addition, after searching the declaration below the search engine there is an extra button "Export (XLS)", which clicked enables to download the XLS file with a list of declarations that meet search criteria.



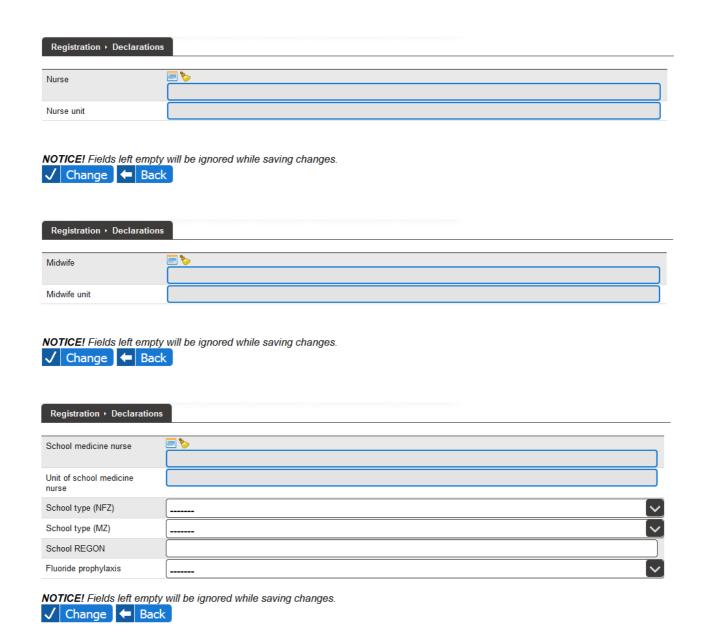
At each declaration there is the "See" button which clicked opens in new window "Declarations" tab in the patient's card. By each declaration (with the exception of withdrawn and sent ones), the selection field is also visible (by default, this field is selected for all declarations in the search results list, with the exception of withdrawn and sent ones) and the "Group data change" button appears below the list of declarations. This button enables a wholesale change of data in selected declarations. Group change of data is only possible if all selected declarations are of the same type. After clicking this button, a form for changing the declaration data is displayed. This form is different for each type of declaration, and so:

- in the case of a doctor's declaration, it is possible to change the doctor and the unit
- in the case of a nurse's declaration, it is possible to change the nurse and the unit
- in the case of a midwife's declaration, it is possible to change the midwife and the unit
- in the case of a school medicine declaration, it is possible to change the nurse, the unit, the type of school according to the National Health Fund, the type of school according to Health Ministry, the REGON number of the school, fluoride prophylaxis.

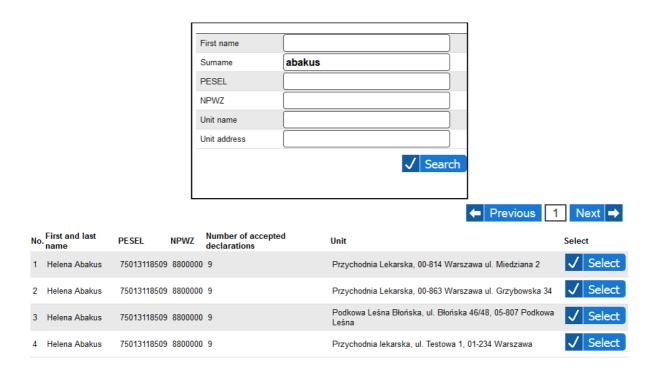


NOTICE! Fields left empty will be ignored while saving changes.

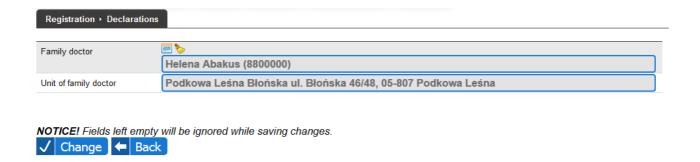
✓ Change ← Back



To change the doctor / nurse / midwife and unit, click on the calendar icon. This will open a new window with the staff search, in which you must enter the search criteria and click the "Search" button. Then, the search engine will display a list of staff meeting the search criteria and for each person a "Choose" button.



Clicking the "Select" button next to the right person will insert it in the group data change form and close the staff search window.



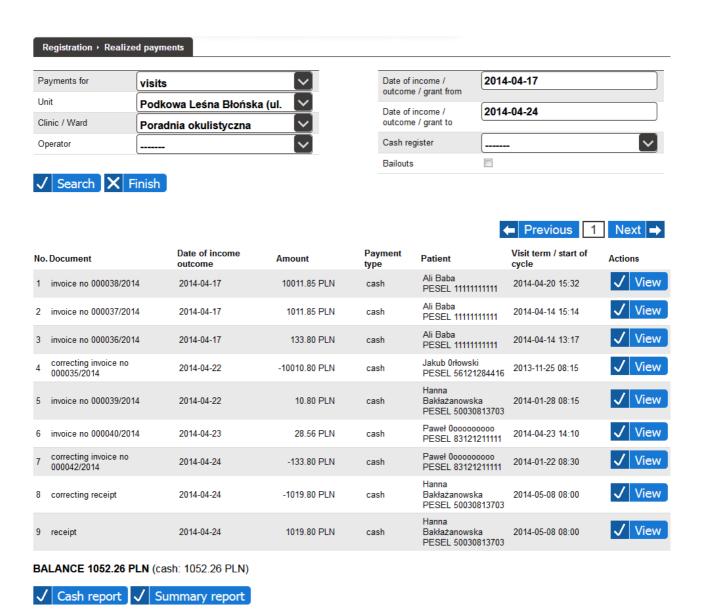
To clear the data of the doctor / nurse / midwife and unit from the form, click the brush icon.

The changes introduced to the form should be confirmed by clicking on the "Change" button - the system will inform about the change by displaying a relevant message. Leaving any of the fields in the form empty will result in no change in the corresponding values in the declaration data.

# Realized payments

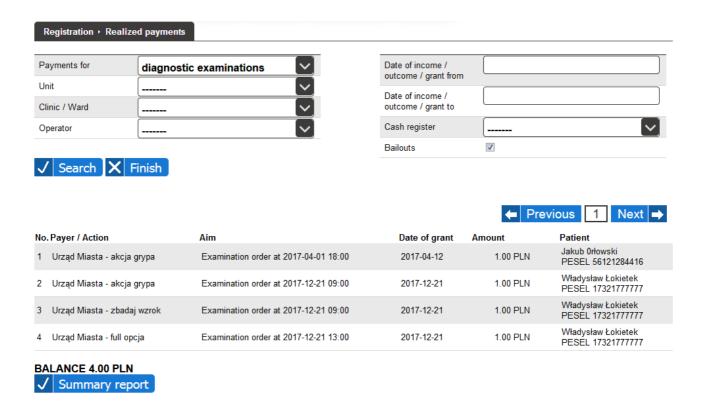
The "Realized payments" functionality in the "Register" menu is used to generate a report of accepted payments from patients for commercial visits (including rehabilitation cycles planned using packages), diagnostic examinations, vaccinations, benefits, hospital stays and CTC stays and returned payments for unrealized commercial visits and planned and unrealized services during hospital stays and CTC stays. In particular it can be used to control cash at the end of each day. After selecting this functionality there is displayed search engine for restricting the scope of the data included in the report to a particular payment range (payment for visits, payments for examinations, payments for vaccinations, payments for benefits, payments for hospital stays, payments for CTC stays), unit, clinic / ward (choice of clinic / ward is possible only after selecting the unit; in the case

of hospital stays and CTC stays, it concerns the place where the stay begins), operator (person that took payment / made return), the period of payment / return and cash register (choice of cash register precisely points out payment type/types and clinics within which payments were realized, that is why after selection of cash register fields of payment type, unit and clinic / ward become inaccessible). After defining the criteria and clicking "Search" button there is displayed a list of documents that meet the search criteria and for each one there is "View" button that allows to view the document (and if the document is a receipt to which the invoice was issued, the "Invoice to receipt" button is additionally displayed to enable viewing the invoice). Below the list of documents there is shown the balance being the sum of the amounts of individual documents (also divided into particular forms of payment) and the "Cash report" button that allows to download (in PDF format) and print (in the prescribed format) cash report created basing on the search criteria and "Summary report" button that allows to download (in PDF format) and print (in the prescribed format) statement of payments for each clinic separately.



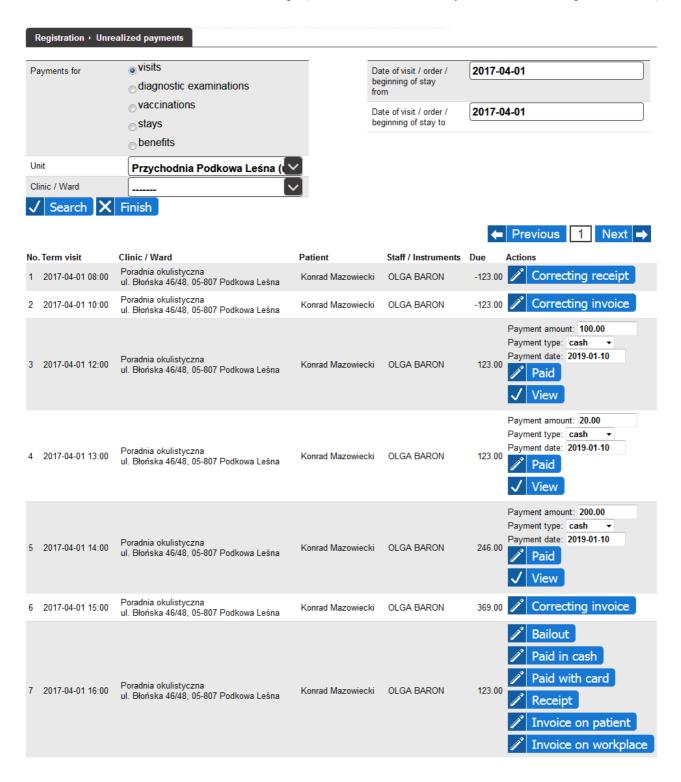
The second application of this functionality is to cover the costs of visits, examinations and vaccination from bailouts. In order to use this functionality for this purpose, the field "Bailouts"

should be marked in the search engine, other search criteria should be specified (in the case of bailouts date fields mean the dates of granting the bailout) and click the "Search" button. The list of granted bailouts will then be displayed. Under the list of bailouts there is the balance which is the sum of the amounts from individual bailouts and the button "Summary report" enabling downloading (in PDF format) and printing (in the prescription format) a list of bailouts broken down by the clinic.



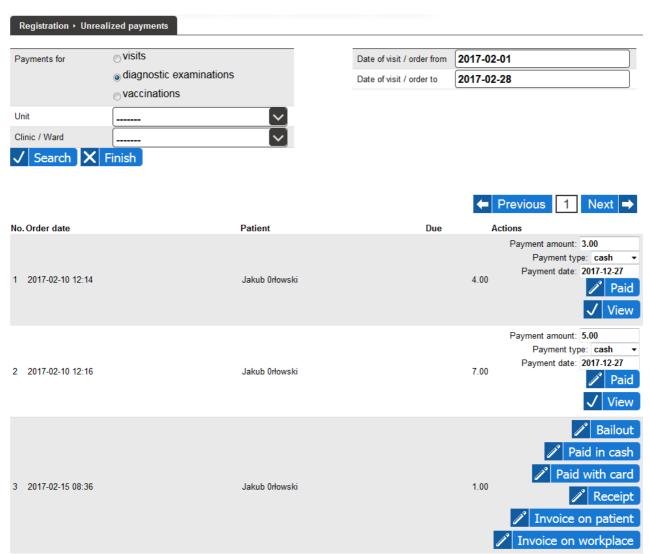
# **Unrealized payments**

The "Unrealized payments" functionality in the "Register" menu is used to generate a report of unrealized payments of patients, unpaid invoices, unpaid receipts and overpayments that require to return money. After selecting this functionality there is displayed search engine for restricting the scope of the data included in the report to a particular payment range (payments for visits, payments for examinations, payments for vaccinations, payments for hospital stays, payments for CTC stays, payments for benefits), unit, clinic / ward (choice of clinic / ward is possible only after selecting the unit; in case of hospital stays and CTC stays is refers to the place where stay began) and the period of visits / orders / realization / stays beginnings. After defining the criteria and clicking "Search" button there is displayed a list of unrealized payments of patients. In case of payments for commercial visits for each one there are "Bailout", "Paid in cash", "Paid with card", "Receipt", "Invoice on patient" and "Invoice on workplace" buttons or "Corrective invoice" or "Correcting receipt" button that enable to accept bailout and to issue accounting document (as described in the "Payments" tab in the patients card). In case of rehabilitation cycles planned using packages the same buttons as for commercial visits display except the "Bailout" button. In case of unpaid invoices of the patients and at each a form to record the receipt of payment for the invoice, the "View" button that allows to view an invoice and the buttons "Invoice to receipt on patient" and "Invoice to receipt on workplace" enabling the issue of an invoice to the receipt, if it has not already been issued or the "Invoice to receipt" enabling the preview of the invoice to the receipt, if it has already been issued (as described in the "Payments" tab in the patients card). In case of unpaid receipts of the patients and at each a form to record the receipt of payment for the receipt and the "View" button that allows to view a receipt (as described in the "Payments" tab in the patients card).

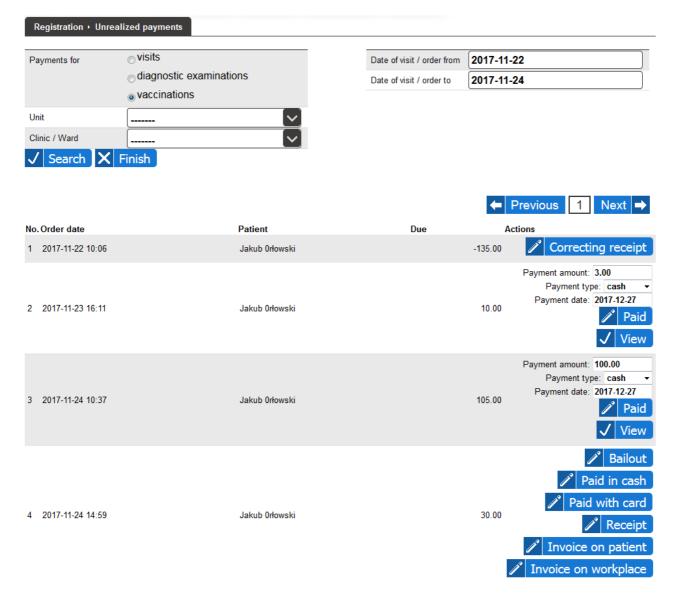


In case of payments for diagnostic examinations by each position there are buttons "Bailout", "Paid in cash", "Paid with card", "Receipt", "Invoice on patient" and "Invoice on workplace" buttons or "Correctiong receipt" / "Correcting invoice" button allowing to accept bailout and to issue financial document (as described in the "Payments" tab in the patients card) and unpaid invoives / receipts in

case of which there is form allowing to record the contribution of payment for the invoice / receipt and the "View" button that allows to view an invoice / receipt and in the case of a receipt, the buttons "Invoice to receipt on patient" and "Invoice to receipt on workplace" enabling the issuing of an invoice to a receipt, if it has not already been issued, or the "Invoice to receipt" enabling viewing of the invoice to the receipt, if any already issued (as described in the "Payments" tab in the patients card).



In case of payments for vaccinations by each position there are buttons "Bailout", "Paid in cash", "Paid with card", "Receipt", "Invoice on patient" and "Invoice on workplace" buttons or "Correctiong receipt" / "Correcting invoice" button allowing to accept bailout and to issue financial document (as described in the "Payments" tab in the patients card) and unpaid invoives / receipts in case of which there is form allowing to record the contribution of payment for the invoice / receipt and the "View" button that allows to view an invoice / receipt and in the case of a receipt, the buttons "Invoice to receipt on patient" and "Invoice to receipt on workplace" enabling the issuing of an invoice to a receipt, if it has not already been issued, or the "Invoice to receipt" enabling viewing of the invoice to the receipt, if any already issued (as described in the "Payments" tab in the patients card).



In the case of payments for hospital stays, the situation looks almost the same as in the case of payments for commercial visits with only one difference that for the hospital stays the "Bailout" button is not visible.

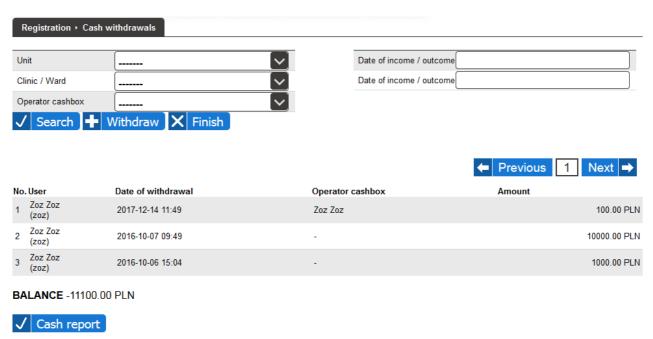
In the case of payments for CTC stays, the situation looks almost the same as in the case of payments for commercial visits with only one difference that for the hospital stays the "Bailout" button is not visible.

In case of payments for benefits by each position there are buttons "Bailout", "Paid in cash", "Paid with card", "Receipt", "Invoice on patient" and "Invoice on workplace" buttons or "Correctiong receipt" / "Correcting invoice" button allowing to accept bailout and to issue financial document (as described in the "Payments" tab in the patients card) and unpaid invoives / receipts in case of which there is form allowing to record the contribution of payment for the invoice / receipt and the "View" button that allows to view an invoice / receipt and in the case of a receipt, the buttons "Invoice to receipt on patient" and "Invoice to receipt on workplace" enabling the issuing of an invoice to a receipt, if it has not already been issued, or the "Invoice to receipt" enabling viewing of the invoice to the receipt, if any already issued (as described in the "Payments" tab in the patients card).

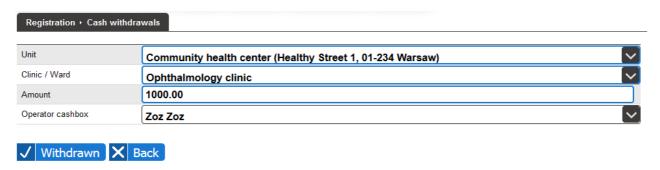
### **Cash withdrawals**

"Cash withdrawals" functionality in menu "Registration" is used to record facts of withdrawal of

money from cash registers and to browse history of such withdrawals. After choosing this functionality there appears search form allowing to limit range of information about withdrawals made to particular unit and clinic / ward (choice of clinic / ward is possible only after choosing unit), operator (person that when taking payments has collected means from which withdrawal was made) and to period of visits realization. After specifying criteria and pressing the button of "Search" there appears list of made money withdrawals from cash registers. Under the list of withdrawals there is balance displayed which is a sum of amounts of particular documents and there id button named "Cash report" allowing to download (in PDF format) and print (in prescription format) cash report based on entered search criteria.



Under search form there is visible also the button named "Withdraw" that allows to report a fact of money withdrawal. After clicking this button there appears form in which one has to specify unit and clinic / ward which disposes the cash register from which withdrawal was made, amount withdrawn and optionally operator from which means withdrawal is made and then to confirm fact of making withdrawal with the button named "Withdrawn".



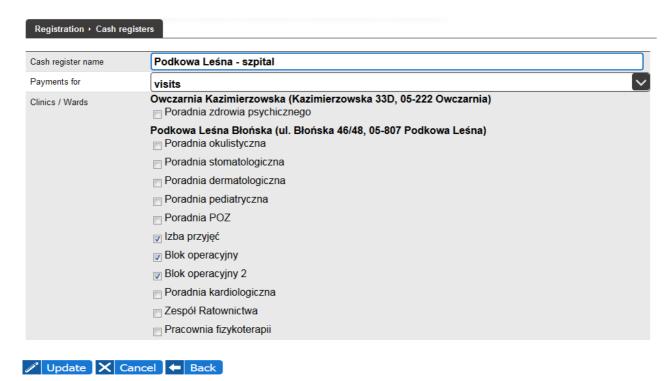
# **Cash registers**

"Cash registers" functionality from menu "Registration" is used for defining cash registers that work in healthcare center. Cash register is understood as set of payments for commercial visits realized within the specified group of clinics. After choosing this functionality there is list of defined cash registers displayed. By each of them there are buttons allowing to modify or delete the

given cash register and under the list there is a button allowing to add new cash register.



To add new cash register one has to click the button "Add cash register". After that form is displayed where one has to specify cash register name and mark clinics that cash register spreads over and then to confirm with a button "Add".



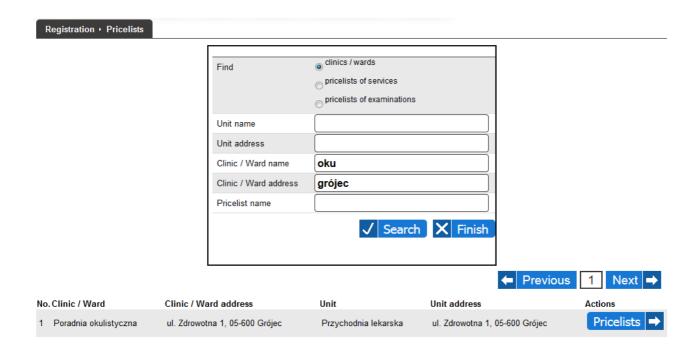
To modify cash register data one has to click the button "Edit" by the given cash register within cash registers list. Cash register form displays then, which is the same as in case of new cash register addition except that is it filled with defined cash register data. One can enter modifications to the data, which one has to confirm with a button "Update" visible at the bottom of form.

To delete cash register data one has to click the button "Delete" by the given cash register within cash registers list. Cash register form displays then, which is the same as in case of defined cash register modification except that is it in readonly mode. Intention of deletion of cash register one has to confirm with a button "Delete" visible at the bottom of form.

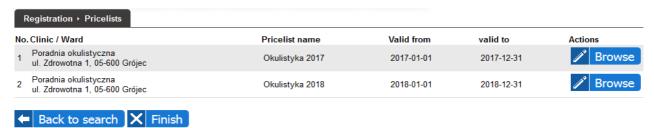
### **Pricelists**

The functionality of "Pricelists" within "Registration" menu is intended for quick browsing of contents of pricelists of commercial services and diagnostic examinations defined within the

system. After choosing this functionality there appears the search form of clinics / pricelists. Pricelists of commercial services can be searched two ways: by choosing option "clinics / wards" and entering criteria related to clinic / ward within which pricelist is defined or by choosing option "pricelists of services" and entering criteria related to clinic / ward within which pricelist is defined and to the name of searched pricelist and after that clicking the button "Search". When applying the first method, the list of clinics / wards matching the search criteria appears and by each of them there is a button "Pricelist".

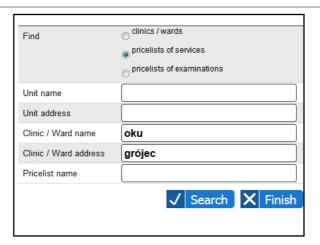


By clicking the button "Pricelist" by the given clinic there appears list of pricelists defined within this clinic.



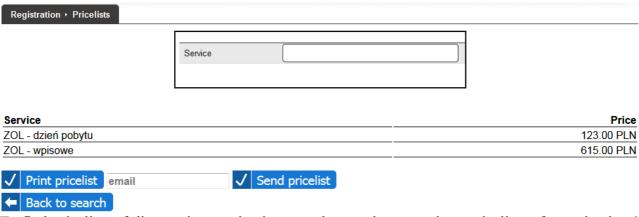
When applying the second method there appears the list of pricelists matching the search criteria.

Registration • Pricelists



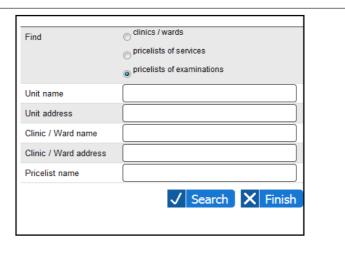
No. Clinic / Ward	Pricelist name	Valid from	valid to	Actions
Poradnia okulistyczna ul. Zdrowotna 1, 05-600 Grójec	Okulistyka 2018	2018-01-01	2018-12-31	
Poradnia okulistyczna ul. Zdrowotna 1, 05-600 Grójec	Okulistyka 2017	2017-01-01	2017-12-31	<b>Browse</b>

Independently on the method used to find pricelist of services, by each of found pricelist there appears "Browse" button, which when clicked allows to display pricelist contents. After clicking the button "Browse" there appears list of services within the pricelist. Above the list of positions contained within the pricelist there is a field, where one can enter a part of service name – while entering it system automatically narrows down the list of services to those containing the entered text within the name. Below the list of items in the pricelist, there are two buttons: "Print pricelist" enabling downloading (as a PDF file) and printing the pricelist, and "Send pricelist" enabling sending the price list (as a PDF file) to the email address entered in the field next to this button.



To find pricelist of diagnostic examinations one has to choose option "pricelists of examinations" within the search form and optionally enter part of name of searched pricelist. After clicking the button "Search" there appears list of pricelists of examinations matching the search criteria.

Registration • Pricelists





By each of found pricelist there appears "Browse" button, which when clicked allows to display pricelist contents. After clicking the button "Browse" there appears list of examinations within the pricelist. Above the list of positions contained within the pricelist there is a field, where one can enter a part of examination name – while entering it system automatically narrows down the list of services to those containing the entered text within the name. Below the list of items in the pricelist, there are two buttons: "Print pricelist" enabling downloading (as a PDF file) and printing the pricelist, and "Send pricelist" enabling sending the price list (as a PDF file) to the email address entered in the field next to this button.



Examination	Price
50 Kał - badanie ogólne	20.00 PLN
52 Kał na pasożyty (1 ozn.)	20.00 PLN
54 Kał - G. lamblia met. ELISA	30.00 PLN
55 Kał - krew utajona (bez diety)	20.00 PLN
57 Kał - nosicielstwo Salmonella (3 ozn.)	140.00 PLN
58 Kał - rota i adenowirusy	45.00 PLN
59 Kał - norowirusy	80.00 PLN
1101 Kał posiew (bad. bakter.)	50.00 PLN
1252 Posiew kału w kierunku Salmonella / Shigella (bad. bakter.)	50.00 PLN
1254 Posiew kału w kierunku enteropatogennej Escherichia coli (EPEC)	50.00 PLN
1256 Posiew kału w kierunku Campylobacter	80.00 PLN
2101 Kał posiew (bad. mykol.)	50.00 PLN
3221 Kyber Kompakt PRO, jakościowe i ilościowe badanie mikrobiologiczne kału	520.00 PLN
3232 KyberKompakt, jakościowe i ilościowe badanie mikrobiologiczne kału	425.00 PLN
3234 Kał pasożyty – Parasep SF	30.00 PLN



### External staff and units database

The functionality of "External staff and units database" within "Registration" menu is for creation of database of doctors working within other health care centers and issuing referrals with units they are working at. Creating of such a database simplifies entering into the system the referrals issued by external staff. After choosing this functionality list of doctors appears and by each of them there are two buttons "Edit" and "Delete". Below the list of doctors there appears button "Add".



To add new doctor into database one has to click the button "Add". Then there appears form to enter data of doctor and unit he works at. After entering data and clicking button "Add" doctor is added into database and he appears within the list of doctors.



**+** Add

 **X** Cancel

 **←** Back

To modify doctor data one has to click the button "Edit" by an appropriate doctor within the list. Then there appears the same form as when adding doctor except that is is filled with doctor data. After making changes one has to confirm them by clicking he button "Update" visible below the form.

To delete doctor one has to click the button "Delete" by an appropriate doctor within the list. Then there appears the same form as when adding doctor except that is is filled with doctor data and it is visible in read only mode. One has to confirm ones intention to delete the doctor by clicking the button "Delete" visible below the form.

### **Bailouts**

The functionality of "Bailouts" within menu "Registration" is intended to manage paymasters which fund medical services / actions within which medical services are funded. After choosing this functionality there appears list of defined paymasters / actions and by each of them there are buttons:

- Statement (PDF) allows to generate (as PDF file) and to print settlement of patients to which bailouts have been accepted including amounts of these bailouts (fields visible above this button allows to enter dates to narrow down the statement to the specified period of accounting of bailouts)
- Statement (XLS) allows to generate (as XLS file) settlement of patients to which bailouts have been accepted including amounts of these bailouts (fields visible above allows to enter dates to narrow down the statement to the specified period of accounting of bailouts)
- Settlement (PDF) allows to generate (as PDF file) and to print a settlement document for the financing payer with a list of patients to which bailouts have been accepted including amounts of these bailouts (fields visible above this button allows to enter dates to narrow down the statement to the specified period of granting of bailouts)
- Settlement (XLS) allows to generate (as XLS file) a settlement document for the financing payer with a list of patients to which bailouts have been accepted including amounts of these bailouts (fields visible above this button allows to enter dates to narrow down the statement to the specified period of granting of bailouts)
- Edit allows to modify paymaster / action data (this button is availableonly in case of paymasters / actions which funds have not yet been used to accept any bailout)

- Delete allows to delete paymaster / action (this button is availableonly in case of paymasters / actions which funds have not yet been used to accept any bailout)
- Details allows do preview paymaster / action data

Within the list of paymasters / actions means that ends up are emphasized with red color. Under the list of paymasters / action there is a button "Add" that allows to add new paymaster / action.

### Registration > Bailouts

No. Paymaster / Action  1 Urząd Miasta - akcja grypa	Period Initial pool  1000.00 PLN	Means available	Bailout 10.00 PLN	Actions since till
2 Urząd Miasta - cytologia	10000.00 PLN	9900.00 PLN	100.00 PLN	since till  ✓ Statement (PDF)  ✓ Statement (XLS)  ✓ Settlement (PDF)  ✓ Settlement (XLS)  ✓ Edit  Details
3 Urząd Miasta - full opcja	10000.00 PLN	9983.00 PLN	full	since till  ✓ Statement (PDF)  ✓ Statement (XLS)  ✓ Settlement (PDF)  ✓ Settlement (XLS)  ✓ Edit  Details
4 Urząd Miasta - szczepienia ochronne	10000.00 PLN	9900.00 PLN	100.00 PLN	since till  ✓ Statement (PDF)  ✓ Statement (XLS)  ✓ Settlement (PDF)  ✓ Settlement (XLS)  ✓ Edit  Details
5 Urząd Miasta - zbadaj wzrok	50000.00 PLN	49558.80 PLN	50.00 PLN	since till  ✓ Statement (PDF)  ✓ Statement (XLS)  ✓ Settlement (PDF)  ✓ Settlement (XLS)  ✓ Edit  Details

+ Add X Finish

To add paymaster / action one has to click the button "Add". Then there appears form for paymaster / action data. If the field of "Bailout" within the form is left empty, then system interprets this as bailout of full amount of service. Paymaster / action field of influence can be limited to specified period and to clinics with specified speciality codes. When entering speciality codes (within the field one can enter parts of speciality codes or names) system displays suggestions — correct speciality code should be chosen by clicking the correct option within suggestions list. By default single field to enter single speciality code is visible, to enter more codes one has to click the button "More specialities" - every consecutive click of this button leads to display new field to enter the consecutive speciality code. Fields left empty are ignored when saving data. After entering data one has to save them by clicking the button "Add" under the form.

Paymaster / Action	Urząd Miasta - rotawirusy
Full name	Urząd Miasta - rotawirusy - umowa UM/RX/12/2017
unds	10000
Bailout	100 Leave this field empty in case of bailout of full amount
Valid from	2017-12-01
Valid to	2017-12-31
Valid for specialities	0010  → More specialities

To modify paymaster / action data one has to click button "Edit" by the given paymaster / action. Then there appears form of paymaster / action data the same as form for paymaster / action addition except that it is filled with paymaster / action data. After entering changes one has to save them by clicking the button "Save".

To delete paymaster / action one has to click button "Delete" by the given paymaster / action. Then there appears form of paymaster / action data the same as form for paymaster / action edition except that it is ni readonly mode. Intention to delete paymaster / action one has to confirm by clicking the button "Delete".

To view paymaster / action data one has to click button "Details" by the given paymaster / action. Then there appears form of paymaster / action data the same as form for paymaster / action edition except that it is in readonly mode.

If logged user does not have privilege for bailouts management but he has privilege named "REJESTRACJA - ostrzeganie o kończących się dofinansowaniach" then instead of table with list of bailouts and buttons to manage them there appears informative table with the list of bailouts in case of which means are ending.

Ending	means	of bai	louts

No. Paymaster / Action	Initial pool	Means available
1 Urząd Miasta - akcja grypa	1000.00	947.00

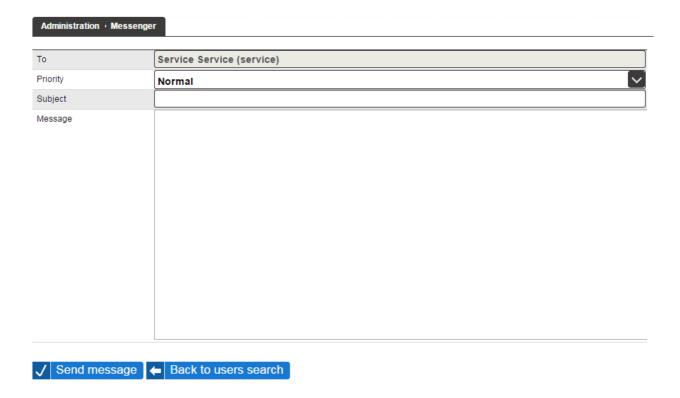
# Messenger

Privileged users of application have the ability to send messages to other users of the application. For this purpose there is "Messenger" functionality in the "Administration" menu. At the home page of messenger functionality there is a search engine of users - recipients of the messages. Search of users is possible by any combination of the following criteria:

- > name first name or part of name of the user; capitalization does not matter
- > surname surname or part of surname of the user; capitalization does not matter
- > login login or part of user's login; capitalization does not matter
- > status user's status (active or blocked)
- > role role which the user has
- > unit administration unit

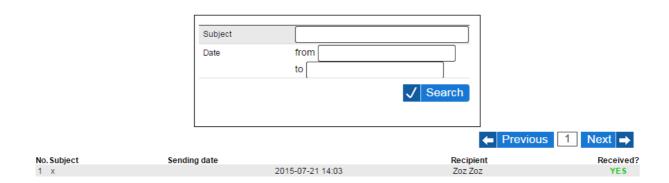
After entering the search criteria and pressing the search button, under the search engine displays a list of users that meet your search criteria. At each user from the list there is a field where you can mark that user as a recipient of the message.

After selecting the recipients and clicking on "Write a message to selected users" or pressing the "Write a message to all users" button (without selecting recipients, when the message has to be sent to all searched users) there is displayed the form to write a message to selected / all recipients.



After entering the subject and content of the message and possible changing of its priority and then pressing "Send message" button, message is sent to each of the recipients visible on the form.

In the form of users - recipients' search engine, there is also a button to view the confirmation of messages' receiving by the recipients to which it was sent. After pressing the "Acknowledgment of receipt" button, opens a new window with the search engine of messages. Messages can be searched by part of subject (capitalization does not matter), and the range of dates of sending messages. After determining the criteria and pressing the "Search" button, there is displayed a table of messages that match the search criteria with the designation for each recipient if the message has been received by him (read) or not.



### **Notices**

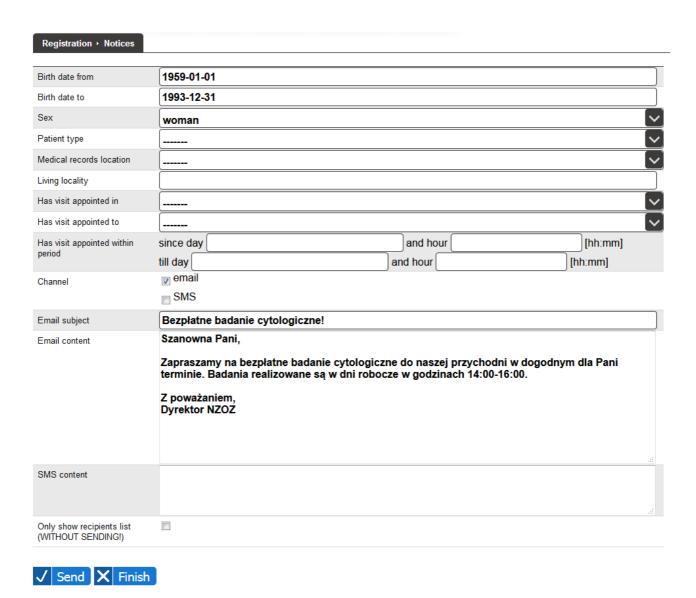
The "Notices" functionality from the "Registration" menu is used to send notifications to groups of patients who meet certain criteria. After selecting this functionality, a form is displayed that allows you to enter patient selection criteria (recipients), shipping channels and message content. Patients to whom the message is addressed can be chosen based on the following criteria:

- date of birth
- sex
- patient type
- place of storage of medical records
- place of residence
- shipping to patients who have an appointment arranged in the indicated clinic
- shipment to patients who have an appointment arranged to the indicated doctor
- shipping to patients who have an appointment arranged during the indicated period

The message can be sent via two channels:

- e-mail
- SMS

After defining the patient selection criteria and indicating the delivery channels, you must compose the message content for each channel. Before sending you can still check to whom the message will go - to do this, check the box "Only show recipients list (WITHOUT SENDING!)" and click "Send" - the message will not be sent, only list of recipients will be displayed. Leaving the field "Only show recipients list (WITHOUT SENDING!)" unchecked and clicking "Send" button, message is sent and additionally system displays the list of patients to whom the message was sent and a list of patients to whom the message could not be sent (that is patients who met criteria of being the recipients of the message but did not have an email address / mobile phone number).



The system informs about the successful sending of messages by an appropriate message with information on the number of recipients to whom the message was sent.

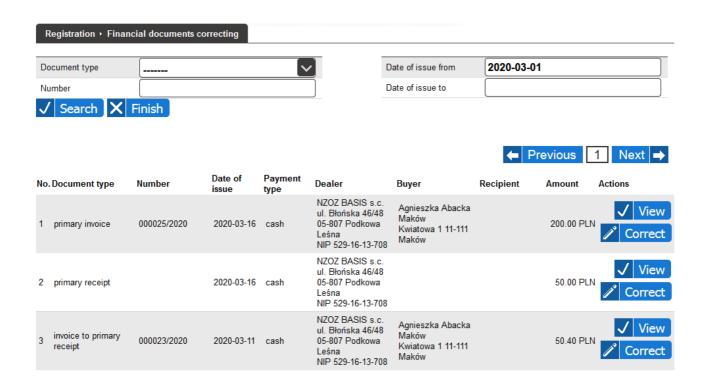
# Financial documents correcting

The "Financial documents correcting" functionality from the "Registration" menu is used to correct mistakes in basic financial documents that were created when they were issued. After selecting this functionality, the financial document search engine is displayed. The search is possible according to any combination of the following criteria:

- type of document
- document number (full number or beginning of number, leading zeros do not matter when searching)
- date of issue from
- date of issue to

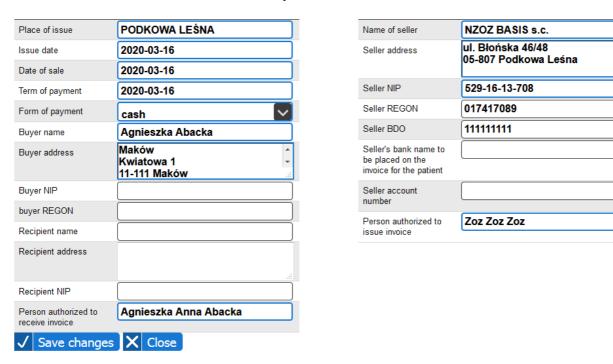
After entering the search criteria and clicking the "Search" button, the search engine displays a list of financial documents that meet the search criteria, and next to each of them the "View" buttons for

previewing the document and "Correct" for adjusting the basic document data.



To correct document data, click the "Correct" button next to the given document on the list. A form with the data of the selected document will be displayed in a new window, in which appropriate corrections can be made. The corrections should be confirmed with the "Save changes" button.

## Primary invoice no 000025/2020



## **Keyboard shortcuts**

As part of the functionality of the "Registration" module it is possible to use keyboard shortcuts. As part of the "New Patient" functionality:

- Ctrl + P use of this key combination has the same effect as clicking "Add Patient" button
- Ctrl + F use of this key combination has the same effect as clicking on the "Back to search" button
- Ctrl  $+ \rightarrow -$  use of this key combination switches to the next tab
- $Ctrl + \leftarrow -$  use of this key combination switches to the previous tab

As part of the "Patients (active cards)" functionality:

- Enter use of this key combination has the same effect as clicking "Search" button
- Ctrl + P use of this key combination has the same effect as clicking "Add new patient" button
- Ctrl + F use of this key combination has the same effect as clicking "Finish" button
- $Ctrl + \rightarrow -$  use of this key combination switches to the next subpage with the search results
- Ctrl + ← use of this key combination switches to the previous subpage with the search results

As part of the "Patients (inactive cards)" functionality:

- Enter use of this key combination has the same effect as clicking "Search" button
- Ctrl + F use of this key combination has the same effect as clicking "Finish" button
- $Ctrl + \rightarrow -$  use of this key combination switches to the next subpage with the search results
- Ctrl + ← use of this key combination switches to the previous subpage with the search results

As part of the "Registration book" functionality:

- Ctrl + D use of this key combination has the same effect as clicking "Display" button
- Ctrl + F use of this key combination has the same effect as clicking "Finish" button

As part of the "Visits book" functionality:

- Enter use of this key combination has the same effect as clicking "Search" button
- Ctrl + F use of this key combination has the same effect as clicking "Finish" button
- $Ctrl + \rightarrow -$  use of this key combination switches to the next subpage with the search results
- Ctrl + ← use of this key combination switches to the previous subpage with the search results

# Staff

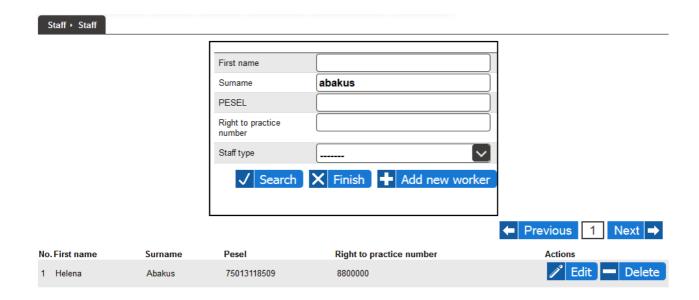
Module "Staff" is used to manage staff working in a healthcare institution, including the timetables of work of the staff and pools of prescriptions and timetables of equipment functioning at the institution.

## Staff

The "Staff" functionality in the "Staff" menu allows for data management of staff working in health care institution. When this functionality is selected, the search engine of staff is available. Searching is possible by any combination of the following criteria:

- > first name
- > surname
- > PESEL
- > right to practice number
- > staff type

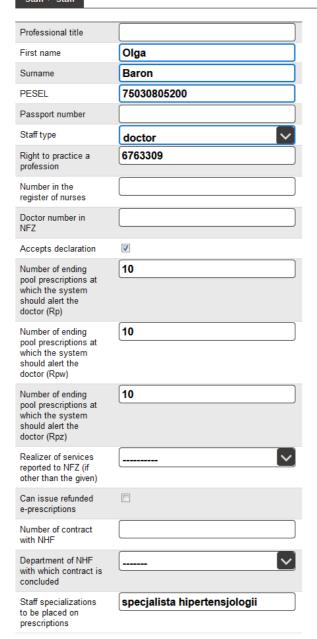
After entering the search criteria and pressing the "Search" button, there is displayed a list of employees that meet the search criteria and for each one there is the buttons: "Edit" and "Delete" allow to modify or delete employee's data. At the search engine there is also a button allows to add a new employee.



To add a new employee you have to press the "Add new employee" button and fill in the form which then displays (at least the required fields and in case of doctors, the number of right to practice is additionally required). If at the visits of the staff, the person who carried out the services is different staff, then you can indicate it in the field "Realizer of services reported to the NFZ" - then the staff will be selected automatically when encoding visits as carried out the service. If staff is to have possibility to issue transborder prescriptions it is necessary to enter professional title, email and/or phone with international prefix. When you edit employee's data there is displayed the same form except that it is already filled with the employee's data. When removing, form is available only for reading. In the form (when adding and editing employees) should be indicated in which clinics / wards is the employee working. An employee may work in more than one clinic / ward. To indicate more than one clinic / ward, use the button "More clinics / wards". At each clinic / ward assigned to employee there is "Delete" button allows to remove the clinic / ward from the list of employee's workplaces. Button "More clinics / wards" and "Delete" buttons at the particular clinic / ward do not save changes - just click the "Add" or "Update" button (depending on whether adding a new employee, or update an existing employee's data) is saving data from the form. In the

form (at adding and editing employee) it is also possible to indicate which rehabilitation services the employee does not realize (including therapists, therapist realizes all rehabilitation services with the exception indicated in the form). To be able to indicate more than one treatment, use the "More rehabilitation services" button. At every treatment there is, in turn, "Delete" button allows to remove a treatment from the list of services not realized by the employee. "More rehabilitation services" and "Remove" buttons at the individual services do not save changes - just the "Add" or "Update" button (depending on whether adding a new employee, or update an existing employee data) is saving data from the form. If the staff is to receive automatic notifications about visits scheduled for tomorrow or automatic notifications of visits a specified number of hours before the duty time, then it is necessary to specify the time of these notifications in the form (email address / telephone number must be also given depending on the channel the staff is to be notified through). If a given personnel is to be able to issue refunded e-prescriptions, check the box "Can issue refunded eprescriptions", while at the same time either there must be a healthcare facility contract with the NFZ imported into the iHIS system or the number of staff contract with the NFZ must be entered in the staff data form and the NFZ department with which the contract was signed should be specified. In the field "Staff specializations to be placed on prescriptions" one can enter information about the doctor's specialization / specializations, which information will be placed on the paper prescription under the name of the doctor (e.g. "cardiology specialist"), if this field is empty, then the first of the specializations marked in the "Specializations" section will be placed on the prescription (if any selected). If a given person will issue e-prescriptions on medical practice, then in the form, enter the data of the medical practice, including the box "Possibility of issuing e-prescriptions on medical practice" as well as enter relevant certificates and passwords to them, and at the clinics / wards whose staff is to issue e-prescriptions on medical practice check the box "Issue e-prescriptions on medical practice". If the "Possibility of issuing e-prescriptions on medical practice" field is not checked then the staff will issue e-prescriptions in all clinics / departments on healthcare company. If the field "Possibility of issuing e-prescriptions on medical practice" is checked, then the staff will issue e-prescriptions on medical practice in clinics / wards with the "Issue e-prescriptions on medical practice" box marked, while in others on healthcare company. If the integration mechanisms of the jHIS system with the ZnanyLekarz website are enabled and the person operates on the ZnanyLekarz website, then the person corresponding to the given on ZnanyLekarz website should be indicated in the field "Person in ZnanyLekarz service".

#### Staff · Staff



Poland
321321321
olga@baron.med
13:00
60

#### Medical practice data

Name	OlgaMed
Locality	Warszawa
Street	Piwna
House number	1
Flat number	
Postal code	11-111
Post office	Warszawa
REGON	275670517
NIP	
Phone	
Regional medical chamber	Beskidzka Izba Lekarska w
Medical practice type	individual medical practice onl
Part I of ministerial code	000213
Part V of ministerial code	11
Performed activity type	Ambulatory health care service

Possibility to issue e-prescriptions on medical practice	
Certificate to issue e-prescriptions (WSS)	Przeglądaj Nie wybrano pliku.
Password to certificate to issue e-prescriptions (WSS)	
Retype of password to certificate to issue e prescriptions (WSS)	
Certificate to issue e-prescriptions (TLS)	Przeglądaj Nie wybrano pliku.
Password to certificate to issue e-prescriptions (TLS)	
Retype of password to certificate to issue e prescriptions (TLS)	
Service provider own node identifier (OID)	1

## Occupational medicine seal symbols

Province symbol

14 - mazowieckie

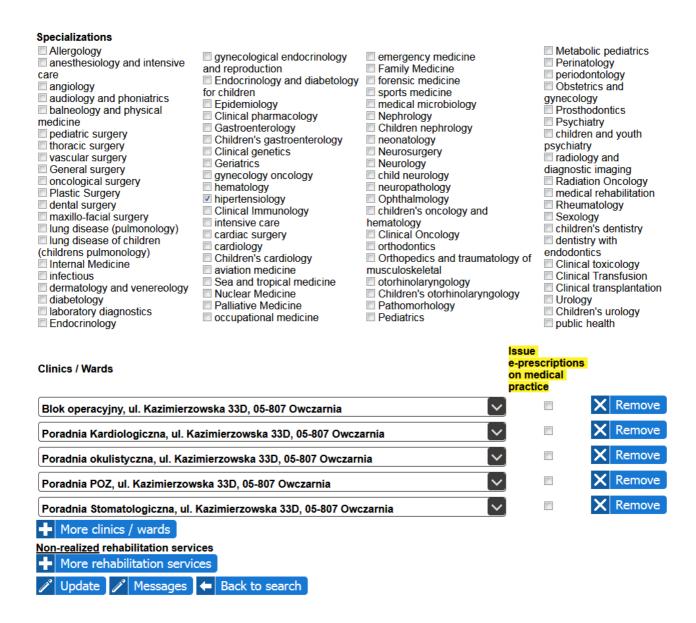
Specializations / Trainings

Enter the appropriate of the following symbols joining them with dash and replacing XXx by the last two digits of the year of completion / expiry of the validity period (e.g. 1-6-99-J):

- 1 specialization in the field of occupational health and industrial medicine
- 2 specialization in the field of occupational health
- 3 specialization in the field of marine and tropical medicine
- 4 specialization in the medical field station
- 5 specialization in the field of aviation medicine
- 6-XX 6 years work experience
- 7-XX is carried specialization in occupational medicine
- **8-XX** possible to carry out preventive examinations of the time limit
- $\boldsymbol{9}$  specialization in the field of general medicine or family medicine
- J training unit research and development in the field of occupational medicine in the field of preventive medical examinations of workers exposed to ionizing radiation
   T training at the Institute of Marine and Tropical Medicine in
- T training at the Institute of Marine and Tropical Medicine in the field of preventive medical examinations of employees performing work under the conditions of tropical, marine and underwater and workers returning from work in tropical conditions
- K training at the Center for Scientific Medicine Railway research workers work in positions related to road safety M - possibility of carrying out preventive testing limited to specific groups of employees

Order number in the register of doctors making prophylactic examinations

123



As part of this functionality, it is possible to send messages to the staff. To send an email / SMS message to the staff, click the "Messages" button under the form. A new window will open with a form for sending messages. The form has fields that allow you to compose an email (if the staff has an email address) and SMS (if the staff has a mobile number). After entering the content of the message and clicking "Send" it is sent to the staff. Below the form, a list of all messages sent to staff from this level is displayed.

SMS	at
Email subject	
Email content	

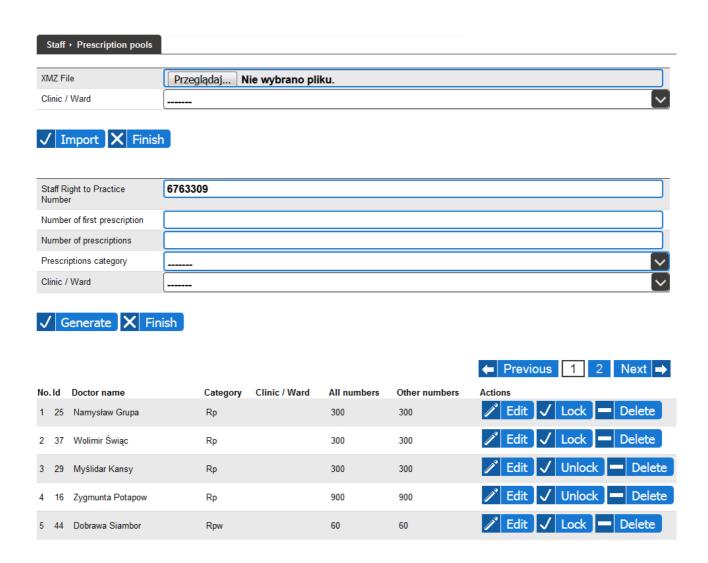


### Messages sent

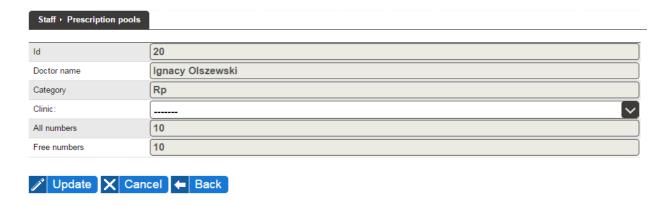
No.	Sending date		Sender login	Channel	Message
1 2019-02-18 12:57		ZOZ		SMS	Test
2 2019-02-18 12:57		707		email	Test
2 2019-02-10 12:51	-18 12:5 <i>f</i> zoz	202	eman	eman	Test

# **Prescription pools**

The "Prescription pools" functionality in the "Staff" menu allows to import prescription pools of staff in the form of XMZ files downloaded from the NFZ SZOI system (both old-type files and NR REC files) and to generate staff prescription pools based on the number range provided. After selecting this functionality there is displayed the form of import the prescription pools, form for generating the prescription pool and under the forms there is a list of already imported pools of prescription. If the logged-in user has administrator's privileges, then the list of imported pools of prescription contains all the pools of prescription of all doctors, otherwise contains all the pools of prescription of logged doctor's only. To import a pool of prescriptions in the form of import should be specified the XMZ file downloaded before from the NFZ SZOI system and eventually clinic / ward in which a pool of prescriptions will be available and then confirm with "Import" button. The system on the basis of the information contained in the XMZ file automatically bind a particular pool with proper doctor. If in the form was indicated clinic / ward, the doctor will be able to issue prescriptions with the numbers of a particular pool only at the visits realized in this clinic / ward, if the clinic / ward is not indicated, then the pool of prescriptions will be possible to use in all clinics / wards where the doctor works. To generate a prescription pool based on the given range, enter the doctor's NPWZ in the prescription pool generation form, the first prescription number (beginning number of the prescription number range to be generated), specify the number of prescriptions to generate and, if necessary, indicate the clinic / ward where the doctor will be able to use the given pool and confirm by clicking "Generate". Based on the entered data, the system will generate an appropriate pool and associate it with the appropriate doctor.



Imported pools of prescriptions can be edited, locked / unlocked and removed. For this purpose, there are intended buttons: "Edit", "Lock" / "Unlock" and "Delete" appear on the list of imported prescriptions pools at each pool. After pressing the "Edit" there is displayed data form of pool, where you can specify or change the clinic, in which a pool of prescriptions will be available. In particular, any clinic cannot be selected - the pool of prescriptions will be available in all clinics where the doctor works. After entering the information, confirm it by clicking "Update" button.



After confirming changes, the system will again display the form of pools of prescriptions to import and a list of imported pools of prescriptions.

To remove a pool of prescriptions use the "Delete" button visible at a particular pool from the list of imported pools of prescriptions. When you press this button there is displayed a form of pool's data to insight (no edits), with "Delete" button, which pressed removes the pool of prescriptions from the system.

After removing a pool, the system displays again a form of pools of prescriptions to import and a list of imported pools of prescriptions.

To lock a pool of prescriptions use the button "Lock" visible at a particular pool from the list of imported pools of prescriptions (if the pool is not locked). When you press this button, the pool will be blocked and becomes inaccessible for the doctor until it is unlocked.

To unlock a pool of prescriptions use the button "Unlock" visible at a particular pool from the list of imported pools of prescriptions (if the pool is locked). When you press this button, the pool will be unlocked and becomes available for the doctor.

## Staff timetables

The "Staff timetables" functionality is used to plan of staff's timetables of work in particular clinics / wards of the healthcare facility. Timetables are planned for each clinic / ward separately. There are the following types of timetables:

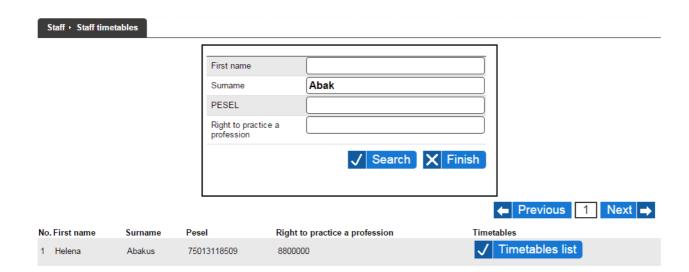
- template timetables weekly scheme of work of medical worker in clinic / ward
- version of template timetable snapshot of the template timetables from a particular moment
- current timetable real timetable of medical worker

Template timetables represent the schemes of work of medical staff (dates of visits repeated cyclically in the coming weeks). Template timetables does not determine the dates, but only days of week. State of template timetable can be saved at any time in the form of version of the template timetable. Dates of visits from any version of the template timetable can be copied to the current timetable somehow duplicating what has been planned in this version of the template timetable for the upcoming weeks of work of staff. In this way there is created a real timetable of work of the staff in a particular period. Exceptions to the work of the staff (absences, holidays, changes in hours of work on specific days) are introduced already in the current timetable.

After selecting the "Staff timetables" functionality in the "Staff" menu there is displayed a search engine of medical staff. Searching can be done by any combination of the following criteria:

- \rightarrow first name beginning of first name of medical worker (capitalization does not matter)
- > surname beginning of surname of medical worker (capitalization does not matter)
- > PESEL PESEL number of medical worker
- Right to practice a profession NPWZ number of medical worker

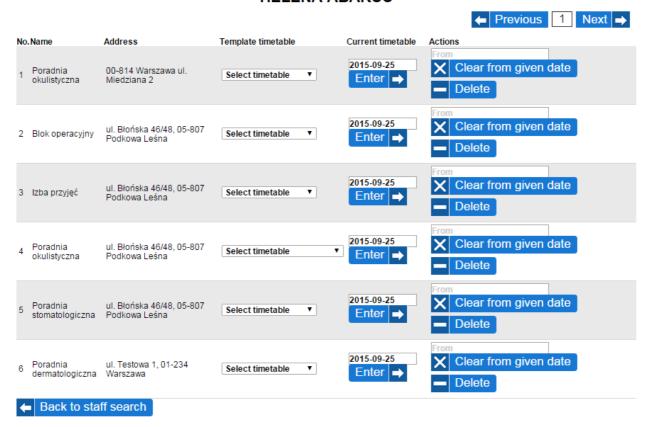
After entering the search criteria and pressing the "Search" button there is displayed a list of employees that meet the search criteria and for each of them - the "Timetables list" button that allows to display a list of timetables of this person.



After pressing the "Timetables list" button at the selected staff there is displayed a list of clinics / wards where this person is working and at each of them:

- A selection list of template timetable or one of its versions lets you see this timetable / version
- > "Enter" button allows you to view the current schedule
- Clear from given date" button allows to remove all planned visits in timetable from any specified date in the future (if at any of the deleted dates had been planned visit, then this visit will receive status "visit to cancel")
- Delete" button allows to remove timetables (template, versions and current) in the clinic / ward (if at any from removed dates had been planned visit, then this visit will receive status "visit to cancel")

### **HELENA ABAKUS**



After selecting "Template timetable" position from the dropdown list visible in the "Template timetable" column, the system displays a grid for the planning template timetable. The grid has seven columns corresponding to the days of the week (Monday to Sunday). The rows correspond to the possible hours of admission (the grid is limited to clinic's / ward's working hours and every hour is divided into 12 parts for 5 minutes).

Monday - Sunday									
	Mon Monday	Tue Tuesday	Wed Wednesday	Thu Thursday	Fri Friday	Sat Saturday	Sun Sunday		
08:00									
09:00									

Above the grid is a form and there are following options:

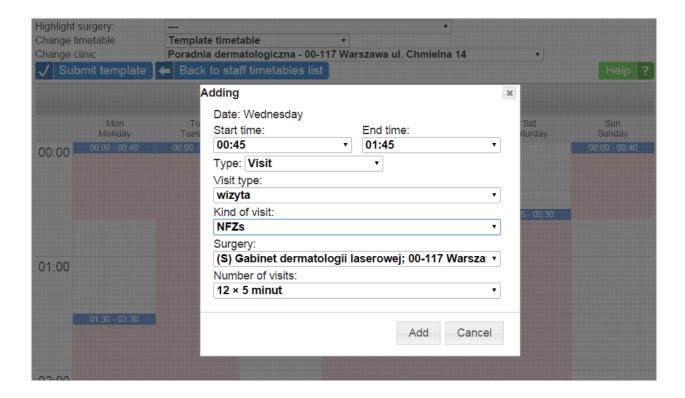
- Highlight surgery allows you to select the surgery from a list of surgeries functioning in the clinic and then it marks on the timetable (bright orange color) hours in which the office is already taken this is an indication for the person who plans the timetable when he can use that surgery and when not.
- Change timetable lets you switch between template timetable and versions of template timetable (if any were created)
- Change clinic Views the template timetable of staff in another clinic (if the employee works in several clinics)
- Submit template saves the current state of the template timetable as the version of the template timetable
- Back to staff timetables list returns to the list of timetables of the employee
- Help enables to display a window explaining the meaning of each color on schedule



Creating a template timetable is done by dragging the mouse (with the left mouse button) under the timetable's grid. At the time of release the left mouse button there is shown window with the parameters of the slot (a set of planned visits, staff's availability period to take the patients / carry out the surgeries or break in the work of the staff):

- > start time filled with value, where planned slot starts on the grid. This time can be changed
- end time filled with value, where planned slot ends on the grid. This time can be changed
- > type determines whether it is the time-frame for a visit, whether it is a time of staff
  availability (for taking patients / carrying out surgeries / realizing rehabilitation surgeries),
  or is it a break in work of staff (visit is selected by default)
- availability for rehabilitation if as a type of slot has been selected availability then there is the "availability for rehabilitation" field for specifying which conditions of realization of rehabilitation services the availability is relevant (as far as accessibility is concern the realization of rehabilitation services); Only the availabilities for which there was filled the "availability for rehabilitation" field will be visible at planning the rehabilitation services
- visit type specifies the type of visit possible to choose among types defined for the clinic (if the clinic has specified default type of visit then it is selected instantly)
- kind of visit (NFZs, commercial) It determines how it will look the process of signing up for a visit; selection options are available depending on the type of visit assigned to the clinic:
  - if the clinic has assigned NFZs or commercial tyApe of visit then there is available only this kind of visit
  - if the clinic has assigned mixed type of visit then there is available both kinds of visit -NFZs and commercial

- surgery surgery where visit will take place (if there is only one surgery in the clinic and default type of visits required to determine surgery then this surgery is selected by default)
- visibility within internet defines whether the given term / set of terms is to be visible within internet portal for patients (patients will be able to register themselves for visits within these terms using internet)
- visibility on the ZnanyLekarz website determines whether a given term / set of terms is to be visible on the ZnanyLekarz website (patients will be able to arrange visits to such terms on their own via the ZnanyLekarz website)
- number of visits determines how many visits will be planned in a given period of time (if the time period can be divided into parts for as many minutes as long is the default duration of the visit in the clinic, then such number of visits will be selected by default)

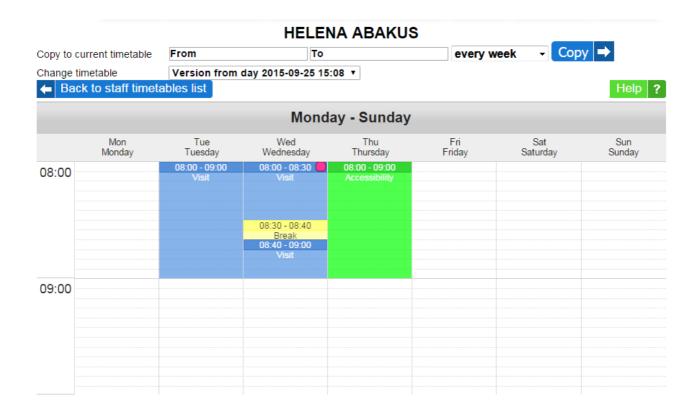


After filling / verifying the parameters of the slot they have to be confirmed with the "Add" button. Then the window with the parameters disappears and the planned slot appears on the grid. If the type of visit that you selected at adding slot has defined color of highlighting, then in the upper right corner of the slot there is displayed spot in this color.

#### **HELENA ABAKUS** Highlight surgery: (S) Gabinet 1 Template timetable ▼ Change timetable Change clinic Poradnia ginekologiczno-położnicza - 00-855 Warszawa ul. Grzybowska 34 🔻 Back to staff timetables list Help ? Monday - Sunday Tue Wed Mon Thu Fri Sat Sun Friday Sunday Monday Tuesday Wednesday Thursday Saturday 08:00 - 09:00 08:00 - 08:30 08:00 - 09:00 08:00 08:30 - 08:40 09:00

Planned slots in the timetable can be modified: lengthen, shorten, move, copy and delete. To modify or remove slot you have to click it the mouse – there is shown the window of slot's parameters - then you can modify parameters and save them by clicking "Save" button or remove the slot by pressing the "Delete". If you put the mouse's cursor over the bottom edge of the slot, then by holding down the left mouse button, you can change the length of the slot (lengthen it or shorten) - the change will be approved after releasing the left mouse button (the slot can be extended or shortened only in multiples of visit's time specified in slot's parameters). If you put the mouse cursor on the header of slot then by holding down the left mouse button you can move the slot to another place in the grid (to another hour, another day) - the change will be approved after releasing the left mouse button. But if you put the mouse cursor on the header of slot and hold down the shift key on the keyboard while holding down the left mouse button, you can copy a slot in another place of grid (to another hour, another day) - the change will be approved after releasing the left mouse button.

To create current timetable on the basis of a template timetable it should be approved by button visible in the form under the timetable (then will be created a version of a template timetable with the date and time of creation), and then from the "Change timetable" list in the same form select the version you've created. There will be displayed the selected version of template timetable and over this there will be a form to copy data from this version to the current timetable. Slots in versions of a template timetable cannot be modified or deleted - you can only get a preview of slot's parameters by clicking on this slot by left mouse button. Form under the version of template timetable lets you copy (duplicate) slots planned in this version to the current timetable for the specified period (full weeks), with the possibility of copying every week, every two weeks, every three weeks, etc. Copying for a specific number of weeks can be useful if the staff has different work patterns used alternately in the following weeks - then one should create different versions of the timetable template and each copy for other weeks.



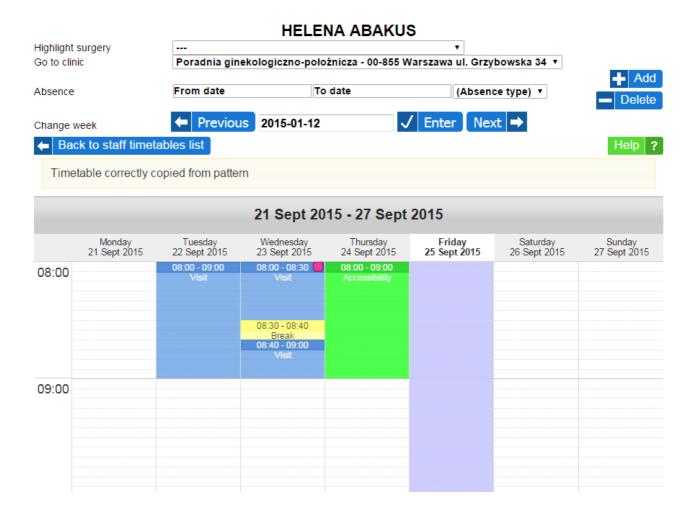
To copy data from a version of template timetable to the current timetable, in the form on the top of the page should be indicate the scope of weeks (and possibly select for how many weeks copying has to be done) and then click "Copy" button. The system will ask for confirmation yet - request for confirmation will be displayed on the form of copying (which has to be confirmed by using the "Yes" button or canceled by using the "No" button). When copying is complete, the system will inform about it in the relevant message. In addition, if at the copying will be any conflicts between the current timetables of the staff/equipment from different clinics, the system also displays information about the existing conflicts - such conflicts have to be removed manually in the current timetables.

The consequences of copying are as follows:

- in all the weeks in the current timetable where has not been made any manual changes (add / modify / delete single slots for specific days, add absences) during the period when it was copied, all the previously existing visits are removed and new ones are created, such as in the version of template timetable
  - o if as a result of copying is removed any visit from the current timetable and in its place there is new one, it does not have any effect on appointed visits
  - o if as a result of copying is removed any visit form the current timetable and in its place there is new one, then planned visits at this time is marked as "visit to cancel" the task of registering workers is to inform patients and to cancel such marked visits
- ) in all the weeks in the current timetable where manually changes were done (adding / modifying / deleting of single slots for specific days, adding of absences) there are not entered any changes at copying such weeks are dropped when copying, because that handmade changes in current timetable (usually they are emergency situations) have a higher priority than the repetitive scheme

View of the current timetable is similar to the view a template timetable except that we are already

dealing with specific dates and under the timetable's grid there is displayed information about a particular week - whether it was copied from the version of a template timetable or whether it was created / modified manually. There is also another form under the timetable.



In the form above the timetable there are following options:

- Highlight surgery allows you to select the surgery from a list of surgeries functioning in the clinic and then it marks on the timetable (bright orange color) hours in which the office is already taken this is an indication for the person who plans the timetable when he can use that surgery and when not.
- Go to clinic allows to view the current timetable for the staff working in another clinic (if the employee works in several clinics)
- Absence (with "Add", "Delete", "List" buttons) allows to add, remove and browe staff's absences (opposed to the breaks, absences apply to whole days)
- Change week allows to move between different weeks of the current timetable (to move to another week, click on the date field, indicate in the calendar any day of the week for which you want to move and press the "Enter" button; to go to the previous week from the currently displayed one, one should press the "Previous" button; to go to the next week from the currently displayed one, one should press the "Next" button)
- Back to staff timetables list returns to the list of timetables of the employee

Help - enables to display a window explaining the meaning of each color on schedule

To add absence you should indicate start day of absence, end day of absence (in both cases by clicking the field and selecting a date from the calendar), type of absence (from drop list) and confirm by "Add" button. Absence will appear in timetable as yellow highlight of columns corresponding to the days of absence. To delete an absence you should indicate start day of absence, end day of absence (in both cases by clicking the field and selecting a date from the calendar) and confirm by "Delete" button. You can also delete some absences in case of a few days absence indicating a shorter period in the form. To see the list of scheduled absences of the doctor, click the "List" button - a list of planned absences of the doctor in a given clinic will open in a new window.

## Olga Baron Poradnia POZ, ul. Kazimierzowska 33D, 05-807 Owczarnia

No.	Period since	Period till	Kind
1 2020-01-27		2020-01-31	inny



The rules of adding, editing, deleting, lengthening, shortening, moving or copying slots in current timetable are identical as in template timetable.

Slots within timetables can have the following colors:

- blue slots in this color are correctly planned terms to arrange visits
- red slots in this color are planned terms but the surgery room in which they are planned is occupied by another staff at the same time
- green slots in this color are planned periods of availability of staff
- yellow slots in this color are planned breaks in staff work
- pink slots in this color indicate the work of staff in other clinics and the time necessary to move staff between units, such slots are displayed only informatively (they result from other staff timetables so they can not be added, edited or deleted), after clicking on such a slot there appears a window with information about the workplace of the staff at that time or with information that this is the time needed to move staff between units, if the clinic which corresponds to the pink slot is in another unit then before the pink slot corresponding to the work time in another unit there appears an additional pink slot with a duration such as the time needed to move staff to this unit (from the clinic for which the timetable is displayed) and after pink slot corresponding to the work time in another unit there appears an additional pink slot with a duration such as as the time needed to move staff from this unit (to the unit for which the timetable is displayed), these times are defined as described in the chapter "Distance of outlets"

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• pink – slots in this color are staff working times in other clinics, slots with this color are displayed only for informational purposes (they come from other planned timetables so they cannot be added, modified nor deleted), if clinic corresponding to pink slot is located in different unit then pink slot is automatically lenghtened at the beginning by the time necessary for the staff to move to that clinic and at the end by the time necessary for the staff to move from that clinic (theses times are defined as stated in chapter "Units distance")

Background of columns in timetable can have the following color:

- violet background in this color means current day (today)
- peach background in this color means free day
- light yellow background in this color means absence of staff
- light orange background in this color shows where surgery room chosen above the timetable is occupied
- gray background in this color is used in basic health care clinics and means that no staff and no equipment is working in this clinic at that time
- dark green background in this color is used in basic health care clinics and means that some staff or some equipment is working in this clinic at that time

# **Equipment timetables**

The "Equipment timetables" functionality is used to plan timetables of equipment's work in particular clinics / wards of healthcare facility. Equipment timetables are planned in a situation when it is not important who will be handle the device (eg. X-ray apparatus), but when it will be possible to do a surgery on this device. Timetables are planned for each clinic / ward separately. There are the following types of timetables:

- > template timetable weekly scheme of work of medical equipment in clinic / ward
- > version of template timetable snapshot of template timetable at a specified moment
- current timetable actual timetable of work of medical equipment

Template timetables are for planning repetitive (cyclically in the coming weeks) dates of work of medical equipment. Template timetable's state at any time can be saved in the form of a version of template timetable. Dates of work, from any version of template timetable can be copied to the current timetable somehow duplicating what has been planned in this version of template timetable for the upcoming weeks of equipment's work. In this way creates a real timetable of equipment's work in a particular period. Exceptions in the work of equipment (unavailability due to maintenance or repairs, alterations of hours of work on specific days) are entered already in the current timetable.

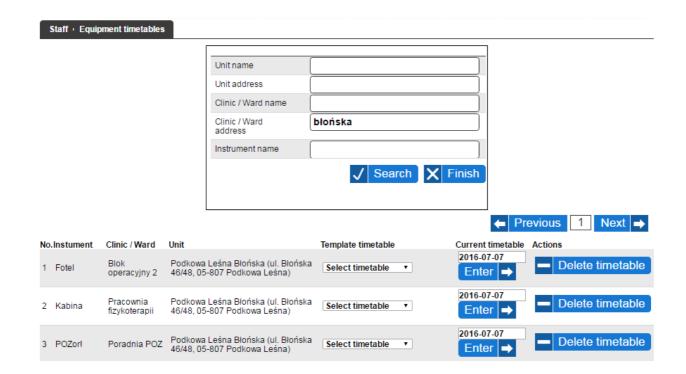
After selecting the "Equipment timetables" functionality in the "Staff" menu, there is displayed a search engine of medical equipment. Searching can be done by any combination of the following criteria:

- \rightarrow unit name part of the name of the unit (capitalization does not matter)
- \rightarrow unit address part of the unit's address (capitalization does not matter)
- clinic / ward name part of the name of the clinic / ward (capitalization does not matter)
- clinic / ward address part of the clinic's / ward's address (capitalization does not matter)
- instrument name part of equipment's names (capitalization does not matter)

After entering the search criteria and pressing the "Search" button there is displayed a list of equipment matching search criteria and at each of them:

> selection list of template timetable or one of its versions allows to see such a timetable/version (if for the equipment in the clinic / ward timetable has already been created)

- the "Enter" button allows to view the current timetable (if for the equipment in the clinic / ward timetable has already been created)
- the "Create timetable" button allows to create timetable of equipment's work in the clinic / ward (if for the equipment in the clinic timetable has already been created)
- the "Delete timetable" button allows to delete timetable of equipment's work in the clinic / ward (if for any of the dates had been planned visit, then such a visit will receive status "visit to cancel"). (if for the equipment in the clinic / ward timetable has already been created)



If for a particular equipment there is still not any timetable of work in the clinic / ward then simply click the "Create timetable" button at the equipment to create such timetable. Similarly, you can remove already created timetable by clicking on the "Delete timetable" button at the equipment.

After selecting an item of the "Template timetable" name from the drop list visible in the "Template timetable" column, the system displays a grid for planning template timetable. The grid has seven columns corresponding to the days of the week (Monday to Sunday). The rows correspond to the possible working hours (the grid is limited to working hours of clinic / ward and every hour is divided into 12 parts for 5 minutes).

	TOPOGRAF ROGÓWKI							
Change ti Change c		Template time	table istyczna - ul. Błoń	eka 46/49, 05-907	Podkowa Leéna	-		
	mit template		tuments search		Poukowa Lesiia	•	Help ?	
			Mond	ay - Sunday				
	Mon Monday	Tue Tuesday	Wed Wednesday	Thu Thursday	Fri Friday	Sat Saturday	Sun Sunday	
08:00								
09:00								

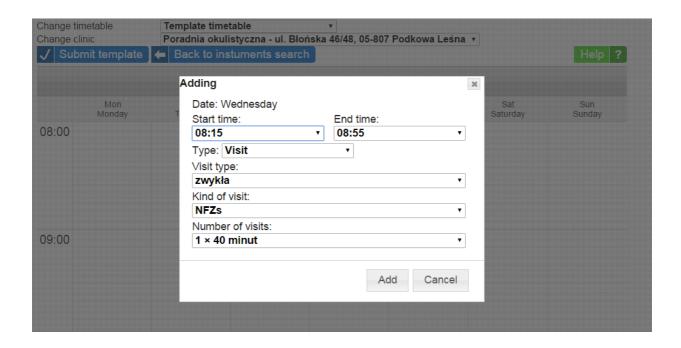
Above the grid there is a form where are following options:

- Change timetable lets you switch between template timetable and versions of template timetable (if any were created)
- Change clinic Views the template timetable of equipment's work in another clinic (if the equipment is functioning in several clinics)
- > Submit template saves the current state of the template timetable as the version of the template timetable
- Back to instruments search returns to the search engine of equipment
- Help enables to display a window explaining the meaning of each color on schedule

Creating a template timetable is done by dragging the mouse (with the left mouse button) under the timetable's grid. At the time of release the left mouse button there is shown window with the parameters of the slot (a set of planned visits, equipment's availability period to handle the patients / carry out the surgeries or break in the work of the equipment):

- > start time filled with value, where planned slot starts on the grid. This time can be changed
- > end time filled with value, where planned slot ends on the grid. This time can be changed
- type determines whether it is the time-frame for a visit, whether it is a time of equipment's availability (for handling the patients / carrying out surgeries using it / realizing rehabilitation services using it), or is it a break in work of equipment (visit is selected by default)
- availability for rehabilitation if as a type of slot has been selected availability then there is the "availability for rehabilitation" field for specifying which conditions of realization of rehabilitation services the availability is relevant (as far as accessibility is concern the realization of rehabilitation services); Only the availabilities for which there was filled the "availability for rehabilitation" field will be visible at planning the rehabilitation services

- visit type specifies the type of visit possible to choose among types defined for the clinic (if the clinic has specified default type of visit then it is selected instantly)
- kind of visit (NFZs, commercial) It determines how it will look the process of signing up for a visit; selection options are available depending on the type of visit assigned to the clinic:
  - if the clinic has assigned NFZs or commercial type of visit then there is available only this kind of visit
  - if the clinic has assigned mixed type of visit then there is available both kinds of visit NFZs and commercial
- surgery surgery where visit will take place (if there is only one surgery in the clinic and default type of visits required to determine surgery then this surgery is selected by default)
- visibility within internet defines whether the given ter / set of terms is to be visible within internet portal for patients (patients will be able to register themselves for visits within these terms using internet)
- number of visits determines how many visits will be planned in a given period of time (if the time period can be divided into parts for as many minutes as long is the default duration of the visit in the clinic, then such number of visits will be selected by default)



After filling / verifying the parameters of the slot they have to be confirmed with the "Add" button. Then the window with the parameters disappears and the planned slot appears on the grid. If the type of visit that you selected at adding slot has defined color of highlighting, then in the upper right corner of the slot there is displayed spot in this color.

#### TOPOGRAF ROGOWKI Change timetable Template timetable Poradnia okulistyczna - ul. Błońska 46/48, 05-807 Podkowa Leśna 🔻 Change clinic ← Back to instuments search ✓ Submit template Help ? Monday - Sunday Mon Wed Fri Sat Tue Thu Sun Monday Tuesday Wednesday Thursday Friday Saturday Sunday 8:00 - 09:00 8:00 - 09:00 8:00 - 09:00 08:00 09:00

Planned slots in the timetable can be modified: lengthen, shorten, move, copy and delete. To modify or remove slot you have to click it the mouse – there is shown the window of slot's parameters - then you can modify parameters and save them by clicking "Save" button or remove the slot by pressing the "Delete". If you put the mouse's cursor over the bottom edge of the slot, then by holding down the left mouse button, you can change the length of the slot (lengthen it or shorten) - the change will be approved after releasing the left mouse button (the slot can be extended or shortened only in multiples of visit's time specified in slot's parameters). If you put the mouse cursor on the header of slot then by holding down the left mouse button you can move the slot to another place in the grid (to another hour, another day) - the change will be approved after releasing the left mouse button. But if you put the mouse cursor on the header of slot and hold down the shift key on the keyboard while holding down the left mouse button, you can copy a slot in another place of grid (to another hour, another day) - the change will be approved after releasing the left mouse button.

To create current timetable on the basis of a template timetable it should be approved by button visible in the form under the timetable (then will be created a version of a template timetable with the date and time of creation), and then from the "Change timetable" list in the same form select the version you've created. There will be displayed the selected version of template timetable and over this there will be a form to copy data from this version to the current timetable. Slots in versions of a template timetable cannot be modified or deleted - you can only get a preview of slot's parameters by clicking on this slot by left mouse button. Form under the version of template timetable lets you copy (duplicate) slots planned in this version to the current timetable for the specified period (full weeks), with the possibility of copying every week, every two weeks, every three weeks, etc. Copying for a specific number of weeks can be useful if the equipment has different accessibility patterns used alternately in the following weeks - then one should create different versions of the timetable template and each copy for other weeks.

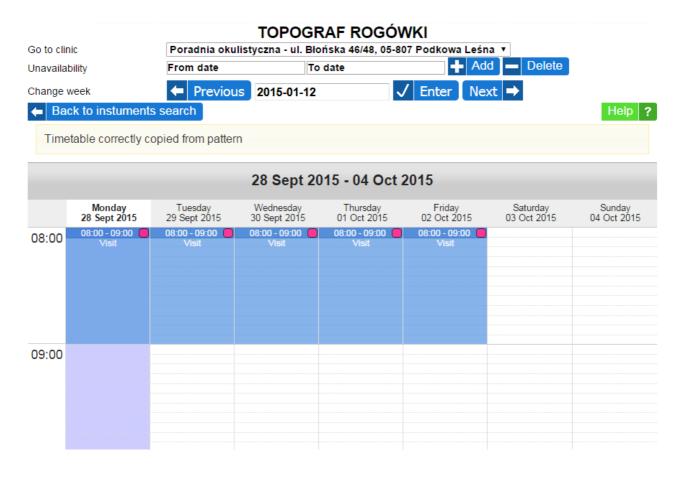
#### TOPOGRAF ROGÓWKI Copy → From Copy to current timetable every week Change timetable Version from day 2015-09-28 15:44 ▼ ← Back to instuments search Help ? Monday - Sunday Mon Tue Wed Thu Fri Sat Monday Friday Saturday Tuesday Wednesday Thursday Sunday 08:00 - 09:00 08:00 - 09:00 08:00 - 09:00 08:00 - 09:00 08:00 09:00

To copy data from a version of template timetable to the current timetable, in the form on the top of the page should be indicate the scope of weeks (and possibly select for how many weeks copying has to be done) and then click "Copy" button. The system will ask for confirmation yet - request for confirmation will be displayed on the form of copying (which has to be confirmed by using the "Yes" button or canceled by using the "No" button). When copying is complete, the system will inform about it in the relevant message.

The consequences of copying are as follows:

- in all the weeks in the current timetable where has not been made any manual changes (add / modify / delete single slots for specific days, add unavailabilities) during the period when it was copied, all the previously existing visits are removed and new ones are created, such as in the version of template timetable
  - if as a result of copying is removed any visit from the current timetable and in its place there is new one, it does not have any effect on appointed visits
  - o if as a result of copying is removed any visit form the current timetable and in its place there is new one, then planned visits at this time is marked as "visit to cancel" the task of registering workers is to inform patients and to cancel such marked visits
- in all the weeks in the current timetable where manually changes were done (adding / modifying / deleting of single slots for specific days, adding of unavailabilities) there are not entered any changes at copying such weeks are dropped when copying, because that handmade changes in current timetable (usually they are emergency situations) have a higher priority than the repetitive scheme

View of the current timetable is similar to the view a template timetable except that we are already dealing with specific dates and under the timetable's grid there is displayed information about a particular week - whether it was copied from the version of a template timetable or whether it was created / modified manually. There is also another form under the timetable.



In the form above the timetable there are following options:

- Go to clinic allows to view the current timetable of equipment's work in another clinic (if the equipment functions in several clinics)
- Unavailability (with "Add", "Delete", "List" buttons) allows to add, remove, browse equipment's unavailabilities (opposed to the breaks, unavailabilities apply to whole days)
- Change week allows to move between different weeks of the current timetable (to move to another week, click on the date field, indicate in the calendar any day of the week for which you want to move and press the "Enter" button; to go to the previous week from the currently displayed one, one should press the "Previous" button; to go to the next week from the currently displayed one, one should press the "Next" button)
- Back to instruments search returns to the search engine of equipment
- Help enables to display a window explaining the meaning of each color on schedule

To add unavailability you should indicate start day of unavailability, end day of unavailability (in both cases by clicking the field and selecting a date from the calendar) and confirm by "Add" button. Unavailability will appear in timetable as yellow highlight of columns corresponding to the days of unavailability. To delete an unavailability you should indicate start day of unavailability, end day of unavailability (in both cases by clicking the field and selecting a date from the calendar) and confirm by "Delete" button. You can also delete some unavailabilities in case of a few days unavailability indicating a shorter period in the form. To view the list of planned equipment unavailability, click the "List" button - a list of planned equipment unavailability in a given clinic will open in a new window.

### Stół operacyjny 1

Blok operacyjny, ul. Kazimierzowska 33D, 05-807 Owczarnia

#### None



The rules of adding, editing, deleting, lengthening, shortening, moving or copying slots in current timetable are identical as in template timetable.

Slots within timetables can have the following colors:

- blue slots in this color are correctly planned terms to arrange visits
- green slots in this color are planned periods of availability of equipment
- yellow slots in this color are planned breaks in equipment usage

Background of columns in timetable can have the following color:

- violet background in this color means current day (today)
- peach background in this color means free day
- light yellow background in this color means unavailability of equipment
- light orange background in this color shows where surgery room chosen above the timetable is occupied
- gray background in this color is used in basic health care clinics and means that no staff and no equipment is working in this clinic at that time
- dark green background in this color is used in basic health care clinics and means that some staff or some equipment is working in this clinic at that time

## **Contracts**

The "Contracts" functionality from the "Staff" menu is used to manage contracts signed by the medical staff. After selecting this functionality there is displayed a search engine of staff. In the search engine you can see the "Contracts list preview" button, which allows you to quickly view the list of all contracts. When you click it, a new window opens with the list of contracts. Each contract has a "Go" button that allows you to quickly go to the personnel contracts.

No.	Staff	Contract name	Contract number	Signing date	Valid from	Valid to	Actions
1 Olg	a Baron	Umowa 2019	1/2019	2019-01-01	2019-01-01	2019-12-31	Go →

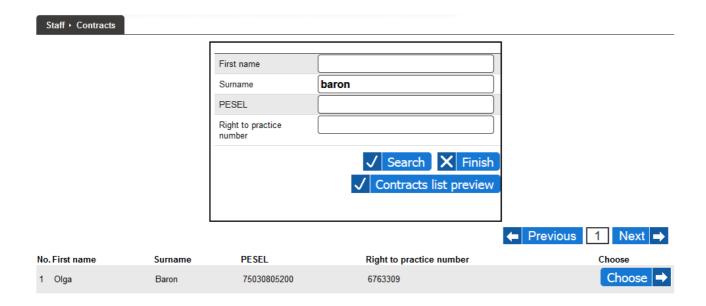


Searching can be done by any combination of the following criteria:

> First name

- > Surname
- > PESEL
- > Right to practice number

After entering the search criteria and pressing the "Search" button, there is displayed a list of employees that meet the search criteria and for each there is the "Choose" button.



When you click "Choose" button at a person from the staff, there is displayed a list of contracts of staff (or information about lack of the contracts) and the "Add contract" button below allowing to enter a new contract.



After clicking "Add contract" button, there is displayed a form to add a new contract, where next to the basic data of contract can be entered also its content and the position corresponding to the terms of settlement of the contract. Entering content is done by using an editor that allows text formatting (change font size, alignment, bold, italic, underline, strikethrough, subscript, superscript), the creation of bullets (numbered and unnumbered), insert symbols and tables on the principle such as editors like OpenOffice, LibreOffice or Microsoft Word. Placing the tags {TAG NAME} in the content of the contract will cause that they will be automatically replaced with appropriate data. The following tags have been defined:

- {X} automatically generated records corresponding to defined contract positions
- {DATA} date of contract signing

- {NUMER} contract number
- {OD} date of beginning of contract validity
- {DO} date of end of contract validity
- {PLACOWKA\_NAZWA\_1}, {PLACOWKA\_NAZWA\_2}, ... place names taken from defined contract positions
- {PLACOWKA\_ADRES\_1}, {PLACOWKA\_ADRES\_2}, ... place addresses taken from defined contract positions
- {ZAKLAD NAZWA} name of company
- {ZAKLAD SIEDZIBA} seat address of company
- {ZAKLAD KRS} KRS of company
- {ZAKLAD REGON} REGON of company
- {ZAKLAD\_NIP} NIP of company
- {PERSONEL IMIE} staff name
- {PERSONEL NAZWISKO} staff surname
- {PERSONEL\_ADRES} staff address
- {PERSONEL NPWZ} staff RTPN
- {PERSONEL NIP} staff NIP
- {PERSONEL REGON} staff REGON

In the form of adding the contract it is possible to define any number of contract's positions of four different types:

- positions of the contract in relation to NFZ's visits
- positions of the contract in relation to commercial visits
- positions of the contract in relation to NFZ's services
- positions of the contract in relation to commercial services

Positions of the contract in relation to NFZ's visits determine the rate by which the staff will have charged payment for carrying out the NFZ's visits that meet certain conditions. The rates can be defined as the amount per visit (payment due to staff depends on the number of visits carried out by him), or the amount per hour (payment due to staff is dependent on the duration of the visits carried out by him). For each rate can specified the conditions under which the payment should be implemented according to the rate. Conditions can be defined as any combination of the following criteria:

- place identification of place means that the payment of the specified rate will be implemented only for visits carried out in the specified place
- specialty identification of specialty means that the payment of the specified rate will be implemented only for the visits carried out in a given specialty clinics
- visit kind identification of the kind of visits means that the payment of the specified rate will be implemented only for realized visits of particular kind (scheduled, additional)
- visit type identification of the type of visits means that the payment of the specified rate

will be implemented only for realized visits of particular type; a list of possible types of visits to select is only available when you select specialty

- procedure identification of the procedure code (ICD-9) means that the payment of the specified rate will be implemented only for realized visits where staff done the procedure of the particular code
- days identification of the type of days means that the payment of the specified rate will be implemented only for the visits carried out in the indicated days (weekdays, weekends, certain day of the week, holidays, specified day); when the rate is applying to visits realized a certain date there should be given a specific date which such situation is concerning
- hours identification of the hours means that the payment of the specified rate will be implemented only for the visits carried out in certain hours

Positions of the contract in relation to commercial visits determine the rate by which the staff will have charged payment for carrying out the commercial visits that meet certain conditions. The rates can be defined as the amount per visit (payment due to staff depends on the number of visits carried out by him), the amount per hour (payment due to staff is dependent on the duration of the visits carried out by him), percent per visit (payment due to staff is a percentage of receivables collected by a health care from patient per visit), the formula for the visit (payment due to staff depends on the receivables collected by a health care from the patient for the visit and calculated according to a defined pattern operates on the debts). For each rate can specified the conditions under which the payment should be implemented according to the rate. Conditions can be defined as any combination of the following criteria:

- place identification of place means that the payment of the specified rate will be implemented only for visits carried out in the specified place
- specialty identification of specialty means that the payment of the specified rate will be implemented only for the visits carried out in a given specialty clinics
- visit kind identification of the kind of visits means that the payment of the specified rate will be implemented only for realized visits of particular kind (scheduled, additional)
- visit type identification of the type of visits means that the payment of the specified rate will be implemented only for realized visits of particular type; a list of possible types of visits to select is only available when you select specialty
- procedure identification of the procedure code (ICD-9) means that the payment of the specified rate will be implemented only for realized visits where staff done the procedure of the particular code
- days identification of the type of days means that the payment of the specified rate will be implemented only for the visits carried out in the indicated days (weekdays, weekends, certain day of the week, holidays, specified day); when the rate is applying to visits realized a certain date there should be given a specific date which such situation is concerning
- hours identification of the hours means that the payment of the specified rate will be implemented only for the visits carried out in certain hours

Positions of the contract in relation to NFZ's services determine the rate by which the staff will have charged payment for carrying out the NFZ's services that meet certain conditions. The rates are defined as the amount per service (payment due to staff depends on the number of services carried out by him, which have been settled with the NFZ, what means that they are accepted by the NFZ). For each rate can specified the conditions under which the payment should be implemented

according to the rate. Conditions can be defined as any combination of the following criteria:

- place identification of place means that the payment of the specified rate will be implemented only for services carried out in the specified place
- specialty identification of specialty means that the payment of the specified rate will be implemented only for the visits carried out in a given specialty clinics
- service type identification of the type of service means that the payment of the specified rate will be implemented only for service realized in clinics of particular type;
- range of services identification of the code of range of services means that the payment of
  the specified rate will be implemented only for the realized services assigned to the range of
  services under contracts with the NFZ
- service identification of the service code means that the payment of the specified rate will be implemented only for realized services having this service code under contracts with the NFZ.
- procedure identification of the procedure code (ICD-9) means that the payment of the specified rate will be implemented only for services realized during the visits when staff done the procedure with particular code
- days identification of the type of days means that the payment of the specified rate will be implemented only for the services carried out in the indicated days (weekdays, weekends, certain day of the week, holidays, specified day); when the rate is applying to services realized a certain date there should be given a specific date which such situation is concerning
- hours identification of the hours means that the payment of the specified rate will be implemented only for the services carried out in certain hours

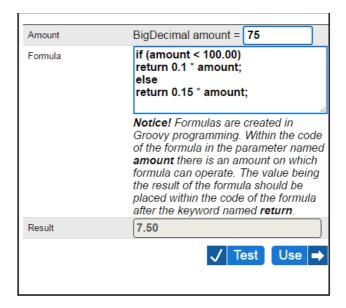
Positions of the contract in relation to commercial services determine the rate by which the staff will have charged payment for carrying out the commercial services that meet certain conditions. The rates can be defined as the amount per service (payment due to staff depends on the number of services carried out by him), percent per service (payment due to staff is a percentage of receivables collected by a health care from patient per service), the formula for the visit (payment due to staff depends on the receivables collected by a health care from the patient for the service and calculated according to a defined pattern operates on the debts ). For each rate can be specified conditions under which the payment should be implemented according to the rate. Conditions can be defined as any combination of the following criteria:

- place identification of place means that the payment of the specified rate will be implemented only for services carried out in the specified place
- service type identification of the type of service means that the payment of the specified rate will be implemented only for service realized in clinics of particular type;
- price list identification of price list means that the payment of the specified rate will be implemented only for the realized services selected from the indicated price list
- service identification of the service code means that the payment of the specified rate will be implemented only for realized services having this service code under contracts with the NFZ.
- procedure identification of the procedure code (ICD-9) means that the payment of the specified rate will be implemented only for services realized during the visits when staff

done the procedure with particular code

- days identification of the type of days means that the payment of the specified rate will be implemented only for the services carried out in the indicated days (weekdays, weekends, certain day of the week, holidays, specified day); when the rate is applying to services realized a certain date there should be given a specific date which such situation is concerning
- hours identification of the hours means that the payment of the specified rate will be implemented only for the services carried out in certain hours

The rates defined as an amount or a percentage are floating-point numbers determined with an accuracy of up to two places after the decimal point. The rates defined as formula (for commercial visits and services) are created as ports of the source code in the Groovy programming language (http://www.groovy-lang.org/documentation.html). In the content of formula in the parameter called **amount** is available the amount of the fee for the visit / service for which the formula can operate. The value representing the result of the formula should be placed in the content of the formula after the **return** keyword. At any field of rate allows the entering the formula there is the "Verify" button. This button becomes active when you select a formula as a kind of rates and makes it easier to create and test formulas. Click on this button opens a new window with a field for entering a formula and a field to enter the test amount. To ensure proper operation of the formula, after entering the test amount and content of the formula, click "Verify" button. If the content of the formula is not a valid code in the Groovy programming language, the system reports an error, and if it is a valid code in the Groovy programming language then in the "Result" field will be the result of calculation of the formula using a specified test amount. Entering any amendments to the content of the formula and re-test for different test amounts you can make sure of the correctness of created formula. Clicking on "Use" button closes the test formula and the final content of the formula is automatically inserted into the data form of contract.

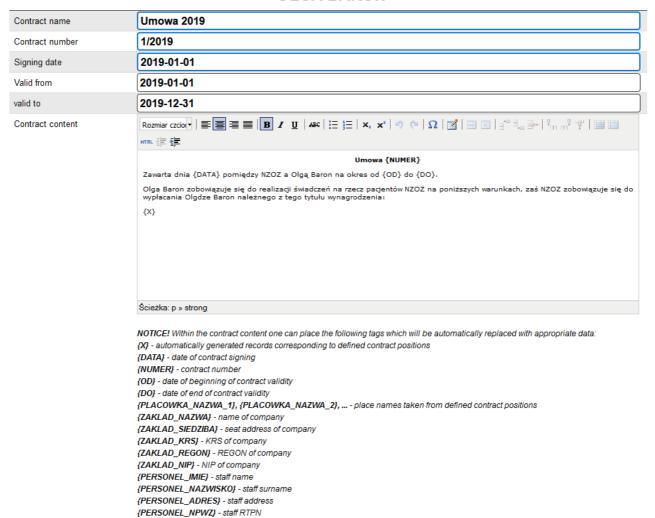


In the data form of contract for each of the four types of positions there is also available a "More" button, which the next click displays the next lines in the form to enable the introduction of more positions of the contract. Positions of the contract does not have to be exclusive - you can define

multiple positions of the contract under which there will be calculated payment for the same visit / service (eg. The definition of the rate for each commercial visit and rates for each commercial service will mean that for each commercial visit will be calculated payment basing on the first rates and additionally for each commercial service realized during this visit will be calculated additional value of payments by second rate). This solution allows you to build multiple mechanisms of provision calculation.

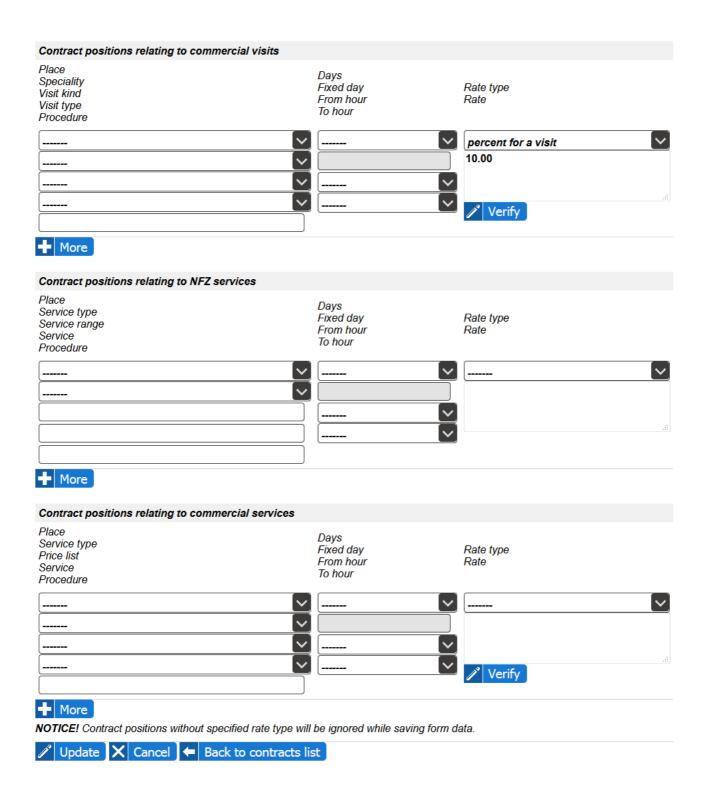
More

### **OLGA BARON**



#### Contract positions relating to NFZ visits Place Days Speciality Fixed day Rate type Visit kind From hour Rate Visit type To hour Procedure Przychodnia Owczarnia, ul. Kazimierzowska 33D, working days amount for a visit 25 **OUTPATIENT DERMATOLOGICAL (1200)** planned visits 09:00 19:00 89.00

{PERSONEL\_NIP} - staff NIP {PERSONEL\_REGON} - staff REGON



After entering all the data, save them by clicking the "Add" button. Positions contract that does not have specified the type of rates are skipped at saving data. After saving, the data form of the contract is empty again allowing the entering the next contract. To cancel entering another contract, click "Back to the list of contracts." Added contract becomes visible on the list of contracts of staff.



At each contract there are five buttons:

- Copy allows to quickly create a copy of the contract
- Edit allows to edit the data contract
- Delete allows to delete the contract
- Print allows to download a PDF file with the content of the contract to print
- Settlement allows you to view and print the status of the contract with amounts due to personnel caused by the execution of this contract

If there is a need for a new contract, which will be slightly different from the existing one, then the easiest way is to create a copy of an existing contract and then modify the data of that copy. To create a copy of the contract, click "Copy" button at the contract list. There will appear a window asking you to enter the name of a copy of the contract.

After entering the name of a copy of the contract and confirming by pressing "OK" button on the list of contracts will appear a newly created copy.



A copy differs from the original contract only name. To modify the other data, click the "Edit" button.

If you want to modify the contract data, click "Edit" at the contract list. There will appear the data form of the contract the same as at adding a new contract, but filled with data. After making changes (editing data of contract has the same rules as at adding a new contract), save them by clicking the "Save" button below the form.

If there is need to remove the contract, click the "Delete" button at the contract list. There will be displayed the data form of contract identical as at editing contract data but in read-only mode. Pressing the "Delete" button below the form removes the contract from the system.

To print the contract, click "Print" button at the contract list. It opens the PDF document with the contents of the contract to print.

#### Kontrakt nr 1/2016

#### z dnia 1 stycznia 2016

zawarty pomiędzy

NZOZ Testowym zwanym dalej Zleceniodawcą

а

dr n. med. Olgą Baron zwaną dalej Zleceniobiorcą.

§1

Zleceniodawca zleca a Zleceniobiorca przyjmuje na siebie wykonywanie obowiązku świadczenia usług medycznych w siedzibie Zleceniodawcy w okresie od 1 stycznia 2016 do 31 grudnia 2016, za co Zleceniodawca zobowiązuje się wypłacać Zleceniobiorcy za każdy przepracowany miesiąc do 15 dnia kolejnego miesiąca wynagrodznie naliczane według następujących zasad:

- za każdą NFZ-ową wizytę zrealizowaną w placówce Podkowa Leśna Błońska (ul. Błońska 46/48, 05-807 Podkowa Leśna) w ramach specjalności 1800 (PORADNIA STOMATOLOGICZNA) w przypadku wizyt planowych dla wizyt typu zwykła przy wykonaniu procedury 89.00 (Porada lekarska, konsultacja, asysta) w dni robocze od godziny 00:00 do godziny 24:00 ustala się stawkę w kwocie 25.00 PLN
- za każdą komercyjną wizytę zrealizowaną w dni wolne ustala się stawkę wynoszącą 10.00% wartości wizyty
- za każdą rozliczoną NFZ-ową usługę zrealizowaną dla świadczeń w rodzaju podstawowa opieka zdrowotna dla świadczeń z zakresu 01.0010.092.01 (ŚWIADCZENIA LEKARZA POZ) ustala się stawkę w kwocie 70.00 PLN
- za każdą komercyjną usługę zrealizowaną w dni robocze ustala się stawkę obliczaną zgodnie z formułą

if (amount < 100.00)

return 0.1 \* amount;

else

return 0.15 \* amount;

gdzie amount oznacza wartość usługi w PLN

 za każdą komercyjną usługę zrealizowaną w dni wolne ustala się stawkę obliczaną zgodnie z formułą

if (amount < 100.00)

return 0.2 \* amount;

else

return 0.25 \* amount;

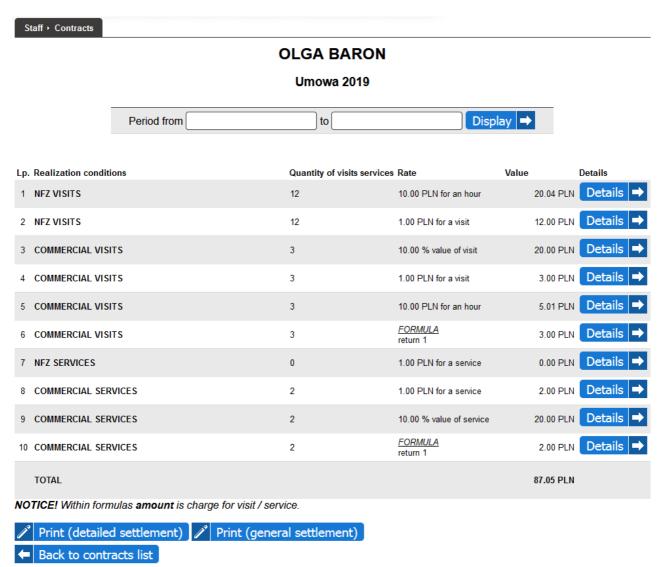
gdzie **amount** oznacza wartość usługi w PLN

To check the status of the contract click "Settlement" button at the contract on the list. You will see a table with the list of positions of the contract. For each position there are given:

- realization conditions
- rate, according to which there is calculated value of the payment due to staff by realization

of visits / services that meet specified conditions

 value of payments due to staff by realization of visits / services that meet specified conditions



At each position of the contract in the table there is "Details" button allows you to view (in new window) realized visits / services that make up the amount of the payment due to staff.

In the case of positions of the contract relating to NFZ's visits, in details for each visit there are visible date, type, clinic, rate and value of the payment due to staff for realization of the visit.

No.	Visit term	Visit type	Clinic / Ward	Patient	Rate	Value
1	2019-03-01 08:00-08:10	public extra wideokonsultacja	Poradnia POZ ul. Kazimierzowska 33D, 05-807 Owczarnia	Agnieszka Abacka PESEL 85050550101	10.00 PLN for an hour	1.67 PLN
2	2019-03-13 14:00-14:10	public extra standardowa	Poradnia POZ ul. Kazimierzowska 33D, 05-807 Owczarnia	Agnieszka Abacka PESEL 85050550101	10.00 PLN for an hour	1.67 PLN
3	2019-03-13 15:28-15:38	public extra standardowa	Poradnia POZ ul. Kazimierzowska 33D, 05-807 Owczarnia	Agnieszka Abacka PESEL 85050550101	10.00 PLN for an hour	1.67 PLN
4	2019-03-15 12:43-12:53	public extra standardowa	Poradnia POZ ul. Kazimierzowska 33D, 05-807 Owczarnia	Agnieszka Abacka PESEL 85050550101	10.00 PLN for an hour	1.67 PLN
5	2019-04-01 09:00-09:10	public extra standardowa	Poradnia POZ ul. Kazimierzowska 33D, 05-807 Owczarnia	Agnieszka Abacka PESEL 85050550101	10.00 PLN for an hour	1.67 PLN
6	2019-04-01 12:00-12:10	public extra standardowa	Poradnia POZ ul. Kazimierzowska 33D, 05-807 Owczarnia	Agnieszka Abacka PESEL 85050550101	10.00 PLN for an hour	1.67 PLN
7	2019-04-01 15:00-15:10	public extra standardowa	Poradnia POZ ul. Kazimierzowska 33D, 05-807 Owczarnia	Agnieszka Abacka PESEL 85050550101	10.00 PLN for an hour	1.67 PLN
8	2019-09-01 08:00-08:10	public extra standardowa	Poradnia POZ ul. Kazimierzowska 33D, 05-807 Owczarnia	Agnieszka Abacka PESEL 85050550101	10.00 PLN for an hour	1.67 PLN
9	2019-09-01 09:00-09:10	public extra standardowa	Poradnia POZ ul. Kazimierzowska 33D, 05-807 Owczarnia	Agnieszka Abacka PESEL 85050550101	10.00 PLN for an hour	1.67 PLN
10	2019-09-01 public Poradnia POZ 10:00-10:10 extra ul. Kazimierzowska 33 standardowa		Poradnia POZ ul. Kazimierzowska 33D, 05-807 Owczarnia	Agnieszka Abacka PESEL 85050550101	10.00 PLN for an hour	1.67 PLN
11	2019-10-01 public extra ul. Kazimierzowska 33D, 05-807 Owczarnia		Agnieszka Abacka PESEL 85050550101	10.00 PLN for an hour	1.67 PLN	
12	2019-10-01 public extra standardowa standardowa public extra ul. Kazimierzowska 33D, 05-807 Owczarnia PESEL 85050550101				10.00 PLN for an hour	1.67 PLN
					RAZEM	20.04 PLN

NOTICE! Within formulas amount is charge for visit / service.



In the case of positions of the contract relating to commercial visits, in details for each visit there are visible date, type, clinic, visit cost, rate and value of the payment due to staff for realization of the visit.

No.	Visit term	Visit type	Clinic / Ward	Patient	Visit cost	Rate	Value
1	2019-04-01 16:00-16:10	commercial extra standardowa	Poradnia POZ ul. Kazimierzowska 33D, 05-807 Owczarnia	Agnieszka Abacka PESEL 85050550101	100.00 PLN	10.00 % value of visit	10.00 PLN
2	2019-10-01 15:00-15:10	commercial extra standardowa	Poradnia POZ ul. Kazimierzowska 33D, 05-807 Owczarnia	Agnieszka Abacka PESEL 85050550101	100.00 PLN	10.00 % value of visit	10.00 PLN
3	2019-10-17 17:30-17:40	commercial extra standardowa	Poradnia POZ ul. Kazimierzowska 33D, 05-807 Owczarnia	Agnieszka Abacka PESEL 85050550101	0.00 PLN	10.00 % value of visit	0.00 PLN
						RAZEM	20.00 PLN

NOTICE! Within formulas amount is charge for visit / service.



In the case of positions of the contract relating to NFZ's services, in details for each service there are visible date, type, clinic, service name, multiplicity, rate and value of the payment due to staff for realization of the visit.

ı	No. Visit term	Visit type	Clinic	Service name	Multiplicity	Rate	Value
	2016-02- 1 08 14:10- 14:20	extra	Poradnia POZ ul. Błońska 46/48, 05-807 Podkowa Leśna	ŚWIADCZENIA LEKARZA POZ-UBEZPIECZENI POWYŻEJ 65 RZ (5.01.00.0000025)	1.00	70.00 PLN for a service	70.00 PLN
						DA7FM	70 00 PLN

NOTICE! Within formulas amount is charge for visit / service taken from patient.



In the case of positions of the contract relating to commercial services, in details for each service there are visible date, type, clinic, service name, quantity, unit price, rate and value of the payment due to staff for realization of the visit.

No	. Visit term	Visit type	Clinic / Ward	Patient	Service name Quant	ity Unit pri	e Rate	Value
1	2019-04-01 16:00-16:10	commercial extra standardowa	Poradnia POZ ul. Kazimierzowska 33D, 05-807 Owczarnia	Agnieszka Abacka PESEL 85050550101	Wizyta płatna	1 100.0	0 1.00 PLN for a service	1.00 PLN
2	2019-10-01 15:00-15:10	commercial extra standardowa	Poradnia POZ ul. Kazimierzowska 33D, 05-807 Owczarnia	Agnieszka Abacka PESEL 85050550101	Wizyta płatna	1 100.	0 1.00 PLN for a service	1.00 PLN
							RAZEM	2.00 PLN

NOTICE! Within formulas amount is charge for visit / service.



Above the table showing the status of realization of the contract there is a form to display the status of realization of the contract at any time. To view the status of realization of the contract in a given period in the form should be set border dates of the period and press the "Display" button - then a table showing the status of realization of the contract will be limited to visits / services provided in a given period. Preview of the status of realization of the contract in any period is applicable in case of monthly periods of the contract settlement.

Staff · Contracts

**OLGA BARON** 

#### **Umowa 2019**



Lp. Realization conditions	Quantity of visits services	Rate	Value	Details
1 NFZ VISITS	2	10.00 PLN for an hour	3.34 PLN	Details →
2 NFZ VISITS	2	1.00 PLN for a visit	2.00 PLN	Details →
3 COMMERCIAL VISITS	2	10.00 % value of visit	10.00 PLN	Details →
4 COMMERCIAL VISITS	2	1.00 PLN for a visit	2.00 PLN	Details →
5 COMMERCIAL VISITS	2	10.00 PLN for an hour	3.34 PLN	Details →
6 COMMERCIAL VISITS	2	FORMULA return 1	2.00 PLN	Details →
7 NFZ SERVICES	0	1.00 PLN for a service	0.00 PLN	Details →
8 COMMERCIAL SERVICES	1	1.00 PLN for a service	1.00 PLN	Details →
9 COMMERCIAL SERVICES	1	10.00 % value of service	10.00 PLN	Details →
10 COMMERCIAL SERVICES	1	FORMULA return 1	1.00 PLN	Details →
TOTAL			34.68 PLN	

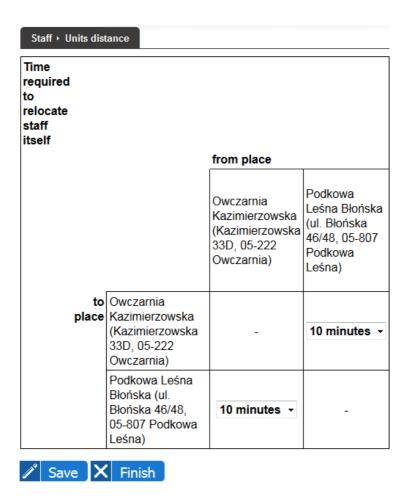
NOTICE! Within formulas amount is charge for visit / service.



Under the table showing the status of the contract, the "Print (detailed settlement)" buttons are visible, after which you click the PDF document presenting the status of the contract with a breakdown into individual items and details of visits / services carried out under a given contract item, and "Print (general settlement) ", after clicking on which opens a PDF document showing the status of the contract with a breakdown into individual items.

# **Units distance**

The functionality of "Units distance" within the menu of "Staff" allows to specify the time necessary for the staff to move between two units od health care company. Time required to move from unit A to unit B is most often the same al time required to move from unit B to unit A, but in some situations it can be different (for example when moving from A to B with the different road than from B to A) and that's why system allows to define both times independently (time required to move from unit A to B and time required to move from unit B to A). After selecting functionality "Units distance" there appears table, in which each column represents unit from whitch staff starts ane each row represents unit to which staff moves – in the cell on the crossing of the given column and row there is a list that allows choice of time necessary to move between these units. After setting times necessary to move between particular units ona has to save data clicking the button of "Save".



Times required for staff to move between units are taken into account when planning timetables – if doctor works in two units then system automatically adds to doctor working time an appropriate time margin necessary to move between unit (within the period of time reserved for staff to move between units it is not possible to plan slots in any of these units).

### **Thermometers**

Functionality "Thermometers" from menu "Staff" allows privileged user for monitoring of internet thermometers. After choosing this functionality there appears list of thermometers being monitored and by each one of them there are the following buttons:

- Monitor allows to view registered temperature changes within last hour for a given thermometer
- Report allows to generate report as chart of temperature changes within arbitrarily chosen month



After clicking the button of "Monitor" there appears a chart of temperature changes during last hour.

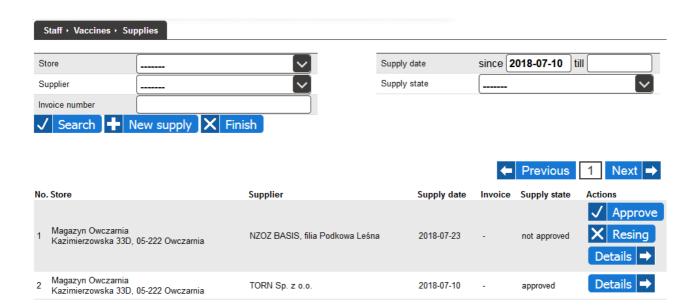
After clicking "Report" button, form with list of periods within which thermometer was monitored is displayed. After choosing period and clicking button "Generate" under the form, there appears link, which when clicked allows to download and print report in PDF format with chart of temperature changes within the selected period and table of temperature measurements every day of the month at 8:00 and 17:30 hours.

### **Vaccines**

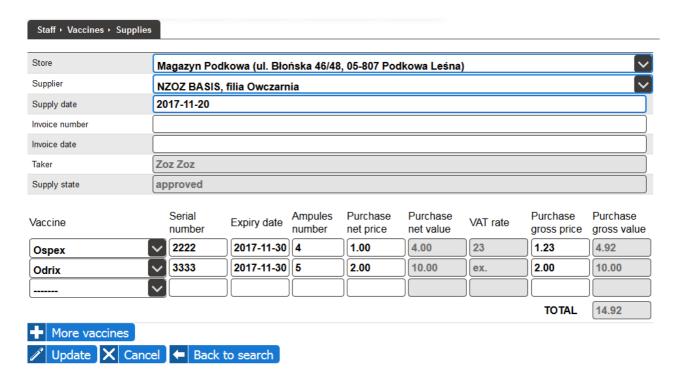
Functionalities from submenu "Vaccines" within menu "Staff" allows privileged user to serve storeage movement: taking supplies into stores, realizing interstore transfers, supervising store states and doing destroying.

### **Supplies**

Functionality "Supplies" from submenu "Vaccines" within menu "Staff" is intended to take supplies of vaccines into stores and to approve interstore transfers. After choosing this functionality there appears form for searching supplies already taken into stores and interstore transfers awaiting for approval. Under the seach form there is also button allowing for taking new supply into store.



To take new supply into store one has to click button "New supply" under search form. Then system displays form to enter data of supply and supplied batches of vaccines. By default single row is displayed to enter single batch of vaccines. If supply covers more than one batch of vaccines then one has to use the button "More vaccines" - every click of this button leads to display consecutive row to enter consecutive batch of vaccines. When entering purchase net price, purchase net value, purchase gross price and purchase gross value are calculated automatically, similarly when entering purchase gross price, purchase net price, purchase net value and purchase gross value are calculated automatically (VAT rate is taken from dictionary of vaccines). On a regular basis there is also updated value within the field of "TOTAL" - total purchase gross amount of vaccines.



After filling the form one has to save data by clicking the button "Add". Supply taken into store this way gets status of approved and vaccines contained in it increase store state.

Within the supplies search results by found supplies there can appear the following buttons:

- Edit button that allows for modification of supply data (it is available only for supplies not being a consequence of the interstore transfers from which vaccines haven't been started to be used yet)
- Delete button that allows for removal of supply (it is available only for supplies not being a consequence of the interstore transfers from which vaccines haven't been started to be used yet)
- Approve button that allows for approval of supply (it is available only for yet not approved supplies being an effect of interstore transfers)
- Resign button that allows for return of supply to source store (it is available only for yet not approved supplies being an effect of interstore transfers)
- Details button that allows for previewing supply data

To modify supply data one has to click the button "Edit" by the given supply within the list. Then system displays form identical as one used to take new supply except that it is filled with data of given supply. After making changes one has to save data by clicking the button "Update".

To delete supply one has to click the button "Delete" by the given supply within the list. Then system displays form identical as one used to edit supply data except that it is displayed in read only mode. Intention of supply deletion one has to confirm by clicking the button "Delete".

To approve supply one has to click the button "Approve" by the given supply within the list. Then system displays form identical as one used to edit supply data except that it is displayed in read only mode. Intention of supply approval one has to confirm by clicking the button "Approve". Vaccines from approved supply increase store state.

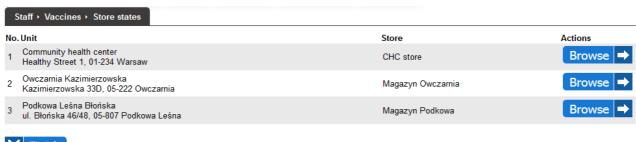
To return supply to source store one has to click the button "Resign" by the given supply within the

list. Then system displays form identical as one used to edit supply data except that it is displayed in read only mode. Intention of supply resignation one has to confirm by clicking the button "Resign". Vaccines from the supply are returned to source store states.

To preview details of supply one has to click the button "Details" by the given supply within the list. Then system displays form identical as one used to edit supply data except that it is displayed in read only mode.

#### Store states

The functionality of "Store states" from submenu "Vaccines" within menu "Staff" is intended to supervise states of vaccines within stores. After choosing this functionality there appears list of stores and by each store there is a button "Browse".





By clicking the button "Browse" by the given store there appears list of vaccines contained currently within the store. Expiry dates ending within the week are emphasized with ornage color, expiry dates of staled vaccines are emphasized with red color.



#### **Interstore transfers**

The functionality of "Interstore transfers" from submenu "Vaccines" within menu "Staff" is intended to transfer vaccines between stores. After choosing this functionality there appears list of stores and by each of them there is a buttons "History" and "Choose".

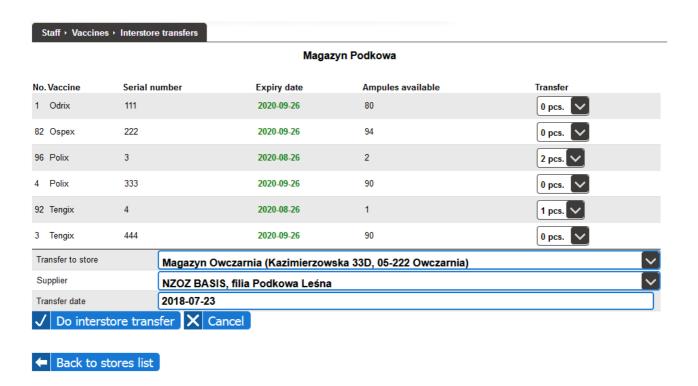


After clicking button "History" by the given store, new window opens with history of interstore transfers to (positive quantities) and from (negative quantities) this store.

No.	Vaccine	Serial number	Expiry date	Ampules number	Transfer date	Source / Target store
1	Ospex	2	2020-08-26	4	2017-11-20	Magazyn Owczarnia
2	Odrix	111	2020-09-26	-1	2018-01-08	CHC store
3	Ospex	2	2020-08-26	-1	2018-01-08	CHC store
4	Tengix	4	2020-08-26	-1	2018-01-08	CHC store
5	Odrix	111	2020-09-26	-1	2018-01-08	CHC store
6	Polix	3	2020-08-26	-2	2018-01-08	CHC store
7	Polix	3	2020-08-26	-2	2018-01-08	CHC store
8	Tengix	4	2020-08-26	-1	2018-01-08	CHC store



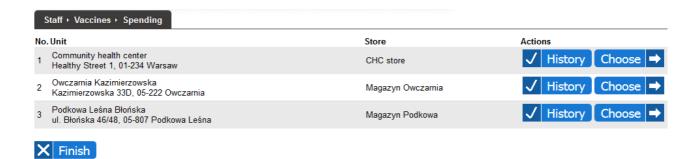
After clicking button "Choose" by the given store, there appears state of vaccines within that store and form allowing for transfer of vaccines from this store to another one.



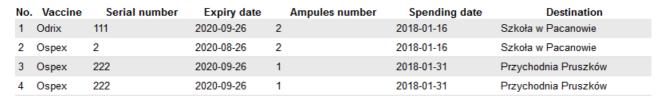
After filling the form one has to confirm ones intention to do the transfer by clicking the button "Do interstore transfer". After clicking this button, state of store from which transfer is being done, is decreased by specified amounts of vaccines. Simultaneously not approved supply is being generated to the store where vaccines are to be transfered. So the vaccines come into target store state one has to find and approve such a supply using the functionality of "Supplies" from submenu "Vaccines" within menu "Staff" as described in one of previous chapters.

### **Spending**

The functionality of "Spending" from submenu "Vaccines" within menu "Staff" is intended to do spending of vaccines outside the stores. After choosing this functionality there appears list of stores and by each of them there is a buttons "History" and "Choose".

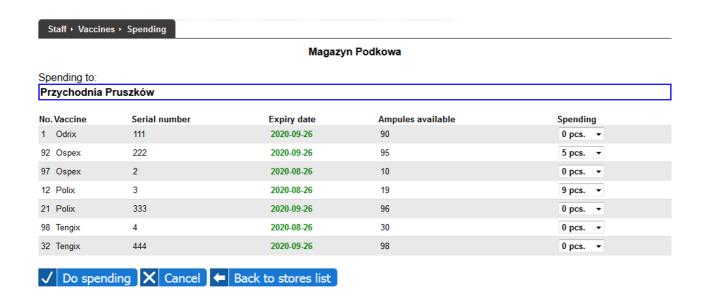


After clicking button "History" by the given store, new window opens with history of vaccine spending from this store.





After clicking button "Choose" by the given store, there appears state of vaccines within that store and by each batch of vaccines there is a field to allowing to choose quantity of vaccinet so be spent outide. To do spending one has to choose quantities of vaccines to be spent and click the button "Do spending".



After clicking this button, selected quantities of vaccines are taken off the store state and there is displayed link to download and print spending report.

### **Destroying**

The functionality of "Destroying" from submenu "Vaccines" within menu "Staff" is intended to do collective destroying of vaccines within stores. After choosing this functionality there appears list of stores and by each of them there is a buttons "History" and "Choose".



After clicking button "History" by the given store, new window opens with history of vaccine destroying from this store.





After clicking button "Choose" by the given store, there appears state of vaccines within that store

and by each batch of vaccines there is a field to mark this batch and under the list of vaccines there is a field to enter destroying reason. To do destroying one has to mark vaccines to be destroyed, enter the reason and click the button "Do destroying".



After clicking this button, marked vaccines are taken off the store state and there is displayed link to download and print destroying report to be sign by commission members.



### Locking

The functionality of "Locking" from submenu "Vaccines" within menu "Staff" is intended to block (temporarily take out of usage) certain lots of vaccines and unblock previously blocked lots. After selecting this function, a list of stores is displayed and by each of them there is a button "Choose".

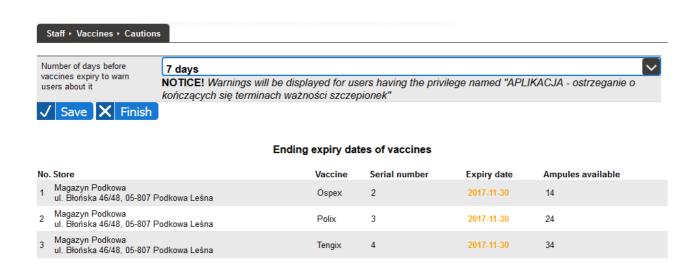


After clicking the "Choose" button by the given store, the state of this store is displayed and a field enabling selection of it for each lot of vaccines. Marking a lot means blocking it. After entering the appropriate selection, save the changes by clicking the "Save" button.



## Cautions

The functionality of "Cautions" from submenu "Vaccines" within menu "Staff" is intended to browse (and for privileged user also to configure) cautions corresponding to ending of expiry dates of vaccines. After choosing this functionality there is presented list of vaccines which expiry date ends within the number of days defined by a privileged user and if logged user has appropriate privileges above the list of vaccines there is also form that allows to define the number of days before vaccines expiry to warn user about it.



To change number of days before vaccines expiry do warn user about id, one has to choose an appropriate number of days and click the button "Save".

If user has privilege to be warned about ending of expiry dates of vaccines and if there exist expiring vaccines, then after log into system, instead of main page appropriate for the given user, th page with cautions will be displayed.

### History

The functionality of "History" from submenu "Vaccines" within menu "Staff" is intended to browse history of incomes and outcomes of vaccines within stores (internal vaccines) and history of

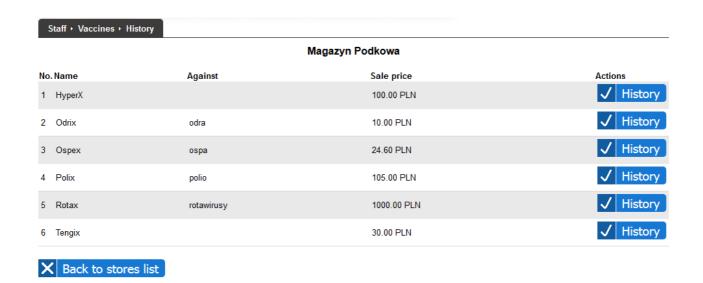
vaccinations of patient vaccines (external vaccines). After choosing this functionality there appears list of vaccine types and by each of them there is a button "Choose".



After clicking the "Choose" button, a list of stores (in the case of internal vaccines) or a list of units (in the case of internal vaccines) is displayed for a given type of vaccines and "Choose" button for each item on the list.



After clicking button "Choose" by the given store / unit, there appears list of all vaccines that have ever been stored within the given store / vaccinated within the given unit and by each of them there is button "History".



After clicking "History" button by the given vaccine, within new window there appears history of incomes and outcomes of the given vaccine that covers: supplies, interstore transfers, spendings,

destroyings and vaccinations.

#### Magazyn Podkowa Odrix

No.	Event	Date	Serial number	Expiry date	Ampules number	State	Notes
1	supply	2017-11-01	1	2020-08-26	+10	10	supplier: NZOZ BASIS, filia Podkowa Leśna
2	vaccination	2017-11-24	1	2017-11-30	-1	9	patient: Jakub Orłowski (PESEL: 56121284416), nurse: Zoz Zoz
3	vaccination	2017-11-27	123	2017-11-30	-1	8	patient: Jakub Orłowski (PESEL: 56121284416), nurse: Zoz Zoz
4	vaccination	2017-11-27	1	2017-11-30	-1	7	patient: Jakub 0rłowski (PESEL: 56121284416), nurse: Zoz Zoz
5	destroying	2017-11-29	1	2020-08-26	-5	2	
6	supply	2017-12-01	111	2020-09-26	+100	102	supplier: Pollek
7	vaccination	2017-12-01	123	2017-11-30	-1	101	patient: Jakub Orłowski (PESEL: 56121284416), nurse: Zoz Zoz
8	transfer	2018-01-08	111	2020-09-26	-1	100	target store: CHC store
9	transfer	2018-01-08	111	2020-09-26	-1	99	target store: CHC store
10	spending	2018-01-16	111	2020-09-26	-2	97	destination place: Szkoła w Pacanowie
11	vaccination	2018-02-16	111	2017-12-31	-1	96	patient: Władysław Łokietek (PESEL: 17321777777), nurse: Zoz Zoz
12	vaccination	2019-01-07	111	2020-09-26	-1	95	patient: Dionizja Abakanowska (PESEL: 02020202020), nurse: Zoz Zoz

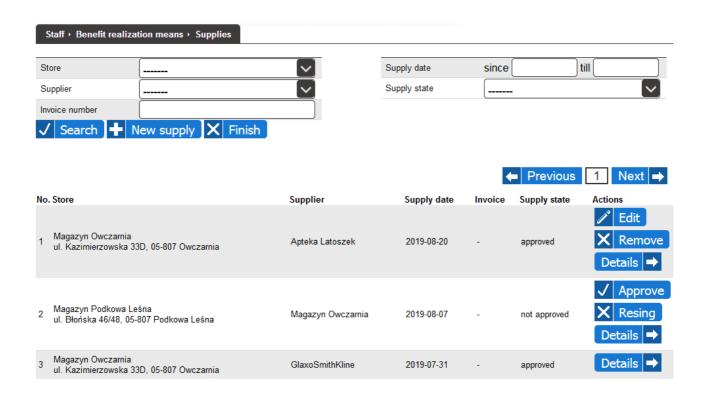


### **Benefit realization means**

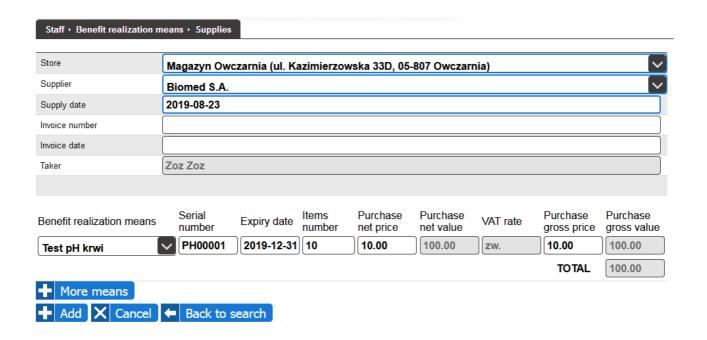
Functionalities from submenu "Benefit realization means" within menu "Staff" allows privileged user to serve storage movement of means for realization of commercial benefits: taking supplies into stores, realizing interstore transfers, supervising store states and doing destroying.

# **Supplies**

Functionality "Supplies" from submenu "Benefit realization means" within menu "Staff" is intended to take supplies of means into stores and to approve interstore transfers. After choosing this functionality there appears form for searching supplies already taken into stores and interstore transfers awaiting for approval. Under the seach form there is also button allowing for taking new supply into store.



To take new supply into store one has to click button "New supply" under search form. Then system displays form to enter data of supply and supplied batches of means. By default single row is displayed to enter single batch of means. If supply covers more than one batch of means then one has to use the button "More means" - every click of this button leads to display consecutive row to enter consecutive batch of means. When entering purchase net price, purchase net value, purchase gross price and purchase gross value are calculated automatically, similarly when entering purchase gross price, purchase net price, purchase net value and purchase gross value are calculated automatically (VAT rate is taken from dictionary of benefit realization means). On a regular basis there is also updated value within the field of "TOTAL" - total purchase gross amount of means.



After filling the form one has to save data by clicking the button "Add". Supply taken into store this way gets status of approved and means contained in it increase store state.

Within the supplies search results by found supplies there can appear the following buttons:

- Edit button that allows for modification of supply data (it is available only for supplies not being a consequence of the interstore transfers from which means haven't been started to be used yet)
- Delete button that allows for removal of supply (it is available only for supplies not being a consequence of the interstore transfers from which means haven't been started to be used yet)
- Approve button that allows for approval of supply (it is available only for yet not approved supplies being an effect of interstore transfers)
- Resign button that allows for return of supply to source store (it is available only for yet not approved supplies being an effect of interstore transfers)
- Details button that allows for previewing supply data

To modify supply data one has to click the button "Edit" by the given supply within the list. Then system displays form identical as one used to take new supply except that it is filled with data of given supply. After making changes one has to save data by clicking the button "Update".

To delete supply one has to click the button "Delete" by the given supply within the list. Then system displays form identical as one used to edit supply data except that it is displayed in read only mode. Intention of supply deletion one has to confirm by clicking the button "Delete".

To approve supply one has to click the button "Approve" by the given supply within the list. Then system displays form identical as one used to edit supply data except that it is displayed in read only mode. Intention of supply approval one has to confirm by clicking the button "Approve". Means from approved supply increase store state.

To return supply to source store one has to click the button "Resign" by the given supply within the list. Then system displays form identical as one used to edit supply data except that it is displayed in read only mode. Intention of supply resignation one has to confirm by clicking the button "Resign". Means from the supply are returned to source store states.

To preview details of supply one has to click the button "Details" by the given supply within the list. Then system displays form identical as one used to edit supply data except that it is displayed in read only mode.

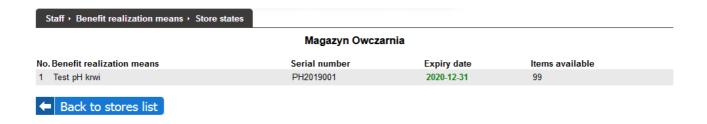
#### Store states

The functionality of "Store states" from submenu "Benefit realization means" within menu "Staff" is intended to supervise states of means within stores. After choosing this functionality there appears list of stores and by each store there is a button "Browse".





By clicking the button "Browse" by the given store there appears list of means contained currently within the store. Expiry dates ending within the week are emphasized with ornage color, expiry dates of staled means are emphasized with red color.



#### Interstore transfers

The functionality of "Interstore transfers" from submenu "Benefit realization means" within menu "Staff" is intended to transfer means between stores. After choosing this functionality there appears list of stores and by each of them there is a buttons "History" and "Choose".

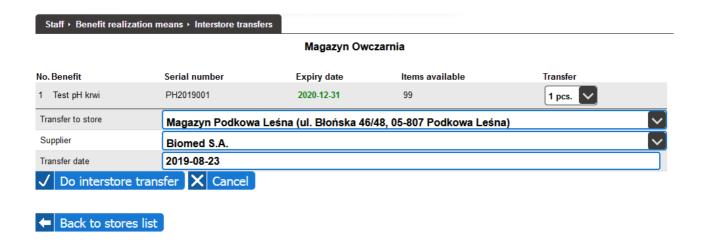


After clicking button "History" by the given store, new window opens with history of interstore transfers to (positive quantities) and from (negative quantities) this store.





After clicking button "Choose" by the given store, there appears state of means within that store and form allowing for transfer of means from this store to another one.



After filling the form one has to confirm ones intention to do the transfer by clicking the button "Do interstore transfer". After clicking this button, state of store from which transfer is being done, is decreased by specified amounts of means. Simultaneously not approved supply is being generated to the store where means are to be transfered. So the means come into target store state one has to find and approve such a supply using the functionality of "Supplies" from submenu "Benefit realization means" within menu "Staff" as described in one of previous chapters.

### **Spending**

The functionality of "Spending" from submenu "Benefit realization means" within menu "Staff" is intended to do spending of means outside the stores. After choosing this functionality there appears list of stores and by each of them there is a buttons "History" and "Choose".



After clicking button "History" by the given store, new window opens with history of means spending from this store.





After clicking button "Choose" by the given store, there appears state of means within that store and by each batch of means there is a field to allowing to choose quantity of means so be spent outide. To do spending one has to choose quantities of means to be spent and click the button "Do

spending".



After clicking this button, selected quantities of means are taken off the store state and there is displayed link to download and print spending report.

### **Destroying**

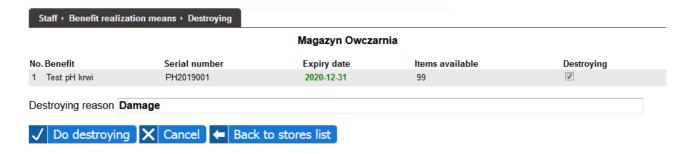
The functionality of "Destroying" from submenu "Vaccines" within menu "Staff" is intended to do collective destroying of vaccines within stores. After choosing this functionality there appears list of stores and by each of them there is a buttons "History" and "Choose".



After clicking button "History" by the given store, new window opens with history of means destroying from this store.



After clicking button "Choose" by the given store, there appears state of means within that store and by each batch of means there is a field to mark this batch and under the list of means there is a field to enter destroying reason. To do destroying one has to mark means to be destroyed, enter the reason and click the button "Do destroying".



After clicking this button, marked means are taken off the store state and there is displayed link to download and print destroying report to be sign by commission members.

### Locking

The functionality of "Locking" from submenu "Benefit realization means" within menu "Staff" is intended to block (temporarily take out of usage) certain lots of means and unblock previously blocked lots. After selecting this function, a list of stores is displayed and by each of them there is a button "Choose".



After clicking the "Choose" button by the given store, the state of this store is displayed and a field enabling selection of it for each lot of means. Marking a lot means blocking it. After entering the appropriate selection, save the changes by clicking the "Save" button.



#### **Cautions**

The functionality of "Cautions" from submenu "Benefit realization means" within menu "Staff" is intended to browse (and for privileged user also to configure) cautions corresponding to ending of expiry dates of means. After choosing this functionality there is presented list of means which expiry date ends within the number of days defined by a privileged user and if logged user has appropriate privileges above the list of means there is also form that allows to define the number of days before means expiry to warn user about it.



To change number of days before means expiry do warn user about id, one has to choose an appropriate number of days and click the button "Save".

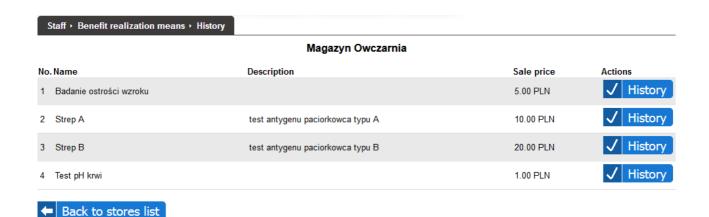
If user has privilege to be warned about ending of expiry dates of means and if there exist expiring means, then after log into system, instead of main page appropriate for the given user, th page with cautions will be displayed.

### History

The functionality of "History" from submenu "Benefit realization means" within menu "Staff" is intended to browse history of incomes and outcomes of means within stores. After choosing this functionality there appears list of stores and by each of them there is a button "Choose".



After clicking button "Choose" by the given store, there appears list of all means that have ever been stored within the given store and by each of them there is button "History".



After clicking "History" button by the given means, within new window there appears history of incomes and outcomes of the given means that covers: supplies, interstore transfers, spendings, destroyings and sales.

#### Magazyn Owczarnia Strep A

No.	Event	Date	Serial number	Expiry date	Items number	State	Notes
1	supply	2019-07-31	A001	2020-07-31	+10	10	supplier: GlaxoSmithKline
2	transfer	2019-07-31	A001	2020-07-31	-1	9	target store: Magazyn Podkowa Leśna
3	spending	2019-07-31	A001	2020-07-31	-1	8	destination place: Przychodnia dla przechodnia
4	sale	2019-08-06	A001	2020-07-31	-1	7	patient: Agnieszka Abacka (PESEL: 85050550101), nurse: Zoz Zoz
5	sale	2019-08-06	A001	2020-07-31	-1	6	patient: Agnieszka Abacka (PESEL: 85050550101), nurse: Zoz Zoz
6	transfer	2019-08-07	A001	2020-07-31	-1	5	target store: Magazyn Podkowa Leśna
7	spending	2019-08-07	A001	2020-07-31	-1	4	destination place: X
8	sale	2019-08-07	A001	2020-07-31	-1	3	patient: Agnieszka Abacka (PESEL: 85050550101), nurse: Zoz Zoz
9	sale	2019-08-20	A001	2020-07-31	-1	2	patient: Agnieszka Abacka (PESEL: 85050550101), nurse: Zoz Zoz
10	sale	2019-08-20	A001	2020-07-31	-1	1	patient: Agnieszka Abacka (PESEL: 85050550101), nurse: Zoz Zoz



## Resources

Functionalities from the "Resources" submenu in the "Staff" menu allow authorized staff to handle the store traffic of various types of resources: accepting deliveries to strores, carrying out interstore transfers, controlling inventory levels and making shortages.

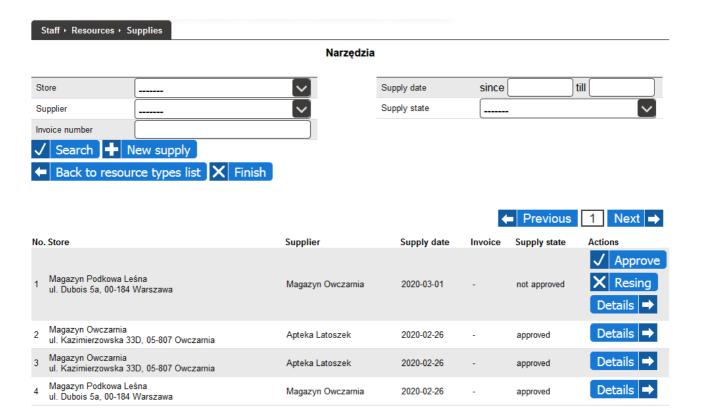
# **Supplies**

The "Supplies" functionality from the "Resources" submenu in the "Staff" menu is used to accept resource deliveries and approve interbranch transfers. After selecting this functionality, a list of resource types is displayed, with a "Choose" button next to each one.

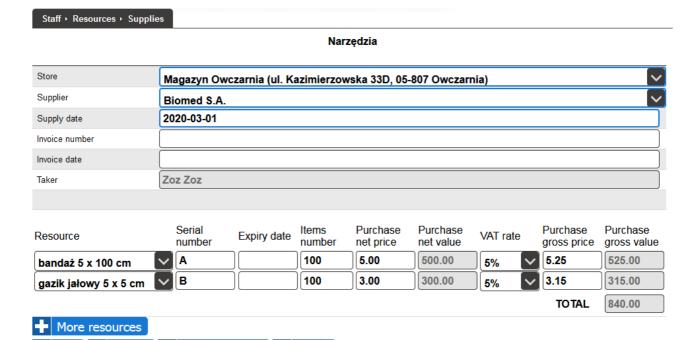


To start handling deliveries, click the "Choose" button next to the type of resources. The delivery

search engine will then be displayed, allowing you to search for deliveries already received and for interstore transfers awaiting acceptance. A button to accept a new delivery is also available under the search engine.



To accept a new delivery, click the "New supply" button below the search engine. A delivery form will then be displayed in which you must enter the delivery details and the delivered batch of resources. By default, the form displays one row of fields for entering one batch of resources. If the delivery includes more batches of resources, use the "More resources" button - each click will display the next line to enter the next batch of resources. When entering the net purchase price of a resource, the net value, gross price and gross value are calculated automatically, similarly when entering the gross price, the net price, net value and gross value are calculated automatically. The value of the "TOTAL" field - total gross purchase amount - is updated on an on-going basis.



After completing the form, save the data by clicking the "Add" button. The delivery accepted in this way receives the status of approved and the resources contained in it increase the stock level.

The following buttons can appear in the delivery search results for deliveries:

- Edit a button for modifying delivery data (available only for deliveries that are not a consequence of the interstore transfer whose resources have not yet been used in any way)
- Delete a button for deleting a delivery (available only for deliveries that are not a consequence of the interbranch transfer and whose resources have not yet been used in any way)
- Approve a button to confirm delivery (available only for unapproved deliveries resulting from interbranch transfers)
- Resign a button for returning a delivery to the source store (available only for unapproved deliveries resulting from interbranch transfers)
- Details a button for viewing delivery data

+ Add X Cancel ← Back to search X Finish

To modify delivery details, click the "Edit" button next to the delivery in the delivery list. A form identical to the one for adding a new delivery will be displayed, except that it is filled with the details of the selected delivery. After making changes to the data, save them by clicking the "Update" button.

To delete a delivery, click the "Delete" button next to the delivery in the delivery list. A form identical to that in the case of edition of delivery data will be displayed, except that it will be displayed in read-only mode. The intention to delete a delivery should be confirmed by clicking the "Delete" button.

To confirm a delivery, click the 'Confirm' button for the given delivery in the delivery list. A form identical to that in the case of edition of delivery data will be displayed, except that it will be displayed in read-only mode. The intention to approve delivery should be confirmed by clicking the "Confirm" button. Resources from approved delivery increase inventory.

To return a delivery to the source store, click the "Cancel" button next to the delivery in the delivery list. A form identical to that in the case of edition of delivery data will be displayed, except that it will be displayed in read-only mode. The intention to confirm delivery should be confirmed by clicking on the "Cancel" button. The resources from the delivery will be returned to the stock of the source store.

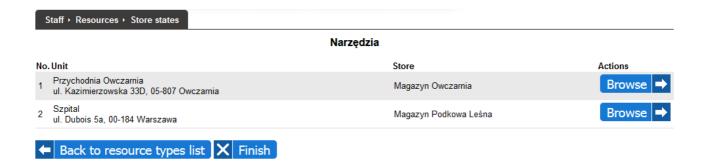
To view delivery details, click the "Details" button next to the delivery in the delivery list. A form identical to that in the case of edition of delivery data will be displayed, except that it will be displayed in read-only mode.

#### Store states

The "Store states" functionality from the "Resources" submenu in the "Staff" menu is used to control the stock levels of various types of resources. After selecting this functionality, a list of resource types is displayed, with a "Choose" button next to each one.



To start browsing inventory levels, click the "Choose" button next to the type of resources. A list of stores will be displayed, with a "Browse" button next to each.

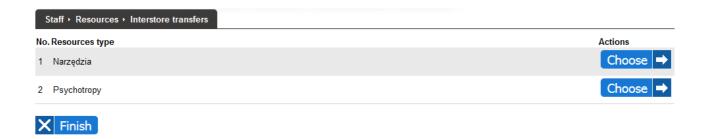


After clicking "Browse" next to a given store, a list of resources currently in the given store is displayed. Expiration dates ending within the next week are highlighted in orange, and expiration dates of expired assets in red.



#### Interstore transfers

The "Interstore transfers" functionality from the "Resources" submenu in the "Staff" menu is used to transfer resources between stores. After selecting this functionality, a list of resource types is displayed, with a "Choose" button next to each one.



To start handling interstore transfers, click the "Choose" button next to the type of resources. A list of stores will be displayed, with "History" and "Choose" buttons next to each.



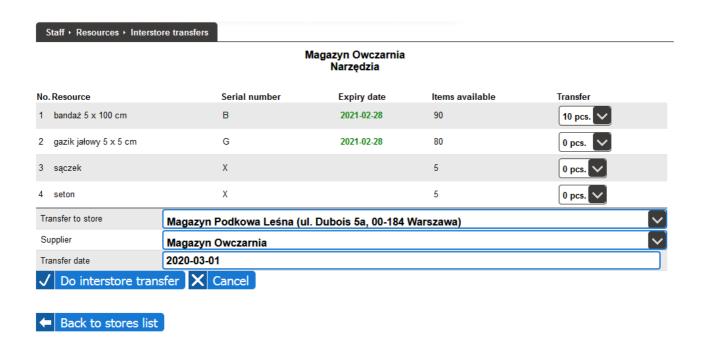
After clicking the "History" button next to a given store, a new window opens with the history of transferring resources to (positive quantities) and from (negative quantities) of that store.

#### Magazyn Owczarnia Narzędzia

No.	Resource	Serial number	Expiry date	Items number	Transfer date	Source / Target store
1 seto	n	X		-5	2020-02-26	Magazyn Podkowa Leśna
2 sącz	ek	X		-5	2020-02-26	Magazyn Podkowa Leśna
3 gazi	c jałowy 5 x 5 cm	G	2021-02-28	-10	2020-03-01	Magazyn Podkowa Leśna



After clicking the "Choose" button next to a given store, the status of this store is displayed and a form enabling the transfer of resources from this store to another.



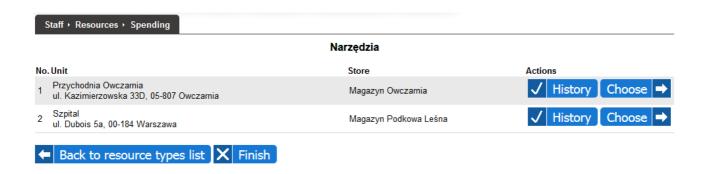
After completing the form, confirm your intention to make the transfer by clicking on the "Do interstore transfer" button. After clicking this button, the state of the store from which the transfer takes place is reduced by the set amount of resources. At the same time, an unapproved delivery to the store is generated to which the resources are to be transferred. In order for the resources to enter the state of the target store, such delivery must be found and confirmed using the "Supplies" functionality from the "Resources" submenu in the "Staff" menu as described in one of the previous chapters.

# **Spending**

The "Spending" functionality from the "Resources" submenu in the "Staff" menu is used to spend resources from outside stores. After selecting this functionality, a list of resource types is displayed, with a "Choose" button next to each one.



To start spending services, click the "Choose" button next to the type of resources. A list of stores will be displayed, with "History" and "Choose" buttons next to each.



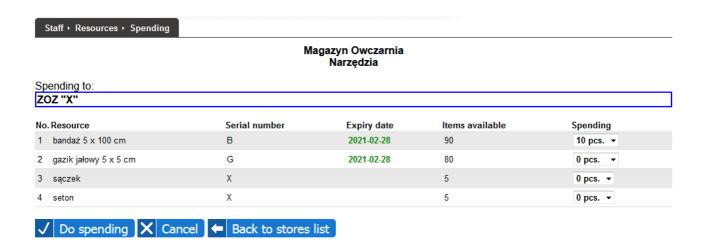
After clicking the "History" button next to a given store, a new window opens with the history of spending resources from this store.

#### Magazyn Owczarnia Narzedzia

No.	Resource	Serial number	Expiry date	Items number	Spending date	Destination
1	gazik jałowy 5 x 5 cm	G	2021-02-28	10	2020-02-26	Szpital MSWiA
2	bandaż 5 x 100 cm	В	2021-02-28	10	2020-02-26	Szpital MSWiA



After clicking the "Choose" button for a given store, the status of this store is displayed and for each batch of resources a field enabling selection of the quantity to be spent outside. To do a spending, select the amount of resources to be spent and click "Do spending".



After clicking this button, the indicated amounts of resources are removed from the store and a link is displayed to download and print the spending report.

### **Destroying**

The "Destroying" functionality from the "Resources" submenu in the "Staff" menu is used to carry out a commissioning of resources. After selecting this functionality, a list of resource types is displayed, with a "Choose" button next to each one.



To start the handling of destroying please click the "Choose" button for the given resource type. A list of stores will be displayed, with "History" and "Choose" buttons next to each.



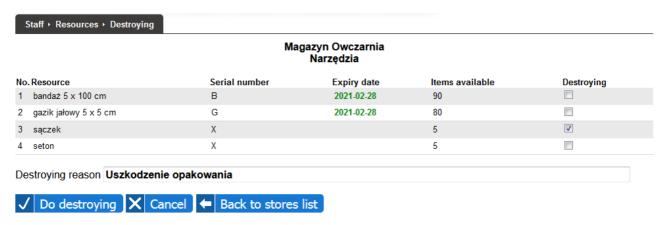
After clicking "History" next to a given store, a new window opens with the history of lack of resources from this store.

#### Magazyn Owczarnia Narzędzia

No.	Resource	Serial number	Expiry date	Items number	Destroying date
1 s	ączek	X	5		2020-03-02



After clicking the "Choose" button for a given store, the status of this store is displayed and for each batch of resources a field enabling its selection and under the list of resources a field enabling indicating the reason for destroying. To make a shortage, select the resources to be scrapped, specify the reason, and click "Do destroying".

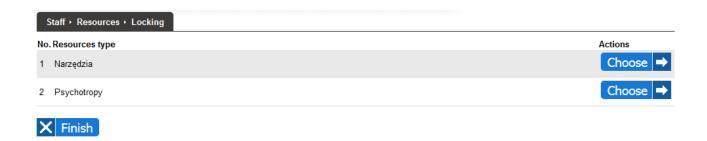


After clicking this button, the marked resources are removed from the store and a link is displayed

# Locking

The "Blocking" functionality from the "Resources" submenu in the "Staff" menu is used to block (temporarily disable) certain batches of resources and to unblock previously blocked batches. After selecting this functionality, a list of resource types is displayed, with a "Choose" button next to each one.

that allows you to download and print the destroying report for signing it by committee members.



To start blocking / unblocking support, click the "Choose" button for the given resource type. A list of stores will be displayed, with a button and "Choose" next to each.



After clicking the "Choose" button for a given store, the status of this store is displayed and for each batch of resources a field enabling its selection. Selecting a batch means that it is blocked. After making the appropriate selections, save the changes by clicking the "Save" button.



#### **Cautions**

The "Cautions" functionality from the "Resources" submenu in the "Staff" menu is used to view (and configure for authorized users) warnings regarding the expiry dates of the resources. After selecting this functionality, a list of resources is displayed, whose expiry date ends within the number of days specified by the authorized user, and if the logged-in user has the appropriate permissions over the list of resources, a form appears that allows determining how many days before the end of the validity of the resources, the system will alert users about this.



To change the number of days for which users should be notified before the end of validity of the resource, indicate the appropriate number of days and click "Save".

If the user has the privilege of being warned about the expiration of resource expiration dates and there are resources whose expiration dates are expiring, then after logging into the system instead of

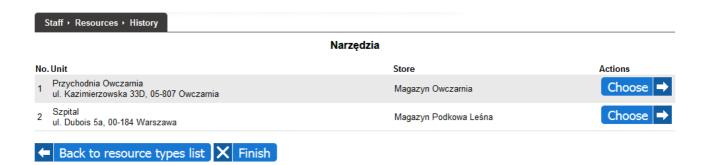
the main page appropriate for the given user, a warning page will be displayed.

### **History**

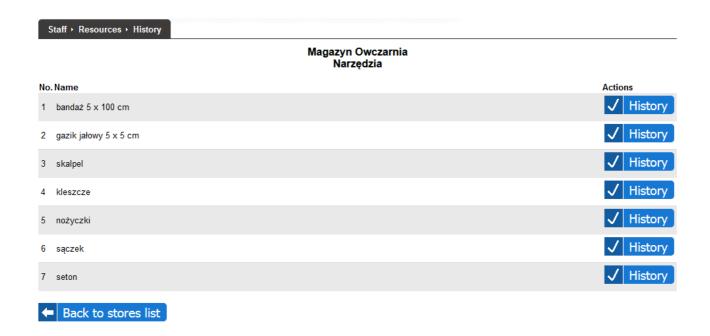
The "History" functionality from the "Resources" submenu in the "Staff" menu is used to view the history of revenue and expenditure of resources stored in stores. After selecting this functionality, a list of resource types is displayed, with a "Choose" button next to each one.



To start browsing history, click "Choose" next to the type of resources. A list of stores will be displayed, with a "Choose" button next to each one.



After clicking "Choose" next to a given store, a list of all resources that have ever been stored in a given store is displayed, and next to each of them the "History" button.



After clicking the "History" button next to the selected resource, a new window displays the history of revenues and expenses of the given resource, including: deliveries, interstore transfers, spending outside, destroying items and use for the implementation of commercial services.

#### Magazyn Owczarnia Narzędzia bandaż 5 x 100 cm

No.	Event	Date	Serial number	Expiry date	Items number	State	Notes
1	supply	2020-02-26	В	2021-02-28	+100	100	supplier: Apteka Latoszek
2	spending	2020-02-26	В	2021-02-28	-10	90	destination place: Szpital MSWiA

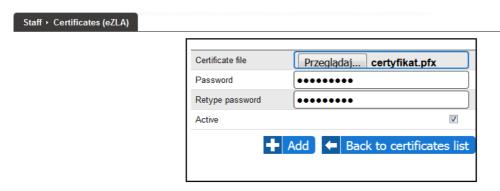


# **Certificates (eZLA)**

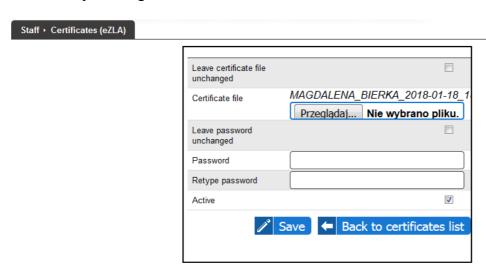
The "Certificates (eZLA)" functionality from the "Staff" menu is used to import certificates that provide medical staff with an access to the eZLA platform dedicated to issuing electronic sick leave to the jHIS system. After selecting this functionality, a list of certificates of the logged staff appears and at each of them the "Edit" and "Remove" buttons, and under the list of certificates, the "Add" button is displayed.



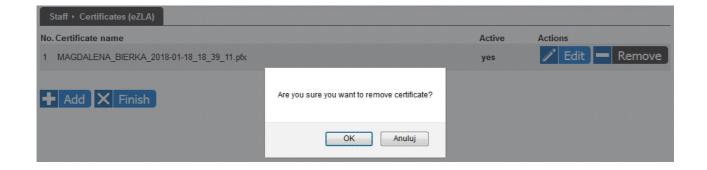
To add a new certificate, click "Add". Then a form for adding a certificate will be displayed, in which the certificate file (previously downloaded from the PUE ZUS platform or P1 platform), password for the file should be indicated and indicate whether the certificate is active (active certificate will be used for communication with the eZLA platform of ZUS; only one certificate can be active; checking the certificate as active will automatically mark other certificates as inactive). After entering the data, save it by clicking "Add".



To modify the certificate data, click the "Edit" button next to the appropriate certificate in the list of certificates. The certificate data form will then be displayed, where you can specify a different certificate file (or check the box "Leave certificate file unchanged" if changes do not apply to the certificate file), indicate a new password (or check the box "leave password unchanged" if changes do not apply to the password), select whether the certificate should be active. After making changes, save them by clicking the "Save" button.

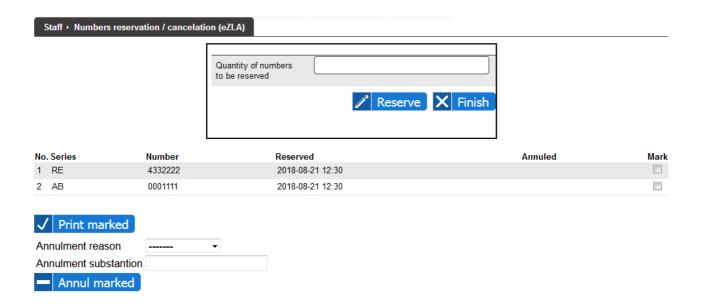


To delete a certificate, click the "Remove" button next to the appropriate certificate in the list of certificates. A window will then be displayed asking you to confirm that you want to delete the certificate. After confirmation, the certificate will be deleted.



# Numbers reservation / cancelation (eZLA)

The functionality "Numbers reservation / cancelation (eZLA)" from the "Staff" menu is used to reserve / cancel medical exemption numbers on the eZLA platform. In order for a doctor to be able to issue a patient exemption in any situation (no access to the Internet, no access to the eZLA platform, ...), he should pre-book some numbers for exemptions for such situations on the eZLA platform. To do this, one should enter the quantity of numbers to be reserved withinin the form and click "Reserve". Reserved numbers will appear in the list below the form. Then the doctor can select the numbers on the list and click the "Print marked" button to print blank forms of exemptions with these numbers (to be completed in paper version and subsequent electronisation after regaining access to the eZLA platform; exemption number after its electronisation disappears from the list of reserved numbers). If specific numbers are not used, they should be canceled by marking selected numbers on the list, indicating the reason for the cancelation, specifying the substantion for the cancelation and clicking the "Annul marked" button.



# My timetable

The functionality of "My timetable" from the "Staff" menu allows to view the weekly work timetable of the logged in staff in the form of an hour grid. The timetable shows all scheduled visits and operations as well as free terms and availabilities of staff during the current week in hours covering the total working hours of all clinics in which the staff is working. Visits, operations, free

terms and availabilities are color-coded according to the legend visible after clicking on the green "Help" button. After hovering over the appointment, operation, free term or availability, a tooltip appears with detailed information about it. A table with a list of extra visits of logged-in staff from the current week is displayed under the timetable grid.



#### Monday Tuesday Wednesday Thursday Friday Saturday Sunday 2018-10-15 2018-10-16 2018-10-19 2018-10-20 2018-10-21 2018-10-17 2018-10-18 none none none none none APPOINTMENT NADIA SAWICKA Jakub 0rłowski 14:29 APPOINTMENT SYLWESTER ADAMCZYK

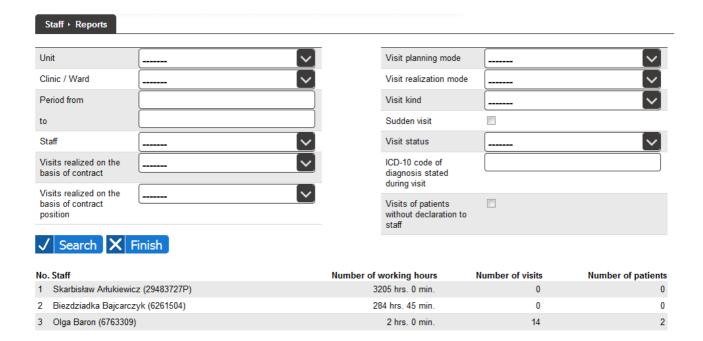
Above the timetable there are the buttons "Previous week" and "Next week" allowing to view the schedule in the previous / next week in relation to the currently displayed one and date field: after entering the date, the system automatically changes the schedule view to the correct one for the week in which the entered date is located.

# Reports

The functionality of "Reports" from the "Staff" menu allows to generate a summary of the number of working hours, number of visits and the number of patients for individual doctors for given criteria. The number of working hours results from planned timetables. It is possible to generate a statement using any combination of the following criteria:

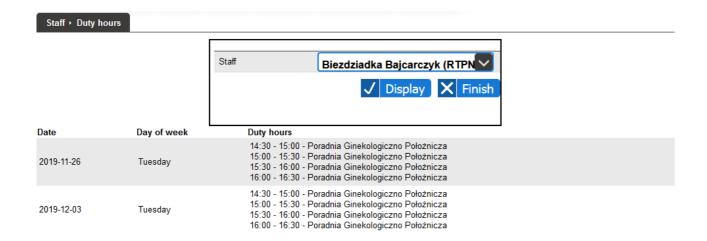
- unit
- clinic (selection of a clinic is possible only after choosing an unit)
- period
- staff
- the contract under which the visit was carried out (not applicable to the number of working hours)
- the point of the contract on the basis of which the visit was carried out (not applicable to the number of working hours)
- visit planning mode (not applicable to the number working hours)
- visit realization mode (not applicable to the number of working hours)
- visit kind (not applicable to the number of working hours)
- urgency of the visit (not applicable to the number of working hours)
- visit status (not applicable to the number of working hours)
- ICD-10 code of diagnosis made during the visit (does not apply to the number of working hours)
- visits of patients without a declaration to the doctor (not applicable to the number of working hours)

After determining the criteria and clicking the "Search" button, a list of staff with number of working hours, number of visits and number of patients is displayed. The number of visits does not have to be the same as the number of patients (group session is one visit to which a group of patients is saved, several visits may be arranged for one patient).



# **Duty hours**

The "Duty hours" functionality from the "Staff" menu allows you to quickly view doctors' reception times. After selecting this functionality, the doctor selection filter is displayed. After choosing a doctor and clicking the "Display" button, a list of days is displayed on which the doctor has planned work schedules divided into admission hours in individual clinics.



# **Visits**

The "Visits" module is used for arranging visits and handling already prearranged visits.

# Scheduled visits

After selecting from the "Visits" menu the "Scheduled visits" functionality there is displayed search engine of available dates and arranged today visits in clinics located in the units, which are

accessible for the logged user. The first step is to choose a clinic and click "Search" button. If there are any timetables of work of the staff or equipment in the clinic (even empty), then the page displays a grid of timetable (otherwise displays an appropriate message) and above the grid there is name and address of unit where searched clinic is placed with buttons "Earlier free terms" and "Later free terms". The grid has a column corresponding to all employees and equipment for which there are timetables of work in the clinic. Rows correspond in turn to possible hours of visits (grid is limited to the clinic's working hours and every hour is divided into 12 parts for 5 minutes). At the grid there are marked all the available dates and visits according to the scheme

- \rangle future available dates are displayed in blue
- past available dates are displayed in gray
- future availabilities of personnel / equipment to handle patients / carry out operations are displayed in yellow
- past availabilities of personnel / equipment to handle patients / carry out operations are displayed in brown
- arranged visits that do not require supplement the information or verification are displayed in green; in case of visits carried out jointly by several people from staff, visit displays in green at that person from staff at who it was planned and in emerald at other people corealizing a visit; in the case of commercial visits for which payment is made after the visit, but before the visit at least a partial amount is known, the visit header is displayed in the form of a green-red gradient (and in case of co-realization of visit in the form of emerald-cherry gradient)
- arranged visits that require supplement the information or verification (attach referral, attach an insurance document, settlement of payments, adding more patients in the case of group sessions which have not saved a set of patients, cancel the visit because of changes in work timetable of doctor or equipment) are displayed in red; in case of visits carried out jointly by several people from staff, visit displays in red at that person from staff at who it was planned and in cherry at other people co-realizing a visit
- if the type of the visit appropriate for a given free date or appointed visit has defined color of highlighting, then in the upper right corner of the date / visit there is displayed spot in this color
- if the visit has been marked as realized, then the ✓ sign appears next to the slot title on a
   green background
- $\rangle$  if the visit has been marked as unrealized then the x sign appears next to the slot title on a red background
- if the visit is an occupational medicine visit, the \* sign appears next to the slot title on the purple background
- if the visit requires payment of a fee and has not been paid or has not been fully paid, then the € sign appears on the slot title on a brown background
- $\rangle$  if the visit requires a declaration and the patient does not have it, then the  $\emptyset$  sign appears on the slot title on a navy blue background
- if the visit was arranged via the ZnanyLekarz website, then the ★ sign appears on the slot title on an orange background

When you move the mouse cursor over a free date, availability or an appointment, in a tooltip there

is displayed detailed information about the date, availability or visit accordingly (quick view).



The "Earlier free terms" button allows you to display with one click the previous day before the currently displayed date, in which there is any available term (the search for a free term applies only to future dates, the dates of group sessions with too small number of patients are not considered free). In case the earlier free term does not exist, clicking on the button displays an appropriate message below the button.

The "Later free terms" button allows you to display with one click the next day after the currently displayed date, in which there is any available term (the search for a free term applies only to future dates, the dates of group sessions with too small number of patients are not considered free). In case the later free term does not exist, clicking on the button displays an appropriate message below the button.

In the form above the grid there are in addition the following navigation buttons:

- <<-- allows to view the schedule on a month earlier than the current presented day
  </p>
- <- allows to view the schedule on a week earlier than the current presented day
  </p>
- < allows to view the schedule on a day earlier than the current presented day</p>
- Change date" allows one to view any day, which should be indicated in the date field before pressing the "Change date" button

- "Today" alows one to view today's day
- > allows to view the schedule on a day later than the current presented day
- >> allows to view the schedule on a week later than the current presented day
- >>> allows to view the schedule on a month later than the current presented

Clicking on any of the above buttons changes the view of schedule for the appropriate day to which the button leads.

Clicking on a free date on the grid of schedule begins the process of making an appointment for this term. At first, there appears a window with basic information about the visit and with two or three buttons:

- Change kind of visit before signing up for a visit, it is possible to change the type of visits (for NFZ's if the visit is commercial or for commercial if the visit is NFZ's)
- Continue sign up for a visit allows to start the process of signing up for a visit
- Continue sign up for a visit (use default pricelist) allows to start the process of signing up for a visit with the automatic selection of the default price list (the button is available only for commercial visits and only in the clinics where the default price list has been created)



Continuing the process of signing up for a visit there is displayed a search engine of patients, which is using to search for a patient, for whom the visit will be arranged. The search basis on rules described in the "Patients (active cards)" section, additionally for each of the patients from the list of patients that meets your search criteria as well as in each tab of the patient's card there is an extra button - "Continue sign up for a visit," which allows you to continue the process of signing up the indicated patient for a visit. There is also the possibility to edit data in the card of patient.



After selecting the patient (pressing "Continue sign up for a visit" button), the system checks whether the visit can be set for this patient (eg. for a visit in gynecological-obstetric clinics can be saved only women, for visit in clinics for children can be saved only people up to 18 years of age or having a special permission, etc.). If the visit cannot be arranged there is the appropriate message notifying about it and the system asks to select another patient. If the patient can be signed up for a visit, the signing process continues.

If a visit is commercial and the patient has outstanding payments then the system displays patient's arrears in payments. The person signing up the patient for visit now decides whether to sign up the patient for the next visit (despite arrears) or to discontinue the process of signing up for a visit and go to the module of handling of patient's payments. This step is skipped in case of NFZ visits or commercial visits for patients without arrears.



The next step is to indicate a referral for visit (this step is skipped in case of visits at the clinic where a referral is not required). In this step there is displayed the form of adding a referral with buttons dependent of the type of visit:

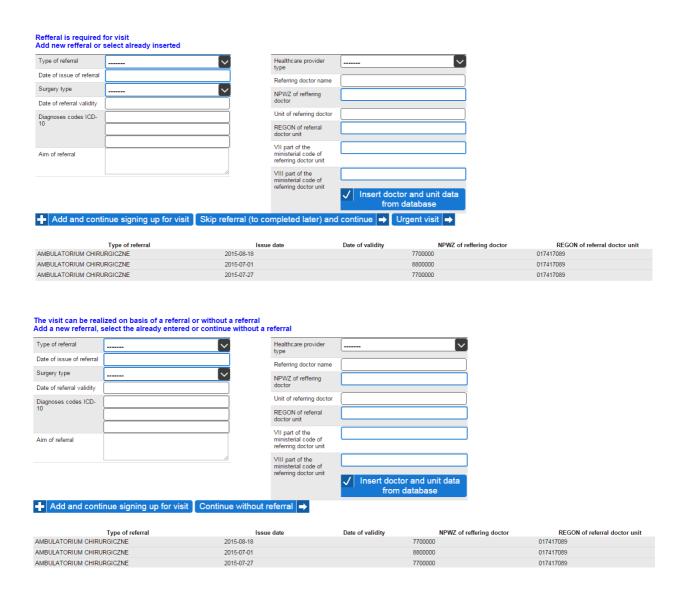
### > In case of NFZ's visits

- Add and continue signing up for visit adds to the patient's card a referral with the data entered by the registrar, checks whether it can be used to signing up a patient for a visit (date of issue of referral must be earlier than the date of issuing visit, a referral must be addressed to a clinic where visit has to be arranged) and if so, it proceed to the next step, and if not, it reports an error and remains at the step of referral selection
- Skip referral (to complete later) and continue allows to skip adding a referral at this point and continue to sign up for the visit (eg. if the registrar signing up the patient for visit during a phone call, then it will be able to enter the data from referral only when the patient will bring them when come on visit), but the doctor will not be able accept that saved patient until he denounce a referral, which registrar will enter to the system
- Urgent visit allows to skip adding a referral in a situation when it is sudden, lifesaving visit such a visit will be carried out without a referral and the patient will be signing up despite the lack of referral

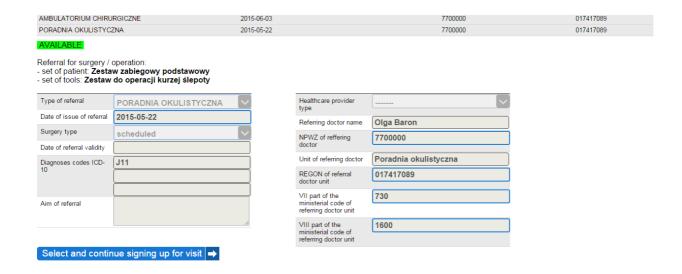
### > In case of commercial visits

- Add and continue signing up for visit adds to the patient's card a referral with the data entered by the registrar, checks whether it can be used to signing up a patient for a visit (date of issue of referral must be earlier than the date of issuing visit, a referral must be addressed to a clinic where visit has to be arranged) and if so, it proceed to the next step, and if not, it reports an error and remains at the step of referral selection
- Continue without referral allows to skip the step of entering a referral (when the commercial visit is carried out without a referral) and continue the process of signing up for a visit

Rules for adding referrals are described in "Referrals" of the "Patients (active cards)" chapter.



Furthermore, below the form of addition of a referral there is displayed a list of all referrals entered to the card of each patient. Clicking on information about any of the referrals develops a form of data of such referral. Above form appears the information if it is a referral available to use for just arranging visit or not. Referral is available if the date of issue of referral is earlier than the date of just arranging visit, a referral is addressed to the clinic where the visit has to be arranged and the type of visit allows you to reuse a referral for a visit if it was already used. In addition, above the form of referral may display information about the sets of equipment / patient needed to carry out the surgery / operation in case of referrals to surgery / operation (please pay attention to this information in order to choose the appropriate referral for arranging surgery / operation because the arranging surgery / operation will involve with the need to prepare appropriate equipment / patient!). Under the form there is the "Select and continue signing up for visit" button, which allows you to continue the process of signing up for a visit on the basis of the referral.



The next step in the process of signing up for visit is to fill documents. This step occurs only if the visit is arranging on basis of a referral and with referral are associated documents to fill out and they were not yet completed. In this case displays a list of documents that have to be completed.



At each unfilled document there is the "Fill" button to display a form to fill in the document, and at every filled document there is the "View" button to download the document in PDF format and print it. As long as there is at least one document to fill out so long under the list of documents is displayed the "Skip filling (to fill later) and continue" button to allow the omission the step of filling documents (eg. At arranging visits over the telephone), but you will need to supplement these documents after the already arranging visit, that the visit could be realized.

To fill the document, click the "Fill" button at them. There will be displayed a form for completing the document, which, after entering the data have to be saved by clicking "Save" button.



After saving data of the document there will be displayed again a list of documents at the referral. Once all the documents from the list will be filled, the "Skip filling (to fill later) and continue"

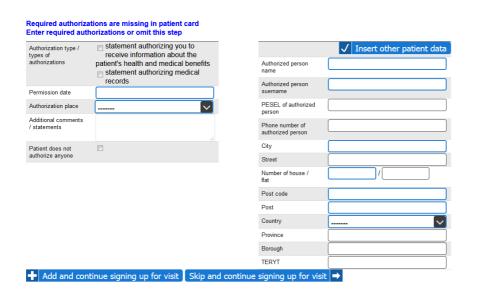
button disappears from under the list of documents and in its place appears the "Continue signing up for a visit" button, which clicked takes you to the next step of the process.



The next step in the process of arranging visit is to verify the patient's declaration. Checking whether the patient has this declaration at the clinic where he is trying to sign up is taking place only in case of NFZ's visits at signings to POZ clinic (in all other cases, this step is skipped). If the patient has a proper declaration then the system automatically goes to the next step of the process. If the patient does not have such a declaration, system displays the form of adding the declaration and asks for its entering. Rules for adding a declaration are described in "Referrals" of "Patients (active cards)" chapter.

In justified cases (eg. lifesaving visit or a patient from another province), you can omit the declaration and admission, despite its absence. Then, instead of filling the data form of the declaration and approve it by pressing the "Add and continue signing up for visit" use the button "Skip and continue signing up for visit" without filling out a form.

In the case of public visits to the BHC in a situation where the patient's card is missing required authorizations, the next step in the process of appointing visit becomes the emtering of such authorizations. The form for entering authorizations is displayed. If it is necessary to arrange a visit without the authorization, then use the "Skip and continue signing up for a visit" button, leaving the form blank. In case of entering authorizations, after filling in the form, you must approve it by clicking the "Add and continue signing up for a visit" button. The system will display the form for entering authorizations until all required types of authorizations are entered.



If the required authorizations are entered, then after clicking the "Add and continue signing up for visit" button, the system will display a button enabling downloading them as a PDF file and printing ("Print issued authorizations") and a button enabling the next step of the process ("Forward").

You can print issued authorizations now

✓ Print issued authorizations Forward →

The next step in the process of arranging visit is entering a patient into waiting lists. This step occurs only in case of NFZ's visits in specialist clinics (in all other cases, this step is skipped). In this step there are displayed two or three buttons, depending on whether the referral for visit was indicated or not, and the task of registrar is to click on the appropriate of them:

- > Enter as a STABLE case button of entering the patient to waiting queue as a STABLE case; button is not available if the visit is arranging on a basis of a referral with the "sudden" surgery type
- > Enter as an URGENT case button of entering the patient to waiting queue as an URGENT case; button is not available if the visit is arranging on a basis of a referral with the "scheduled" surgery type
- Do not enter button skips entering patient to waiting queue

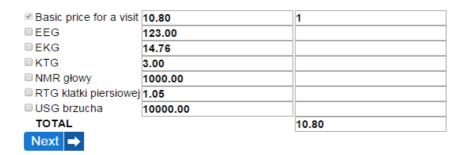
Enter the patient to waiting queue (NFZ)?

| Enter as STABLE case | | Enter as URGENT case | Do not enter |

Depending on the used button, the system does or does not enter the patient to waiting queue and proceeds to the next step of the process of arranging visit, which is to display the pricelist of service at the clinic. This step occurs only in case of commercial visits. Except when the appointment process has been started using the "Continue signing up for a visit (use default pricelist)" button, at first there is displayed a list of available pricelists (in force at the clinic at day of arranging visit), from which you should choose the right one and then click "Next" button to view the content of the pricelist.

Price list
Okulistyka (NZOZ) 
Noxt

In the pricelist there is determined the basic gross price per visit (which, in particular, may be zero) and the prices of individual services. Registrar may (but need not) determine which services are expected by patient within visit (by checking the box next to the name of service). At the time of selection of any of the services there is automatically updated total price for the visit and the field of quantity at the service becomes editable - the quantity of services can be modify and at such modification the total price for the visit is also updated.



The next step in the process of arranging visit is pre-selection of NFZ service. This step occurs only for NFZ visits in primary care clinics (in all other cases, this step is skipped). In this step, you can specify the default service code from the agreement with the NFZ which should be specified at a this visit. If selected service is an advice related with issuing DiLO card then there appears additional field for DiLO card number.

#### Here you can point out the default public service code



Pressing the "Next" button ends the process of signing up for visit. There is displayed a summary with information about an appointment with the "Show summary" button enabling to print summary for the patient.

Clinic Poradnia okulistyczna (ul. Błońska 46/48, 05-807 Podkowa Leśna) Term 2015-09-29 08:15 Duration of visit 15 minut Kind of visit NFZs Visit type zwykła Topograf rogówki Instument Patient Franio Alergik Referral None Visit has been arranged ✓ Show summary 
X Close

When you click "Show summary" buttons, there is opened a summary in PDF format for printing on paper of prescription format (96 mm  $\times$  203 mm).

LOGO	ımmary of signing for vist
	Generating date 2015-08-14 10:57

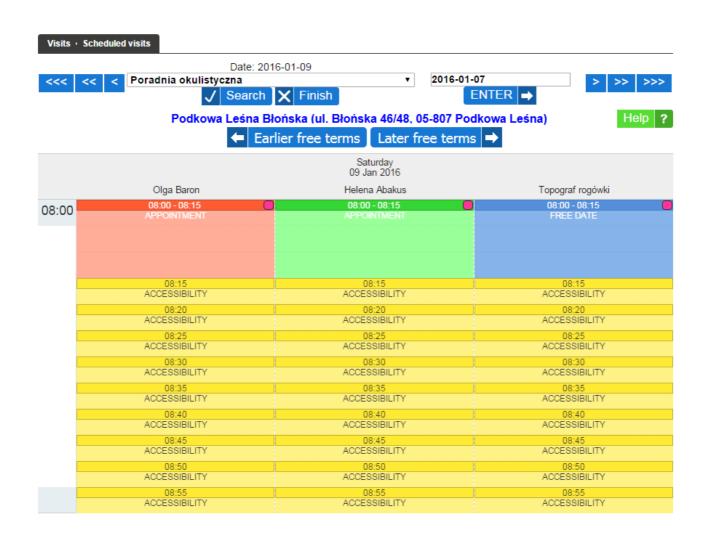
### Information

Patient	Renata Adamiec
Term visit	2015-08-17 08:00
Place of visit	Poradnia okulistyczna (ul. Błońska 46/48, 05-807 Podkowa Leśna)
Doctor	Olga Baron

Additional information on preparing for the visit:

None.

Pressing the "Close" button closes the window of the appointment and in the view of timetable there is updated the color of slot for appropriate for the appointment.



Clicking on the availability on the grid of schedule begins a process of making an appointment at hour visible at the place of click. At first, there is displayed a window with basic information about the visit and "Continue sign up for a visit" button, which allows to begin the process of signing up for a visit.

Clinic Poradnia okulistyczna (00-814 Warszawa ul. Miedziana 2)
Term 2016-01-09 08:45
Doctor Olga Baron

Continue sign up for a visit →

When you click "Continue sign up for a visit", there is displayed a form with basic information of visit, where should be indicated:

- duration of visit list of available duration times of the visit depends on the length of the availability period of personnel / equipment
- kind of visits determines whether it is the NFZ's or commercial visit; by default kinf of visit valid for the given clinic is selected
- visit type defines the type of visit possible to choose among types defined for the clinic; by default main visit type valid for the speciality of the given clinic is selected
- surgery, where a visit is carried out (for visits to equipment this field is not visible, in case of visits not requiring office, for example. home visits, leave this field blank); if there exists

only one surgery room within the given clinic and if main visit type valid for the speciality of the given clinic requires to point out surgery then surgery is selected by default



At the bottom of the form is the "Forward" button that allows you to continue the process of planning your visit, and for commercial visits in clinics where a default price list has been defined, the "Forward (use default price list)" button is displayed that allows you to continue the process of planning your visit with the automatic selection of the default price list. When you click "Forward" button, there is displayed a form of selection staff realizing the visit. In case of visits to the equipment it is blank at the beginning, in case of visits to personnel there is indicated staff for which the visit is arranging (this staff cannot be removed or changed).



If the visit has to be co-realized by some of the staff, then use the "More" button to view more fields in order to select more people to the staff.



To enter into an empty field a staff you have to click on the icon with a green arrow pointing down at the field. This opens a window with search engine of staff, in which after the indication of search criteria can be found staff available during the visits (availability of personnel must be planned in work schedules).



For each person from staff there is "Select" button to click on the search of staff window disappears and selected staff appears in the form of the selection of staff realizing the visit.



For each person from staff it can be selected role that the person has during the realization of the visit. One of the staff has to be designated as primary staff realizing a visit by checking the round field (radio) on the right side of the form (in case of visits appointed to staff this field is marked by default by the staff to which visit is being appointed). If the staff has been inserted by mistake, you can remove it by clicking on the icon with the white minus sign in a red circle. The fields for inputting staff left empty are ignored.



After completing the selection of staff realizing the visit, click "Forward" button. Clicking this button displays a search engine of patients, allowing search for patients to sign up for the visit. Continuation of the process of making an appointment looks identical to an appointment process described above in this section.

After appointing visit, in view of the schedule the availability period in which it was appointed visit

is replaced by a block corresponding to the appointed visit with the color appropriate for this visit (in case of visits realized by additional staff appropriate blocks appear at each of the persons realizing the visit).



At this schedule it is possible to handle prearranged visits. When you click on arranged visit in the schedule (with the exception of visits of cherry and emerald color, click on which displayed "corealization of visit" message), there opens a window with details of the visit, in which below the basic information about the visit, there is information about the signed up patient or patients (in case of group sessions). At each patient there is presented information about the status of the visit, the deficiency relating to the visit, who and when has made an appointment for the visit and action buttons.



Visits can have the following statuses:

- > saved visit default status of your appointment
- visit to cancel a visit which was arranged, but then the work timetable of personnel / equipment changed and the date on which the visit was arranged ceased to be available and because of this the visit has to be canceled
- > realized visit a visit to which the patient came, the doctor took the patient and noted this information in the system
- > unrealized visit a visit to which the patient has not come or which for other reasons did not take place and the doctor noted this information in the system

At the visits may also occur following information about the deficiencies (presented in red):

- No referral for visit if for a visit is required a referral but has not been entered at the stage of arranging visit
- Vinfilled documents if the visit is realized on the basis of a referral from which they are associated documents required to be completed by the patient and at least one of these documents has not yet been completed
- Missing authorizations in case of public visits in Basic Healthcare if system was configured to require authorizations and within patient card these authorization are missing
- > Unrealized payment for visit if the visit should be paid in advance and the fee has not been taken from the patient
- No insurance for day of visit if in the system there is no valid insurance document of patient on a visit day
- Assigned therapist is no more available if to the visit (rehabilitation treatment) has been assigned a therapist who then change the work schedule and as a result he ceased to be available and will not be able to realize visit

At (any) patient signed up for the visit may be available the following buttons:

- Mark visit as realized button to change the status of a visit to the "Visit realized" (button available only for visits for equipment that do not have assigned main staff realizing the visit, if the visit has assigned realizing it staff then this person from the staff is responsible for changing the status of the visit on "Visit realized")
- Mark visit as unrealized button to change the status of a visit to the "Visit unrealized" (button available only for visits for equipment that do not have assigned main staff realizing the visit, if the visit has assigned realizing it staff then this person from the staff is responsible for changing the status of the visit on "Visit unrealized")
- Cancel visit button to cancel the visit, whether it is the patient's request whether this is due to change in work timetable of staff / equipment; when canceling visit system asks for the reason and requestor of canceling and if at arranging a visit the patient was entered into the waiting queue then at cancelation of the visit system asks also for specifying the reason for the deletion from the queue



After specifying the reason (if the system needs it) visit is canceled and the date released and it is now possible to sign up another patient for this date.

Patient card - button allows to access to patient card (opened in a new window) and completing its data (patient card's structure and rules of its filling are described in the "Patients (active cards)" section); fast access to patient card makes it easier to complete the information about an insurance for a day of visit and fill out the documents if such are required to arrange visit

### ATTENTION!

If the patient is insured in NFZ and have a PESEL number and the date of the visit is future, the message about the lack of insurance can be ignored until the day of the visit - the jHIS system on the day of the visit will automatically connect to the eWUŚ system and retrieve electronic document confirming patient's insurance on the day of the visit; if the electronic document does not confirm the patient's insurance, than entering information about insurance on the day of the visit in the patient card will be required - the "Patient insurance statement" button in the "Patient" tab or "Insurance" tab)

- Assign referral button allows to enter data of patient's referral during the visit, if for a visit is required referral and none was entered at the stage of arranging visit; assigning referrals to visit at this stage looks exactly the same as step of indicating a referral described at the discussion of process of arranging visit
- Services the button allows previewing (in a new window) commercial services assigned to the patient's visit and in the case of visits that service has not been started yet, also allows the modification of the scope of services (modification of services operates on the same principle as described in the process of planning a visit)

■ Basic price for a visit	0.00	1
☑ Badanie na prawo jazdy kat. B	200.00	1
☐ Wizyta altruistyczna-bezpłatna	0.00	
Wizyta płatna	100.00	1
☐ Wizyta sobotnia dla pacjentów z listy	50.00	
TOTAL		300.00



Payments - displays patient's unpaid bills with the ability to manage them; this is exactly the functionality of the "Payments" tab described in the section "Patients (active cards)".

In case of group sessions to which patients can still added, under the list of signed up patients also appears the "Append patient to visit" button which begins the process of signing up another patient for a this visit (group session). This process looks identical to the signing up the first patient.

In case of NFZ's visits with the "saved" status and not being group sessions, under the list of saved patients there is also the "Change into commercial visit" button. If patient signing for the NFZ's visit does not have required documents and therefore can not be signed but he agrees to pay for a visit, then by using the "Change into commercial visit" button, the visit can converted into commercial.



If at the NFZ visit there was entered referral, then after clicking the "Change into commercial visit" button there will appear an ask to decide whether a referral should remain at the visit (despite the conversion of visits into commercial) or should be detached from the visit. Depending on the decision, click the appropriate button. If the visit is realized without a referral, this step is skipped.



Next, the system asks to indicate the price list according to which visit commercial will be accounted.



After selecting the price list and clicking the "Next" button there is displayed the price list of services possible to realize during the visit. It operates in the same way as described above when discussing the process of signing for visit.



After selecting services from the price list and clicking "Next" button, visit is converted into commercial, what is reported by appropriate message from the system.



System also allows to transfer scheduled visits to another term except that:

- vist can be transferred to another term and to another doctor only within the clinic where visit has been appointed
- transfer is possible only for visits having status of "saved visit", i.e. Visits waiting fo service
- due to settlements and reports done, is is not possible to transfer visits from past days nor to transfer visits into past days
- due to differences in processes of visits planning, visit scheduled within the slot can be transfered only to another slot (target slot timespan can differ from source slot timespan) and visit scheduled within the accessibility period can be transfered only to another accessibility period (while transfering visit into target accessibility system saves its timespan if target accessibility allows for it or system shortens this timespan if target accessibility is shorter)

At the bottom of the window with details of each visit, which opens by clicking on visit within schedule, there is black button "Do a transfer of this visit".



After clicking the button "Do a transfer of this visit", system memorizes the given visit as visit to be transfered and caption within the button changes into "Resign a a transfer of this visit".



Clicking the button "Resigna a transfer of this visit" means return to the starting point – system will not remember the given visit anymore as visit to be transfered.

If some visit has been memorized as visit to be transfered, then one has to close the window with visit details, find the slot / accessibility whithin the schedule where the visit is to be transfered and to click on in. Then (as it has already been described previously within thi chapter) there opens window with additional black buttons "Transfer here visit from YYYY-MM-DD hh:mm" and "Resing a transfer of visit from YYYY-MM-DD hh:mm" at the bottom of the window, where instead of "YYYY-MM-DD hh:mm" the date and hour of visits memorized to be transfered appears.

Clinic / Ward

Term 2018-02-07 08:15

Duration of visit 15 minutes

Kind of visit

NFZs

Visit type Zwykla

Surgery Gabinet okulistyczny

Doctor Olga Baron

✓ Change kind of visit (on commercial)

Continue sign up for a visit 

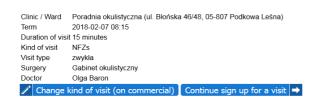
✓ Transfer here visit from 2018-02-07 08:00

✓ Resign a transfer of visit from 2018-02-07 08:00

By clicking the button "Transfer here visit from YYYY-MM-DD hh:mm" system transfers previously memorized visit to the given slot / accessibility and is displays an appropriate information with transfered visit details.



Clicking the button "Resing a transfer of visit from YYYY-MM-DD hh:mm" means return to starting point – it makes system to stop to remember previously memorized visit as visit to be transfered, so buttons "Transfer here visit from YYYY-MM-DD hh:mm" and "Resing a transfer of visit from YYYY-MM-DD hh:mm" disappear from the window of visit planning.



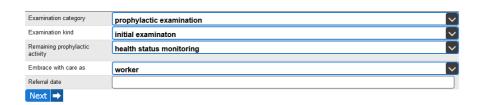
If the service has not been taken up yet and the visit is not a group session and the occupational medicine module is enabled in the jHIS system, then the violet button "Occupational medicine" appears under the list of patients registered for the visit, enabling the transformation of a given visit into the main occupational medicine visit.



Clicking this button displays the institution and post selection form. The post can only be selected after the institution has been selected.

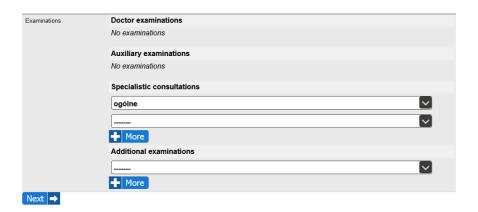


After selecting the institution and post and clicking the "Next" button, the form for entering occupational medicine parameters is displayed.



After specifying occupational medicine parameters and clicking button "Next" there appears form for choosing examinations to be performed. Examinations are divided into four groups:

- doctor examinations doctor examinations appropriate to noxious and strenuous agents being present on a given work post / study course; all examinations are marked, they cannot be changed and all must be performed
- auxiliary examinations auxiliary examinations appropriate to noxious and strenuous agents being present on a given work post / study course; all examinations are marked, they cannot be changed, not all must be performed (checkbox fields allow to mark off examinations to be omitted)
- specialistic consultations specialistic consultations to be performed within occupational medicine; by default there is displayed one field allowing to specify one specialistic consultations, if there is need to specify more specialistic consultations then one has to click button "More" to display more fields allowing to enter more specialistic consultations, fields left unfilled will be ignored by the system
- additional examinations additional examinations to be performed within occupational medicine; by default there is displayed one field allowing to specify one additional examination, if there is need to specify more additional examinations then one has to click button "More" to display more fields allowing to enter more additional examinations, fields



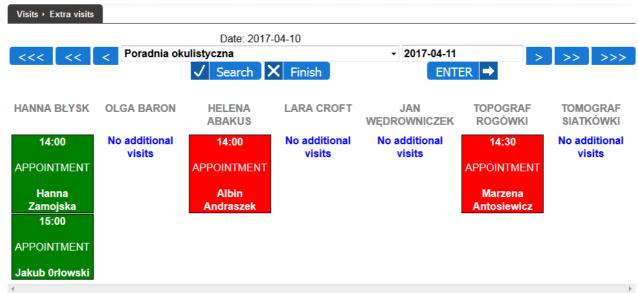
After pointing out the tests and clicking the "Next" button, the system informs with an appropriate message about the completion of the operation transforming the visit into an occupational medicine visit.

## **Extra visits**

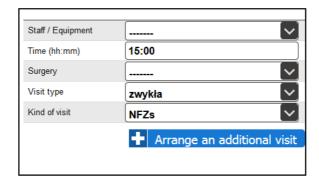
To arrange extra visits and service already prearranged extra visits is used "Extra visits" functionality from "Visits" menu. After selecting from the "Visits" menu "Extra visits" functionality there is displayed search engine of doctors working in clinics located in the units, which are accessible to the logged user. The first step is to choose a clinic and click "Search" button. If there are doctors working in the clinic or equipment functioning in the clinic then on the page, in columns, under the names of these doctors/equipment are displayed their extra visits at particular day (or information about the lack of extra visits arranged to the doctor/equipment at this day). The names of the doctors/equipment who by schedule do not work that day are displayed in gray (however, they can make an extra visit). Extra visits are displayed according to the scheme:

- arranged and realized visits that do not require supplement the information or verification are displayed in green
- arranged and realized visits that require supplement the information or verification (attach referrals, join the insurance document, settlement of payments, fulfillment of required documents) are displayed in red
- \rightarrow unrealized visits are displayed in gray

In the bottom of the page is displayed the form for arrange a new extra visit.



**NOTICE!** Gray colored name means that the given staff do not realize planned visits on the given day (i.e. there are no slots within this staff timetable on the given day). The same rule applies to equipment names.



In the search form visible at the top of the page there are in addition the following navigation buttons:

- > <<< allows to view the schedule on a month earlier than the current presented day</p>
- <- allows to view the schedule on a week earlier than the current presented day
  </p>
- < allows to view the schedule on a day earlier than the current presented day</p>
- Change date" allows one to view any day, which should be indicated in the date field before pressing the "Change date" button
- "Today" alows one to view today's day
- > allows to view the schedule on a day later than the current presented day
- >> allows to view the schedule on a week later than the current presented day
- >>> allows to view the schedule on a month later than the current presented

Clicking on any of the above buttons changes the view of schedule for the appropriate day to which the button leads.

To arrange a new extra visit should using the form at the top of the page, go to the correct date on which the extra visit has to be arranged (if this is a different day than the one currently presented). Then, in form visible at the bottom of the page indicate staff/equipment to which the extra visit has to be arranged, time of visit (by default current time is set), surgery (choice of surgery is only

required for extra visits to staff; if there is only one surgery in the clinic it is automatically selected), type of visit (if there is any default type of visit for this clinic it is automatically selected) and kind of visits (default kind of visit in the clinic is selected automatically) and click "Arrange an additional visit" button. When you press this button then the process of arranging additional visits starts and it looks identical to the process of arranging scheduled visits described in the "Scheduled visits" chapter. In the case of planning commercial visits in clinics / wards in which the default price list has been defined, in addition to the "Arrange an additional visit" button, the "Arrange an additional visit (use default price list)" button appears, which allows you to shorten the appointment process by automatically selecting the default price list.

The "Extra visits" functionality also provides support for prearranged extra visits. When you click on arranged additional visit there opens a window with the details of the visit, in which under the basic information about the visit, there is information about signed up patient. At each patient there are presented information about the status of the visit, the deficiency relating to the visit and action buttons that are identical to those described in the "Scheduled visits" section.

## Visits to cancel

The "Visits to cancel" functionality in the "Visits" menu helps to cancel appointments. In case when doctor's work schedule is changing some of the appointed earlier visits may require cancelation because of the impossibility of their realization. A list of all such visits can be viewed by selecting the "Visits to cancel" functionality in the "Visits" menu. At every visit requires cancelation there is the "Cancel" button.



To cancel a visit, the patient should be informed about that (contact details are visible in the "Patient" column) and then click "Cancel" button. Then there is opened a new window where one has to enter requestor and reason of cancelling. If the patient while saving appointment was inserted into the waiting queue he should be deleted from the queue by indicating the reason and clicking "Next" button; if he was not inserted into the queue, this step is skipped.



Cancellation of the visit is confirmed by the appropriate message of system.



After closing the window of visit cancellation, canceled visit disappears from the list of visits

waiting for cancelation.

## Lacks of insurance

The "Lacks of insurance" functionality in the "Visits" menu helps to complete information about patients' insurance. After selecting this functionality there is displayed a list of scheduled visits for today for patients who do not have valid insurance for today. At each such visit there is visible the "patient card" button.



After clicking on the "Patient card" button there is opened the card of the patient enabling supplement insurance information (confirmation of eWUŚ, a statement of the patient's insurance, the insurance document). After addition of information and closing patient card, visit disappears from the list of lacks of insurance.

## Rehabilitation

The "Rehabilitation" functionality from the "Visit" menu is used for planning rehabilitation services. There are two version of this module: standard and simple. In the standard version, it is possible to plan terms of each surgery separately (each surgery from one day = separate term), in a simplified version, it is possible to plan terms of groups of surgeries (all surgeries from the day = one term) To choose used version there is "Version of rehabilitation module" configuration parameter available in "Configuration" functionality from the "Administration" menu.

### Standard version of rehabilitation module

After selecting the "Rehabilitation" functionality from the "Visit" menu there is displayed a search engine of planned cycles of rehabilitation, in which at least one service was scheduled for today in clinics located in the units to which logged user has access. At first, choose the clinic and press the "Search" button. If there are scheduled cycles of rehabilitation, in which at least one service was scheduled for today, they will be displayed, if not – there will be proper notification. Additionally, there will be displayed the "Arrange rehabilitation services cycle" button, which clicked begins the process of planning the service cycle.



In the search form there are in addition the following navigation buttons:

- > <<< allows to view the planned service cycles on a month earlier than the current presented day
- << allows to view the planned service cycles on a week earlier than the current presented
   day
  </p>
- < allows to view the planned service cycles on a day earlier than the current presented day</p>
- Change date" allows one to view any day, which should be indicated in the date field before pressing the "Change date" button
- "Today" alows one to view today's day
- > allows to view the planned service cycles on a day later than the current presented day
- >> allows to view the planned service cycles on a week later than the current presented day
- >>> allows to view the planned service cycles on a month later than the current presented day

Clicking on any of the above buttons changes the view of the planned service cycles for the appropriate day to which the button leads.

Clicking on the "Arrange rehabilitation services cycle" button begins the process of planning service cycle. At first, there is displayed a window with buttons allowing to choose the admission kind - services can be realized as public or commercial.



When you click a button appropriate for the admission kind, the system asks to select the visit type for surgeries cycle



After selecting the type of visit and clicking "Next" button the system asks to select the conditions of realization the rehabilitation services.

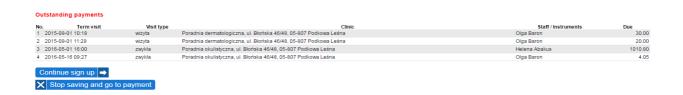


Depending on conditions in which services will be realized click the appropriate button. You will see a search engine of patients, in which should be entered patient's data to be signed for service cycle and click "Search" button. If the search criteria meets only one patient, the system will display the card with the "Continue sign up" button visible at the bottom of the card, if more than one patient meet the search criteria, the list of patients that meeting the search criteria will be displayed under the search engine and at every patient in addition to the "Edit" button for transition to edit patient card there will be the "Continue sign up" button.



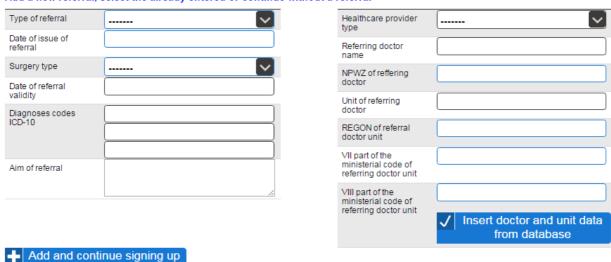
Clicking "Continue sign up" button at the patient on the list of search results or in the patient card means to continue planning service cycle for this patient.

After selecting the patient in case of commercial services, the system checks whether the patient has settled all payments (in case of NFZ's services this step is skipped). If you have outstanding payments, the system displays the relevant information, leaving the user's decision whether to continue the process of planning services or to discontinue it and go to the payment module in order to settle them.



In the next step, the system asks to enter or select already entered referral on the basis of which will be carried out a service cycle. In case of NFZ's services referral is required so there should be either enter the data of referral and click the "Add and continue signing up" or select one of the already entered referrals (if there are any entered referrals, the list of them can be seen under the form of adding a referral and details of each of the these are displayed when you click on the gray bar with the basic information of referral) and click "Select and continue signing up" button at the selected referral.

# The visit can be realized on basis of a referral or without a referral Add a new referral, select the already entered or continue without a referral



In case of commercial services the step of entering / selection referral can be skipped by clicking "Continue without a referral" button.



The next step in the process of planning service cycle is to fill documents. This step occurs only if the visit is arranging on basis of a referral and with referral are associated documents to fill out and they were not yet completed. In this case displays a list of documents that have to be completed.



At each unfilled document there is the "Fill" button to display a form to fill in the document, and at every filled document there is the "View" button to download the document in PDF format and print it. As long as there is at least one document to fill out so long under the list of documents is displayed the "Skip filling (to fill later) and continue" button to allow the omission the step of filling documents, but you will need to supplement these documents after the planning cycle, that the cycle could be realized.

To fill the document, click the "Fill" button at them. There will be displayed a form for completing

the document, which, after entering the data have to be saved by clicking "Save" button.



After saving data of the document there will be displayed again a list of documents at the referral. Once all the documents from the list will be filled, the "Skip filling (to fill later) and continue" button disappears from under the list of documents and in its place appears the "Continue signing up" button, which clicked takes you to the next step of the process.



Within the next step system asks for specification of searching mode – it is possible to search terms manually (then user chooses the terms) or automatically (then system chooses terms based on the chosen criteria).



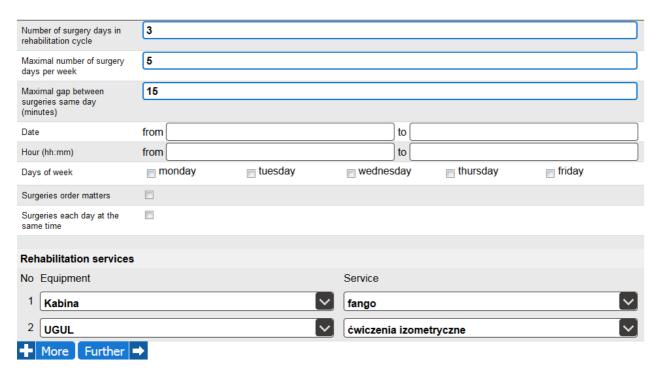
In the next step, the system asks to indicate the services to be realized within a cycle of rehabilitation. In the form of selection of services within manual mode there is one line for introduction of a single service. To enter more services, use the "more" button that allows to display more rows to introduce a greater number of services (lines left blank are ignored).

#### Specify rehabilitation surgeries



Within automatic mode beside choosing equipment and services within the form one specifies also additional search criteria.

#### Specify rehabilitation surgeries



After indicating the planned services and pressing the "Next" button within the manual mode system displays a schedule showing the availability of equipment to realize services indicated earlier in the indicated earlier conditions of realization (availability must be previously created in graphics of equipment). The following columns of schedule correspond to indicated earlier rehabilitation services, rows of schedule are next times (for 5 minutes). In the schedule, periods in which the equipment is available are marked in green, and those when it is not available - in white. In each marked in green cell there is visible radio box allows to booking term of service at a given time - clicking on this radio box will mark the cell and possibly the next cell below it according to the duration of the service with red color (eg. if the procedure takes 20 minutes then clicking the radio box in the cell at 8:00 will highlight in red the next four cells at 8:00, 8:05, 8:10, 8:15 which means booking 20 minutes for the execution of the service).

Services can not be realized in parallel so when you try to select the term of the service meshing with already marked another term of service, the system will remove the meshing reservation (e.g. if the first service will be marked at 8:00 and service takes 15 minutes then when you will try to

select a second surgery at 8:00, 8:05 or 8:10, the mark of the first treatment will be removed - cells marked in red from the first service turn green so the user will have to select a different date for the first service). Each availability period defined in the schedule of the equipment is in the schedule surrounded by a black border. It is also impossible to reserve the date of service at such time when the hour of the end of the availability period is shorter than the time required to realize the service (e.g. if the schedule of the equipment has defined availability period from 8:00 am to 9:00 then services lasting 15 minutes can not be booking at 8:50 and 8:55 because at the time from 8:50 to 9:00 or at time from 8:55 to 9:00 are not achievable services lasting 15 minutes). Even if two periods of availability defined in the schedule of equipment follow immediately at each other, it is not possible to reserve the term of service that began at the first from these periods of availability and finish in second (e.g. if in equipment schedule, availability periods have been defined from 8:00 to 9:00 and from 9:00 until 10:00 then service lasting 15 minutes can not be booking at 8:50 and 8:55 because at the time from 8:50 to 9:00 or at the time from 8:55 am to 9:00 there can not be realized service lasting 15 minutes and the service can not be extend to adjacent availability period). Above the schedule is the date of day on which the schedule is displayed and buttons:

- << allows to view the schedule on a week earlier than the current presented day</li>
- < allows to view the schedule on a day earlier than the current presented day
- > allows to view the schedule on a day later than the current presented day
- >> allows to view the schedule on a week later than the current presented day

After selecting terms of services, the buttons above should be using to go to the schedule for the next days and in the same way select the terms of rehabilitation services from the entire cycle.

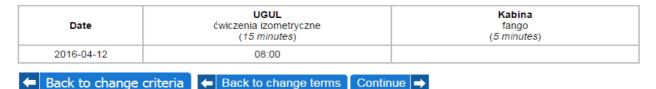
Choose surgery terms through all rehabilitation cycle days

<b>Kabina</b> jonoforeza	<b>Kabina</b> krioterapia	UGUL ćwiczenia izometryczne
08:00-08:05 ⊙	08:00-08:05 •	08:00-08:05 •
08:05-08:10	08:05-08:10	08:05-08:10
08:10-08:15	08:10-08:15 •	08:10-08:15
08:15-08:20	08:15-08:20	08:15-08:20
08:20-08:25	08:20-08:25 ©	08:20-08:25
08:25-08:30	08:25-08:30	08:25-08:30
08:30-08:35	08:30-08:35	08:30-08:35
08:35-08:40	08:35-08:40	08:35-08:40
08:40-08:45	08:40-08:45	08:40-08:45
08:45-08:50	08:45-08:50	08:45-08:50 ⊙
08:50-08:55	08:50-08:55	08:50-08:55
08:55-09:00	08:55-09:00	08:55-09:00
09:00-09:05	09:00-09:05	09:00-09:05
09:05-09:10	09:05-09:10	09:05-09:10
09:10-09:15	09:10-09:15	09:10-09:15
09:15-09:20	09:15-09:20	09:15-09:20
09:20-09:25	09:20-09:25	09:20-09:25
09:25-09:30	09:25-09:30	09:25-09:30
09:30-09:35	09:30-09:35	09:30-09:35
09:35-09:40	09:35-09:40	09:35-09:40
09:40-09:45	09:40-09:45	09:40-09:45
09:45-09:50	09:45-09:50	09:45-09:50
09:50-09:55	09:50-09:55	09:50-09:55
09:55-10:00	09:55-10:00	09:55-10:00

After selecting in the schedule terms for all rehabilitation services in all days of the cycle of rehabilitation services, click "Choice of terms finished" button below the schedule. There will be displayed a summary of selected terms. Within automatic mode, step for choosing terms from schedule is being omitted (system chooses terms automatically) and immediately summary appears

(or information about lack of terms that fulfill the search criteria).

#### Schedule of rehabilitation surgeries



If there is need to make changes to equipment / services / criteria of searching one should use the button "Back to change ctiteria" to display form of selection of services. If some of found terms are to be changed one should use the "Back to change terms" button, which clicked displays the view of the schedule enabling making changes (if terms within the summary have been found automatically, then clicking the button "Back to change terms" switches searching mechanism into manual mode). If changes are not necessary, click the "Continue" button.

In case of automatic mode if algorithm has not found any set of terms fulfuling the search criteria, then there appears an appropriate message an buttons "Back to change criteria" (acting as described above) and "Switch to manual mode" allowing for manual choice of terms of surgeries.



In case of NFZ's services in the next step, the system will ask to enter the patient to waiting queue (in case of commercial services, this step is skipped).



User deciding on entering or not entering patient into the waiting queue clicks the proper button.

In case of commercial services in the next step, the system displays a form to choose the price list according to which service will be settled (in case of NFZ's services this step is skipped).



After selecting the price list and clicking "Next" button, the system displays pricelist for each planned service. In the price list is determined the basic gross price per visit (which in particular may be zero) and the prices of individual services. Registrar can (but not necessarily) determine what services during the visit patient is expecting (by checking the box next to the name of the

service). At the time of selection of any of the services there is automatically updating the total price for the service and the amount at field of the service becomes editable - the number of services can be modified and at such modifications there is also updating the total price for the service.



After selecting in the price lists services specific for the treatments, click the "Next" button. At this point, the signing up process is terminated and is displayed the "Show summary" button that allows a patient to print out a list of terms of arranged services.



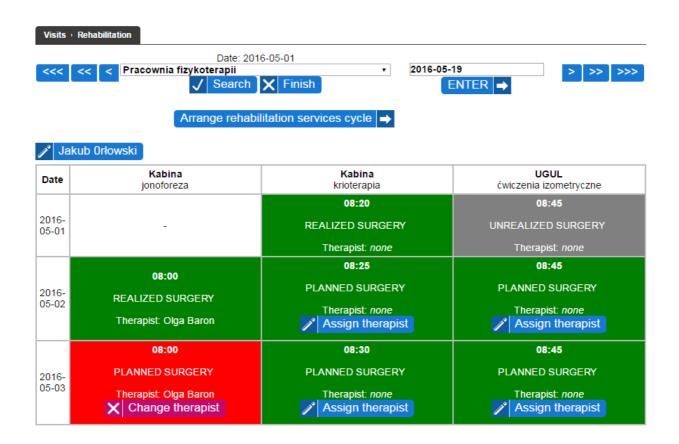
In case of commercial services there is also displayed "Payments" button which allows to accept payment from the patient for services.



"Close" button closes the window of planning rehabilitation cycle. After closing this window, there is displayed a view of the planned rehabilitation cycles.



Each cycle is presented in a table where column means services, rows means dates and the cells correspond to the arranged surgeries. In each cell there is the time of surgery, status (planned, realized, unrealized), information about the therapist realizing a surgery and in case of planned surgeries there is also the button to assign a therapist to surgery or change (including removal) therapist assigned to surgery. The cells in the table may be white (if the surgery that day was not planned or was revoked), green (if surgery was planned or carried out and all the formal requirements for its realization have been met), red (if surgery was planned or completed but not all the formal requirements for its realization have been met), gray (if the surgery has been marked as unrealized). The "Change therapist" button can be blue (if the therapist who has been assigned to the surgery is still available) or pink (if a therapist who has been assigned to surgery is no longer available due to changes in the work schedule). Above the table is visible button with the name of the patient for whom it was planned a surgeries cycle - click on this button opens a new window with the patient card. If all the surgeries in the cycle are future and they all have the planned status then over the table is also shown the "Cancel whole cycle" button which makes possible to revoke all surgeries in a cycle of rehabilitation.



Clicking "Cancel whole cycle" button opens a new window in which there appears request for entering requestor and reason of cancelling and also request for indication cause of the deletion from the waiting queue (if during planning cycle, the patient was entered into the waiting queue). The cencelling of cycle follows after pressing "Next" button.



Clicking on the "Assign therapist" button at the surgery opens a new window with a list of therapists available to realize the surgery (or information about lack of available therapists.) At each therapist is the "Select" button which clicked assigns a therapist to the surgery and closes the window for selecting a therapist.



Clicking on the "Change therapist" button at the surgery opens a new window with a list of therapists available to realize the surgery (or information about lack of available therapists). At each therapist is the "Select" button which clicked assigns a therapist to the surgery and closes the window of selecting a therapist. Under the list of therapists is displayed the "Remove therapist assigned to surgery" button which clicked removes the therapist assigned to surgery and closes the window of selection therapist.

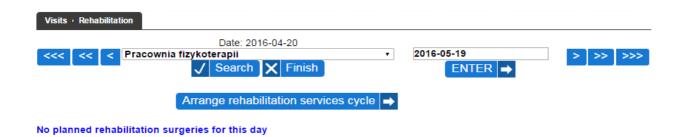


Clicking in the table representing a service cycle a cell representing the surgery (except the "Assign therapist" / "Change therapist" button) opens a new window with details of saved surgery, which content and functionality is the same as described at the end of the "Scheduled visits" chapter.



#### Simplified version of rehabilitation module

After selecting the "Rehabilitation" functionality from the "Visit" menu there is displayed a search engine of cycles of rehabilitation planned for today in clinics located in the units to which logged user has access. At first, choose the clinic and press the "Search" button. If there are scheduled cycles of rehabilitation scheduled for today, they will be displayed, if not – there will be proper notification. Additionally, there will be displayed the "Arrange rehabilitation services cycle" button, which clicked begins the process of planning the service cycle.



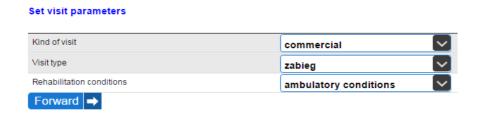
In the search form there are in addition the following navigation buttons:

- > <<< allows to view the planned service cycles on a month earlier than the current presented day
- > << allows to view the planned service cycles on a week earlier than the current presented
  day
  </p>
- < allows to view the planned service cycles on a day earlier than the current presented day</p>
- Change date" allows one to view any day, which should be indicated in the date field before pressing the "Change date" button
- "Today" alows one to view today's day
- > allows to view the planned service cycles on a day later than the current presented day

- >> allows to view the planned service cycles on a week later than the current presented day
- >>> allows to view the planned service cycles on a month later than the current presented day

Clicking on any of the above buttons changes the view of the planned service cycles for the appropriate day to which the button leads.

Clicking on the "Arrange rehabilitation services cycle" button begins the process of planning service cycle. At first, there is displayed a window with a form enable to select basic parameters of visit (series of surgeries): In case when in the configuration of application is enable manually validation of price for the surgeries, parameters to be set are: kind, type and conditions of rehabilitation.



In case when in the configuration of application is enable automatic validation of price for the surgeries, parameters to be set are: kind of visit, pricelist (in case of commercial visits), type of visit and conditions of rehabilitation.



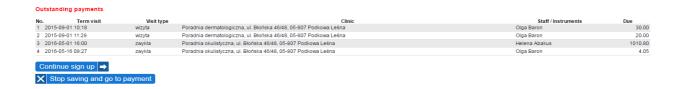
If in the configuration of application are set default values for the kind of visit and conditions of rehabilitation then they are selected by default in the form. If in the dictionary of visit types is the default type of visit then it is also selected by default in the form. If in the clinic is defined default pricelist then it is also selected by default in the form (in case of commercial surgeries).

After setting parameters and pressing "Forward" button, will see a search engine of patients, in which should be entered patient's data to be signed for service cycle and click "Search" button. If the search criteria meets only one patient, the system will display the card with the "Continue sign up" button visible at the bottom of the card, if more than one patient meet the search criteria, the list of patients that meeting the search criteria will be displayed under the search engine and at every patient in addition to the "Edit" button for transition to edit patient card there will be the "Continue sign up" button.



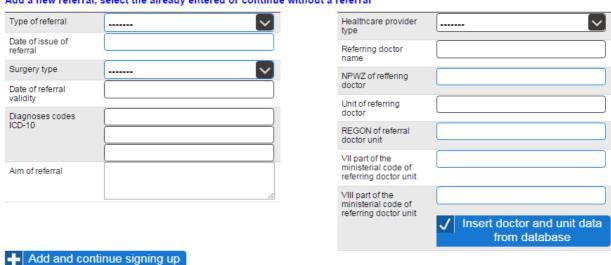
Clicking "Continue sign up" button at the patient on the list of search results or in the patient card means to continue planning service cycle for this patient.

After selecting the patient in case of commercial services, the system checks whether the patient has settled all payments (in case of NFZ's services this step is skipped). If you have outstanding payments, the system displays the relevant information, leaving the user's decision whether to continue the process of planning services or to discontinue it and go to the payment module in order to settle them.

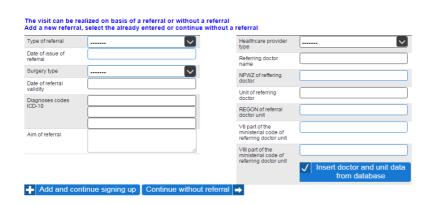


In the next step, the system asks to enter or select already entered referral on the basis of which will be carried out a service cycle. In case of NFZ's services referral is required so there should be either enter the data of referral and click the "Add and continue signing up" or select one of the already entered referrals (if there are any entered referrals, the list of them can be seen under the form of adding a referral and details of each of the these are displayed when you click on the gray bar with the basic information of referral) and click "Select and continue signing up" button at the selected referral.

# The visit can be realized on basis of a referral or without a referral Add a new referral, select the already entered or continue without a referral



In case of commercial services the step of entering / selection referral can be skipped by clicking "Continue without a referral" button.



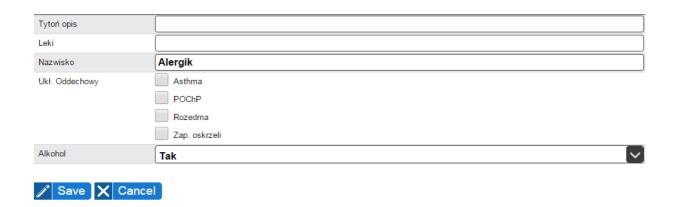
The next step in the process of planning service cycle is to fill documents. This step occurs only if the visit is arranging on basis of a referral and with referral are associated documents to fill out and they were not yet completed. In this case displays a list of documents that have to be completed.



At each unfilled document there is the "Fill" button to display a form to fill in the document, and at every filled document there is the "View" button to download the document in PDF format and print it. As long as there is at least one document to fill out so long under the list of documents is displayed the "Skip filling (to fill later) and continue" button to allow the omission the step of filling documents, but you will need to supplement these documents after the planning cycle, that the cycle could be realized.

To fill the document, click the "Fill" button at them. There will be displayed a form for completing

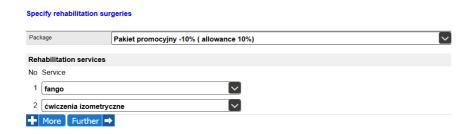
the document, which, after entering the data have to be saved by clicking "Save" button.



After saving data of the document there will be displayed again a list of documents at the referral. Once all the documents from the list will be filled, the "Skip filling (to fill later) and continue" button disappears from under the list of documents and in its place appears the "Continue signing up" button, which clicked takes you to the next step of the process.

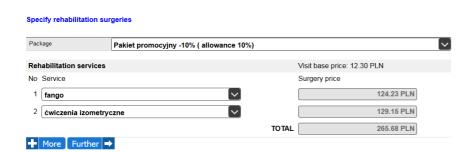


In the next step, the system asks to indicate the services to be realized within a cycle of rehabilitation and possibly discount package (in case of commercial surgeries within clinics where payment is taken before visit; indicating a discount package limits the list of possible surgeries to those included in the package). In the form of selection services is one line for introduction of a single service. To enter more services, use the "more" button that allows to display more rows to introduce a greater number of services (lines left blank are ignored). Form of selection surgeries varies depending on the setting in the configuration mode of valuation price of the procedure. In case of the manual mode in the form are displayed only surgeries.



In the case of the automatic mode for commercial visits at individual surgeries are also visible fields with prices. Choosing surgery makes that field of price for this surgery is automatically filled and automatically updates the total price for all the selected surgeries (system displays nominal prices

and in case of using the package discount is counted automatically after planning rehabilitation cycle).



After indicating the planned services and pressing the "Next" button the system displays a schedule showing the availability of therapists to realize services indicated earlier in the indicated earlier conditions of realization (availability must be previously created in graphics of therapists). The following columns of schedule correspond to particular therapists working in the clinic, rows of schedule are next times (for 5 minutes). In the schedule, periods in which therapists are available are marked in green, and those when they are not available - in white. In each marked in green cell there is visible radio box allows to booking term of service at a given time - clicking on this radio box will mark the cell with red color. Above the schedule is the date of day on which the schedule is displayed and buttons:

- << allows to view the schedule on a week earlier than the current presented day
- < allows to view the schedule on a day earlier than the current presented day
- > allows to view the schedule on a day later than the current presented day
- >> allows to view the schedule on a week later than the current presented day

After selecting terms of services, the buttons above should be using to go to the schedule for the next days and in the same way select the terms of rehabilitation services from the entire cycle.

After selecting in the schedule terms for all rehabilitation services in all days of the cycle of rehabilitation services, click "Choice of terms finished" button below the schedule. There will be displayed a summary of selected terms. If package was chosen for cycle, system in addition displays information whether the chosen package can be used for the selected set of terms or not.



If there is need to make changes to some terms you can use the "Back to change terms" button, which clicked displays again the view of the schedule enabling making changes. If changes are not necessary, click the "Continue" button.

In case of NFZ's services in the next step, the system will ask to enter the patient to waiting queue (in case of commercial services, this step is skipped).



User deciding on entering or not entering patient into the waiting queue clicks the proper button.

If in the configuration of application is set automatic mode of valuate price for the surgery, than at this point the signing process is completed. However, if in the configuration of application is set manual mode of valuate price for the surgery, than in case of commercial surgeries in the next step, the system displays a form of selection price list according to which services will be settled (in case of NFZ's services this step is skipped).

# Choose price list for surgeries cycle Price list Next

After selecting the price list and clicking "Next" button, the system displays pricelist. In the price list is determined the basic gross price per visit (which in particular may be zero) and the prices of individual services. Registrar can (but not necessarily) determine what services during the visit patient is expecting (by checking the box next to the name of the service). At the time of selection of any of the services there is automatically updating the total price for the service and the amount at field of the service becomes editable - the number of services can be modified and at such modifications there is also updating the total price for the service.



After selecting in the price lists services specific for the surgeries, click the "Next" button. At this point, the signing up process is terminated.

Proper alert is informing about terminating of process of signing up and under it is displayed the "Show summary" button that allows a patient to print out a list of terms of arranged surgeries.



In case of commercial services there is also displayed "Payments" button which allows to accept payment from the patient for surgeries.



"Close" button closes the window of planning rehabilitation cycle. After closing this window, there is displayed a view of the planned on that day rehabilitation cycles. In the following rows are visible hours of scheduled surgeries and for each hour is displayed status of surgeries in green, red or gray background (planned, realized, unrealized), patient name, a list of types of surgeries and therapist realizing surgery, "Show whole cycle summary" button and possibly "Resign a package" button. A green background means that the surgeries have been planned or implemented and all the formal requirements for their implementation have been met. Red background means that the treatments have been met (eg. The patient has no insurance, no charges filed, not filled all the required documents). The gray background indicates that the treatments have been marked as unrealized.



Clicking "Show whole cycle summary" button prints a list of terms of appointed surgeries for a patient.

Clicking "Resign a package" button (which is available only in case of visits awaiting for service that belong to rehabilitation cycle planned using package) effects with canceling all the visits within

the cycle awaiting form service and generating overpayment to be returned to patient.

Clicking a cell representing the surgery opens a new window with details of saved surgery visit, which content and functionality is the same as described at the end of the "Scheduled visits" chapter.

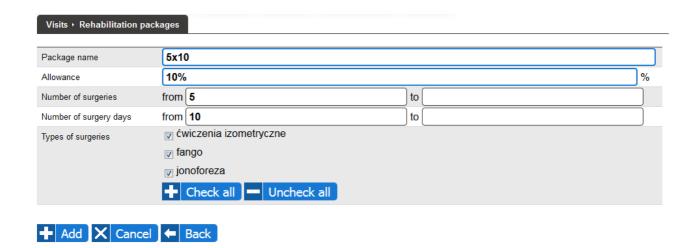


## Rehabilitation packages

The functionality of "Rehabilitation packages" from menu "Visits" is intended to define discounts vested to the patients for realization of cycles of commercial rehabilitation surgeries in case when patient decides to prepay for the whole cycle. After choosing this functionality there appears list of defined packages and by each of them there are buttons "Edit" and "Delete". Under the list of packages there is a button "Add".



To add new package one has to click the button "Add". Then there appears new form for package addition, where one has to specify package name and discount as percentage and possibly one can specify criteria for package usage, that is the number of surgeries (daily), the numer of surgery days and types of surgeries to which package applies. After entering data one has to accept them by clicking button "Add" under the form.

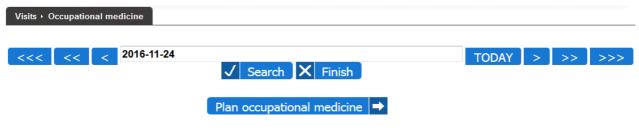


To modify package data one has to click the button "Edit" by an appropriate package within the list of packages. Then there appears the same form as for package addition except that it is filled with package data. Within the form one has to enter desired changes and save them by clicking the button "Update" under the form.

To delete package one has to click the button "Delete" by an appropriate package within the list of packages. Then there appears the same form as for package edition except that is is displayed in read only mode. Intention to delete package one has to confirm by clicking the button "Delete" under the form.

## **Occupational medicine**

The functionality of "Occupational medicine" from menu "Visits" is used to plan and service occupational medicine examinations. By choosing this functionality there appears search form of planned occupational medicine examinations (at least one of which is planned for the current day within one of the clinics located in units to which logged user has access) and occupational medicine examinations waiting to be planned. First one has to choose date and click button "Search". If there exist planned occupational medicine examinations at least one of which is planned for the current day, they will be displayed, if not – there will be displayed appropriate message. Moreover there will be displayed the button od "Plan occupational medicine", which starts the process of planning occupational medicine when clicked.



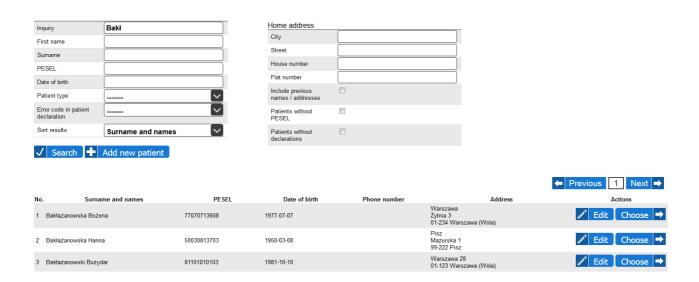
No occupational medicine plans for this day nor without specified day

In the search form there are in addition the following navigation buttons:

- > <<< allows to view the planned occupational medicine examinations on a month earlier than the current presented day
- > << allows to view the planned occupational medicine examinations on a week earlier than
  the current presented day
  </p>
- < allows to view the planned occupational medicine examinations on a day earlier than the
   current presented day
  </p>
- > allows to view the planned occupational medicine examinations on a day later than the current presented day
- >> allows to view the planned occupational medicine examinations on a week later than the current presented day
- >>> allows to view the planned occupational medicine examinations on a month later than the current presented day

Clicking on any of the above buttons changes the view of the planned occupational medicine examinations for the appropriate day to which the button leads.

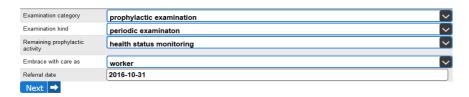
Clicking on the "Plan occupational medicine" button begins the process of planning occupational medicine examinations. At first, there is displayed a window with patients search form, within which one has to enter data of patient to be registered for occupational medicine examinations and then to click "Seach". If only one patient matches search criteria then system displays his card with the button "Choose" visible at the bottom of the card, if there are more patients matching the search criteria then under search form system displays list of patients matching the search criteria where next to "Edit" button (allowing to edit patient card) there is also "Choose" button.



After clicking the button of "Choose" by appropriate patient, there appears form allowing to choose institution and work post / study course for the needs of which are to be planned occupational medicine examinations. Choice of post / course is possible after choosing institution. In the case of institutions marked as created artificially, additional fields appear allowing to enter the name and address of the institution.



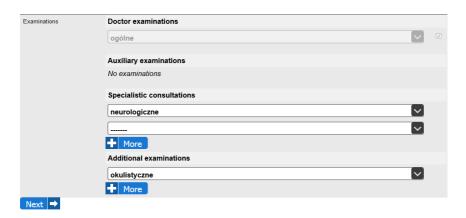
After choosing institution and post /course and clicking button "Next" there appears form of basic parameters of occupational medicine, where one has to point category and kind of examination to be performed and specify remaining prophylactic activity and care embracement range. If occupational medicine is realized on the basis of referrall then onr has to specify also referral date.



After specifying occupational medicine parameters and clicking button "Next" there appears form for choosing examinations to be performed. Examinations are divided into four groups:

 doctor examinations – doctor examinations appropriate to noxious and strenuous agents being present on a given work post / study course; all examinations are marked, they cannot be changed and all must be performed

- auxiliary examinations auxiliary examinations appropriate to noxious and strenuous agents being present on a given work post / study course; all examinations are marked, they cannot be changed, not all must be performed (checkbox fields allow to mark off examinations to be omitted)
- specialistic consultations specialistic consultations to be performed within occupational medicine; by default there is displayed one field allowing to specify one specialistic consultations, if there is need to specify more specialistic consultations then one has to click button "More" to display more fields allowing to enter more specialistic consultations, fields left unfilled will be ignored by the system
- additional examinations additional examinations to be performed within occupational medicine; by default there is displayed one field allowing to specify one additional examination, if there is need to specify more additional examinations then one has to click button "More" to display more fields allowing to enter more additional examinations, fields left unfilled will be ignored by the system



After entering examinations and clicking button "Next" system informs with appropriate message about creation of occupational medicine examinations set. Also the button of "Plan visits" is displayed, which clicked allows to plan visits during which particular examinations will be performed. At this stage one can also break process of planning visits and can close window to accede later to plan visits for previously chosen examinations.

## Set of examinations has been arranged X Arrange visits X Close

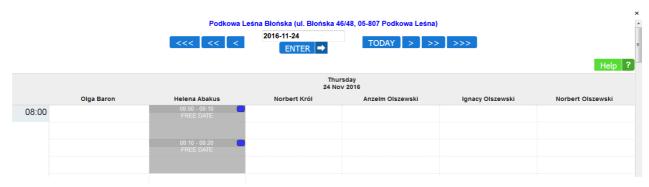
By clicking button "Plan visits" there appears form for choosing examinations which will be performed within the visit being planned (others, not chosen examinations, will be performed within other visits).



After choosing examination / examinations and clicking "Next" system asks for choosing clinic where visit is to be planned and planning mode (whether it is to be visit planned according to timetable or is is to be extra visit).



After choosing clinic and visit planning move and clicking "Next" appears view appropriate for selected visit planning mode. If planned visit has been chosen then timetable mesh appears.



If extra visit has been chosen then form of extra visit data appears.



In case of planned visit by clicking free term in timetable mesh, process of planning visit starts exactly as described in "Scheduled visits" except that the step of choosing patient is omitted because patient has been chosen before start of occupational medicine examinations planning and within the price list the services corresponding to occupational medicine examinations planned to be performed as part of the visit are automatically selected. In case of extra visit after entering visit parameters and clicking "Next", process of planning visit starts exactly as described in "Extra visits" except that the step of choosing patient is omitted. After finishing the process of planning visit one has to close the window of occupational medicine planning. Planned examinations will be displayed then under the search form of occupational medicine examinations.





Patient: Bożena Bakłażanowska

Institution: **TORN Sp. z o.o.** Post: **Programista** 

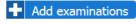
Examination category: prophylactic examination

Examination kind: periodic examinaton

Remaining prophylactic activity: health status monitoring

Embrace with care as: worker

Visit	Examinations
Visit term: 2016-11-24 14:30 Visit kind: NFZs Visit type: Standardowa additional MAIN Visit state: visit appointed Clinic / Ward: Poradnia POZ (ul. Błońska 46/48, 05-807 Podkowa Leśna) Staff / Equipment: Helena Abakus Preview visit	Doctor examinations • ogólne
Visit term: 2016-12-27 14:34  Visit kind: NFZs  Visit type: Wizyta najzwyklejsza additional  Visit state: visit appointed  Clinic / Ward: Poradnia kardiologiczna (ul Błońska 46/48, 05-807 Podkowa Leśna)  Staff / Equipment: Olga Baron  Preview visit   Set as main   Set as main	Specialistic consultations  • neurologiczne
Visit not appointed yet  Plan visit	Additional examinations  • kardiologiczne  Remove examination



Patient: / Hanna Bakłażanowska

Institution: TORN Sp. z o.o.

Post: Monter

Examination category: prophylactic examination

Examination kind: periodic examinaton

Remaining prophylactic activity: health status monitoring

Embrace with care as: worker

Visit	Examinations
Visit not appointed yet  Plan visit   →	Doctor examinations  • ogólne Specialistic consultations  • okulistyczne  Remove examination





The view of planned occupational medicine examinations consists of two-column tables for particular patients. Above each table there are informations about patient (if logged user has privileges to access patient card then name and surname of patient is displayed within the button which clicked opens patient card in new window). Within left column of each table there are planned visits with button "Preview visit" next to each of them. This button allows to view visit details. Moreoves if realization of occupational medicine visits has not started yet, then nex to visits other than main visit there is visible button "Set as main", which allows to change main occupational medicine visit for that one, next to which button "Set as main" has been clicked. (Main occupational medicine visit is the one, within which data from other occupational medicine visits are collected and doctor statement is issued.) Within right column there are examinations to be performed during particular visits. If there exist examinations for which visits have not been planned yet then within the left column there appears information "Visit not appointed yet" and button "Plan visit" allowing to plan subsequent occupational medicine visit and within the right column there appears all these examinations for which visit has not been planned yet. By particular auxiliary examinations, specialistic consultations and additional examinations for which visit has not been planned yet there are visible buttons of "Remove examination" allowing to delete examination in situation of resignation of realization of such an examination to the patient for occupational medicine purposes. Below each table containing list od visits and examinations there is a button of "Add examinations" allowing for addition of subsequent occupational medicine examinations if it turned out thar other examinations are to be performed. If none occupational medicine visit has been planned form the given patient then below the table containing list of examinations where id a button of "Cancel occupational medicine", which allows with one click to cancel all planned occupational medicine examinations.

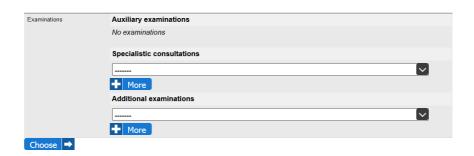
The button of "Preview visit" visible by each plannec occupational medicine visit opens in new window details of visit presented the same way as described in chapter "Scheduled visits".



The button "Plan visit" opens new window and initializes process of arranging occupational medicine visit starting with choice of examinations to be realized within the visit as described above within this chapter (only examinations for which visit has not been planned yet are available to choose).



Button "Add examinations" opens in new window a form for choosing examinations that can be realized within occupational medicine visit. Way of using this form has been described previously within this chapter.



After choosing examinations and clicking "Choose" an appropriate message appears that informs of examinations addition.

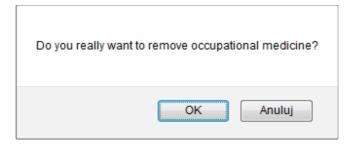


After closing examination choosing window, chosen examinations appears in the view of planned occupational medicine examinations.

Button "Remove examination" displays request for confirmation whether to remove examination and after confirmation system removed examination from planned occupational medicine examinations (removed examination disappears from the view of planned occupational medicine examinations).



"Cancel occupational medicine" button displays request for confirmation whether to cancel occupational medicine.



After confirmation in the new window there appears information about execution of required operation.

Operation completed successfully

Close

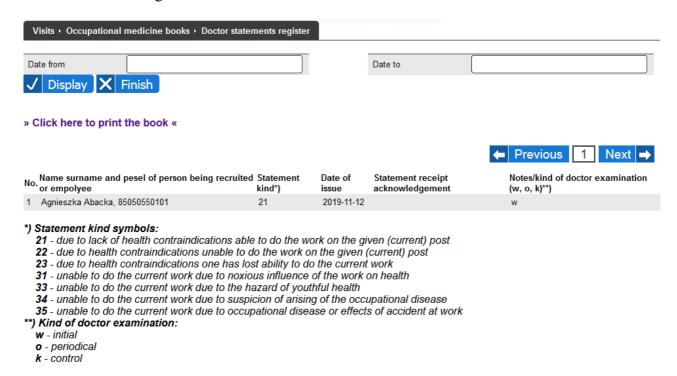
After closing the window canceled occupational medicine disappears from the view of planned occupational medicine examinations.

## Occupational medicine books

Functionalities from submenu "Occupational medicine books" within menu "Visits" are used to browse, to fill and to print books, which leading is required according to legal regulations of occupational medicine.

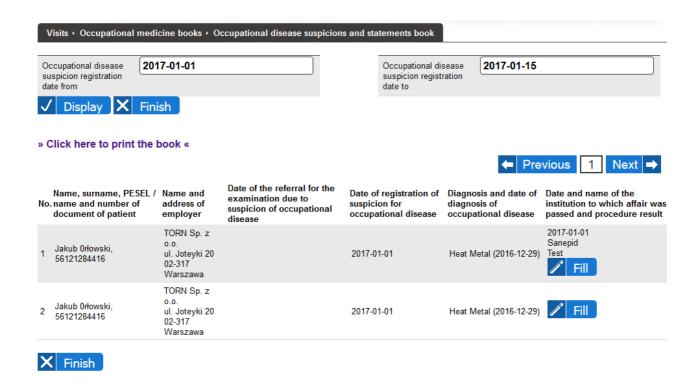
#### **Doctor statements register**

"Doctor statements register" is a functionality allowing to print register of issued doctor statements. Register is created automatically – entries within the register are created when doctor issues statement. After choosing this functionality there appears form allowing to narrow register to the given period within which statements were issued. If dates within the form were not entered, then system would display the whole register. After clicking button "Display" there appears link allowing to download and print doctor statements register (it is in PDF format). Below is a table with data from the register.

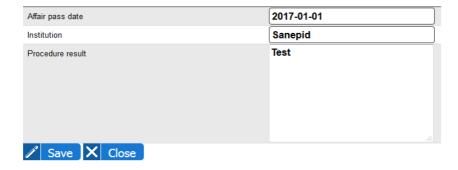


#### Occupational disease suspicions and statements book

"Occupational disease suspicions and statements book" is a functionality allowing to print and fill the book of occupational disease suspicions and statements. This book is created automatically – entries within the book are created when doctor enters information about suspicion or diagnosis of occupational disease while issuing statement. After choosing this functionality there appears form allowing to narrow the book to the given period of registration of occupational disease. If dates within the form are not entered, then system displays the whole book. After clicking "Choose" there appears link allowing to download and print book of occupational disease suspicions and statements (it is in PDF format) and table of entries within the book.



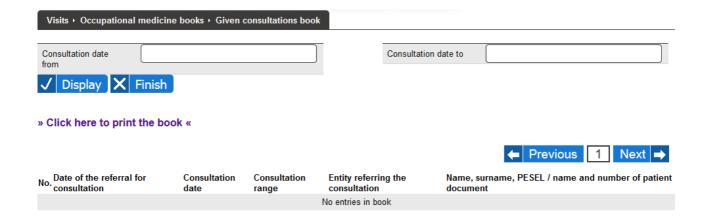
By each entry in last column there is button "Fill" allowing to enter/modify informations about date and institution, to which case were passed to and about result of case. After clicking this button in new window there opens form allowing to enter the mentioned data.



After entering data one has to save them by clicking button "Save" and then to close the window by clicking button "Close".

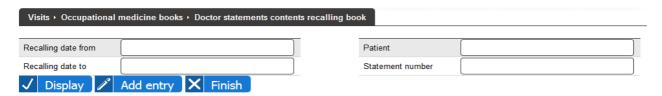
#### Given consultations book

"Given consultations book" is a functionality allowing to print book of consultations given within occupational medicine visits. The book is created automatically – entries within the book are made when doctor fills information about the range of given consultation. After choosing this functionality there appears form allowing to narrow the book to specified period when there were realized visits during which consultations were given. If dates within the form are not entered, then system displays the whole book. After clicking the button "Display" there appears link allowing to download and print book of given consultations (it is in PDF format). A table with data from the book is displayed below.

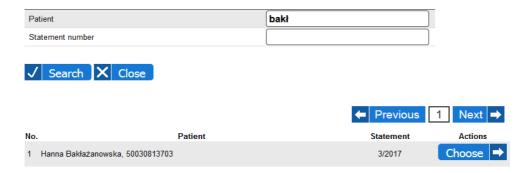


#### **Doctor statements contents recalling book**

"Doctor statements contents recalling book" is a functionality allowing to create, to fill and to print book of doctor statements contents recalling. After choosing this functionality there appears form allowing to display the book narrowed to the specified period of recalling, specified patient and specified number of statement to which recalling was made (button "Display") and allowing to add new entry to the book (button "Add entry"). While narrowing the book to specific patient, one can enter name and/or surname and/or PESEL number and/or birth date of patient within "Patient" field". While narrowing the book to specific statement, one can enter serial number or serial number stroke year.

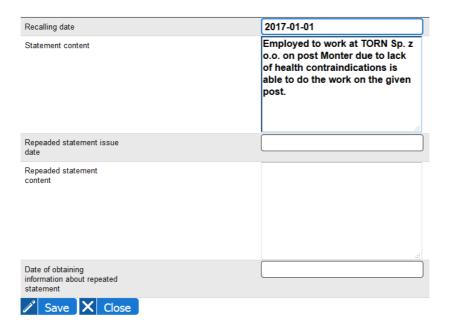


To add entry to the book of doctor statements contents recalling one has to click button "Add entry". Then within new window there appears statements search form. Searching is possible by patient and/or statement number. Here apply the same rules of searching as for searchin of entries within the book (described above). After entering search criteria, list of patients and their statements matching these criteria is displayed. By each statement there is button "Choose" allowing to enter informations about recalling to the given statement.

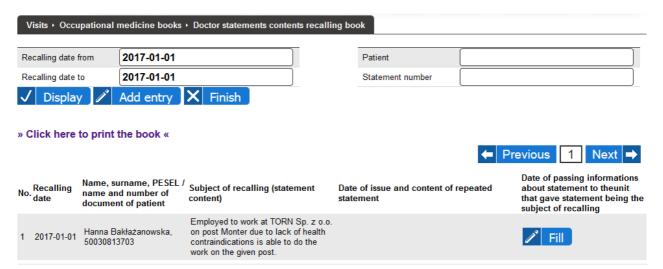


After clicking button "Choose" by an appropriate statement system displays form to enter informations about recalling. Field of recalling date within the form is by default filled with the current date and field of statement content – with informations from statement contents to which recalling is being made. When adding entry this two informations are sufficient – they can possibly

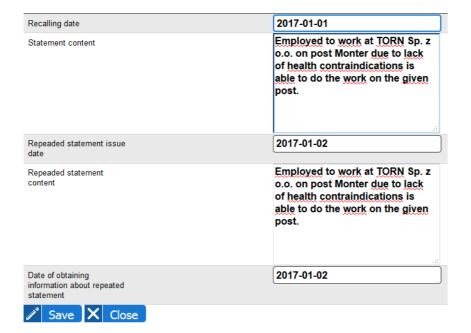
be modified and after that saved by clicking button "Save", and next case should be passed to recalling institution (beyond jHIS system). With data saving, window for adding new entry to the book is being closed.



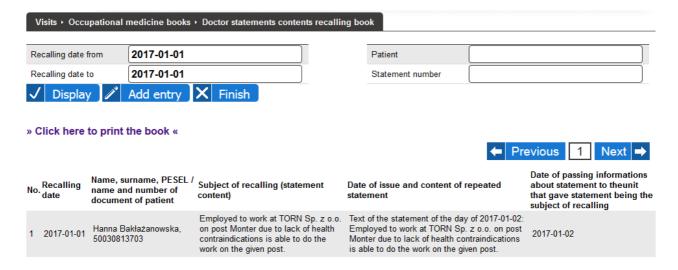
To display nad print contents of the book of doctor statements recalling, one has to enter narrowing criteria to the form and then click the button "Display". Then there appears link allowing to print the book (it is in PDF format) and table with list of entries within the book. Until no informations about recalling result are entered, by each entry within the table there is a button "Fill" allowing to enter these informations.



Clicking the button "Fill" by an appropriate entry within the book opens within new window the same form, which was used to add new entry but filled with previously entered data. Data should be complemented with informations gained from recalling institution and after that save them by clicking the button "Save". With saving data, window for filling entry in the book is being closed.



After closing the window for filling entry in the book, the view of table with list of entries is refreshed, as an effect within the table newly enterd informations appear.



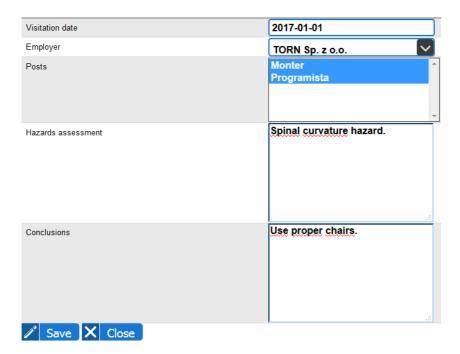
#### Posts visitations book

"Posts visitations book" is a functionality allowing to create and to print book of posts visitations. After choosing this functionality there appears form allowing to display the book narrowed to specified period of visitations (button "Display") and allowing to add new entry to the book (button "Add entry").



To add entry to the book of posts visitations one has to click the button of "Add entry". Then within new window there appears form to enter informations about posts visitations. After entering data

one has to save them by clicking button "Save". With saving data window for addition new entry to the book is being closed.



To print contents of the book of posts visitations one has to enter narrowing criteria within the form and then click the button "Display". Then link allowing to print the book is displayed (the book is in PDF format). A table with data from the book is displayed below.



## **Today visits**

The "Today visits" functionality from the "Visits" menu is used to print lists of visits scheduled for the current day to a specific doctor as well as to mark the fact of telephone confirmation of a patient's visit (if such practice is used in a healthcare facility). If the logged in user has access rights to all scheduled visits, then after selecting this functionality, the doctor selection form is displayed. After selecting a doctor and clicking the "Display" button, a link to download (as a PDF file) and print the list of visits scheduled for the current day to a specific doctor is displayed, below there is a table with a list of visits and confirmation status. If the visit has not been confirmed, the "Confirm" button is displayed next to it.





If the visit is confirmed (e.g. by phone) then this fact should be noted by clicking "Confirm". The visit will then be marked as confirmed.



X Finish

If the logged in user has access rights only to his own scheduled visits, then the doctor selection filter is not visible and immediately a link to the file with the list of visits of the logged in user and the table with the list of visits of the logged in user is displayed.

## **Reports**

The "Reports" functionality in the "Visits" menu is used to generate statistical reports for visits. After selecting this functionality, the search engine displays. Searching for visits is possible according to any combination of the following criteria:

- unit
- clinic list of clinics is displayed after choosing an unit
- surgery if clinic is not selected then list of all surgery room is displayed, if clinic is selected then list of surgery rooms within this clinic is displayed
- realizing staff within this field one can enter beginning or whole name, beginning or whole surname, PESEL and/or RTPN od staff realizing visit; capitalization does not matter
- equipment if clinic is not selected then list of all equipment is displayed, if clinic is

selected then list of equipment within this clinic is displayed

- patient when entering data, a list of suggestions appears and the appropriate patient can be selected from the list of suggestions
- appointing date
- visit date
- commercial service a commercial service provided as part of a visit
- planning mode
- realization mode
- visit kind
- visit type list of visit types is displayed after selecting clinic
- sudden visit
- visit status

After indicating the criteria and the format of the results and clicking the "Search" button, the system searches for visits that meet certain criteria. Group sessions are not displayed as single visits of many patients but for each patient participating the session separately. If a table on the page is indicated as the result format, then a list of visits matching the search criteria is displayed under the search engine (data for each visit are presented in two rows - the first row with the gray background presents the basic data of the visit, the second row with the white background presents the details of the visit costs; the status of visits is highlighted in color: white - appointed, green - realized, red - unrealized, yellow - canceled). If an XLS or PDF file is indicated as the results format, then link is displayed under the search engine to download a file with a list of visits that meet the search criteria. If the table on the page and the XLS or PDF file have been indicated as the results format, a link appears below the search engine enabling downloading a file with a list of visits that meet the search criteria and a table with a list of such visits.

## 

Commercial service		
Planning mode		
Realization mode		
Visit kind		
Visit type		
Sudden visit		
Visit status		
Results format	table on website	<u>\</u>



						<b>(-</b>	Previous	1 N	ext →
No	. Unit	Clinic / Ward	Surgery	Realizing staff Equipment	t Patient	Appointing date	Visit date	Visit attributes	Visit state
	Charge	Commercial se	ervices						
1	Przychodnia Owczarnia ul. Kazimierzowska 33D, 05-807 Owczarnia	Poradnia POZ	Gabinet 2	Diana Zubczyć RTPN: 9615049	Agnieszka Abacka PESEL: 85050550101	2019-12-31	2019-12-31	planned surgery commercial standardowa	appointed
	100.00 PLN	Name	Quantity	Unit price					
		Wizyta płatna	1	100.00 PLN					
2	Szpital ul. Dubois 5a, 00-184 Warszawa	Ogólna izba przyjęć	Gabinet nr 1	Adam94 Leczniczy RTPN: 7391197	Anna Kasina PESEL: 12300509785	2019-12-31	2019-12-31	extra surgery NHFs normalna	appointed
	0.00 PLN	none							
3	Przychodnia Owczarnia ul. Kazimierzowska 33D, 05-807 Owczarnia	Poradnia POZ	Gabinet 1	Olga Baron RTPN: 6763309	Agnieszka Abacka PESEL: 85050550101	2019-12-31	2019-12-31	extra surgery commercial standardowa	canceled
	0.00 PLN	none							
4	Przychodnia Owczarnia ul. Kazimierzowska 33D, 05-807 Owczarnia	Poradnia POZ	Gabinet 1	Olga Baron RTPN: 6763309	Agnieszka Abacka PESEL: 85050550101	2020-01-02	2020-01-01	extra surgery NHFs standardowa	appointed
	0.00 PLN	none							
5	Przychodnia Owczarnia ul. Kazimierzowska 33D, 05-807 Owczarnia	Poradnia POZ	Gabinet 1	Olga Baron RTPN: 6763309	Agnieszka Abacka PESEL: 85050550101	2020-01-02	2020-01-02	extra surgery NHFs standardowa	realized
	0.00 PLN	none							
6	Szpital ul. Dubois 5a, 00-184 Warszawa	Ogólna izba przyjęć	Gabinet nr 1	Adam94 Leczniczy RTPN: 7391197	Anna Kasina PESEL: 12300509785	2020-01-02	2020-01-02	extra surgery NHFs normalna	realized
	0.00 PLN	none							
7	Szpital ul. Dubois 5a, 00-184 Warszawa	Ogólna izba przyjęć	Gabinet nr 1	Adam94 Leczniczy RTPN: 7391197	Anna Kasina PESEL: 12300509785	2020-01-02	2020-01-02	extra surgery NHFs normalna	appointed
	0.00 PLN	none							

X Finish

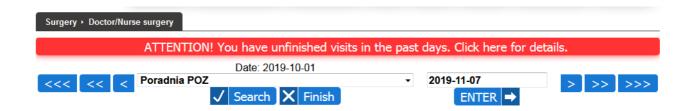
## Surgery

The "Surgery" module is intended for medical staff and is used to support medical surgeries and collection facilities

## **Doctor / Nurse surgery**

The "Doctor /Nurse surgery" functionality in the "Surgery" menu is used to support overall medical surgeries in the registration of medical history of the patient and comprehensive patient's care (including drugs prescription, prescriptions and referrals, ordering diagnostic tests, preparation of recommendations for the patient). After selecting the "Doctor / Nurse surgery" functionality there is displayed a search engine of prearranged visits to the logged doctor today in clinics where the logged doctor works. Depending on the system configuration, above a search engine can be displayed, in addition, information about the endless pools of prescriptions numbers - such information is a signal for the doctor that it is needed to downloaded from the NFZ and import them to the jHIS system new pools of prescriptions numbers (system estimates when runs out the pool of prescriptions numbers based on their previous average consumption).

In addition, a warning may appear above the browser about unfinished visits in the past days.



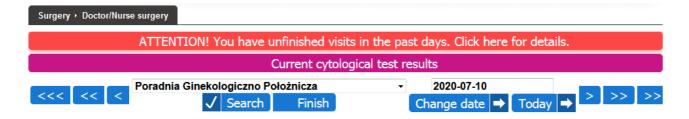
After clicking on this warning, a new window opens with detailed information on which days in which clinics which visits were not closed. By clicking on the name of the clinic, the system changes the view of appointments to visits on a given day in a given clinic, where closed visits should be closed (marked as completed or unrealized).

#### Unclosed visits require state change

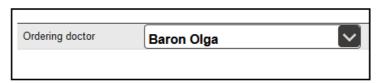
- 2019-10-01
  - o Poradnia okulistyczna, ul. Kazimierzowska 33D, 05-807 Owczarnia
    - extra visit at 11:00
  - Poradnia Stomatologiczna, ul. Kazimierzowska 33D, 05-807 Owczarnia
    - extra visit at 12:00
- 2019-10-11
  - o Poradnia POZ, ul. Kazimierzowska 33D, 05-807 Owczarnia
    - extra visit at 12:44
- 2019-10-17
  - Poradnia POZ, ul. Kazimierzowska 33D, 05-807 Owczarnia
    - extra visit at 17:00
    - extra visit at 17:30
- 2019-10-26
  - Poradnia POZ, ul. Kazimierzowska 33D, 05-807 Owczarnia
    - extra visit at 13:00
- 2019-10-29
  - o Poradnia POZ, ul. Kazimierzowska 33D, 05-807 Owczarnia
    - extra visit at 10:50
- 2019-10-31
  - o Poradnia POZ, ul. Kazimierzowska 33D, 05-807 Owczarnia
    - extra visit at 12:00



In the gynecology and obstetrics clinics above the search engine, an additional bar appears "Results of current cytological tests", providing the doctor with access to the cytological tests not yet evaluated and assessing them.



After clicking on this bar, a new window opens with the filter for selecting the ordering physician (the logged-in physician is selected by default) and a list of unrated results (entered by registration in the 'History' tab in the patient's card). The test results are available in the form of links to files with their descriptions. Each test has two buttons "Normal result" and "Incorrect result". After assessing the test result, the doctor marks the result as normal or abnormal by clicking the appropriate button. In both cases, the test disappears from the list, but if the result was assessed as incorrect, it will appear in the "Cytologies" tab in the window of the patient's visit in doctor surgery room.





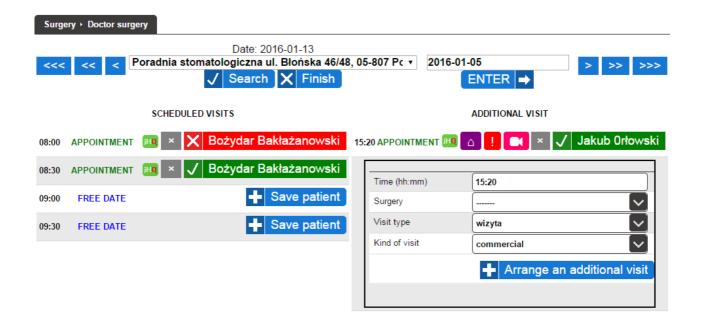


To begin using the functionality of the doctor's office it is at first needed to choose a clinic and click "Search" button (if the doctor only works in one clinic then this activity is done automatically). Under the search engine is displayed in two columns a view of prearranged visits to the logged doctor and free terms of logged doctor today in the indicated clinic. The search engine includes in addition the following navigation buttons:

- > <<< allows to view visits arranged to logged doctor and free terms at logged doctors in the
  indicated clinic on a month earlier than the current presented day
  </p>
- <- allows to view visits arranged to logged doctor and free terms at logged doctors in the indicated clinic on a week earlier than the current presented day
  </p>
- < allows to view visits arranged to logged doctor and free terms at logged doctors in the indicated clinic on a day earlier than the current presented day
  </p>
- Change date" allows you to display any day that needs to be indicated in the date field before pressing the "Change date" button
- \rightarrow "Today" displays today's day
- > allows to view visits arranged to logged doctor and free terms at logged doctors in the indicated clinic on a day later than the current presented day
- >> allows to view visits arranged to logged doctor and free terms at logged doctors in the indicated clinic on a week later than the current presented day
- >>> allows to view visits arranged to logged doctor and free terms at logged doctors in the indicated clinic on a month later than the current presented day

Clicking on any of the above buttons changes the view of arranged visits to the logged doctor and free terms to logged doctor in the indicated clinic for the appropriate day for which the button leads.

View of prearranged visits to the logged doctor and free terms in logged doctor consists of two columns. The left column is a list of hours of dates at the clinic, which are marked arranged scheduled visits (ie visits scheduled for that day in the indicated clinic in hours resulting from the work timetable of doctor) and available dates due to doctor's work timetable. The right column is for additional visits, arranged on a given day in the indicated clinic and the form of arranging another extra visit. At the bottom right of the screen there is the "Help" button that opens a legend of the signs used in the surgery room in a new window.



In this view, past hours are grayed out, at every hour is the information about the status of the term (a free date, arranged visit, realized visit, unrealized visit), in addition, at a status may be the reason why a doctor should not realize the visit (Visit to cancel, too little or too much signed up patients for group sessions). At every free date is displayed "Save patient" button allows the doctor to sign up a patient on a specific date. The signing up process is described in the "Scheduled visits" section. At each of visit there is visible, one or more buttons (more than one in case of group sessions) with the names of the patients signed up for a particular visit (if for a day visit the patient has status of uninsured child, then at the patient's name appears on the "(DN)" endorsement). These buttons can take the following colors:

- y green means that the patient signed up for a visit fulfilled all formalities and may be adopted; when you click this button it opens a window of visit
- red means that the patient signed up for a visit did not fulfill the related formalities and cannot be accepted; when you click this button, a window appears with information which formalities have not been completed (eg. the lack of referral, blank documents, lack of authorizations, lack of insurance, lack of fee)
- gray means that the patient did not show up for a visit and the visit has been marked as unrealized; button is inactive (clicking on it does not cause any action) is displayed for information only

In the case of prearranged visits (these are not marked nor as realized nor as unrealized) before the button of the patient's name there is also visible gray button with an "×" mark, which allows to cancel the visit (future visit) or to mark the visit as an unrealized (past visits). If the patient was entered into the waiting queue at signing up on the visit, then after clicking the gray button with an "×" mark, the patient have to be deleted from the queue, so that the system will request for specifying the reason for the deletion of the patient from the queue. The button with the "x" mark is only available for the main staff realizing the visit / surgery.

If the response from the eWUŚ system for the patient's insurance status today includes information that the patient is currently being quarantined, then a black triangle icon with an exclamation mark on a yellow background appears next to the patient's name.

If there exist cautions for the patient entered within registration and marked as significant for

doctor, then next to the name of the patient registered for a visit there is red button with "!" mark. Clicking this button shows message with caution content.

By each of home visits there is house icon on violet background.

At each visit for which video-consultation mode is possible there is a pink button with a camera icon. Depending on the system configuration, a chat window will open with the option of switching to video communication mode or video communicator window. If the system has been configured in such a way that the chat window opens, then at the bottom of the window there is a field for entering the text messages to be exchanged (the message is sent after clicking the Enter button on the keyboard) and a field for sending files (the file is sent after selecting the file from the disk; the progress bar indicates the file transfer progress). Next to the field for entering exchanged text messages there is a "VIDEO" button enabling switching the messenger into the video communication mode

10:32:28: Dzień dobry

10:32:49: Czy endoskop z pracowni przy ul. Lazurowej został już naprawiony?

10:33:37: Tak, naprawa została zakończona.

10:33:49: Kiedy bedzie można odebrać urzadzenie?

10:34:01: W godzinach 14:00-16:00

10:34:03: Dziękuję



If the system has been configured in such a way that the chat window opens and the "VIDEO" button is clicked in it, or if the system has been configured in such a way that the video communicator window opens, then the video communicator window will open. Its left upper part displays patient's name and surname and image from the patient's camera (if the indicator next to the patient's name is red, it means that the patient has not turned on the video communicator yet, if it is green, it means that the patient has established a connection), the upper right displays the name, surname and image from the own camera of doctor (as will be seen by the patient), in the bottom there is a chat and a field to enter exchanged text messages (sending a message follows after clicking Enter on the keyboard) and a field for transferring files (the file is sent after the file is selected from the disk; the progress bar indicates the progress of the file transfer). The connection between the doctor and the patient is established automatically after turning on the videocommunicators by both sides. To start video communication, you need a Firefox 61+, Chrome 67+, Opera 67+ or Safari 12+ browser.



If the logged medical staff to whom visits have been arranged has the privilege to use the jHQ queuing system and in the jHIS system configuration the visibility of icons for recalling patients is enabled, then by each visit that is waiting for completion and for which all formalities have been completed there displays icon with the jHQ system logo. If the patient confirmed the arrival for the visit (or in the case of a group session if all patients registered for a group session confirmed the arrival for the visit), this icon flashes which is an indication for the doctor which patients may be invited to the surgery room. After clicking it, a new window opens and in it there is first and last name of the patient (or first and last names of patients - in the case of group sessions) and the button "Invite to surgery room" for calling the patient / patients appointed for the visit to the surgery room. The order of calling is decided by the doctor by clicking the button next to the proper visit (he can call the patients in succession according to the admission hours, but he can also recall the patient who is late for the visit whose time has passed).

#### DIONIZJA ABAKANOWSKA

### Invite to surgery room

After clicking this button, on the display in front of the surgery room the icon / icons of admission status for an appropriate patient / patients are changed into "please enter the surgery room" and in the patient / patients calling window the question "Did the patient / patients come to the surgery room?" and two buttons "Yes" and "No" appear. At this point, the doctor should wait for a while and if the patient / patients called appear in the surgery room, click "Yes" button and if he / they do not appear, click "No" button. After clicking "Yes" or "No" button, on the display in front of the surgery

room the icon / icons of the admission status change on the "in the surgery room" or "expects" respectively, while the patient / patients calling window is automatically closed.

#### DIONIZJA ABAKANOWSKA

Did patient / patients come to the surgery room?

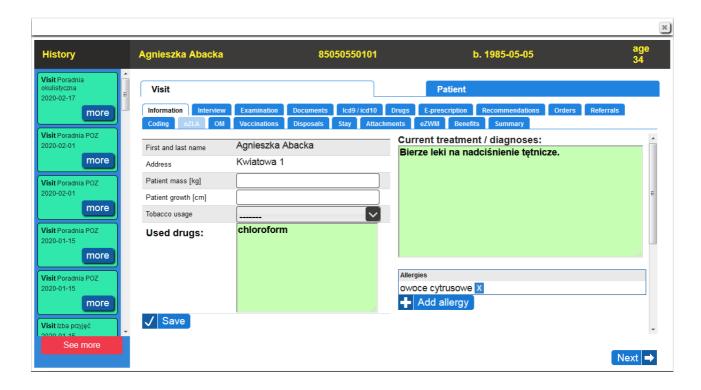


If to a doctor come a patient not signed up for a visit and there are no longer available dates this day, then doctor may sign up the patient to extra visit using the form in the right column of a view. In the form are specified:

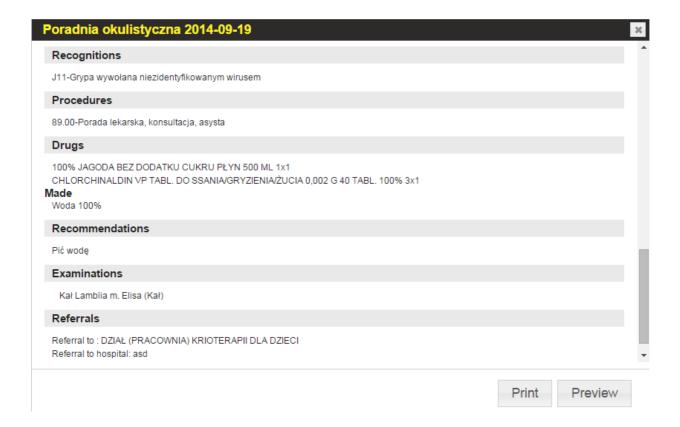
- > time by default filled with current hour
- surgery if in selected clinic is only one surgery then it is selected by default
- visit type if in selected clinic is only one visit type then it is selected by default
- kind of visit default kind of visit for selected clinic selected by default

Pressing the "Arrange an additional visit" (or "Arrange an additional visit (use default price list)" when arranging commercial visits in a clinic where a default price list has been defined) button begins a process of arranging additional visit, which looks identical to the process of arranging scheduled visit described in the "Extra visits" chapter.

At the time when the patient comes to the surgery for visit, the doctor checks whether the patient can be accepted. If the patient cannot be accepted (that is, when the button at the name of the patient is red), then the doctor sends him to registration in order to complete the missing data. If the patient can be accepted (ie when the button with the name of the patient is green), then the doctor clicks the button with the name of the patient thereby opening the window of the visit.



On the left side of the window there is visible column with a history of patient's visits and realized examinations and orders. At each visit, examination and order there is a "More" button allows to view details of visit (information entered by the doctor in the context of this visit: history, examinations, diagnoses, procedures, medications, etc.), examination (test results received from the laboratory) or order (order realization result description) with the option of preview of print and print these information (in case of visits and examinations).



If the visit at which the "More" button was clicked was carried out by a logged-in physician in the same clinic as the current visit (currently carried out) and the "Possibility of copying data from visit history to the current visit" option in the surgery configuration was enabled, then during interviews, icons for copying this data to the current visit are displayed on tests, diagnoses, procedures, drugs and recommendations. Clicking such an icon allows you to copy the data at which this icon is located for the current visit.



In the column with the history of visits, examinations and orders there are presented visits, examinations and orders from last year (365 or 366 days back from the current date) and underneath

is available the "See more" button opens a window with all patient's visits, examinations and orders with filter uses to reduce history to only a visits, only the examinations of the orders only.

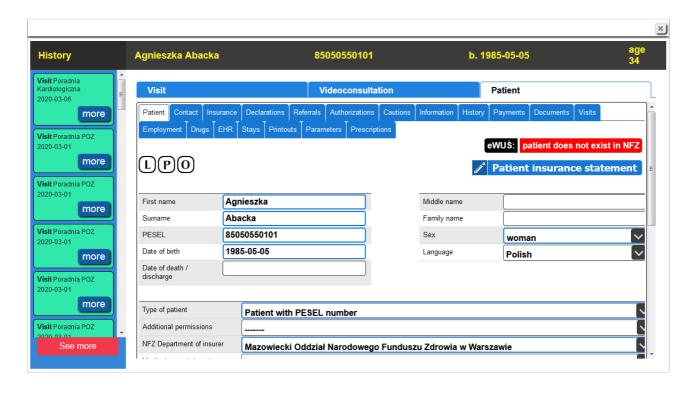


In the upper part of the window of visit there are presented basic data of patient: first name, surname, PESEL, date of birth and age (if for a day visit the patient has a status of uninsured child, then at the patient's name appears on the "(DN)" endorsement; if the response from the eWUŚ system for the patient's insurance status today includes information that the patient is currently under quarantine, then the patient's name has a flashing triangle icon with an exclamation mark on a yellow background).

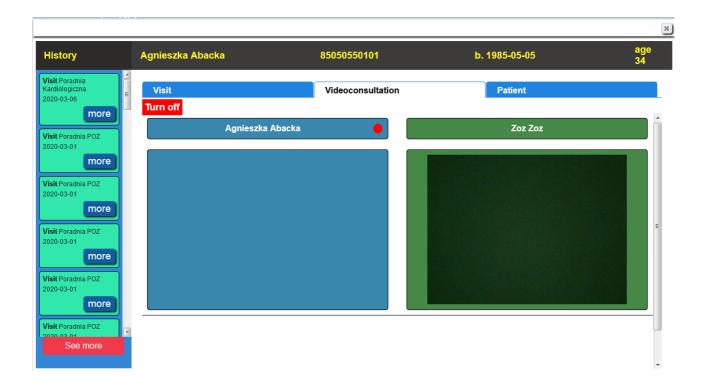
The main part of the window of visit are two tabs:

- Visit visit card allows doctor to register information about the patient's medical history during the visit
- Video consultation enables the doctor to contact the patient in the video consultation mode (if the type of the visit allows it)
- Patient allows the doctor to access the patient card

After selecting the "Patient" tab, the patient card is displayed. The doctor has the ability to manage patient data as described in the section "Patients (active cards)".



After selecting the "Videoconsultation" tab, if the visit is not carried out in the video consultation mode, an appropriate message is displayed, and if the visit is carried out in the video consultation mode, a green "TURN ON" button is displayed, which enables chat / video communicator in this tab. When the chat / video communicator is on, the red "TURN OFF" button is displayed to turn it off. Using the chat / video communicator in this tab is identical to that described earlier in this chapter.



The default tab is open "visit". This tab is itself also divided into sub-tabs:

- \rightarrow Information personal and address data of the patient, allergies, addiction, warnings
- \rightarrow Interview information from an interview conducted during the current visit
- Examination the results of tests conducted during the visit
- Documents documentation of the patient led to the patient's on subsequent visits (eg. the card of pregnancy)
- > ICD9 / ICD10 diagnosed diagnosis and procedures done during the visit
- > Drugs medicaments prescribed during the visit, paper prescriptions
- E-prescription medicaments prescribed during the visit, electronic prescriptions
- Recommendations Recommendations for the patient after a visit
- > Orders orders of diagnostic and microbiological tests
- Referrals referrals to specialists, to hospital, on spa treatment
- > Coding realized diagnostic tests
- > OM occupational medicine
- > Vaccinations vaccination orders
- Disposals internal orders (admission on ward, transfer to another ward, discharge, examination)
- > Stay data from observations, celebrations, etc. recorded during a hospital stay
- Attachments files attached to the patient's medical history (eg DICOM files, document scans, etc.)
- > eZWM electronic orders for the supply of medical products
- > Benefits commercial benefits' orders
- > Cytologies negative cytological tests performed
- > RTG radiological images taken
- Summary data to the book of treatments, pricelist of services (in case of commercial visits), closing visit

Each of the above tabs has its own mechanisms for saving data so you should remember to save data in each tab after entering them. It is also possible to use the cabinet configuration in such a way that the data entered into individual tabs are automatically saved when moving to the next tab. The mechanism of automatic data recording includes:

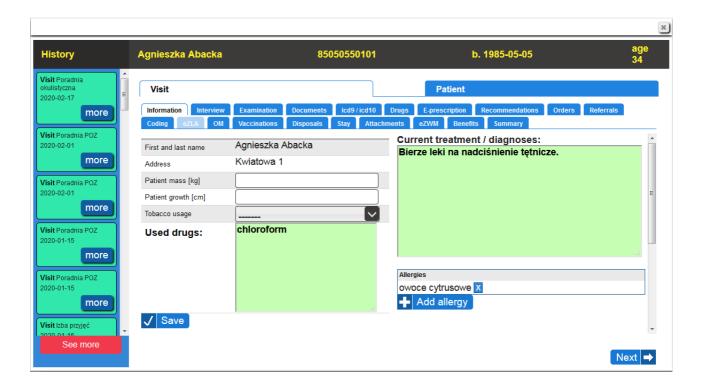
- basic parameters of the patient and information about his current treatment in the "Information" tab
- teeth diagram, eyes diagram and documents completed in the 'Interview' tab
- documents completed in the 'Examination' tab
- introduced diagnoses, procedures and chronic diseases in the "ICD9 / ICD10" tab
- data of drugs not assigned to any prescription in the "Drugs" tab
- data of drugs not assigned to any e-prescription in the "E-prescription" tab

- introduced recommendations and documents completed in the "Recommendations" tab
- data entered in the "Coding" tab
- examination cards and results od examinations and specialistic consultations in the "OM"
   tab
- documents completed in the "Stay" tab

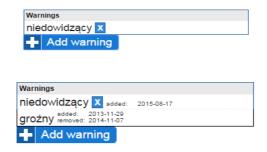
In the case of an attempt to automatically save data fails, the system displays a message about the failure and does not allow to go to the next tab. In this situation, the data should be corrected and saved manually or corrected and tried to go to the next tab allowing the system to make another attempt to automatically save data.

### Information

The "Information" tab presents basic data of patient (first name, surname, address), allows to register his basic parametrs, drugs used by patient and current treatment information and allows to register data of allergies, addictions and warnings concerning the patient. To add a allergy, addiction or warning, press the add button, enter the information in the window that appears and confirm it by clicking "OK". So added information will appear in the "Information" tab with the "x" button enables deletion of the information.



Deleted allergy, addiction or warning does not disappear completely from the card of visit - when you hover the mouse over a section of addictions, allergies or warnings, at the current allergies, addictions and warning displays the date of entry of information into the system but also displays deleted information with the date of entry and the date of removal.



To register the patient's basic parameters (weight, height, tobacco use) and / or enter information about drugs used by patient and the patient's current treatment, complete the appropriate fields and click 'Save' below these fields. Determination of patient parameters is mandatory at the first NFZ-patient visit to primary health care in each calendar year starting from 2020. If the patient's parameters were entered into the patient's card before the visit, then the patient's parameters form is initiated with the values of these parameters saved in the patient's card. Drugs used and current treatment are an information fields, the content of which can be seen by all doctors at each patient's visit and all doctors can edit its content. In a sense, these fields are a mechanism for transferring relevant information about patient treatment between doctors (eg "Treated for hypertension since 2000.").

"Next" button at the bottom of the tab allows to switch to the next tab in the visit card.

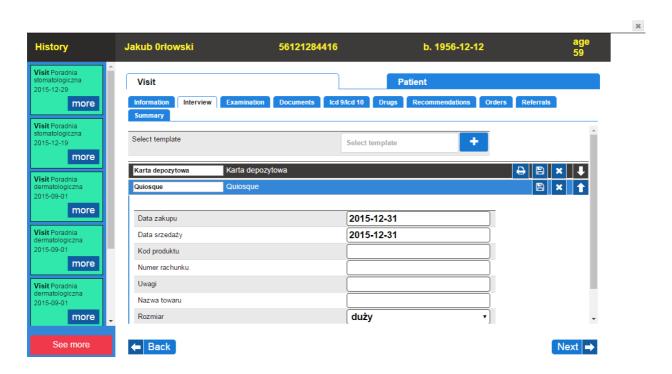
### Interview

The "Interview" tab allows to enter the information gathered during an interview at the start of the visit. For legibility, information is not entered in the form of description but by a properly defined template of form or template of document. The doctor creates by himself templates of forms / documents to enter information from the interview. Because the range of input information depends on the type of visit and specialties, so you can create many different templates (the way of their creation is presented in the section "Defining Documents" and "Document templates"). In the "Interview" tab there can be visible:

- teeth diagram an interactive diagram showing the teeth of the patient (only in case of dental and orthodontic clinics, only for main staff realizing visit)
- eyes diagram an interactive diagram of the patient's eyes (only for ophthalmic clinic, only for the main staff realizing visit)
- templates selecting field field helps doctor to select one or more templates of form / documents to fill during the visit (field is not visible in case of realized visits)
- form/ forms to fill forms corresponding to selected templates made for filling during the visit.

To complete the form, click on the "Select template" field. The list of available templates of forms / documents will develop (document templates has the "(PDF)" endorsement; templates in the patient's language are additionally marked with "+"). You can select a template by clicking on the appropriate template (selected templates appear in the "Select template" field). If there is only one interview template and the surgery room configuration indicates that it is to be automatically selected or if the definition of the interview form template indicates that it is to be automatically selected, then such a template is selected systemically at the moment of entering the "Interview" tab. After selecting a template / templates, click the "+" sign to show in the interview tab a form corresponding to these templates. Over each form there is the title bar with a field with the name of

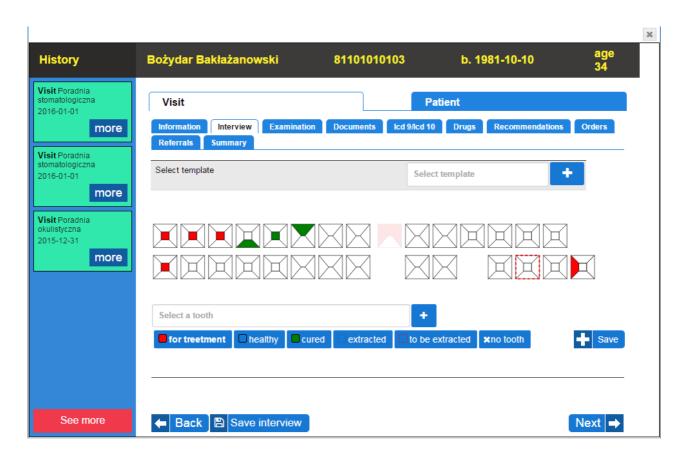
the form (to edit), the template name and buttons of saving a form with floppy icon and with an "x" sign to remove a form. After saving an interview in the header bar appears the button with printer icon to print a document. When you have selected more than one template there is visible only one form with header bar and for the other forms there are only header bars – by clicking on the header bar you can switch between following forms to fill out. The text fields in the forms corresponding to document templates have a built-in content filling control indicator: if the content entered in the text field takes up less than 90% of the space allocated to it in the document template, then the background of the text field is white, if it takes 90% to 95% of the space - the background changes to yellow, if it occupies between 95% and 100% space - the background changes to orange, if it takes more than 100% space - the background changes to red. After filling / modifying form, the interview should be saved by pressing the button with floppy icon on the header bar of form. In case of visits / surgeries realized by more than one person from staff, each person realizing the visit will be seen interviews made by themselves and by other people realizing the visit but save and delete buttons will be available only at the interviews entered by himself.



In case of dental and orthodontic clinics, in the upper part of the "Interview" tab there is visible teeth diagram in the form of diagrams of teeth and jaw, which can be modified (if diagram has been entered on one of visits), or that diagram can be created (if it has not been created yet and it is not visible). To create / modify the diagram there is a mechanism for adding teeth to the diagram. To add teeth to a diagram, in the "Select a tooth" field start typing it's code or name and then click on the appropriate tooth from the list of suggestions which there appears. Selected tooth appears in the text field in the form of a code on a blue square. In the same way you can select next teeth to be placed on the diagram. You can also add all the permanent or milk teeth at once by selecting the "permanent" or "milk" option in the "Select a tooth" field. To place selected tooth on a diagram, click the "+" sign appeared next to the field in which they have written codes of teeth to be placed on the diagram. If on the diagram teeth already exist in the same positions as those selected for placement, the system asks for permission to replace tooth in the diagram with selected and if the user confirms, the teeth on the diagram will be replaced with selected. Each tooth on diagram has marked its relevant surfaces. Permanent teeth have edges drawn in black and milk teeth in blue. Under the diagram there are buttons for selecting the teeth surfaces and all teeth:

- for treatment clicking on this button and then on the tooth's surface is highlighting it by red color it is marked as requiring treatment (next click on this surface marked it as healthy)
- healthy clicking on this button and then on the tooth's surface is highlighting it by white color it is marked as healthy
- cured clicking on this button and then on the tooth's surface is highlighting it by green color it is marked as cured (next click on this surface marked it as healthy)
- extracted clicking on this button and then on the tooth changes this tooth on translucent it is marked as torn (click again on the tooth to restore its previous appearance)
- to be extracted clicking on this button and then on the tooth is surrounding the tooth by red
  dotted line it is marked as to be extracted (click again on the tooth to restore its previous
  appearance)
- no tooth clicking on this button and then on the tooth removes the tooth from a diagram

After entering appropriate selections, save them by clicking "Save" button below the diagram of teeth. Teeth diagram with all the information entered on it is visible on all visits of the patient in the dental and orthodontic clinics.



In case of ophthalmic clinic for the main staff realizing visit, in the upper part of the "interview" tab is visible eyes diagram in the form of a symbolic representation of the right eye ( on the left) and the left (on the right). Under the diagram is shown the button to open the color palette – by using this button you can choose colors to draw over the diagram). Next to the button of opening color palette is visible a slider allows you to set the thickness of the brush used to draw over the diagram. The

following butons are visible below:

- Background enables / disables mode of paint background on the eyes diagram (if the name of the button is bolded means that the mode of painting background is enabled, if it is not bold, this means that the mode of painting background is turned off)
- Vessel enables / disables mode of draw vessels on the eyes diagram (if the name of the button is bolded means that the mode of drawing vessels is enabled, if it is not bold, this means that the mode of drawing vessels is turned off)
- Artifact enables / disables mode of inserting artefacts on the eyes diagram (if the name of the button is bolded means that the mode of inserting artefacts is enabled, if it is not bold, this means that the mode of inserting artefacts is turned off)
- Remove removes marked vessel or artifact
- Erase removes all elements visible on the eyes
- Save save changes in eyes diagram

To start painting the background, on the diagram should be selected color from the palette and set the slider of the thickness of the brush (these settings can be changed during painting), then turn on the mode of painting the background (by clicking the "Background" button if its name is not bolded - if it is bold then mode of painting background is already enabled) then you can paint the background by moving the cursor over the diagram and holding down the left mouse button. After painting the background, space colored outside the grid are automatically cleared.

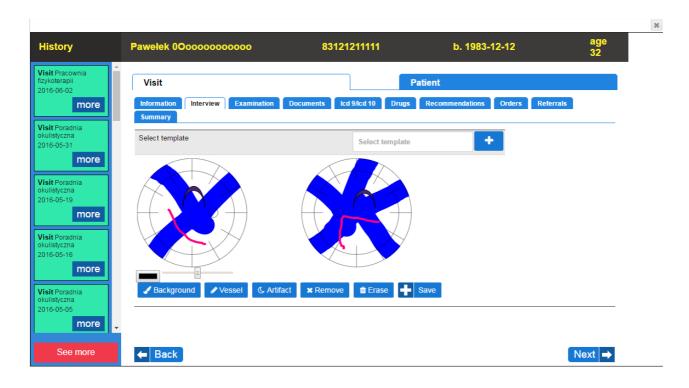
To start painting vessel, on the diagram should be selected color from the palette and set the slider of the thickness of the brush (these settings can be changed during painting), then turn on the mode of painting the vessels (by clicking the "Vessel" button if its name is not bolded - if it is bold then mode of painting vessels is already enabled) then you can paint vessels by moving the cursor over the diagram and holding down the left mouse button.

To place the artifact, on the diagram should be turn on the mode of placing artifacts (by clicking the "Artifact" button if its name is not bolded - if it is bold then mode of placing artifacts is already enabled) then you can click on the diagram, where the artifact has to be placed (click on the diagram puts artifact in the shape of violet arrow on it and automatically disables a mode of placing artifacts.

If any mode (painting background, painting vessels, placing artifacts) is not turned on (the buttons names are not bolded) then click on the diagram on the vessel or artifact causes that there appears light blue mesh around it that allows the manipulation of the vessel or artifact - moving, scaling and rotation. If around artifact or vessel appears light blue mesh that allows the manipulation of a vessel or an artifact, then clicking on the "Delete" button deletes the data from the diagram this vessel or artifact.

From the diagram, you can remove all elements visible on it (artifacts, vessels, background) by clicking on the "Erase" button.

After making changes to the eyes diagram, save them by clicking the "Save" button. Eyes diagram with all the information entered on it is visible on all visits of the patient in ophthalmology clinics.



The "Back" and "Next" buttons visible at the bottom of the tab allow you to switch accordingly to previous and next tabs in the visit card.

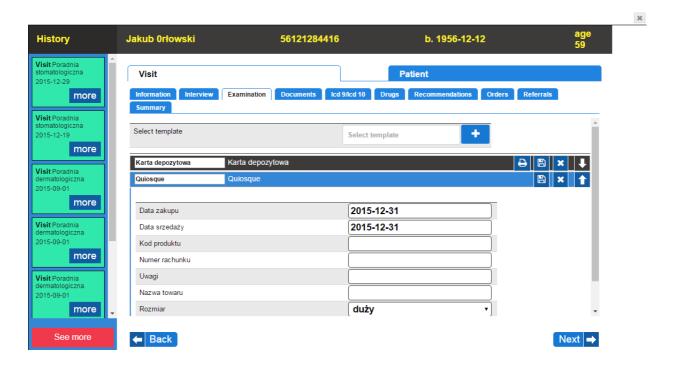
## **Examination**

The "Examination" tab allows to enter the result of examinations conducted by a doctor during the visit. For legibility, information is not entered in the form of description, but by a properly defined template form or template of document. The doctor by himself creates templates of forms / documents to entering examination results. Because the range of input information depends on the type of visit and specialties, so you can create many different templates (the way of their creation is presented in the section "Defining Documents" and "Document templates"). In the "Examination" tab there can be visible:

- templates selecting field field helps doctor to select one or more templates of forms / documents to fill during the visit (field is not visible in case of realized visits)
- form/ forms to fill forms corresponding to selected templates made for filling during the visit.

To complete the form, click on the "Select template" field. The list of available templates of forms / documents will develop (document templates has the "(PDF)" endorsement; templates in the patient's language are additionally marked with "+"). You can select a template by clicking on the appropriate template (selected templates appear in the "Select template" field). If there is only one examination template and the surgery room configuration indicates that it is to be automatically selected or if the definition of the examination form template indicates that it is to be automatically selected, then such a template is selected systemically at the moment of entering the "Examination" tab. After selecting a template / templates, click the "+" sign to show in the examination tab a form corresponding to these templates. Over each form there is the title bar with a field with the name of the form (to edit), the template name and buttons of saving form with floppy icon and with an "x" to remove a form. After saving an interview in the header bar appears the button with printer icon to print a document. When you have selected more than one template there is visible only one form with header bar and for the other forms there are only header bars – by clicking on the header bar

you can switch between following forms to fill out. The text fields in the forms corresponding to document templates have a built-in content filling control indicator: if the content entered in the text field takes up less than 90% of the space allocated to it in the document template, then the background of the text field is white, if it takes 90% to 95% of the space - the background changes to yellow, if it occupies between 95% and 100% space - the background changes to orange, if it takes more than 100% space - the background changes to red. After filling / modifying form, the examination should be saved by pressing the button with floppy icon on the header bar of form. In case of visits / surgeries realized by more than one person from staff, each person realizing the visit will be seen examinations made by themselves and by other people realizing the visit but save and delete buttons will be available only at the examinations entered by himself.



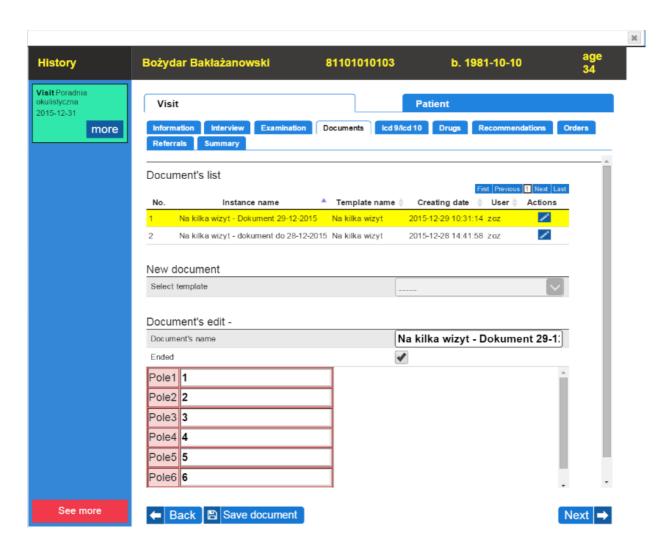
The "Back" and "Next" buttons visible at the bottom of the tab allow you to switch accordingly to previous and next tabs in the visit card.

### **Documents**

"Documents" tab allows to keep records of the patient in the form of documents that are created during one of his visits and which filling is continued on subsequent visits (eg. the card of pregnancy). For legibility, the information is not entered in the form of description but by properly defined form templates. The doctor himself creates form templates for entering documents. Because the input range of information depends on the type of visit and specialties, it is possible to create multiple different templates (creation is described in the "Defining Document" section). In the "Documents" tab there are three sections:

- list of documents list of documents completed during the current visit and the forms filled out on earlier visits, which are not marked as "Closed".
- new document list helps doctor to choose one of the templates of forms to fill
- editing a document a form to fill or edit

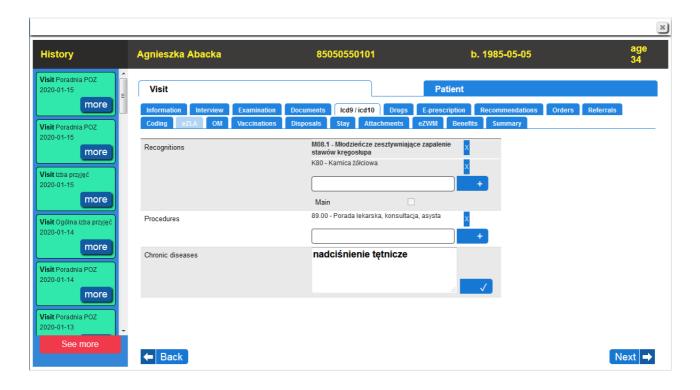
At each document on the list, there are available buttons of deleting and editing the document. Doctor on a visit can edit and delete documents from the list or fill in new ones. Removal is only possible for not realized visit, only for new documents filled during this visit. To edit the document, the doctor clicks the edit button at the document on the list, and in order to complete a new document selects a template of new document. In both of these cases, in the edit section of document there is displayed a form to fill in or update. After completing / modifying the form, save the document by pressing the "Save document" button. When saving a document it is possible to change the checking of "Closed" field - documents marked as "Closed" will not appear on subsequent visits, and documents without this designation will appear in the list of documents in the upper part of the "Documents" tab on subsequent visits of the patient. After saving the document, it appears on the list of documents. During one visit you can fill many documents by repeating a choose of new template of document, fill displayed form and save it. In case of visits / surgeries realized by more than one person from staff, each person realizing the visit will see the documents created by himself and by other people realizing the visit but the buttons of deleting and editing will be available only at the documents created by them.



The "Back" and "Next" buttons visible at the bottom of the tab allow you to switch accordingly to previous and next tabs in the visit card.

## **ICD9 / ICD10**

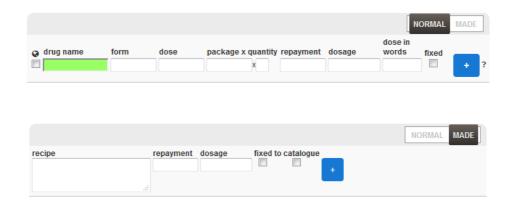
The "ICD9 / ICD10" tab allows the doctor to register diagnosed recognitions and procedures during the visit. To enter the recognitions / procedure in field recognitions / procedures start typing the code or the name of the sought recognition / procedure. After entering at least two letters there is displayed a list of hints - proper recognition / procedure should be selected by clicking on the list of hints and approving by the button with "+" sign - then the recognition / procedure will be appended to the visit card. One from the recognitions can be marked as the main by checking the "Main" (before pressing the "+" button). You can enter multiple recognitions / procedures. At each recognition / procedure appended to the visit card, there are "x" buttons which allow to remove a recognition / procedure. (For visits / surgeries realized by more than one person from staff, each person realizing the visit will see the recognitions / procedures introduced both by themselves and by other people realizing the visit but the "x" will be available only at the recognitions / procedures introduced by himself). The main recognition is bolded. In addition, the tab provides the option of entering and viewing information about a patient's chronic diseases. This information is visible to all doctors and any doctor can modify it. After making changes to the patient's chronic disease information, save it by clicking the "\sqrt{"}" button.



The "Back" and "Next" buttons visible at the bottom of the tab allow you to switch accordingly to previous and next tabs in the visit card.

# **Drugs**

The "Drugs" tab allows the doctor to prescribing drugs for patients and issuing the paper prescriptions. It is possible to prescribe also already prepared (normal) and made drugs - to change the type of prescribing drug, there is NORMAL / MADE switch.



Prescribing prepared drugs is based on the mechanism of hints. If the field with the globe icon in front of the drug name field is not checked, then trade names should be used when entering the drug name, otherwise international names should be used. If in the surgery configuration mode of displaying hints when prescribing drugs "hints displayed for the name of the drug but containing the name, form, dosage and package" is on, then to prescribe normal drug start typing the name of the drug in the "drug name" field and optionally a dose. After entering at least three letters there is displayed a list of suggestions (refunded drugs on suggestions list are marked with the character of ®). Appropriate drug should be chosen from the list of suggestions. At the moment, the "drug name", "form", "dose", "package", "quantity", "repayment" fields will be automatically filled and in case of psychotropic drugs from group P-III and P-IVand all Rpw prescription drugs for doses determined by total or fractional micrograms, milligrams, grams, microliters, milliliters, liters, grams per liter, milligrams per liter, micrograms per liter, grams per hour, milligrams per hour, micrograms per hour, grams per milliliter, milligrams per milliliter, micrograms per milliliter also "dose in words" field, and moreover before "+" / "Add" (character / text within the button dependent on surgery configuration) button will appear a magnifier icon / "SoPCh" text (icon / text within the button dependent on surgery configuration). However, if mode of displaying hints when prescribing drugs "hints displayed separately for the name, form, dosage and package" in the surgery configuration is on, then to prescribe normal drug start typing the name of the drug in the "drug name" field. After entering at least three letters there is displayed a list of suggestions (refunded drugs names on suggestions list are marked with the character of ®). Appropriate drug should be chosen from the list of suggestions. After selecting name of drug form the list of hints, the system automatically moves a cursor to the field of form of drug and displays hints containing available forms of drug having this name (refunded drugs forms on suggestions list are marked with the character of ®). After selecting form of drug from the list of hints, the system automatically moves a cursor to the field of dose of drug and displays hints containing available doses of drug having this name and form (refunded drugs doses on suggestions list are marked with the character of ®). After selecting dose of drug from the list of hints, the system automatically moves a cursor to the field of package of drug and displays hints containing available packages of drug having this name, form and dose (refunded drugs packages on suggestions list are marked with the character of ®). After selecting package of drug the system automatically fills the "quantity" and "repayment" fields and in case of psychotropic drugs from group P-III and P-IV and all Rpw prescription drugs for doses determined by total or fractional micrograms, milligrams, grams, microliters, milliliters, liters, grams per liter, milligrams per liter, micrograms per liter, grams per hour, milligrams per hour, micrograms per hour, grams per milliliter, milligrams per milliliter, micrograms per milliliter also "dose in words" field, and moreover before "+" / "Add" (character / text within the button dependent on surgery configuration) button will appear a magnifier icon / "SoPCh" text (icon / text within the button dependent on surgery configuration). The task of the doctor is to verify (and possibly modify) the amount and payment for a drug (if for a given drug there is more than one

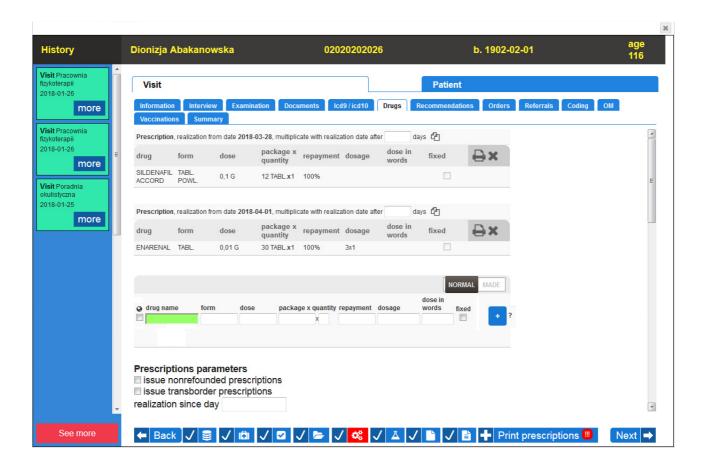
level of price then placing the cursor in the "repayment" field and pressing the down arrow on your keyboard will develop a list of available payment to choose), determine the dosage, in case of psychotropic drugs from group P-III and P-IV enter the dose of the active substance in words (if it is not filled automatically) and in case of fixed drugs note that the drug is fixed. The magnifier icon / "SoPCh" text (icon / text within the button dependent on surgery configuration), which appears before "+" / "Add" (character / text within the button dependent on surgery configuration) button after the selection of drug enables to view the details data of selected drug (clicking on this icon opens a new window with information about the drug).



To prescribe made drug, in the "recipe" field should be entered the content of the drug's recipe and in the "repayment" field - repayment for that drug (setting mouse in the "repayment" field and pressing down arrow on the keyboard will develop the list of repayment to choose). Morover one can specify dosage and mark such a drug as permanent. In order to add the added drug to the catalog of prescription drugs (common for all doctors), one must additionally check the "to catalog" box. After filling the data (both for normal and made drug) drug should be added to the visit card by pressing the "+" / "Add" (character / text within the button dependent on surgery configuration) button. Repeating the above steps, it is possible to enter any number of drugs. If there is need to change the amount, payment, or dosage in words at added drug (before issuing prescriptions) should be made changes in the appropriate fields at the drug and save them by clicking on the floppy disk icon at the drug (any modification of the amount, payment, or dosage in words entered at the drugs are also saved at the moment of creating recipes). If any drug is added by mistake, it is possible to remove it using the button with "×" sign visible at a particular drug. By the names of prescribed drugs there can appear the follwing caution marks: P – psychotropic drug, X – very strong drug, S – strong drug, N – intoxicating drug (full text of caution is displayed within tooltip which appears after moving mouse cursor onto the given mark). After finishing entering drugs, prescriptions can be issued. For this purpose, use the "Create prescriptions" or "Print prescriptions" button (it depends on system configuration). If prescriptions are to be non-refunded (without the number and with repayment of 100%) it is necessary to mark the field sissue nonrefunded prescriptions" visible within prescription parameters section before clicking button "Create prescriptions" or "Print prescriptions". If prescriptions are to be transborder it is necessary to mark the field "ssue transborder prescriptions" visible within prescription parameters section before clicking button "Create prescriptions" or "Print prescriptions" (this field is visible only if doctor has professional title and phone or email). If prescriptions are to have future realization date one has to enter realization since day within prescription parameters section before clicking button "Create prescriptions" or "Print prescriptions". If for the doctor there is no free numbers of prescriptions or prescriptions pool ends in the system, then next to the "Create prescriptions" / "Print prescriptions" button appears three exclamation marks on a red background, and when you hover the mouse cursor on it, there is information in a balloon about the state of pools of prescriptions' numbers (if in the pool there is no free prescriptions' numbers XMZ file with the pool of prescriptions should be download from the NFZ SZOI system and use the "Prescription pools " functionality in the "Staff" menu to enter the file into the system). After pressing the "Create prescriptions" / "Print prescriptions" button, system divides prescription drugs into groups and each group a separate prescription is issued. Rules of dividing drugs into groups are as the following:

- each psychotropic and narcotic drug from groups I-N, II-N, III-P and IV-P goes to the separate prescription (Rp, Rpz or Rpw depending on kind of recipes for which the drug is required)
- any recapture drug goes on a separate prescription (Rp)
- other prescription drugs and non-prescription drugs with payment different than 100% are divided into groups of up to 5 drugs (the division into groups is implemented in such a way that all the drugs in this group require the same kind of prescription: Rp, Rpz or Rpw), and for each group is issued a separate recipe (Rp, Rpz or Rpw); non-prescription drugs but with a payment other than 100% are treated as Rp prescription drugs
- non-prescription drugs do not get prescription

When to create prescriptions is used "Create prescriptions" button above drugs will appear icons of printing prescription (printer icon) and cancelation of receipt ("×" icon) allowing to download and print each prescriptions separately or cancel receipt in case of error on it. When to create prescriptions is used "Print prescriptions" button then immediately opens the file with all issued prescriptions for printing or prescriptions not already printed (in case of surgery configuration) and also above drugs will appear icons of printing prescription (printer icon) and cancelation of receipt ("×" icon) allowing to download and print each prescriptions separately or cancel receipt in case of error on it. In addition, information about the date of realization appears on top of each prescription, as well as a field and icon that allows you to duplicate a given prescription with the date of realization later for the indicated number of days (eg. to issue a series of prescriptions for monthly treatments). To duplicate the prescription with the realization date later for a certain number of days, enter the desired number of days in the field visible above the prescription and then click the recipe duplication icon. Prescriptions are printed on blank paper - the system automatically creates a proper imprint.



The button with the database icon at the bottom of the "Drugs" tab allows to access to the history of prescribed medication and issued prescriptions for the patient and provides in an easy way to represcribing the same medication or re-issuing the same prescriptions. When you press this button there opens a new window in which at the left side are categories of drugs, and at the right side drugs. Categories of drugs are divided by clinics where the patient is treated and on the other drugs. At first there is displayed the clinic, where the current visit takes place. Each clinic provides the following categories of drugs:

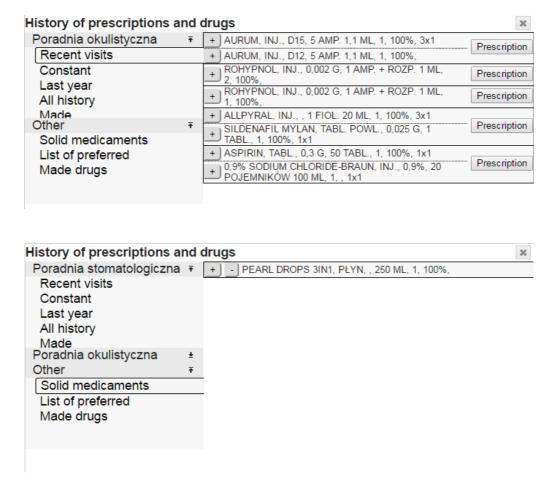
- recent visits patient's normal and made drugs of the last three visits in the clinic, including ready drugs prescribed for e-prescription
- constant patient's normal and made fixed drugs from all visits realized in the clinic
- \rangle last year patient's normal and made drugs from the last year visits (365 or 366 days back from the current date) in the clinic, including ready drugs prescribed for e-prescription
- all history patient's normal and made drugs from all his visits in the clinic, including ready drugs prescribed for e-prescription
- > made patient's made drugs from all his visits in the clinic

In addition, (next to the drugs listed in clinics) there are other drugs into categories:

- Solid medicaments all normal and made fixed drugs of the patient
- List of preferred a handy list of preferred (most frequently prescribed) drugs by a doctor
- bMade drugs patient's made drugs from all realized visits

By clicking on the names of the categories, on the right side of the window will be displayed drugs

appropriate to the category. Drugs witch have been prescribed for current visit are grayed out. At each drug there is a button with "+" sign, which pressed, adds selected drug to the list of drugs prescribed to the patient on the current visit. In addition, the "solid medicaments" and "fixed" category, at each drug there is the button with "-" sign, which pressed removes the drug from the history of prescriptions and medications, which applies in a situation where a specific drug is no longer the patient's constant drug. In "recent visits", "last year", "all history" categories, drugs are grouped in such way in which they were placed on prescription. At each that group of drugs (except drugs prescribed for e-prescription) there is available the "Prescription" button which pressed adds a selected group of drugs to the list of drugs prescribed to the patient on the current visit and automatically creates on a current visit a prescription with these drugs. It is therefore a very fast way to repeat a prescription.



Button with the "×" sign in the window of history of prescriptions and drugs closes this window and returns to the "drugs" tab in the visit window.

Button with an first aid kit icon visible in the lower part of the tab "Drugs" opens the same window as the database icon button, except that in the open window appear immediately drugs from the "preferred list" category.

Button with the "\(\overline{\mathbb{Z}}\)" icon visible in the lower part of the tab "Drugs" opens the same window as the database icon button, except that in the open window appear immediately drugs from the "permanent drugs" category.

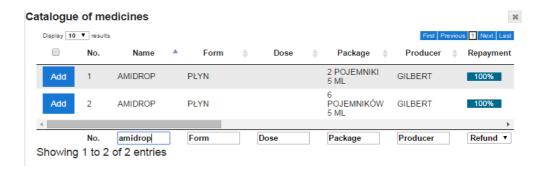
The button with an icon of open file displayed in the lower part of the "Drugs" tab allows to access to the full catalog of drugs and provides an easy way to prescribe drugs from the catalog. When you press this button there is opened a window of drugs' catalogue, which shows all the available drugs.

At each drug are presented the following information:

- name
- form
- package
- producer
- repayment
- is this drug authorized for marketing
- is this contraceptive drug
- group of precursors
- category of availability
- international name
- characteristic if the drug has a characteristic then in the field of characteristic is displayed a button with the down arrow "to download the PDF file with the characteristic of the drug
- replacements at every drug there is the "Display" button, which allows to display replacements for a particular drug

Before each of the drugs there is visible "Add" button, which adds the drug to the list of drugs prescribed to the patient on the current visit. In turn, pressing the button of displaying replacements at any drug switches the view from the list of drugs to the list of replacements for this drug. In the upper part of the window there is displayed additional information about which drug's replacements are currently displayed ant at this information is "×" sign. Clicking on the "×" ends displaying of replacements and restores the previous view of drugs.

The list of drugs displayed in the window of catalogue of drugs can be narrowed by entering a part of the name, form, package, producer, international name in the fields visible at the bottom of the column and / or selecting the appropriate values from the drop-down lists also visible at the bottom of the column. When entering a part of the name, form, package, producer, international name and / or selecting values from drop-down lists, the system automatically displays only these medicines that meet the search criteria. By clicking in turn on the headers of columns under the list of drugs it is possible to sort them alphabetically by the column (subsequent clicks are changing the sort order from ascending to descending and vice versa). At the top of the left column there is also displayed a navigation pane uses to change the amount of drug visible on one screen as well as switching between successive screens if the drugs do not fit on one.

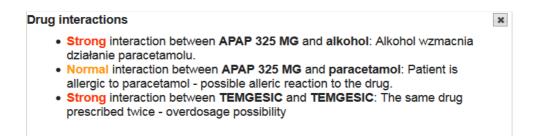


Button with the "x" sign in the catalogue of drugs window can close this window and return to the

"drugs" tab in the visit window.

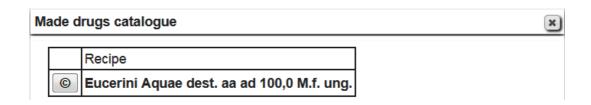
Button with gears visible in the lower part of the tab "Drugs" allows to preview list of interactions between prescribed drugs, interactions between prescribed drugs and agents patient is allergic to, nteractions between prescribed drugs and agents patient is addicted to, and interactions between prescribed drugs and other agents defined within the dictionary of interaction agents. Depending on system configuration, this button can be always blue (higher system performance) or it can automatically change color into red in case when any interaction is detected (lower system performance). After clicking this button there opens new window with the list of detected interactions. System indicates the following interactions:

- drug-drug interaction defined by the user within interactions database (drug in sense of trade name or international name)
- drug-agent interaction defined by the user within interactions database (drug in sense of trade name or international name)
- prescribing of the same drug more than once
- prescribing at least two drugs containing the same component (component in sense of trade name or international name)
- interaction between drug and agent patient is allergic to
- interaction between drug and agent patient is addicted to



Button with mark "×" within drug interactions window allows to close this window and return to "Drugs" tab within visit window.

The button with the flask icon visible at the bottom of the "Drugs" tab allows access to the prescription drug catalog. After clicking it, a new prescription drug catalog is displayed in the new window and with each drug a button with the "©" sign, clicking which closes the catalog window and copies the recipe to the prescription drug prescription form at the bottom of the "Drugs" tab, which allows faster prescription of the given drug to the patient.



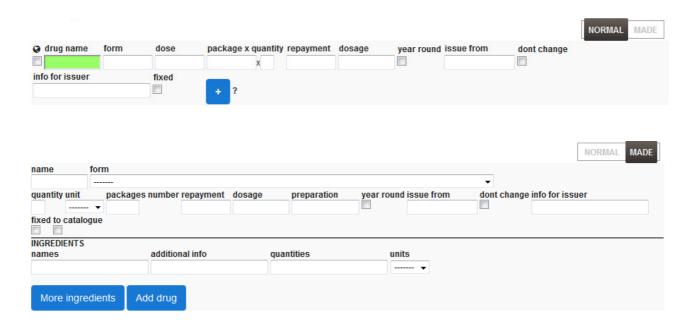
Button with icon of empty sheet of paper at the bottom of the "Drugs" tab allows to print empty prescription print.

The button with the icon of a filled sheet of paper at the bottom of the "Drugs" tab allows to print a prescription print with the number, company details, doctor's and patient's details.

The "Back" and "Next" buttons visible at the bottom of the tab allow you to switch accordingly to previous and next tabs in the visit card.

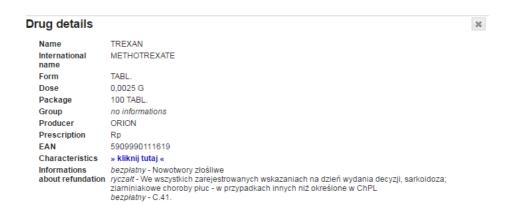
## **E-prescription**

The "E-prescription" tab allows the doctor to prescribe medications for the patient and issue electronic prescriptions (e-prescriptions). The tab is organized in the form of three tables and a drugs prescribing form. The first table is the packages of issued e-prescriptions. The second table are ready drugs for which e-prescriptions have not yet been issued. The third table is prescription are made drugs for which e-prescriptions have not yet been issued. The drugs prescribing form allows one to prescribe both ready and made medicines — one can use the NORMAL / MADE switch to change the type of medicine being prescribed.



Prescribing prepared drugs is based on the mechanism of hints. If the field with the globe icon in front of the drug name field is not checked, then trade names should be used when entering the drug name, otherwise international names should be used. If in the surgery configuration mode of displaying hints when prescribing drugs "hints displayed for the name of the drug but containing the name, form, dosage and package" is on, then to prescribe normal drug start typing the name of the drug in the "drug name" field and optionally a dose. After entering at least three letters there is displayed a list of suggestions (refunded drugs on suggestions list are marked with the character of ®). Appropriate drug should be chosen from the list of suggestions. At the moment, the "drug name", "form", "dose", "package", "quantity", "repayment" fields will be automatically filled and moreover before "+" / "Add" (character / text within the button dependent on surgery configuration) button will appear a magnifier icon / "SoPCh" text (icon / text within the button dependent on surgery configuration). However, if mode of displaying hints when prescribing drugs "hints displayed separately for the name, form, dosage and package" in the surgery configuration is on, then to prescribe normal drug start typing the name of the drug in the "drug name" field. After entering at least three letters there is displayed a list of suggestions (refunded drugs names on suggestions list are marked with the character of ®). Appropriate drug should be chosen from the

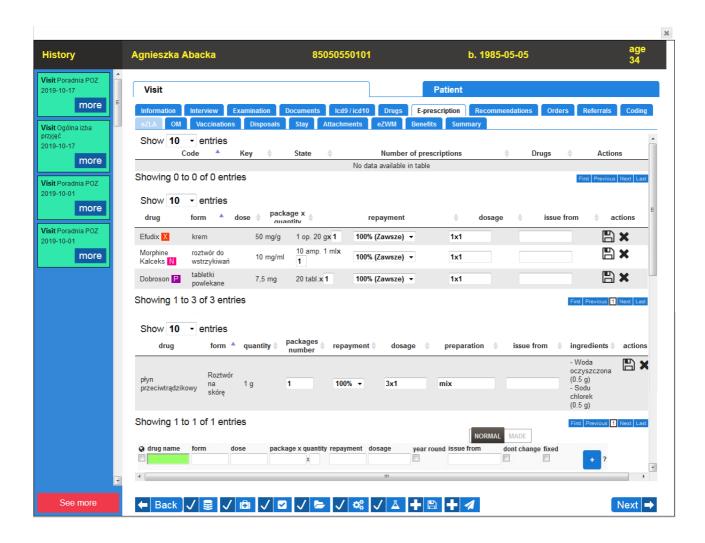
list of suggestions. After selecting name of drug form the list of hints, the system automatically moves a cursor to the field of form of drug and displays hints containing available forms of drug having this name (refunded drugs forms on suggestions list are marked with the character of ®). After selecting form of drug from the list of hints, the system automatically moves a cursor to the field of dose of drug and displays hints containing available doses of drug having this name and form (refunded drugs doses on suggestions list are marked with the character of ®). After selecting dose of drug from the list of hints, the system automatically moves a cursor to the field of package of drug and displays hints containing available packages of drug having this name, form and dose (refunded drugs packages on suggestions list are marked with the character of ®; drug packaging for which the marketing authorization has expired are highlighted in red). After selecting package of drug the system automatically fills the "quantity" and "repayment" fields and moreover before "+" / "Add" (character / text within the button dependent on surgery configuration) button will appear a magnifier icon / "SoPCh" text (icon / text within the button dependent on surgery configuration). The task of the doctor is to verify (and possibly modify) the amount and payment for a drug (if for a given drug there is more than one level of price then placing the cursor in the "repayment" field and pressing the down arrow on your keyboard will develop a list of available payment to choose), determine the dosage, if the prescription for a given drug is to have a deferred realization date, indicate the issue date, if the given drug is to be on the list of patient's permanent medicines check the "fixed" field (if a given drug has already been entered on the patient's fixed drugs list, then the request to re-enter the given drug on this list will be ignored), if the prescription for a given medicine is to be year-round check the "year round" field, if substitutes for the drug cannot be used, check the "dont change" box, optional information can also be provided for the drug issuer. The magnifier icon / "SoPCh" text (icon / text within the button dependent on surgery configuration), which appears before "+" / "Add" (character / text within the button dependent on surgery configuration) button after the selection of drug enables to view the details data of selected drug (clicking on this icon opens a new window with information about the drug). After filling the data drug should be added to the visit card by pressing the "+" / "Add" (character / text within the button dependent on surgery configuration) button. Repeating the above steps, it is possible to enter any number of drugs.



To prescribe a made drug, enter its name, specify the form, indicate the quantity and unit, specify the number of packages, enter repayment, specify the dosage and describe how to prepare the medicine and determine the ingredients and quantities. By placing the cursor in the "repayment" field and pressing the down arrow on the keyboard, the list of payments to be selected will expand. If a given drug is to be included in the patient's permanent drugs list, then the "fixed" field should

be checked (if a given drug has already been entered on the patient's fixed drugs list, then the request to re-enter the given drug on this list will be ignored). In order to add the added drug to the catalog of prescription drugs (common for all doctors), one must additionally check the "to catalog" box. If the prescription for a given drug is to have a deferred realization date, then the issue date should be indicated. If the prescription for a given medicine is to be year-round, check the "year round" box. If substitutes cannot be used for a given medicine, check the "dont change" box. Optional information can also be provided for the drug issuer. Ingredients are entered by specifying the name and the quantity and unit. When entering the name of the ingredient, after entering at least three characters, a list of hints with the names of the ingredients will be displayed - the correct ingredient should be selected from the list of hints. By default, the fields for entering one ingredient are displayed. To display more fields to enter more ingredients, use the "More ingredients" button. Each click on this button will display additional fields for entering the next ingredient. Fields for entering ingredients that are not filled will be ignored when adding the drug to the visit card. After completing the data, it remains to add the drug to the visit card by pressing the "Add drug" button. By repeating the above steps, you can enter any number of medicines.

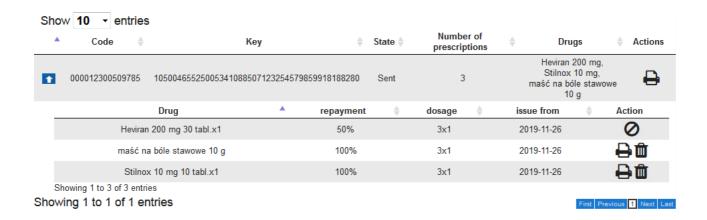
If there is need to change the amount, payment, dosage or issue date for added ready drug or to change amount, payment, dosage, preparation or issue date for added made drug (before issuing prescriptions) one should made changes in the appropriate fields at the drug and save them by clicking on the floppy disk icon at the drug (any modification of the amount, payment, dosage, preparation or issue date entered at the drugs are also saved at the moment of creating prescriptions). If any drug is added by mistake, it is possible to remove it using the button with "×" sign visible at a particular drug. By the names of prescribed drugs there can appear the follwing caution marks: P – psychotropic drug, X – very strong drug, S – strong drug, N – intoxicating drug (full text of caution is displayed within tooltip which appears after moving mouse cursor onto the given mark).



One can issue e-prescriptions after completing the drug entry. To issue e-prescriptions without sending them at the same time, click the floppy disk button at the bottom of the "E-prescription" tab. The system will automatically issue e-prescriptions (a separate e-prescription is issued for each medicine) and automatically create packages for e-prescriptions issued (each package may contain a maximum of five e-prescriptions). The packages created will be displayed in the e-prescription package table. Each package has a blue button with a white arrow that allows you to show / hide package details, i.e. e-prescriptions included in the package. Each e-prescription has a button with the "×" sign enabling it to be deleted. Removing a prescription results in transferring the medicine for which the prescription was issued to the list of medicines for which prescription has not been issued. An identical button next to the package allows one to delete the package. The removal of the package results in the removal of all e-prescriptions included in the package, and thus the transfer of all medicines for which these prescriptions were issued, to the list of medicines for which prescription has not been issued.

▲ Code ♦ Key ♦ State ♦  Not sent			Nun	Number of prescriptions			Drugs		-	Actions
			3			Heviran 200 mg, Stilnox 10 mg, maść na bóle stawowe 10 g			×A	
	Drug		<b>A</b>	repayment	$\Rightarrow$	dosage	$\stackrel{\triangle}{\triangledown}$	issue from	-	Action
Heviran 200 mg 30 tabl.x1			50%			3x1		2019-11-26		×
maść na bóle stawowe 10 g			100%			3x1		2019-11-26		×
Stilnox 10 mg 10 tabl.x1			100%		3x1		2019-11-26		×	
Showing 1 to 3 of 3	entries									
howing 1 to 1 of 1 entries								First Pre	vious 1 Next	

Each e-prescription package also has a button with a paper plane icon that you click to send the e-prescription package. The view of the e-prescription package table changes then - the icons for removing e-prescriptions / packages and sending packages disappear, and icons for e-prescription printing and package printing and e-prescription cancelling appear. Clicking on the print package / e-prescription icon opens a preview of the package / e-prescription in a new window, enabling it to be printed. After clicking on the e-prescription cancellation icon, the system asks for the reason for its cancellation, then cancels the e-prescription and instead of printing and canceling icons, an icon appears indicating that the e-prescription has been canceled.



To issue e-prescriptions with their simultaneous sending, click the button with the paper airplane icon visible at the bottom of the "E-prescription" tab. The system will automatically issue e-prescriptions (a separate e-prescription is issued for each medicine), automatically create packages for e-prescriptions issued (each package may contain a maximum of five e-prescriptions) and send them. The created packages will be displayed in the e-prescription package table with the icons of printing next to them and the printing icons of e-prescriptions included in the packages.

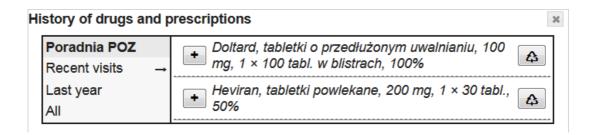
If in the system configuration the mechanism of automatic sending of SMS messages with e-prescription access codes to patients has been enabled, then when the e-prescription package is sent to the P1 platform, an SMS is also sent to the patient with the access code to such e-prescription package (if the patient does not use the Internet Patient Account and has a mobile phone number in the patient's card).

The button with the database icon visible at the bottom of the "E-prescription" tab allows access to the history of prescribed drugs and prescriptions issued for the patient and allows you to easily rewrite the same drugs or re-issue the same prescriptions. After pressing this button a new window opens in which drug categories appear on the left and drugs on the right. Drug categories are

divided into outpatient clinics where the patient was treated. The following categories of medicines are available in each clinic:

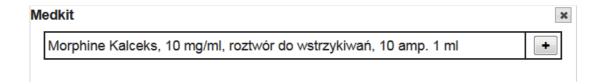
- recent visits ready and made medicines for the patient from the last three visits completed at the given clinic
- last year ready and made medicines for the patient from visits completed at the given clinic during the last year (365 or 366 days back from the current date)
- all patient's ready and made drugs from all visits at the given clinic

By clicking on the names of individual categories, the right drugs are displayed on the right side of the window. Each drug has a button with a "+" sign, which, when pressed, adds the selected drug to the list of medications prescribed to the patient at the current visit. Drugs are grouped in the way they were prescribed. For each such group of drugs there is a button with the sign "\Delta", which pressing adds the selected group of drugs to the list of drugs prescribed to the patient at the current visit and automatically creates an e-prescription package with these drugs at the current visit. It is therefore a very fast way to repeat e-prescriptions.



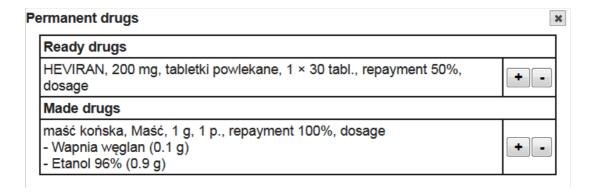
The "×" button in the prescription and drug history window closes this window and returns to the "E-prescription" tab in the visit window.

The button with the medkit icon visible at the bottom of the "E-prescription" tab opens the medkit window, i.e. the list of your doctor's preferred medicines. Each drug has a button with a "+" sign, which, when pressed, adds the selected drug to the list of medications prescribed to the patient at the current visit.



The "x" button in the first aid kit window allows you to close this window and return to the "E-prescription" tab in the visit window.

The button with the "\overline{\sigma}" icon visible at the bottom of the "E-prescription" tab opens a window with a list of patient's permanent medicines broken down into ready and made medicines. Each drug has a button with a "+" sign, which, when pressed, adds the selected drug to the list of medications prescribed to the patient at the current visit. Each drug also has a button with the "-" sign, which when pressed, removes the selected drug from the patient's permanent drug list.



The "×" button in the permanent medication window allows you to close this window and return to the "E-prescription" tab in the visit window.

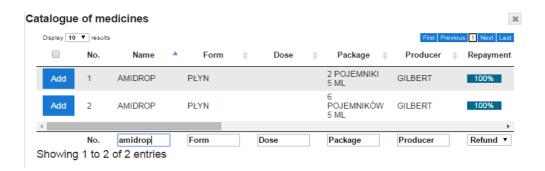
The button with an icon of open file displayed in the lower part of the "E-prescription" tab allows to access to the full catalog of drugs and provides an easy way to prescribe drugs from the catalog. When you press this button there is opened a window of drugs' catalogue, which shows all the available drugs. At each drug are presented the following information:

- name
- form
- package
- producer
- repayment
- is this drug authorized for marketing
- is this contraceptive drug
- group of precursors
- category of availability
- international name
- characteristic if the drug has a characteristic then in the field of characteristic is displayed a button with the down arrow "to download the PDF file with the characteristic of the drug
- replacements at every drug there is the "Display" button, which allows to display replacements for a particular drug

Before each of the drugs there is visible "Add" button, which adds the drug to the list of drugs prescribed to the patient on the current visit. In turn, pressing the button of displaying replacements at any drug switches the view from the list of drugs to the list of replacements for this drug. In the upper part of the window there is displayed additional information about which drug's replacements are currently displayed ant at this information is "×" sign. Clicking on the "×" ends displaying of replacements and restores the previous view of drugs.

The list of drugs displayed in the window of catalogue of drugs can be narrowed by entering a part of the name, form, package, producer, international name in the fields visible at the bottom of the column and / or selecting the appropriate values from the drop-down lists also visible at the bottom of the column. When entering a part of the name, form, package, producer, international name and / or selecting values from drop-down lists, the system automatically displays only these medicines

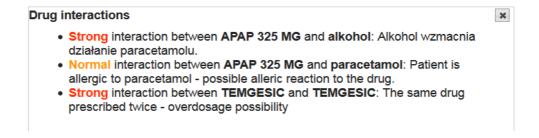
that meet the search criteria. By clicking in turn on the headers of columns under the list of drugs it is possible to sort them alphabetically by the column (subsequent clicks are changing the sort order from ascending to descending and vice versa). At the top of the left column there is also displayed a navigation pane uses to change the amount of drug visible on one screen as well as switching between successive screens if the drugs do not fit on one.



Button with the "×" sign in the catalogue of drugs window can close this window and return to the "E-prescription" tab in the visit window.

Button with gears visible in the lower part of the tab "E-prescription" allows to preview list of interactions between prescribed drugs, interactions between prescribed drugs and agents patient is allergic to, interactions between prescribed drugs and agents patient is addicted to, and interactions between prescribed drugs and other agents defined within the dictionary of interaction agents. Depending on system configuration, this button can be always blue (higher system performance) or it can automatically change color into red in case when any interaction is detected (lower system performance). After clicking this button there opens new window with the list of detected interactions. The interaction detection mechanism includes both drugs prescribed to the patient in the "E-prescription" tab as well as those prescribed to the patient in the "Drugs" tab. System indicates the following interactions:

- drug-drug interaction defined by the user within interactions database (drug in sense of trade name or international name)
- drug-agent interaction defined by the user within interactions database (drug in sense of trade name or international name)
- prescribing of the same drug more than once
- prescribing at least two drugs containing the same component (component in sense of trade name or international name)
- interaction between drug and agent patient is allergic to
- interaction between drug and agent patient is addicted to



Button with mark "×" within drug interactions window allows to close this window and return to "E-prescription" tab within visit window.

The button with the flask icon visible at the bottom of the "E-prescription" tab allows access to the prescription drug catalog. After clicking it, a new prescription drug catalog is displayed in the new window and with each drug a button with the "©" sign, which click closes the catalog window and copies the drug data to the prescription drug prescription form at the bottom of the "E-prescription" tab, which allows faster prescription given medicine to the patient.

M	Made drugs catalogue										
		Name	Form	Quantity	Preparation	Ingredients					
	©	maść ichtiolowa	Maść	10 g	wymieszać	Ichtiol (9 g) Etanol 96% (1 g)					

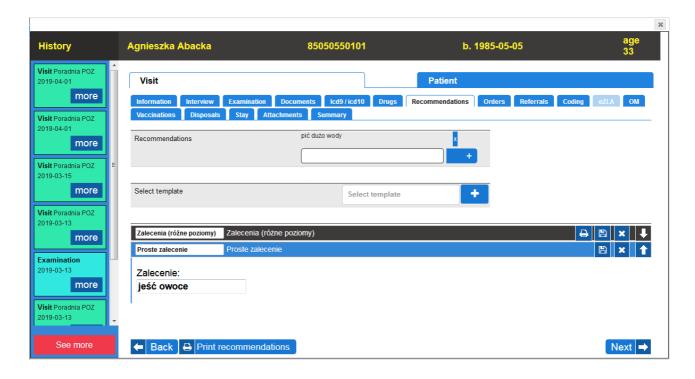
If there is information in the patient's card that he is using the Internet Patient Account, then at the top of the tab an additional red message appears informing the doctor about this fact, and providing an indication for him that there is no need to print e-prescriptions for such a patient.

The "Back" and "Next" buttons visible at the bottom of the tab allow you to switch accordingly to previous and next tabs in the visit card.

## Recommendations

The "Recommendations" tab is used for prescribing to the patient the recommendations that should be followed after the visit. Recommendations can be made in two ways: in the form of a text or template. To add a recommendation in the form of text, enter its content in the text field and press the "+" button. If any recommendation was made by mistake, it can be removed by pressing the "x" button on the recommendation's content. Recommendations can also be entered by an appropriately defined form template or document template. The doctor creates templates of forms / documents for introducing recommendations. Because the scope of information depends on the type of visit and specialty, it is possible to create a lot of different templates (the way they are created is presented in the sub-sections "Form templates" and "Document templates"). To be able to fill in the form, click in the "Select template" field. Then a list of available templates for forms / documents will be developed (document templates has the "(PDF)" endorsement; templates in the patient's language are additionally marked with "+"). By clicking on the appropriate templates, you can select them (selected templates appear in the "Select template" field). If there is only one recommendations template and the surgery room configuration indicates that it is to be automatically selected or if the definition of the recommendations form template indicates that it is to be automatically selected, then such a template is selected systemically at the moment of entering the "Recommendations" tab. After selecting a template / templates, click the button with the "+" sign to display the forms corresponding to these templates in the recommendations tab. A header bar appears above each form with a field with the name of the form (for editing), the name of the template and buttons for saving the form with the disk icon and deleting the form with the "x" sign. After saving the recommendations, a button for printing a document with a printer icon appears in the header bar. If you have selected more than one template, only one form is visible with the header bar and for the remaining forms only headbars are visible - by clicking on the header bars you can switch between subsequent forms to be completed. The text fields in the forms corresponding to document templates have a built-in content filling control indicator; if the content entered in the text field

takes up less than 90% of the space allocated to it in the document template, then the background of the text field is white, if it takes 90% to 95% of the space - the background changes to yellow, if it occupies between 95% and 100% space - the background changes to orange, if it takes more than 100% space - the background changes to red. After filling / modifying the form, save the recommendations by pressing the button with the diskette icon in the form header bar. After all the recommendations have been made, they should be printed out to the patient. Using the "Print recommendations" button, you can print recommendations made in the form of text and entered on the basis of templates of forms. On the print, along with the recommendations, information about the prescribed medicines and their dosage will appear. Recommendations are printed on prescription paper. Recommendations made on the basis of document templates are printed using the print icons visible in the tabs of the form headers with which the recommendations were entered.



The "Back" and "Next" buttons visible at the bottom of the tab allow you to switch accordingly to previous and next tabs in the visit card.

### **Orders**

The "Orders" tab allows the doctor to issue orders for diagnostic and microbiological tests. Within the "Orders" tab there is history of orders from the last year (if any were issued to the patient) and a list of issued orders (if any has been issued) and the button "Add order".



After clicking the button "Add order" there appears new window with two tabs "Refunded examinations" (examinations marked as refunded within the dictionary; this tab is available only for staff of type doctor only in basic health care clinics only for public visits), "Non-refunded examinations" (all examinations defined within the dictionary) and tabs corresponding to each of defined examination ranges (examinations assigned to particular ranges). Next to each of examinations there is a field allowing to mark examination to be ordered.

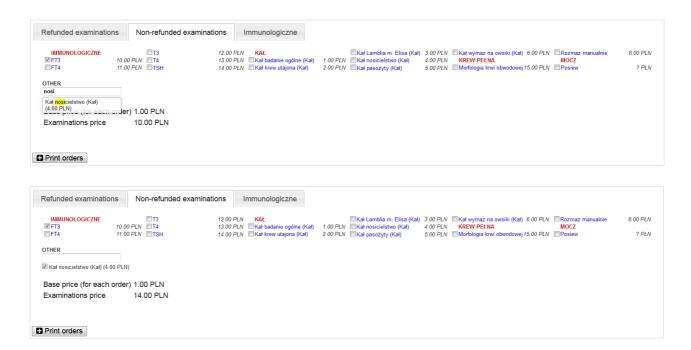


In case of refunded examinations marking examinations in excess of a limit set in surgery room configuration effects with a warning. Warning does not disable possibility to issue an order, it is only a hint for ordering doctor.



In case of non-refunded examinations by each examination there is price for an examinatoin (if it has been defined within price list) – marking or marking off an examination effects in automatic update of total price for examinations visible below the list of examinations. (WARNING! Total price of examinations will be increased by base price for each issued order – examinations are automatically divided into orders). For non-refunded examinations there is a field in which after

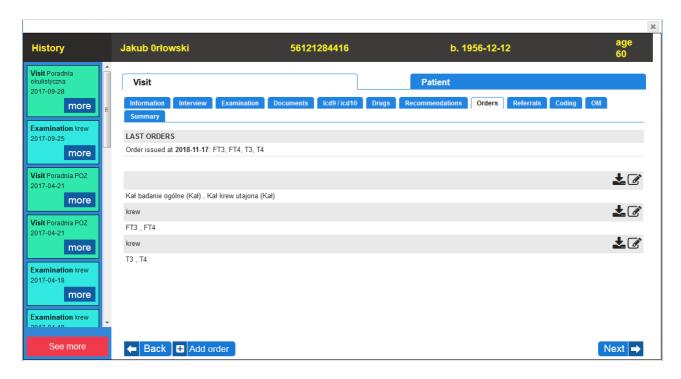
entering part of examination name (at least three characters) there appears list of suggestions with names of examinations and clicking on examination within the list of suggestions leads to attaching this examination to list of examinations to be ordered.



Tabs corresponding to defined examination ranges act the same way as the tab of "Non-refunded examinations" except that there is no suggestions mechanism within them, and there are buttons to mark/unmark all examinations.



After selecting examinations to order, an order should be created by using the "Save orders" or "Print orders" button (depending on system configuration). When you press "Save orders" button the window with list of marked examinations is being automatically closed and created order (or created orders because depending on system's configuration examinations can be divided into several orders) appears within orders list with two icons: to download / print order and to edit order. When to create orders was used "Print orders" button the window with list of marked examinations is being automatically closed and created order (or created orders because depending on system's configuration examinations can be divided into several orders) appears within orders list with two icons: to download / print order and to edit order, moreover the file with all created orders to print immediately opens.



After clicking on the "Print order" icon at ordered examinations, there opens a PDF document enables to print order to give to the patient. Orders are printed on paper in the format of prescription. Orders have automatically assigned an internal bar code (displayed in the top right corner of the order print), which helps to identify the order in the system.

After clicking on thr "Edit order" icon at ordered examinations, there opens order form identical as for addition of new order but with marked examinations contained within the order what allows for modification of the order contents (changes made to the order one has to confirm with button "Save changes").

The "Back" and "Next" buttons visible at the bottom of the tab allow you to switch accordingly to previous and next tabs in the visit card.

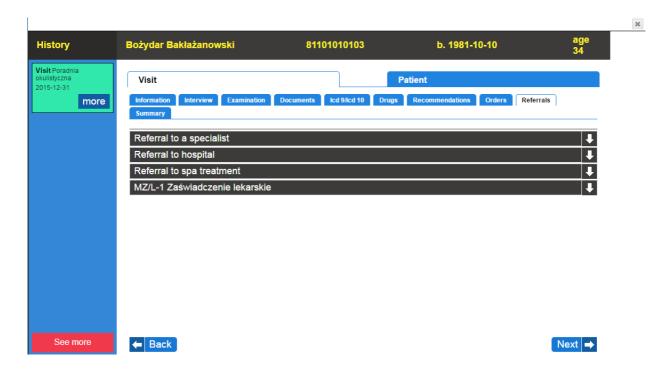
### Referrals

The "Referrals" tab is used to issue referrals and certificates for the patient. In the tab, there are three forms:

- > referral to a specialist
- > referral to hospital
- > referral to spa treatment
- > order for device

as well as other forms and other printed documents defined using the functionality described in the section "Document templates".

By default, in the "Referrals" tab there are displayed dark bars with the names of the available types of referrals and other printed forms. To display the form for the type of referrals or other print form just click on the right bar and then will develop the appropriate form to fill out.



To issue a referral to a specialist, a form have to be completed indicating at least the type of clinic and ICD-10 code of diagnosis / codes of diagnosis. At entering the type of clinic (specialty of department to which the patient is directed) there is displayed a list of hints - the correct option should be selected from a list of suggestions. Clinic name is filled by default with the selected type of clinic but it can be changet – if it is no empty, it appears on referral printout instead of referral type. By default, the "Diagnosis codes (ICD-10)" field is filled with codes entered by the doctor in the "ICD9 / ICD10" tab and separated by commas. However, these codes can be deleted, modified or user can add additional codes (each additional code should append after comma, then while entering the system displays a list of hints). If the issued referral is referral to surgery realized internally in a healthcare institution supported by the jHIS system, then check the "Referral to surgery" box. After checking this box will develop a list of additional options to select which documents the patient before surgery will have to sign (documents in the patient's language are additionally bolded) and to determine which set of tools and the patient should be used to perform the surgery. Sets of tools and patient can be created in three ways:

- by selecting one of the already defined sets the name of the set and tools from such a set will automatically appear in the form of referral's data
- by manually creating sets for this purpose, enter the name of the set and then use the buttons "More tools" and "More Information" to view any number of fields for entering tools / materials by selecting from a dictionary (the "More tools" button), and any number of text fields to enter the types of tools / materials (the "More information" button)
- by combining the above two methods, so selecting one of the already defined sets and supplement it with additional tools / materials, using the "More tools" and "More Information" buttons.

Fields of tools / materials that will not be filled, will be ignored when saving data of referral. After completing the form it has to be confirmed with "Referral to a specialist" or "Print" button (it depends on system configuration). Then a referral will be created and in the upper part of the "Referral" tab will appear the "Print referral" link to download and print the referral (referrals to specialists are printed on paper in the format of prescription) – if for issue of referral was used the

"Print" button then it automatically opens the file with referral to print. In addition, data from created referral will appear in the "Referrals" tab of patient card.

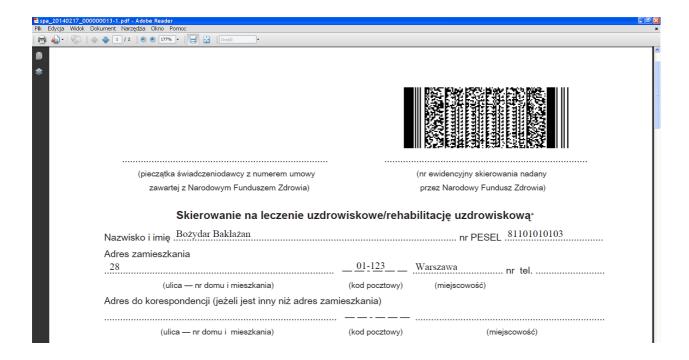
To issue a referral to hospital the form should be completed indicating at least the type of referral, name of the unit and ICD-10 code of diagnosis / codes of diagnosis. At entering the type of referral (specialty of department to which the patient is directed) there is displayed a list of hints - the correct option should be selected from a list of suggestions. At entering the name of the unit, the system displays a list of suggestions created on the basis of the units inserted at issuing earlier referrals to hospital (instead of typing the full name of the unit, you can select it from the list of hints). By default, the "Diagnosis codes (ICD-10)" field is filled with codes entered by the doctor in the "ICD9 / ICD10" tab and separated by commas. However, these codes can be deleted, modified or user can add additional codes (each additional code should append after comma, then while entering the system displays a list of hints). If the issued referral is a referral for the surgery realized internally in a healthcare institution supported by the iHIS system, then check the "Referral for surgery" box. After checking this box there will develop a list of additional options to select which documents the patient for surgery will have to sign (documents in the patient's language are additionally bolded) and to determine which sets of tools and patient should be used for the surgery. Sets of tools and patient are created in the same way as in the case of referrals to specialists. Fields tools / materials that will not be filled, will be ignored at saving data of referral. After completing the form it has to be confirmed with "Referral to hospital" button. Then a referral will be created and in the upper part of the "Referral" tab will appear the "Print referral" link to download and print a referral (referrals to hospital are printed on paper in the format of prescription). In addition, data from created referral will appear in the "Referrals" tab of patient card.

To issue a referral to spa treatment you should click the "Referral to spa treatment" button.

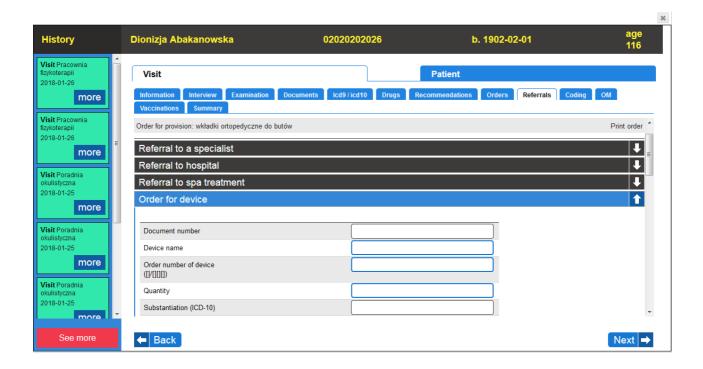


Then, a form opens in the new window, which has to be filled and confirmed with "Generate referral" button.

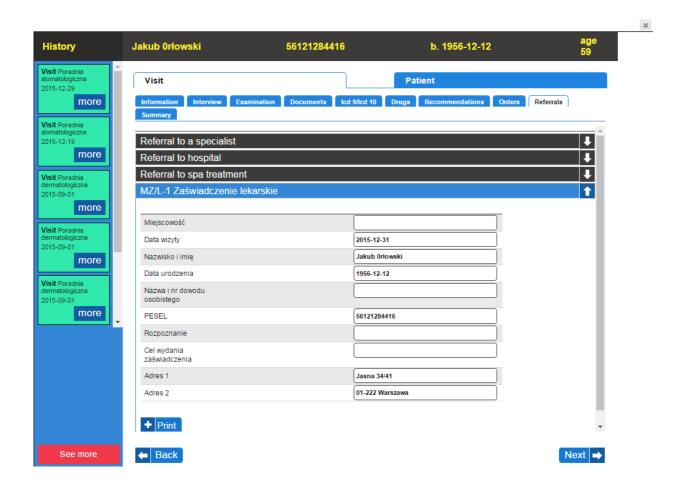
Then, a referral will be created, the form will disappear and in the upper part of the "Referral" tab will appear the "Print referral" link to download and print a referral. Referrals to spa treatment are printed on A4 paper.



To issue order for device one has to fill order form and click the button "Issue". After completing the form it has to be confirmed with "Issue" button. Then an order will be created and in the upper part of the "Referral" tab will appear the "Print order" link to download and print a order (orders are printed on paper in the A4 format).

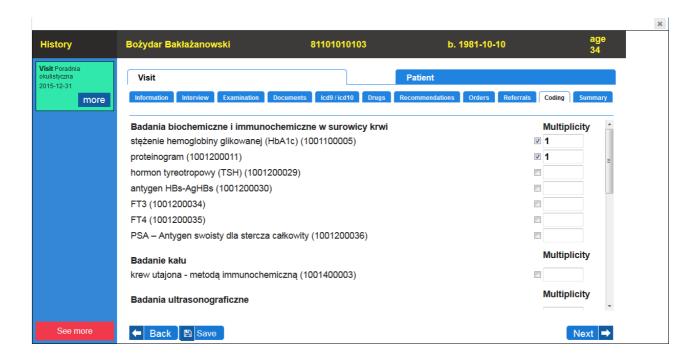


If using the functionality described in the "Document templates" section was created a template of "Referral / prints for the patient" type, form that allows for then fill out such a document is also available in the "Referrals" tab. The text fields in such form have a built-in content filling control indicator: if the content entered in the text field takes up less than 90% of the space allocated to it in the document template, then the background of the text field is white, if it takes 90% to 95% of the space - the background changes to yellow, if it occupies between 95% and 100% space - the background changes to orange, if it takes more than 100% space - the background changes to red. After completing the form it has to be confirmed with a button with name identical to the name of the document template. Then print will be created and in the upper part of the "Referral" tab will appear the "Download form" link that allows to download and print the document (documents are printed on paper in the format of prescription).



## Coding

The "Coding" tab is used to enter information about the realized diagnostic tests and is available only for the main staff realizing visit / sugery. In the tab is visible list of diagnostic tests, including the code of those tests and at each of them there is selection field and multiplicity. Tests that has been done by a doctor should be marked, determined their multiplicity and then saved by clicking the "Save" button.



#### **eZLA**

The "eZLA" tab is used to issue electronic medical exemptions. The tab is active only for doctors who have entered their doctor's certificate into the jHIS system and have marked it as active (see the description of the "Certificates (eZLA)" functionality in the "Staff" chapter) otherwise it is inactive. The tab contains a list of all exemptions issued for a given patient or his guardian. Each doctor has the option of viewing the exemptions issued by all doctors, or issued only by themselves (for this purpose must check the box "Show only my exemptions"). In the case of viewing exemptions issued by other doctors, the list contains only documents sent to ZUS. Working versions of exemptions are visible only to the doctor who is the author of the document. The presented exemptions may occur in one of three states:

- not sent this is the exemption draft, not yet sent to ZUS
- sent this is an exemption that has already been sent to ZUS
- canceled this is an exemption that was sent to ZUS, but was subsequently canceled (an AZLA document was issued for it)

It is only possible to edit or delete exemptions that are in the "not sent" state. To edit / remove the exemption, click the pencil or minus icon respectively.

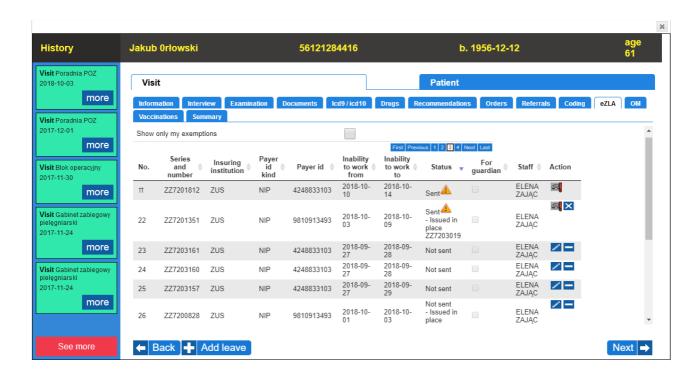
It is possible to print only those exemptions that have been sent to ZUS. To print the exemption, click on the printer's icon. The same icon allows you to print a cover letter if a cancellation document (AZLA) was issued for exemption. A red exclamation mark may appear on the printer icon, it means that the exemption and / or cover letter must be printed because the payer or insured does not have an account in PUE. Detailed information on which documents and why they need to be printed will appear when you hover the mouse over the printer icon.

Exemptions that have been sent to ZUS can be canceled by clicking on the blue button with the "×" sign. A button with the same sign and the arrow "O" applied to it also appears on exemptions that

have already been canceled and clicking on it allows you to issue a new exemption on the basis of the canceled one (this button will not appear if such exemption was issued earlier).

In the case of dismissals in the state "canceled" or "sent" in the column "Status" an icon in the form of a yellow triangle with a black exclamation mark can appear. Such a situation means that the release was sent to ZUS, but during the sending process system in response received warnings about the document at which the icon is located. After hovering over this icon, detailed information with the warning returned by the ZUS system will be displayed. The "Status" column may contain additional information that the exemption was issued in place of the canceled one, then the column and the exemption number are displayed in the place where the exemption was issued.

With some exemptions, the "1" character may be displayed instead of the ordinal number in the first column. It means that it is the retroactive exemption assigned to the exemption in the line above. The retrograde exemptions can only exist in conjunction with the current exemption, so they always appear in the exemption list after the document with which they are associated. This presentation only applies to documents sent to ZUS - in the case of working versions of exemptions, the period of dismissals is presented within one line.



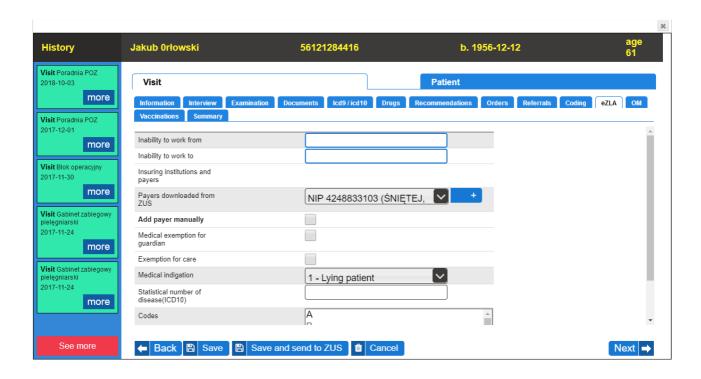
To issue a new exemption, click on the "Add leave" button. The form for issuing a new exemption includes the following fields, which may be supplemented by a doctor:

- Inability to work from the beginning of the period for which the exemption is issued
- Inability to work until the end of the period for which the exemption is issued
- Insurance institutions and payers a list of payers and insurance institutions to which exemptions will be sent (one exemption is always assigned a maximum of one payer). This list can be supplemented in two ways: by selecting a payer from the list "Payers downloaded from ZUS" and clicking the "+" button or by checking the "Add payer manually" option, completing the data yourself and clicking the "+" button next to the completed fields.
- Medical exemption for a guardian allows you to release exemption for a guardian instead

of a patient scheduled to visit. After selecting this field, additional fields are displayed in the form where the guardian's data should be entered. After entering the PESEL number or series and the passport number and date of birth, it is possible to click on the "Download data from ZUS" button which will download the relevant data from the jHIS or from ZUS system (if they are missing in the jHIS system). Checking this box will also automatically mark the "Exemption for care" box and complete the date of birth of the person under care (inserting the date of birth of the patient scheduled for the visit in the field).

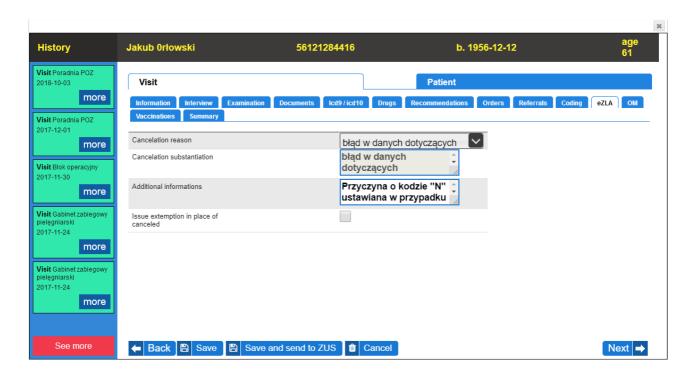
- Exemption for care allows you to release exemption to a patient for the care of another patient (eg a child). After marking this field, additional fields "Code of relationship of the person under care" and "Date of birth of the person under care" appear in the form, which must be supplemented by a doctor.
- Medical indigation indigation on the exemption whether the patient can walk or just lie.
- Statistical disease number (ICD10) a disease code from the ICD-10 classification constituting the reason for issuing an exemption
- Codes additional codes to be entered to exemption (after hovering over a given code, information about what code means is displayed)

The address and identification data of the patient (apart from the exemption for guardian) are automatically taken from the system when the exemption is saved. After completing the data, the doctor can save the release using one of the "Save" or "Save and send to ZUS" buttons. The first one saves the working version of the exemption in the system, without sending it to ZUS. This exemption can be edited or deleted later. The second one causes the saving of the exemption with its simultaneous sending to ZUS, its clicking causes an additional request for confirmation from the doctor if he wants to continue. Confirmation means that the exemption is signed with a doctor's certificate and sent to ZUS, if the sending succeeds, later editing or removal of the exemption is impossible. After saving, system may display a message saying that the saving did not go through with this state of affairs, then the doctor should correct the entered data and retry the attempt to save with sending to ZUS. If the exemption has been correctly saved, the system will automatically return to the list of exemptions. If the exemption was sent to ZUS, the system may display a message that some documents require a printout together with the question whether the doctor wants to print now.

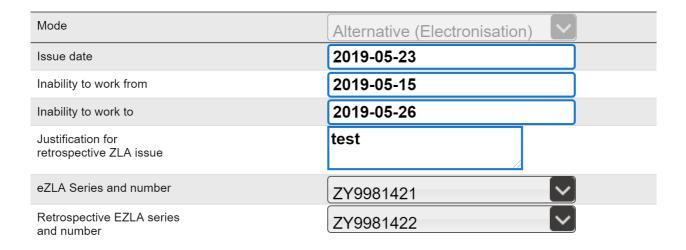


When canceling the exemption, the doctor has three fields to complete:

- Cancellation reason list of reasons for canceling the release; the reasons "błąd w danych identyfikacyjnych ubezpieczonego" and "błąd w danych adresowych ubezpieczonego" will only appear if the system detects that the patient's data in the system is different from those on the canceled release or if the release was issued for the guardian
- Additional informations the content of the information that is provided in the cover letter that is sent to the patient when issuing the AZLA document
- Issue exemption in place of canceled after marking this field, a form with data appears that will be inserted into the new exemption issued in place of the canceled one. The fields for the exemption issued in place of the canceled are the same as for the new exemption, the only difference is that depending on the reason for cancellation, some fields of this form may be inactive and then in the new exemption these fields have the same value as in the canceled exemption.



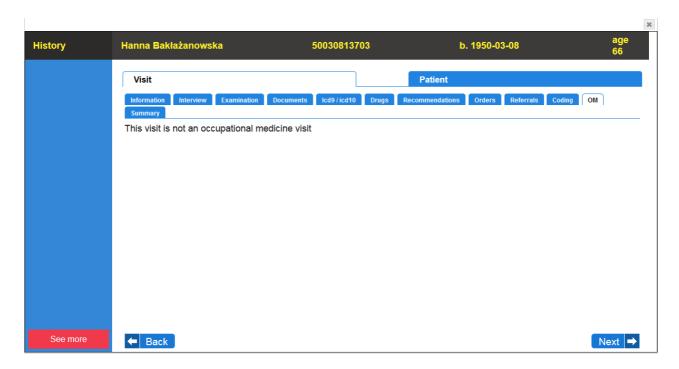
If the patient's exemption was issued in paper form, it should be entered into the system (electronised). To electronise the exemption, in the form of issuing a new exemption, the mode "Alternative (Electronisation)" should be selected in the drop-down list. After selecting this value, three additional fields "Date of issue", "Series and number of eZLA" and "Series and number of reverse eZLA" will appear in the form. The selection of the value for this last field will be possible only if the dates of inability introduced cause that also a retroactive exemption will be issued (the date of commencement of the exemption earlier by at least 3 days than the date of issue). The fields with number and series are drop-down lists where the values of yet unused and unutilized eZLA numbers are reserved using the functionality described in the chapter "Reservation / Canceling numbers (eZLA)". The process of issuing the exemption is the same as in the current mode, the only difference is that in addition the above-mentioned fields must be filled in, and only one payer may be selected for electronisation. Additionally, after saving (without sending) the exemption and its subsequent editing, it is no longer possible to change the mode of its issue from the alternative to the current one or vice versa.



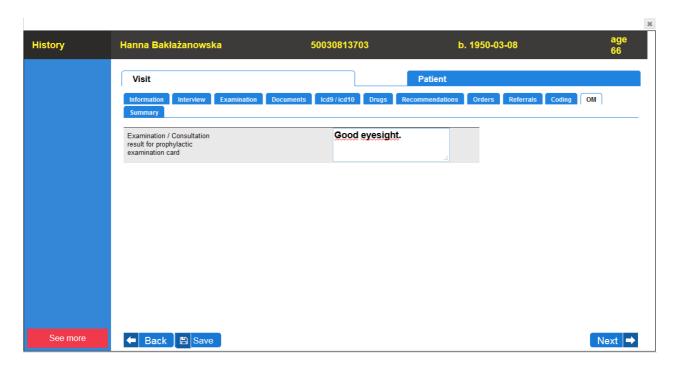
### **OM**

The "OM" tab is used for occupational medicine visit service. Content of this tab depends on visit nature.

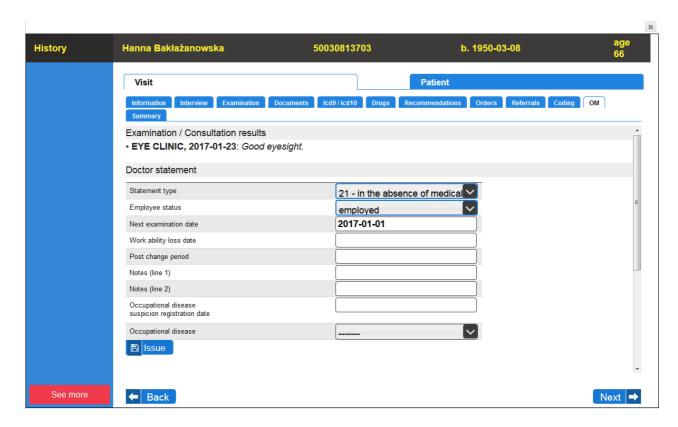
If given visit is not occupational medicine visit then tab does not contain any forms, just an appropriate message informing about this fact.



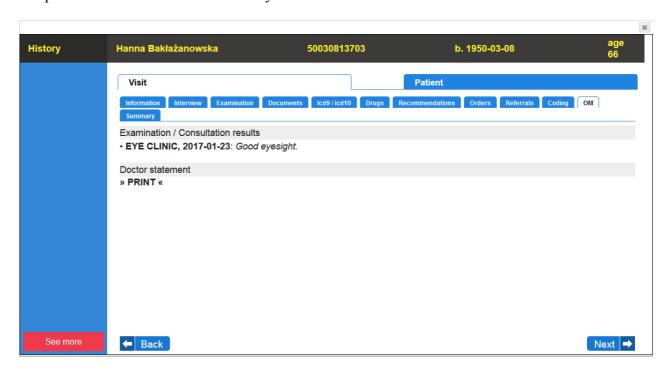
If visit is not main occupational medicine visit (main occupational medicine visit is the one within which informations from particular occupational medicine visits ar collected and doctor statemen is issued), then within the tab of "OM" there appears form allowing to enter result of consultation / examination. After entering result of consultation / examination one has to save data by clicking the button "Save". Results entered this way appears then within the "OM" tab of main occupational medicine visit in order to allow the doctor to make full evaluation of patient health state and to issue right statement.



If visit is main occupational medicine visit then within the tab there appear data of institution and post, results of examinations / consultations performed on occupational medicine visits other than the main one, which have been realized (until result is entered and visit is marked as realized, information about lack of result is displayed within "OM" tab of main occupational medicine visit). Below list of results there is form allowing to issue doctor statement or doctor certificate (if it is provided to issue statements or certificates for the given category of occupational medicine). This form has structure dependent on category of occupational medicine examination. In the case of occupational medicine for applicants / employees / candidates / pupils / listeners / students / doctoral students, the tab also displays a form enabling the issuing of a driver's statement, a statement for sanitary and epidemiological purposes and a medical examination card (e.g. in the case when occupational medicine examinations an employee of a transport company who is a driver and is involved in the transport of food, in addition to the work statement, he may also need a driver's statement and a statement for sanitary and epidemiological purposes). Forms which filling is optional and which have not yet been filled in are hidden by default - to display such a form, click on the header with its name, to hide the form, click on the header with its name again.

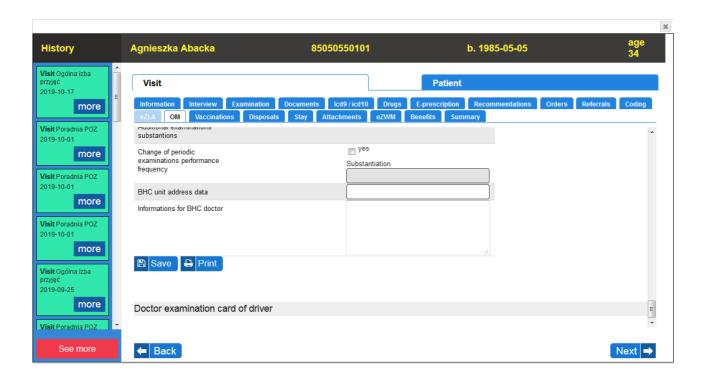


To issue doctor statement / certificate one has to fill in the form and click the button "Issue". After that form of doctor statement / certificate disappears and instead of it there appears link allowing to print issued statement / certificate. Fact of issuing doctor statement is automatically recorded within the register of issued doctor statements. If within the form for issuing statement there will be entered the date of registration of suspicion of occupational medicine disease and possibly there will be specified occupational disease, then entry for the book of suspicions and diagnoses of occupational diseases will automatically be created.



To issue prophylactic / doctor examination card ona has to fill in the form and click the button

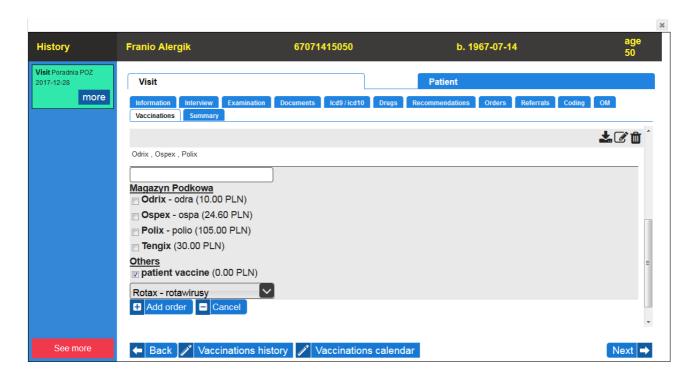
"Save" and then click the button "Print". Then file with filled prophylactic / doctor examination card will open to be printed.



The "Back" and "Next" buttons visible at the bottom of the tab allow you to switch accordingly to previous and next tabs in the visit card.

#### **Vaccinations**

The "Vaccinations" tab is intended to issue orders for vaccinations. Within this tab there is a list of vaccines available within stores of health care company with an additional option of patient vaccine" in case of vaccine delivered by patient himself. To issue order/orders for vaccinations one has to mark appropriate vaccines (in case of patient vaccine one has also to specify vaccine type) and click the button "Add order". If list of vaccines is long then to find vaccine more quickly one cas enter part of vaccine name or disease within the filter field visible above the list of vaccines and then system automatically narrows down the list of vaccines (id applies to stored vaccines and to list of patient vaccine types). Patient vaccine always meets a separate order. Issued orders appear at the top part of the window and by each of them there is an icon allowing to download and print order as a PDF file, an icon allowing to modify orderand an icon allowing to delete order. While issuing order, stores states are decreased by ordered vaccines (system automatically takes vaccines that are to expire first). To modify order one has to click edition icon by the given order within orders list. Then within the form containing list of vaccines, vaccines from the selected order are automatocally marked and button under the form changes its name into "Save order". After entering changes within the form one has to accept theb by clicking button "Save order". To delete an order, click the delete icon next to the order and confirm your intention by clicking "OK" in the prompt that appears. If order isn't realized within the time defined in surgery room configuration, it will be automatically canceled after that time and vaccines contained within this order increase stores states (if at the moment of canceling of order it has already been paid then overpayment appears within the system).



The "Vaccinations history" button visible at the bottom of tab allows for quick access to the list of vaccinations performed to the patient.

The "Vaccinations calendar" button visible at the bottom of tab allows to preview vaccinations calendar.

The "Back" and "Next" buttons visible at the bottom of the tab allow you to switch accordingly to previous and next tabs in the visit card.

## **Disposals**

The "Disposals" tab is used for issuing internal orders (disposals) to be performed by specific organizational units. In the tab, there is a list of disposals (if any have been issued) and a button for deleting a given disposal at each of them. Below you can see the disposal submission form. Disposals may only be issued by the main staff performing the visit.

There are four types of disposals:

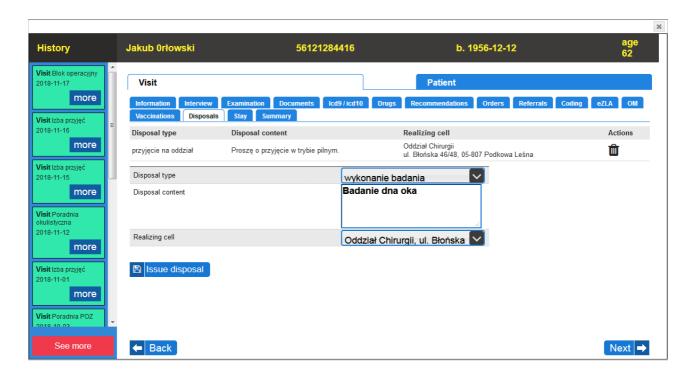
- admission to a ward a disposal issued at the emergency room in case of a decision about admitting a patient to a hospital ward
- transfer to a ward a disposal issued in a ward if a decision is made to transfer a patient to another ward
- discharge disposal issued in a ward if a decision is made to discharge the patient and in case of death of the patient
- performance od examination disposal to perform a n examination (eg histopathological examination)

The specification of a disposal consists of an indication of its type, description and a cell which will be responsible for its implementation. In the case of a disposition of admission to a ward or transfer to a ward, the description of the disposal may contain instructions for the person executing the disposal, in the case of the examination order, the description of the disposal should contain the name of the examination to be performed. In the case of the disposal of admission to the ward, as

the executing cell, the ward to be admitted should be indicated. In the case of disposal of transfer to a ward, as the executing cell, the ward to be transferred should be indicated. In the case of a discharge disposal, the ward on which the patient resides should be indicated as the implementing cell. In the case of the examination execution, as the execution cell, the clinic responsible for the execution of the commissioned study should be indicated.

To issue a disposal, indicate its type, description and implementing cell, and then click the "Issue disposal" button. The disposal will then be displayed in the appropriate place in the system:

- the disposals of admission to the ward are displayed after selecting the "Admissions" functionality from the "Hospital" menu
- disposals of transfer to a ward are displayed after selecting the "Admissions" functionality from the "Hospital" menu, and in special cases, access to them is also possible after selecting the "Ward" functionality from the "Hospital" menu
- disposals for making a discharge are displayed after selecting the functionality "Discharges" from the "Hospital" menu, access to them is also possible after selecting the "Ward" functionality from the "Hospital" menu
- examination execution disposals are displayed after selecting the "Orders" functionality from the "Surgery" menu and the results of their implementation in the history of visits, examinations and orders in the left column of the window of the visit to the doctor's office.



The "Back" and "Next" buttons visible at the bottom of the tab allow you to switch accordingly to previous and next tabs in the visit card.

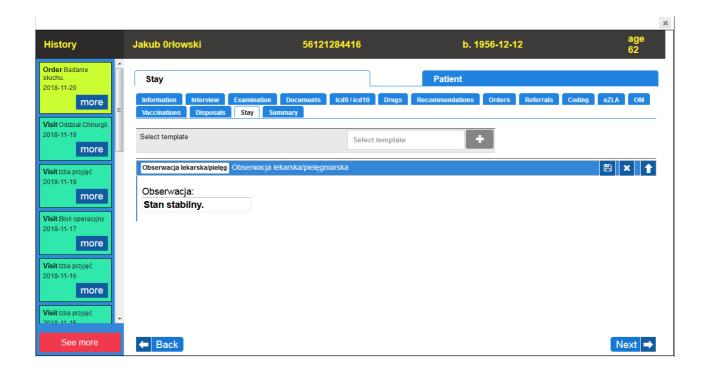
## Stay

The "Stay" tab allows to enter data (observations, celebrations, temperature and pressure measurements) collected during the stay. For legibility, information is not entered in the form of description, but by a properly defined template form or template of document. The doctor by

himself creates templates of forms / documents to entering data. Because the range of input information depends on the many factors, so you can create many different templates (the way of their creation is presented in the section "Defining Documents" and "Document templates"). In the "Stay" tab there can be visible:

- templates selecting field field helps doctor to select one or more templates of forms / documents to fill during the stay (field is not visible in case of realized stays)
- form / forms to fill forms corresponding to selected templates made for filling during the stay.

To complete the form, click on the "Select template" field. The list of available templates of forms / documents will develop (document templates has the "(PDF)" endorsement; templates in the patient's language are additionally marked with "+"). You can select a template by clicking on the appropriate template (selected templates appear in the "Select template" field). After selecting a template / templates, click the "+" sign to show in the stay tab a form corresponding to these templates. Over each form there is the title bar with a field with the name of the form (to edit), the template name and buttons of saving form with floppy icon and with an "x" to remove a form. After saving an observation in the header bar appears the button with printer icon to print a document. When you have selected more than one template there is visible only one form with header bar and for the other forms there are only header bars – by clicking on the header bar you can switch between following forms to fill out. The text fields in the forms corresponding to document templates have a built-in content filling control indicator: if the content entered in the text field takes up less than 90% of the space allocated to it in the document template, then the background of the text field is white, if it takes 90% to 95% of the space - the background changes to yellow, if it occupies between 95% and 100% space - the background changes to orange, if it takes more than 100% space - the background changes to red. After filling / modifying form, the data should be saved by pressing the button with floppy icon on the header bar of form. Each person realizing the stay will see data entered itself and by other people realizing the stay but save and delete buttons will be available only at the data entered by itself.



#### **Attachments**

The "Attachments" tab is used to attach files (eg DICOM files, document scans) to the patient's medical history. To attach a file, click "Browse", select the file from the computer's disk and save it to the system by clicking the "Add" button. The list of attached files is displayed above the file adding form. By clicking on the file names in this list you can open each one. Under the form of adding attachments, an additional list of attachments entered in the patient's card to the "History" tab is displayed (if any have been entered).



The "Back" and "Next" buttons visible at the bottom of the tab allow you to switch accordingly to previous and next tabs in the visit card.

#### **eZWM**

The "eZWM" tab is used to issue electronic orders for the supply of medical products (to be able to issue electronic orders for the supply of medical products, a properly configured eWUŚ account must exist in the system). In the upper part of the tab, a list of issued orders is displayed, below is the order entry form. To place an order, please complete the form. Depending on the type of provision selected, different parts of the form are available for completion. If the supply is eyeglass lenses, provide lens data and, if applicable, documentary evidence confirming entitlement to benefits and additional entitlements. In other cases, the correct product should be indicated first. The correct product is indicated by entering its code or the beginning of its name in the field "Group and order number od product" and selecting the product from the list of hints that appears after entering at least three characters. Then indicate location (if the product requires it) specify the quantity of the product (in the case of products issued on request) or the quantity for the month, month and initial year and the number of months (in the case of products issued on the monthly provision card), provide the justification code (ICD-10), indicate the award criteria (default criteria

for of a given product are automatically selected, inappropriate criteria should be deselected, additional criteria can be added by entering the beginning of the criterion name in the green field and selecting a criterion from the list of hints that appears after entering at least three characters) and enter any additional parameters (pregnancy week - required for dedicated products) for pregnant women, type of stoma and number of fistulas - required for stomy equipment, justification for shortened usage). Below the form there are three buttons:

- Save order saves the order data in the database, the order receives the status "new"
- Save and send order saves the order data in the database and sends the order to the NFZ, the order receives the status "registered"
- Resign deletes all data from the order data form (means resignation from saving the order data)

After pressing the "Save order" button, the order (if it did not contain errors) appears on the list of orders above the form in the "new" state. After pressing the "Save and send order" button, the order (if it did not contain errors) appears on the list of orders above the form in the "registered" state.

Three icons are visible with the order in the "new" state:

- the arrow on the black background the send icon allows you to send the order to the NFZ
- pencil on the background of a sheet of paper the edit icon allows you to modify the order
- basket delete icon allows you to delete an order

To delete an order, click the delete icon and confirm your intention.

To modify the order, click the edit icon. Then the order data form will be filled with his data. After making changes, the order should be saved by clicking the "Save order" or "Save and send order" button.

To send the order to the NFZ, click the send icon. The system will then attempt to send the order to the NFZ. In case of failure, it will inform you about the reasons with an appropriate message. If successful, it will change the order status to "registered".

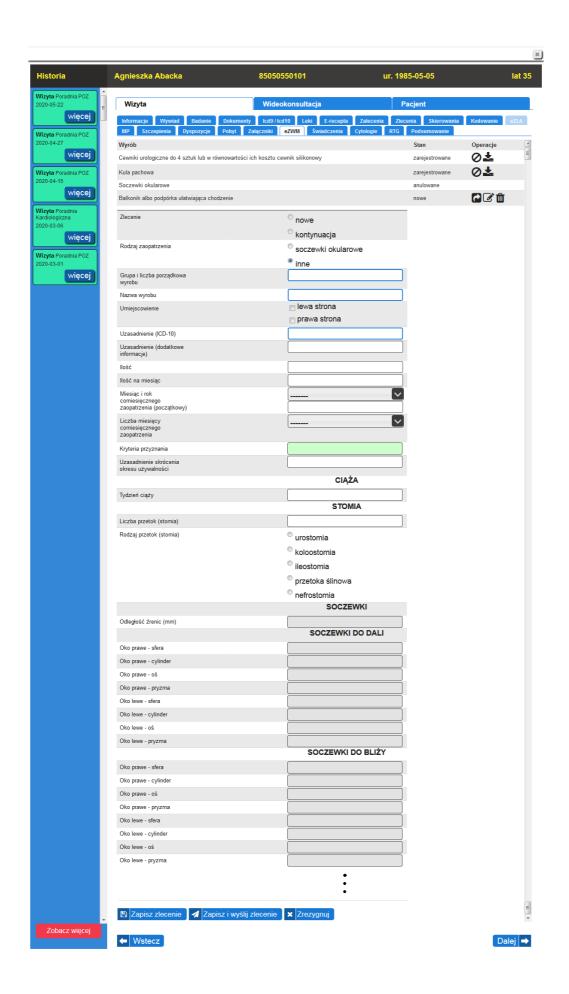
Two icons are visible with the order in the "registered" state:

- the crossed out circle the cancel icon allows you to cancel an order in the NFZ
- download symbol download icon allows to download an order document in PDF format from the National Health Fund

To cancel an order, click the cancel icon. The system will then attempt to cancel the order in the NFZ. In case of failure, it will inform you about the reasons with an appropriate message. If successful, it will change the order status to "canceled".

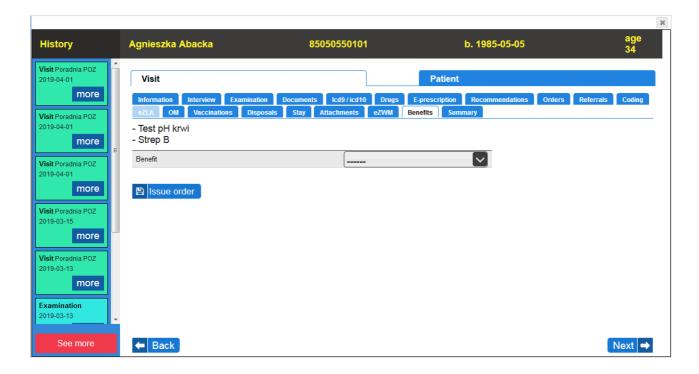
To download the order document, click the download icon. The system will then attempt to download the order in the NFZ and will enable it to be saved as a PDF file on your computer.

No icons are visible with the order in the "canceled" state



#### **Benefits**

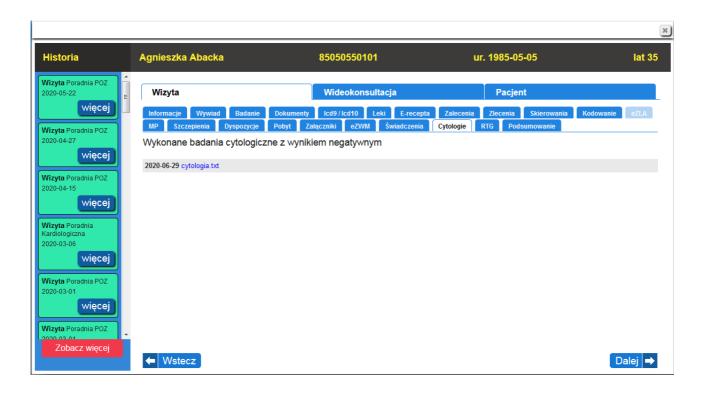
The "Benefits" tab is used to order commercial benefits for the patient, using means from the healthcare facility's stores. To order the benefit, select the it from the drop-down list (from the appropriate store) and click 'Issue order'. The list of benefits ordered is displayed above the benefit request form.



The "Back" and "Next" buttons visible at the bottom of the tab allow you to switch accordingly to previous and next tabs in the visit card.

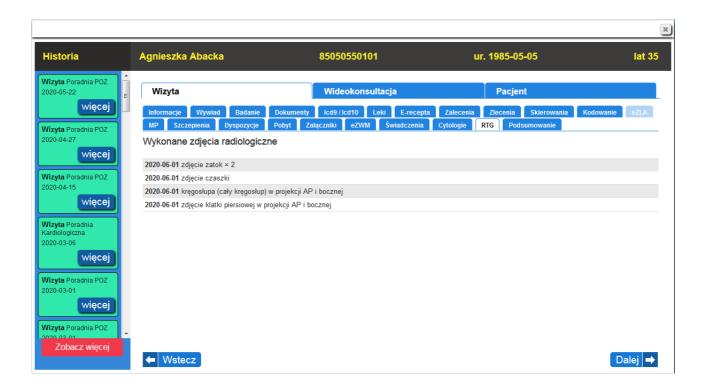
## **Cytologies**

The "Cytologies" tab is used to present negative cytological tests performed to the patient. A link to the results file is displayed for each study.



#### **RTG**

The "RTG" tab is used to present information about radiographic images taken to the patient. It is designed to help the doctor assess whether ordering a radiographic image will be safe for the patient's health.



### **Summary**

The "Summary" tab is used to closing visit.

In case of unfinished NFZ's visits in POZ, AOS, rehabilitation, psychiatry, therapy and stomatology in the "Summary" tab there is displayed a form to indicate services reported to the NFZ. Within POZ it is a list that allows to choose single service that can be settled (if in the application's configuration there was defined a default service, then it is automatically selected with the ability to change). Within AOS it is a list that allows to choose single service that can be settled, in case of gynekology preceded by the list of pregnancy weeks. Within rehabilitation, psychiatry and therapy it is a list of services possible to be settled and by each of them there is checkbox field (allowing to point out services to be settled) and a list of procedures (allowing to point out procedure appropriate for the given service). Within stomatology it is a list of services possible to be settled and by each of them there is checkbox field (allowing to point out services to be settled) and a list of teeth codes (allowing to point out tooth code appropriate for the given service). The form to indicate services reported to NFZ is available only for the main staff realizing a visit / surgery.

For all the (unfinished) visits (except hospital stays) in the "Summary" tab is displayed a form allowing to do entry to the book of surgeries, in which the doctor inserts a note about the type of performed surgery and its progress (the remaining data are inserted automatically to the book of surgeries). This form is available only for the main staff realizing a visit / surgery.

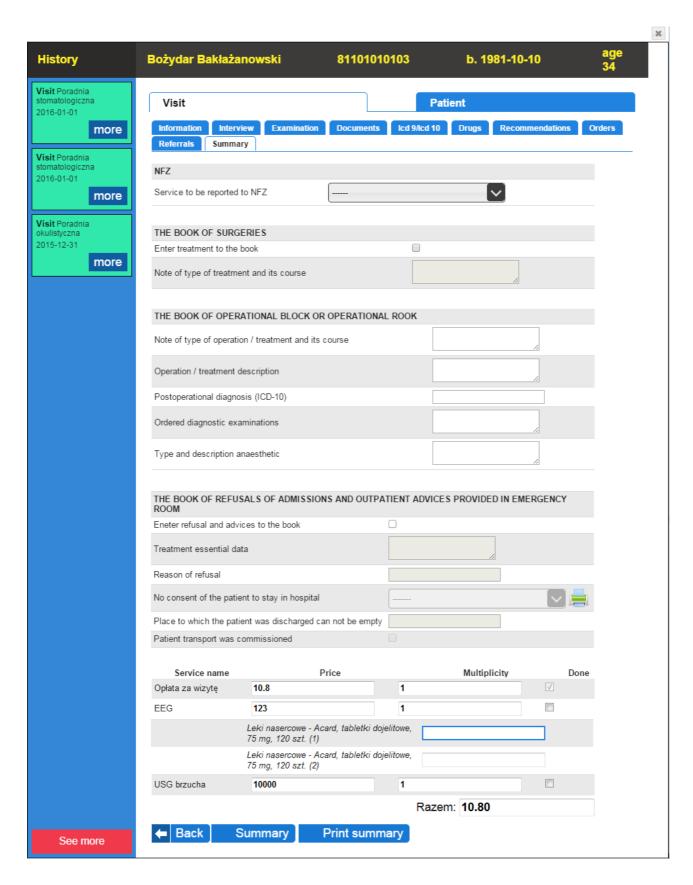
In case of unfinished operations in the operating room there is displayed a form in the "Summary" tab to make an entry to the book of operational block or operational room, where the doctor inserts a note of type and proceeding of made operation / surgery, a detailed description of the operation / surgery, ICD-10 code of diagnosis of pre-operative and post-operative, ordered diagnostic tests and the type and description of given anesthesia to the patient (other data to the book of surgeries are inserted automatically). This form is available only for the main staff realizing a visit / surgery.

In case of unfinished visits in the emergency room, in the "Summary" tab there is displayed a form of making an entry to the book of refusals of admissions and outpatient advices provided in the emergency room (if the visit in the emergency room ends with the refusal of admission to hospital). The entry the book of refusals of admissions and outpatient advices provided in the emergency room requires to enter some data manually (other required data will be inserted automatically). In case of refusal of admission to the hospital, if the reason for refusal is lack of consent of the patient to stay in hospital, you should print a note about the lack of patient's consent for such a stay (by clicking on the printer icon at the "No consent of the patient to stay in hospital" field) and give it to the patient for signing - depending on whether the patient agrees to sign a note or not, this should be noted by selecting the appropriate value in the "No consent of the patient to stay in hospital" field (printed annotation, regardless of whether it has been signed by the patient or not, retain for control purposes). This form is available only for the main staff realizing a visit / surgery.

In case of not finished occupational medicine visits other than main within the tab of "Summary" there is visible form for making note into book of given consultations for occupational medicine purposes, where doctor enters consultation range.

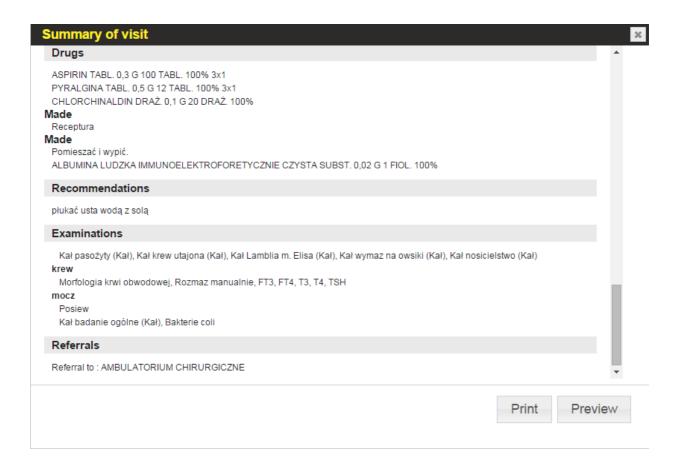
In case of commercial visits (except hospital stays), in the "Summary" tab is also available pricelist of services, in which the doctor notes the services realized during the visit and uncheck services which was pointed by registrar at arranging visit, but they have not been realized. This pricelist is available only for the main staff realizing a visit / surgery. For services for which it is defined that their implementation requires the use of specific resources, fields appear to indicate the resources

used. If for the service it has been specified that a given resource should be shown from 2 to 3 pieces, then two fields will be surrounded by a blue border as required to be filled, and one gray as optional. To select the right resource, start entering the serial number in the field next to the resource and then select the resource from the list of hints (you can also press the down arrow button on the keyboard after placing the cursor in the field, and then the list of hints with all available resources will be displayed).



In the lower part of the tab there are "Back", "Summary" and "End visit" buttons (the last two are only visible to the main staff performing the visit for visits carried out by more than one staff member). "Back" button allows you to switch to the previous tab in the visit card. The "Summary" allows you to preview the summary of the visit and print them. Summary contains all the

information entered by the physician in particular tabs of the visit's window. Depending on system configuration, summary printout pages can be non-numbered or numbered. Pages numbering is automatical (page numbering occurs when the "End visit" button is clicked and the numbering is updated each time when the summary of the visit is downloaded as a PDF file - be it by the doctor when printing the summary, or by registration in the "EHR" tab in the patient's card or by the patient when downloading a medical history of visit within the patient portal) and continuous through all visits of the given patient within the given clinic (consecutive visits summaries of the given patient within the given clinic gain pages numbering so that patient medical documentation had continuous numbering. If there occurs situation when doctor removes something from already realized visit so that summary would shorten (number of summary pages would decrease), then while printing summary again at its end there will be added empty but numbered pages to keep correct continuity of pages numbering for medical documentation. If however there occurs situation when doctor adds something to already realized visit so that summary would lenghten (number of summary pages would increase), then additional pages of this summary will gain numbers created as number of last page of primary summary concatenated with dot and number of additional page (for example if summary had three pages with numbers 1, 2, 3 and doctor added some informations to visit so that number of summary pages lenghtened to five pages, then summary pages would have numbers 1, 2, 3, 3.1, 3.2). Also depending on the system configuration at the time of printing the summary, it can be automatically signed with a doctor's certificate and saved (in the form of a signed PDF file) in the appropriate directory on the server.



The "End visit" button saves forms data filled in the "Summary" tab and changes the status of the visit from agreed to realized (the button "End visit" is available only for the main staff realizing a visit / surgery). If visit is pre-paid and if at least one of realized services within the commercial

services dictionary has specified coresponding diagnostic examination, then while ending visit there is order for this diagnostic examination automatically generated (if visit is post-paid and if at least one of realized services within the commercial services dictionary has specified coresponding diagnostic examination, then generation of an order is postponed to the time when full amount of payments for visit is collected). After the visit, view in the "Summary" tab changes in such a way that forms disappear (and therefore disappears the possibility of entering information) and disappears "End visit" button.

After closing the window of visit, there is again displayed a view of prearranged visits. Window of completed (realized) visit can be opened again by clicking on the button with the name of the patient, but in case of realized visits, there is no possibility of modifying the list of realized services during the visit, and all changes made in any of the tab of window of visits are saved.

## Therapeutic surgery

The "Therapeutic surgery" functionality from the "Surgery" menu is used to support rehabilitation. After selecting the "Therapeutic surgery" functionality there is displayed a search engine of surgeries prearranged to logged therapist today in clinics where the therapist is working. To begin using the functionality of therapeutic surgery, at first select the clinic and press the "Search" button. Under the search engine is displayed a view of patients prearranged to logged therapist today in the selected clinic and at each of the patients a list of scheduled rehabilitations. The search includes the following additional navigation buttons:

- > <<< allows to view rehabilitations scheduled on a month earlier than the current presented
  day
  </p>
- > << allows to view rehabilitations scheduled on a week earlier than the current presented
  day
  </p>
- < allows to view rehabilitations scheduled on a day earlier than the current presented day</p>
- Change date" allows one to view any day, which should be indicated in the date field before pressing the "Change date" button
- "Today" alows one to view today's day
- > allows to view rehabilitations scheduled on a day later than the current presented day
- >> allows to view rehabilitations scheduled on a week later than the current presented day
- >>> allows to view rehabilitations scheduled on a month later than the current presented

Clicking on any of the above buttons change the view of the planned rehabilitations for appropriate for the day to which the button leads.

View of prearranged patients and planned surgeries is a table that presents the rehabilitations scheduled for each patient signed for that day to the logged therapist in the selected clinic. Patients are lined up in the order by the time of the first surgery. If logged therapist has the privilege to edit patient card, then the patient's name is placed on the button which clicked opens patients card in a new window. In case of the rehabilitation module in the standard version, for each application there is displayed information icon, time, name of the apparatus and the name of the rehabilitation. In case of the rehabilitation module in a simplified version there is displayed time of surgeries and for each rehabilitation there is information icon and the name of the surgery. There are following information icons:

• green icon with a "✓" sign means that the surgery has been realized

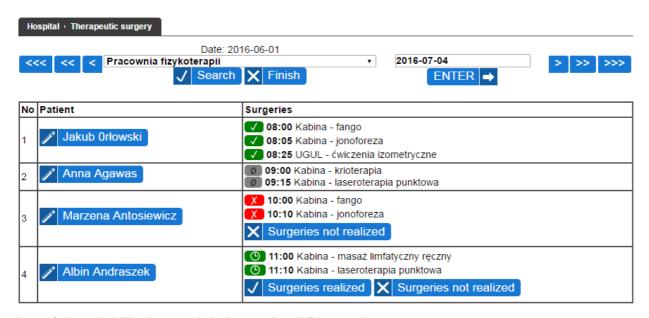
- gray icon with a "\O' sign means that the surgery was not realized (did not take place)
- green icon with "□ □ sign means that the surgery is waiting for realization and can be realized
- red icon with "X" sign means that the surgery is waiting for realization but can not be realized for various reasons (the patient has not made payments for the surgery, there were not filled all the documents required to realize the surgery, the patient is not insured, the surgery has to be canceled)

After clicking on the information icon there will be displayed a message explaining its meaning, in case of red icon with " X " sign, the message indicates the reason / reasons for which surgery can not be realized.

Below the list of surgeries of the patient may be available two buttons:

- Surgeries realized the button is available only when there are surgeries waiting for realization and all can be realized (are labeled with a green icon with a "Dsign); click on the button is marking all operations as realized
- Surgeries not realized the button is available when there are surgeries waiting for realization which may or may not be realized (they are labeled with a green icon with a "□□ sign or a red icon with "✗" sign); click on the button is marking all past surgeries as unrealized and reject all future surgeries (moreover if the patient during rehabilitation surgeries was entered into the waiting queue, the system also prompts you to select the cause of patient deletion from the queue)

View of the rehabilitation module in the standard version



View of the rehabilitation module in the simplified version



# **Collection facility**

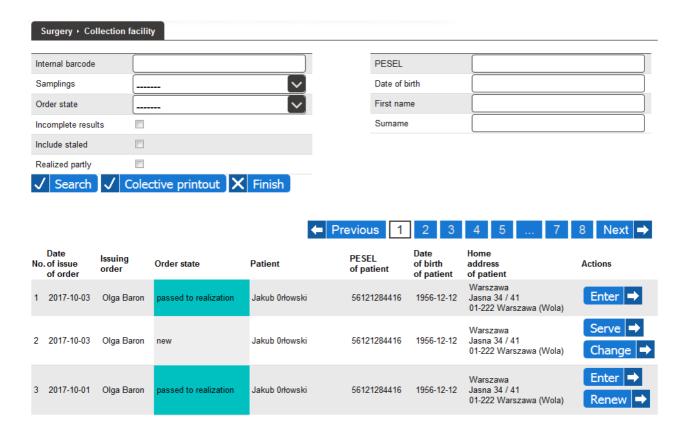
The "Collection facility" functionality in the "Surgery" menu is used for service of collection facilities for collecting sampling materials for diagnostic and microbiological tests and transmit electronically orders for tests into diagnostic laboratories.

After selecting the "Collection facility" functionality in the "Surgery" menu there is displayed a search engine of orders issued by the doctors. It is possible to search orders by any combination of the following criteria:

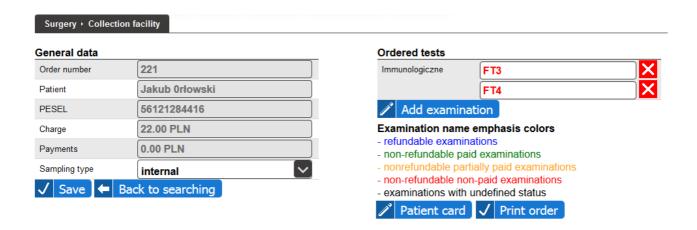
- internal barcode the bar code printed on the top right corner of the order issued by the jHIS system; to load the value of code from referral to the search engines you can use the barcode reader if any is connected to your computer
- > samplings kinds of samplings; there exist the following kinds of samplings
  - o internal realized by healthcare center
  - external realized beyond healthcare center
- order state current order state; there exists the following states
  - new order waiting for collection of samplings of materials
  - passed to realization order waiting for sending to laboratory
  - sent to laboratory order sent to laboratory for realization
  - realized order with results registered
  - canceled order that realization has been canceled
- incomplete results marking this field allows to search orders for which results are incomplete (results are considered complete if results of all examinations contained within the order have been entered or attachment with scan of results have been entered)
- include staled marking this field allows to include staled orders within search results (non-operated orders older than 30 days), without marking this option only valid orders are displayed (non-operated orders not older than 30 days and operated orders; order is valid through 30 days since the date of its issue)

- > realized partly marking this field allows to search orders within which not all examinations have been realized due to some reason (eg. patient had fainted during blood sampling so it wasn't possible to realize all examinations because of lack of required quantity of blood)
- PESEL PESEL number or the beginning of the patient's PESEL number for whom there was issued an order
- date of birth the date of birth of the patient for whom there was issued an order (chosen from the calendar which appears when you click on a text field)
- first name the firs name or the beginning of the first name of the patient to whom there was issued an order (capitalization does not matter)
- > surname the surname of the patient or part of a surname of the patient to whom there was issued an order (capitalization does not matter)

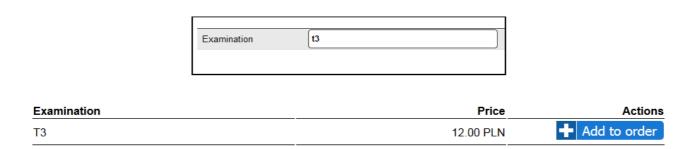
After entering the search criteria and pressing the "Search" button, under the search engine is displayed a list of orders waiting for realization, matching search criteria (states are emphasized with colors). At each order within "new" state there are buttons "Serve" (which allows to display order form and realize the order) and "Change" (which allows to change sampling mode for the order and to delete some examinations from order or add some examinations to order), by other orders there is the "Enter" button which allows to display order form, by orders realized partly there is also the "Renew" button which allows to generate new order with examinations from the given order that have not been realized, and for all realized orders, a "Repeat" button is available to generate a new order with selected examinations from a given order, which must be repeated without charging the patient (eg in the laboratory the sample was damaged with the material taken from the patient and because of that laboratory did not perform certain examinations, it should therefore carry out these examinations for free after receiving a new sample of material collected from the patient).



To change sampling mode and/or examinations for the order and to accept a fee for the order one has to click "Change" button (fee can be accepted also by clicking on "Serve" button). Form allowing to change sampling mode and examinations appears then. Examinations removal and addition is possible only for orders with state "new", wherein one can add examinations to non-paid orders only (orders for which no financial document has been issued) and one can remove examinations from paid orders also but only if no correcting financial document has been issued.



To delete examination from order one has to click the red button with mark "×" by the given examination (one cannot delete all examinations from the order). To add new examination one has to click the button "Add examination" below the list of examinations. Then opens new window with the list of examinations and with the field to narrow down the list of examinations – when writing part of examination name within this field system narrows down the list of examinations to these containing this part within its names. After than one has to click the button "Add to order" by the examination that is to be added to the order (this button is visible only by examinations than can be realized within single order. It is possible to add to order non-refunded examinations only.



To change sampling type one has to choose the correct sampling type from the list and to save the change by clicking the button "Save". To accept a fee for the order one has to click the button "Patient card" and to note payment within the "Payments" tab. To print order one has to click the button "Print order".

In case of orders in "new" state after pressing the "Serve" button at the proper order displays the form of this order. It consists of two columns:

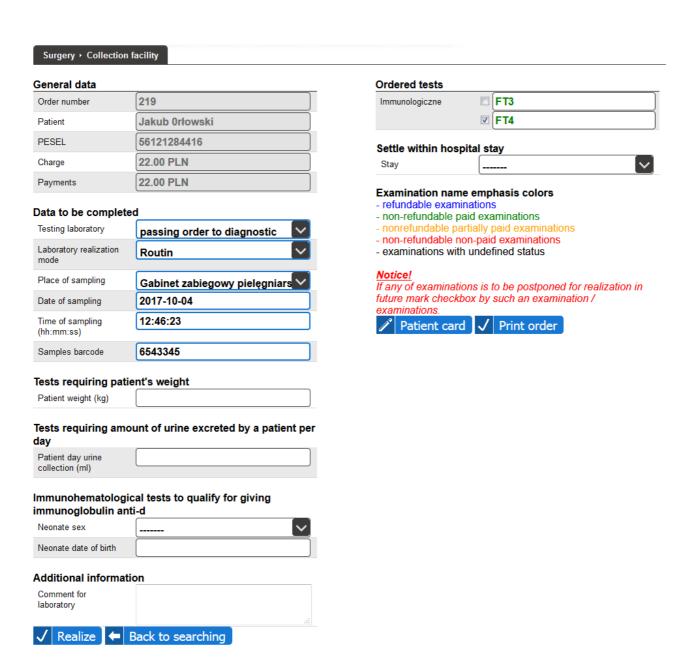
- > left column patient and order general data, data to be completed by the person realizing collection of the material, on which ordered test will be performed (blood, urine, feces, etc.)
- right column a list of tests commissioned by the doctor emphasized with colors: refunded

(blue), non-refunded paid (green), non-refunded partially paid (orange), non-refunded non-paid (red) with additional informations on realization (if such informations have been entered into examinations dictionary)

In the form, the fields surrounded by a blue border should be filled in (form for external samplings contains less fields than form for internal samplings). Order can be sent to laboratory electronic way (if appropriate connections with laboratories has been configured) or can be passed to laboratory in paper form outside the system. Default laboratory set within system configuration is automatically chosen. To enter the bar code from label stuck onto samples (in case of internal samplings), click on the "Samples barcode" field and scan the barcode with the barcode scanner attached to your computer (by default when opening order form, text cursor is placed within the field of "Samples barcode" so it is conveniently to scan barcode first). When realizing the consecutive orders, the field "Place of sampling" is automatically filled with recently used position. Date and hour of sampling are automatically filled with the current date and hour. If the ordered tests require entering additional data, such as:

- > patient weight
- > patient day urine collection
- > neonate sex and date of birth

then they have to be also entered into the form. By all examinations there are check fields that allows to mark examinations which will not be realized within the order but they will be postponed for realization in future (eg. patient had fainted during blood sampling so it wasn't possible to realize all examinations because of lack of required quantity of blood). For postponed non-refunded examination there appears overpayment within patient payments.

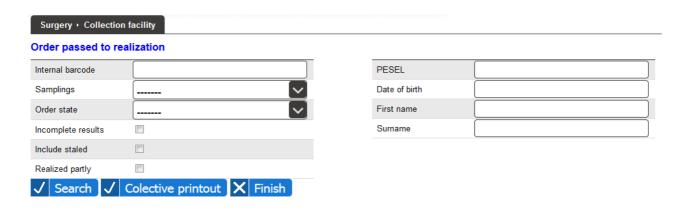


To accept a fee for the order one has to click the button "Patient card" and to note payment within the "Payments" tab or indicate a hospital stay under which examinations are to be settled (if the patient is in a hospital and diagnostic examinations are performed during the stay to implement the treatment process, then the cost of these examinations can be included in the final costs of the patient's stay in the hospital).

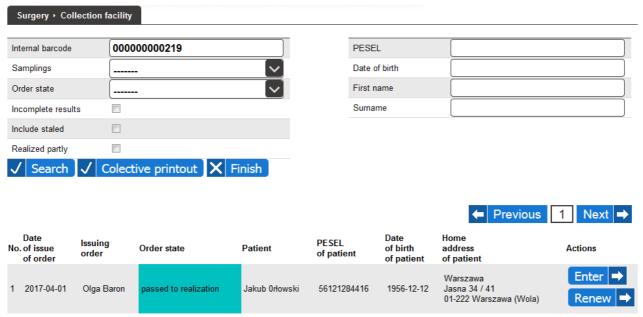
To print order one has to click the button "Print order".

After completing the form one should click button "Realize" (realization of order is possible only if there are no unpaid examinations within the order). After that system informs with appropriate message about passing order to realization, form of order is closed and on the page appears a search engine of orders which lets you search and realize new orders. At the same time order changes its state to "passed to realization". If within order form one has selected laboratory to which orders are sent electronically, then the order goes to the queue of orders to be sent to laboratory, if passing order to diagnostic laboratory out of system has been selected, then the following activities related to send order to laboratory belong to collection facility employee. Orders from the queue are retreived and sent automatically to specified laboratory using integration mechanism appropriate for

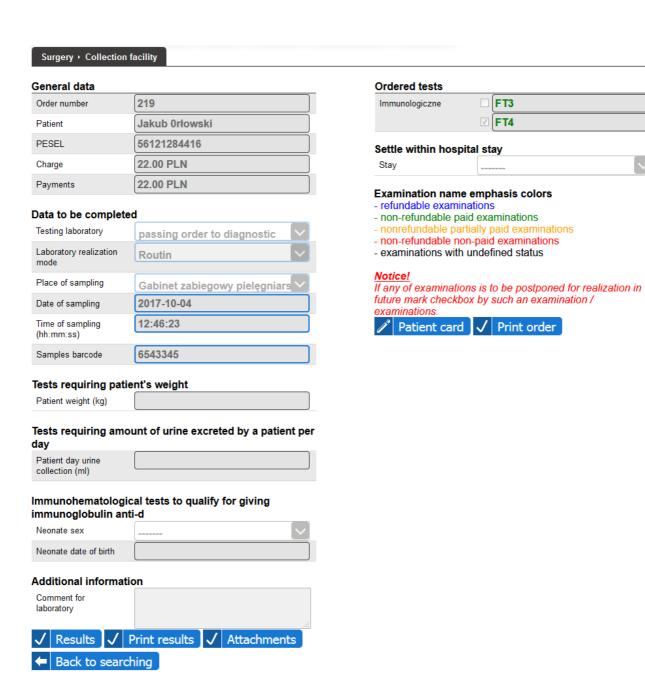
the given laboratory.



For orders having state other than "new", access to order form is also possible by clicking "Enter" button by the given order in search results.

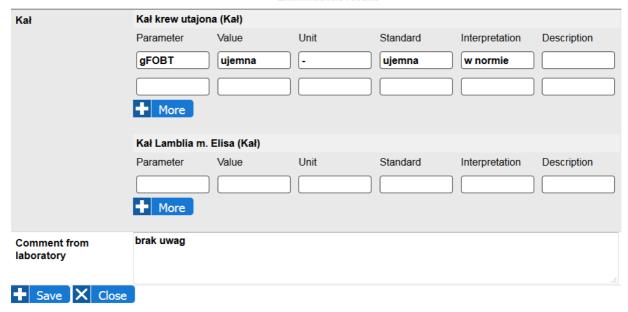


In case of orders having states other than "new", order form is presented in read only mode. Under the form there are buttons "Results", "Print results" and "Attachments".



If order has not been sent to laboratory elentronically but out of a system, then clicking the button "Results" opens in new window a form allowing to enter results received from laboratory (obtained out of system). For each examination there is by default single row to enter value of single parameter of examination result. To enter more parameters one has to use button "More" by the given examination. After entering results one has to save data clicking the button "Save" (rows with empty field of "Parameter" will be ignored while saving data) and then to close the window by clicking the button "Close". Entering results causes that the given order changes its state to "realized". For such orders button "Results" under order form is still visible and allows to enter corrections to examination results.

#### **Examinations results**



If order has been sent to laboratory electronically, then results of examinations are also received electronically (automatically) and in the moment of results receipt the order changes its state to "realized" and "Results" button allows to preview received results within the same form as used to enter results except that it is displayed in readonly mode. Moreover results received from laboratories using eLab system are automatically saved as PDF files in "History" tab within patient card.

The printout of examinations results entered or received electronically can be done by clicking the "Print results" button.

Attaching examination results as attachments (for example scans) is possible too. Button "Attachments" is used to this purpose. By clicking this button there appears form in new window allowing for addition of attachments and list of already added attachments with examination results. By each added attachment there are buttons that allow to preview / to save to disk the given attachment and to delete attachment.



To add new attachment one has to point out file from disk and click "Save". To view / save attachment to disk one has to click "View" button by the given attachment. To delete attachment one has to click "Delete" button by the given attachment.

If order has been realized only partly, ther there exists possibility to realize previously not realized examinations as a new order. By clicking the button "Renew" within search results list by partly realized order, there appears information about its realization state and about possibility to generate new order. Because an order can be issued only during visit, then while generating order system has to generate visit also, leaving just specification of its basic parameters to the user.

Surgery → Collection facility

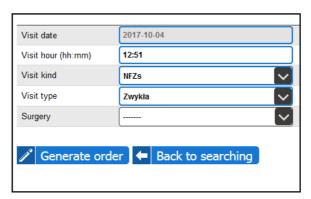
This order having number 219 has been realized partly only

Examinations that has not been realized are:

• FT4 (11.00 PLN)

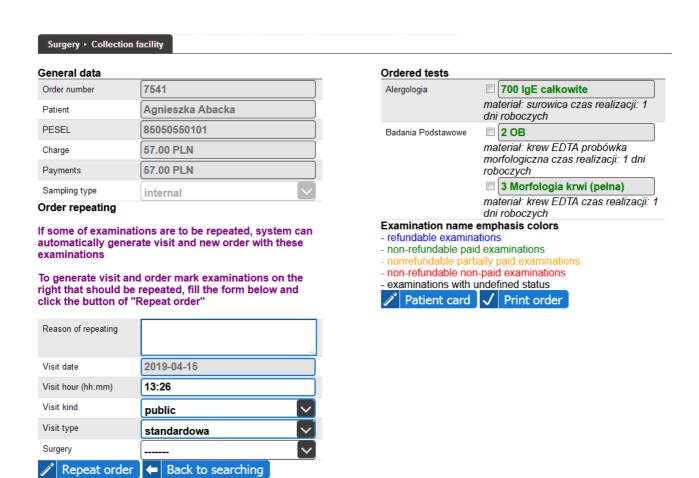
System can automatically generate visit and new order with these examinations

To generate visit and order fill the form below and click the button of "Generate order"

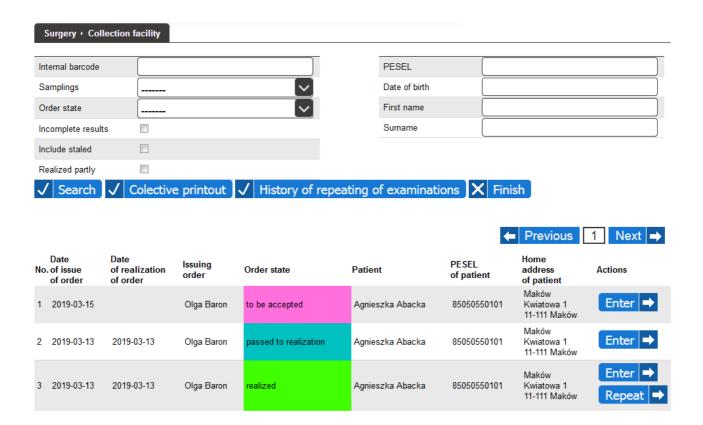


After entering parameters of visit and clicking the button "Generate order" system generates visit and order for examinations that have not been realized previously. Regardless whether bailout was or was not accepted for partly realized order, new order is generated with nominal prices (without bailout) – bailout for such order can be accepted manually.

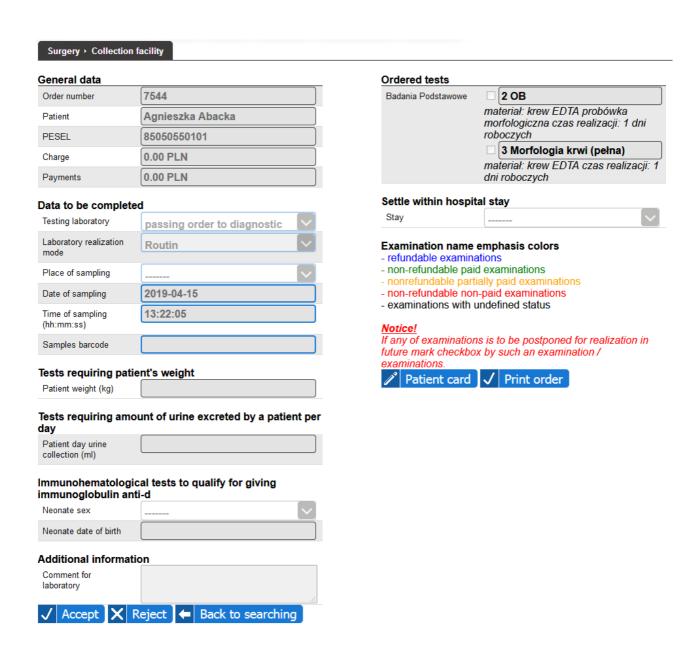
If some examinations from the realized order need to be repeated, then after clicking the "Repeat" button visible in the list of search results on the completed order, the basic order data form is displayed with the option to mark the examinations to be repeated and determine the reason for repeating the examinations. The "Repeat order" button at the bottom of the form allows one to generate a new order with selected examinations and without additional fees. Because the order can be issued only at the visit, the system generating the order must also generate a visit, leaving the user to specify only its basic parameters, hence the form has additional fields to determine the parameters of such visits.



After selecting the examinations to be repeated, filling in the form and clicking the "Repeat order" button, a new order is generated, which receives the status "to be accepted".



As with any order, the "Enter" button is visible when the order is accepted. After clicking this button, the order form is displayed in read-only mode with the buttons "Accept" and "Reject". For users who are not authorized to accept orders, these buttons are inactive, for authorized users they are active.



Depending on the decision, the order should be accepted (clicking the "Accept" button) or rejected (clicking the "Reject" button). Orders accepted receive a "new" status and are operated as described earlier in this chapter. Rejected orders receive the "rejected" status and their further service is not possible.

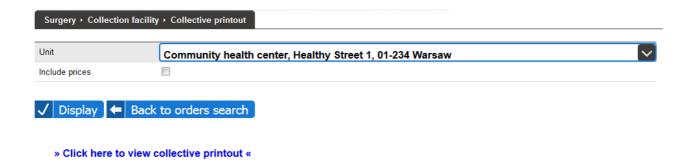
The history of repeating the examinations is registered and is available after clicking the "History of repeating of examinations" button in the orders search engine. After clicking this button, a new window opens with a list of repeated examinations together with the specification of the reason for the repeating.

#### Examinations repeating history

Examination of	Repetition at	Repetition reason	Examination name	Patient
2019-03-13	2019-03-15	Uszkodzenie próbki w laboratorium.	3 Morfologia krwi (pełna)	Agnieszka Abacka 85050550101
2019-03-13	2019-03-15	Uszkodzenie próbki w laboratorium.	2 OB	Agnieszka Abacka 85050550101



Within the orders search form beside "Search" button there is also available "Collective printout" button, that allows to print list of orders realized on the current day within the specified unit. After clicking this button there appears form that allows for the choice of unit. Within the form one can also mark option "Include prices" - then within the printout prices of realized non-refunded examinations appear. After specifying criteria and clicking the button "Display" there appears link that allows to download (as PDF file) and print the list of realized orders. The refunded examinations on the collective printout are marked with the symbol "(R)", for external samplings, instead of the hour of sampling the symbol "(Z)" appears.



Reports on the realization of diagnostic examination are available after clicking the "Reports" button in the orders search engine. Then a list of possible to generate reports is displayed with the "Choose" button next to each of them. After clicking the "Choose" button at a given report, a filter is displayed that allows entering restrictions and generating a report.



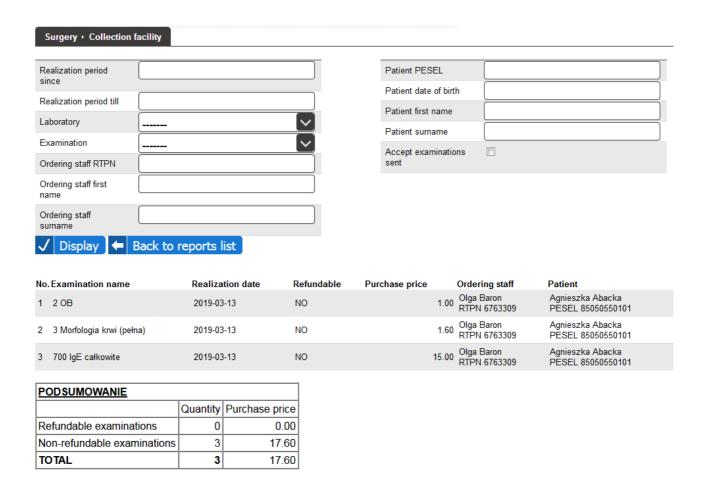
The general summary is a list of examoinations realized in a given period by a specific laboratory with an indication of the ordering staff, the patient, the refund and the purchase price. The report can be generated using the following criteria:

• the period of testing (from, to)

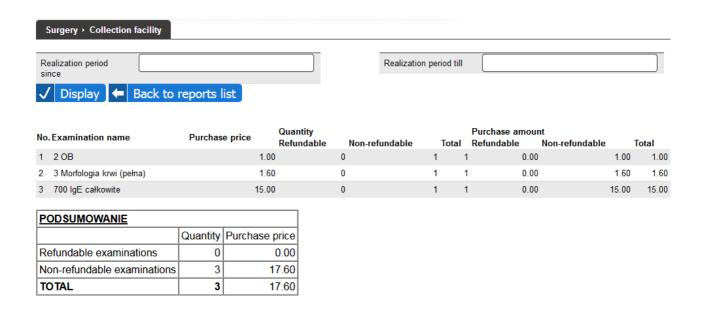
- laboratory performing
- type of examination
- RTPN, name and surname of the ordering staff
- PESEL, date of birth, name and surname of the patient

It is also possible to include in the summary examinations sent to the laboratory but not yet realized.

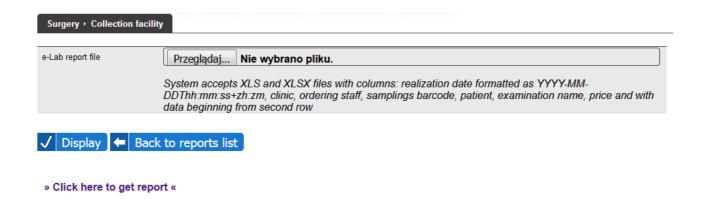
After entering the criteria and clicking the "Display" button, a list of examinations that meet the indicated criteria and a quantitative and valuable summary of the examinations, broken down into refunded and non-refunded, is presented.



Periodic report is a report of the numbers and amounts of individual types of examinations realized over a given period, divided into refunded and non-refunded. After entering the criteria and clicking the "Display" button, a list of examinations that meet the indicated criteria and a quantitative and valuable summary of the examinations, broken down into refunded and non-refunded, is presented.



The e-Lab verification summary is a list of discrepancies between the XLS / XLSX file downloaded from the e-Lab system with the list of diagnostic examinations performed and the jHIS system database. After indicating the XLS / XLSX file and clicking the "Display" button, the system processes the attached file and generates an output file with the same structure but containing only discrepant records and displays a link to download the output file.



# **Vaccination facility**

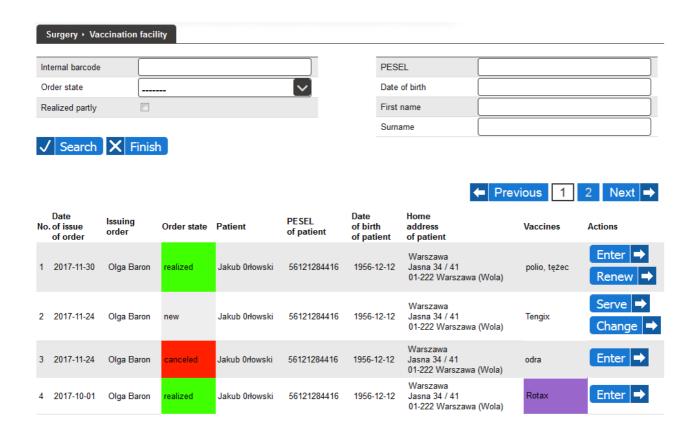
The "Vaccination facility" functionality in the "Surgery" menu is used for service of vaccination facilities.

After selecting the "Vaccination facility" functionality in the "Surgery" menu there is displayed a search engine of orders issued by the doctors. It is possible to search orders by any combination of the following criteria:

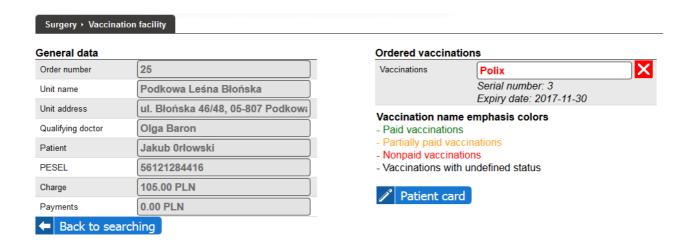
- internal barcode the bar code printed on the top right corner of the order issued by the jHIS system; to load the value of code from referral to the search engines you can use the barcode reader if any is connected to your computer
- order state current order state; there exists the following states
  - o new order waiting for vaccination realization

- realized order with vaccinations realized
- canceled order that realization has been canceled
- > realized partly marking this field allows to search orders within which not all vaccinations have been realized due to some reason (eg. patient had fainted during vaccination so it wasn't possible to realize all vaccinations)
- PESEL PESEL number or the beginning of the patient's PESEL number for whom there was issued an order
- date of birth the date of birth of the patient for whom there was issued an order (chosen from the calendar which appears when you click on a text field)
- first name the firs name or the beginning of the first name of the patient to whom there was issued an order (capitalization does not matter)
- > surname the surname of the patient or part of a surname of the patient to whom there was issued an order (capitalization does not matter)

After entering the search criteria and pressing the "Search" button, under the search engine is displayed a list of orders waiting for realization, matching search criteria (states are emphasized with colors, patient vaccines are emphasized with color). At each order within "new" state there are buttons "Serve" (which allows to display order form and realize the order) and "Change" (which allows to delete some vaccinations from order or add some vaccinations to order), by other orders there is the "Enter" button which allows to display order form and by orders realized partly there is also the "Renew" button which allows to generate new order with vaccinations from the given order that have not been realized. In addition, for orders in the "new" and "realized" status, when the logged in user has the system administrator role, there is a "Delete" button that allows deleting a given order in a situation when it was issued by mistake (the order is also removed from the vaccination facility and from the medical history of patient).



To change vaccinations for the order or to accept a fee for the order one has to click "Change" button (fee can be accepted also by clicking the button "Serve"). Form allowing to change vaccinations appears then. Vaccinations removal is possible only for orders with state "new" non-paid and paid only if no correcting document has been issued.



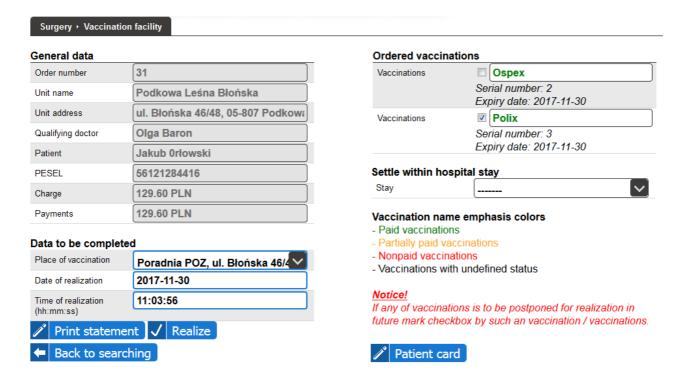
To delete vaccination from order one has to click the red button with mark "×" by the given vaccination (one cannot delete all vaccinations from the order).

To accept a fee for the order one has to click the button "Patient card" and to note payment within the "Payments" tab.

In case of orders in "new" state after pressing the "Serve" button at the proper order displays the form of this order. It consists of two columns:

- > left column patient and order general data, data to be completed by the person realizing vaccination
- right column a list of vaccinations commissioned by the doctor emphasized with colors: paid or free (green), partially paid (orange), non-paid (red) with additional informations on vaccines

In the form, the fields surrounded by a blue border should be filled in (form for vaccination with patient vaccines contains more fields than form for for vaccinations with vaccines from health care company store). When realizing the consecutive orders, the field "Place of sampling" is automatically filled with recently used position. Date and hour of sampling are automatically filled with the current date and hour. By all vaccinations there are check fields that allows to mark vaccinations which will not be realized within the order but they will be postponed for realization in future (eg. patient had fainted during vaccination so it wasn't possible to realize all vaccinations). For paid and postponed vaccinations there appears overpayment within patient payments.

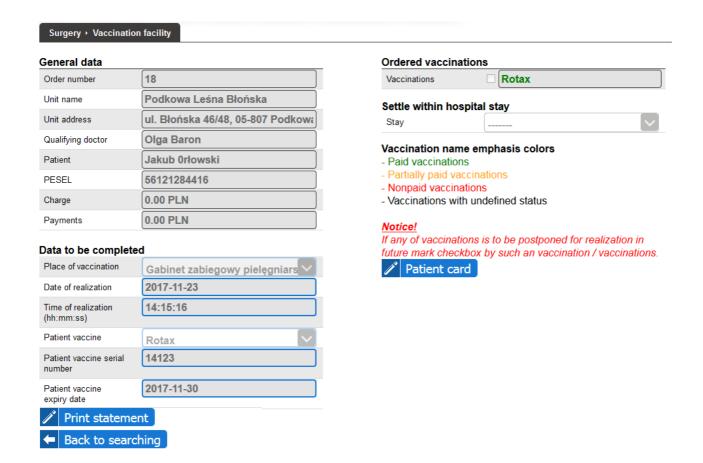


To accept a fee for the order one has to click the button "Patient card" and to note payment within the "Payments" tab or indicate a hospital stay under which vaccinations are to be settled (if the patient is in a hospital and vaccinations are carried out during the stay in order to implement the treatment process, then the cost of these vaccinations can be included in the final costs of the patient's stay in the hospital).

After completing the form one should click the button "Print statement" to download and print statement with agreement for vaccinations to be signed by patient (as PDF file) and then should click the button "Realize" (realization of order is possible only if there are no unpaid vaccinations within the order).

For orders having state other than "new", access to order form is also possible by clicking "Enter" button by the given order in search results. In case of orders having states other than "new", order form is presented in read only mode. Under the form of realized order there is a button "Print statement" to download and print statement with agreement for vaccinations to be signed by patient

(as PDF file) if it wasn't done before statement realization.



If order has been realized only partly, ther there exists possibility to realize previously not realized vaccinations as a new order. By clicking the button "Renew" within search results list by partly realized order, there appears information about its realization state and about possibility to generate new order. Because an order can be issued only during visit, then while generating order system has to generate visit also, leaving just specification of its basic parameters to the user.

Surgery > Vaccination facility

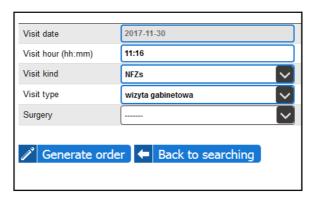
This order having number 35 has been realized partly only

Vaccinations that has not been realized are:

teżec

System can automatically generate visit and new order with these vaccinations

To generate visit and order fill the form below and click the button of "Generate order"



After entering parameters of visit and clicking the button "Generate order" system generates visit and order for vaccinations that have not been realized previously. Vaccines previously not used are transfered to newly generated order.

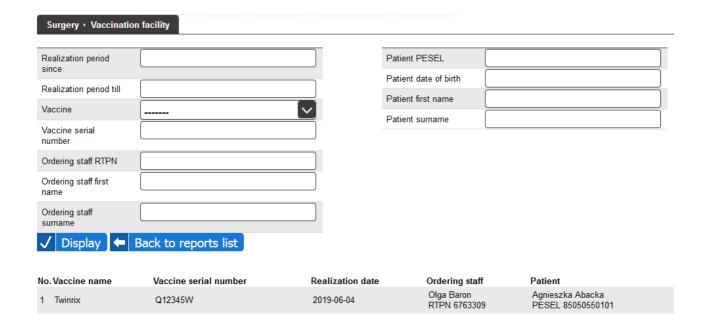
Reports on the performance of vaccinations are available after clicking the "Reports" button in the orders search engine. Then a list of reports possible to generate with the "Choose" button is displayed next to each of them. After clicking the "Choose" button at a given report, a filter is displayed that allows entering restrictions and generating a report.



The general summary is a list of vaccinations realized in a given period with an indication of the serial number of vaccine, realization date, ordering staff and the patient. The report can be generated using the following criteria:

- the period of vaccinations (from, to)
- vaccine kind
- vaccine serial number
- realization date
- RTPN, name and surname of the ordering staff
- PESEL, date of birth, name and surname of the patient

After entering the criteria and clicking the "Display" button, a list of vaccinations that meet the indicated criteria is presented.



# **Drugs**

The "Drugs" functionality in the "Surgery" menu is used to create handy list of favorite drugs (most frequently prescribed) by the logged doctor. After selecting this functionality, there is displayed a view with two columns. The left column is a list of all drugs on the basis of which the doctor can create his handy list of favorite drugs. The right column is a list of favorite drugs of logged doctor.

In the left column by default are displayed all available drugs. At each drug are presented the following information:

- name
- form
- dose
- package
- producer
- repayment
- is this drug authorized for marketing
- is this contraceptive drug
- drug
- group of precursors
- category of availability
- international name

- characteristic if the drug has a characteristic then in the field of characteristic is displayed a button with the down arrow "↓" to download the PDF file with the characteristic of the drug
- replacements at every drug there is the "Display" button, which allows to display replacements for a particular drug

Pressing the button of displaying replacements at any drug switches the view from the list of drugs to the list of replacements for this drug. In the upper part of the window there is displayed additional information about which drug's replacements are currently displayed ant at this information is "×" sign. Clicking on the "×" ends displaying of replacements and restores the previous view of drugs.

Replacements for drug ACCUPRO 20 🕷									
Display 10 ▼ results First Previous 1 2 3 4 5 6 7 Next L									
	No.	Name ^	Form	Dose	Packa				
	1	ACCUPRO 10	TABL. POWL.	0,01 G	30 TAI				
	2	ACCUPRO 10	TABL. POWL.	0,01 G	100 TA				
	3	ACCUPRO 10	TABL. POWL.	0,01 G	30 TA				
	4	ACCUPRO 10	TABL. POWL.	0,01 G	50 TA				
	5	ACCUPRO 20	TABL. POWL.	0,02 G	50 TAI				
	6	ACCUPRO 20	TABL. POWL.	0,02 G	30 TA				
	7	ACCUPRO 20	TABL. POWL.	0,02 G	100 TA				
	8	ACCUPRO 20	TABL. POWL.	0,02 G	30 TA				
	9	ACCUPRO 40	TABL. POWL.	0,04 G	28 TA				
	10	ACCUPRO 40	TABL. POWL.	0,04 G	56 TAI				
4					+				
	No.	Name	Form	Dose	Packa				
Positio	ons fror	m 1 to 10 from 6	3 total						

The list of drugs displayed in the left column can be narrowed by entering a part of the name, form, package, producer, international name in the fields visible at the bottom of the column and / or selecting the appropriate values from the drop-down lists also visible at the bottom of the column. When entering a part of the name, form, package, producer, international name and / or selecting values from drop-down lists, the system automatically displays only these medicines that meet the search criteria. To add a drug to the list of favorite drugs, place the mouse pointer on the drug (in the left column), press the left mouse button and holding down the left mouse button to drag the cursor to the right column and then release the mouse button. In this way the drug is moved from the left to the right column, so it is moved to list of favorites drugs. At the drugs in the left column there are visible fields that allow to select drugs. They are used to possible to add many drugs at once to the list of favorites drugs. To add several medications at once to the list of favorites drugs, simply select it in the left column, hover the mouse over any of these medicines, press the left mouse button and holding down the left mouse button to drag the cursor to the right column and then release the mouse button. In this way drugs are moved from the left to the right column, so are moved to the list of favorites drugs. Above the list of drugs in the left column there is also visible checkbox for selecting / deselecting quickly all visible medicines. By clicking in turn on the headers of columns under the list of drugs it is possible to sort them alphabetically by the column (subsequent clicks are changing the sort order from ascending to descending and vice versa). At the top of the left column there is also displayed a navigation pane uses to change the amount of drug visible on one screen as well as switching between successive screens if the drugs do not fit on one.

In the right column is displayed the list of favorite drugs of doctor. At every drug there is a button with the sign "-" enabling the removal of the drug from the list of favorite drugs. At all the medicines there are also visible fields that allow selection of drugs. They are used to possible to delete multiple medicines at once from the list of favorite drugs. After selecting at least one drug, at the bottom of the right column there is the "Delete selected" button allows the removal of all of the selected drugs from the list of favorite drugs. Above the list of drugs in the right column there is also a checkbox for selecting / deselecting quickly all visible medicines. The order of medicines in the right column can be changed on the basis of drag and drop. To move the drug in the right column to another location you should move the mouse cursor to a drug, press the left mouse button and holding down the left mouse button to drag the cursor to another location of right column and then release the mouse button and the drug will be moved to the indicated place.

#### **EHR** access matrix

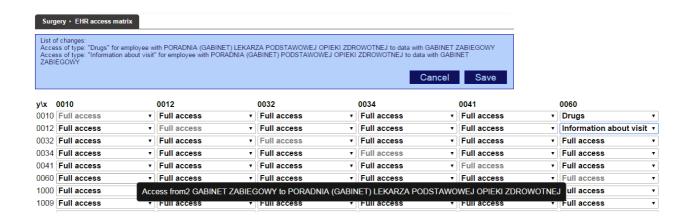
The functionality of "EHR access matrix" in the "Surgery" menu is used to define the level of visibility of Electronic Health Records from particular clinics for doctors of particular professions. Each cell of the matrix is a selection list that specifies how the range of the visits in clinics of specialty given at the beginning of the column is seen by the doctor with a specialization given at the beginning of the line. There are four levels of visibility:

- Full access a doctor specializing in Y sees information about the dates of visits realized in clinics specializing in X and drugs prescribed during these visits and has access to complete medical records compiled during these visits
- Drugs a doctor specializing in Y sees information about the dates of visits realized in clinics specializing in X and drugs prescribed during these visits
- Information about visit a doctor specializing in Y sees information about the dates of visits realized in clinics specializing in X
- No access a doctor specializing in Y does not see information about the dates of visits realized in clinics specializing in X

By default all levels of visibility are set on "Full access".

Due to the size of the matrix for easy orientation in it when you hover your mouse over any cell of the matrix there is displayed a hint to which specialty of doctors and specialty of clinics the cell of matrix refers.

Any changes made in the matrix appears above the matrix on a blue background creating a list of modified components of the item. To confirm the changes click "Save" button, to cancel the changes, use the "Cancel" button.



The levels of visibility entered in the matrix are taken into account when presenting the history of visits in the window of visit in doctor's surgery.

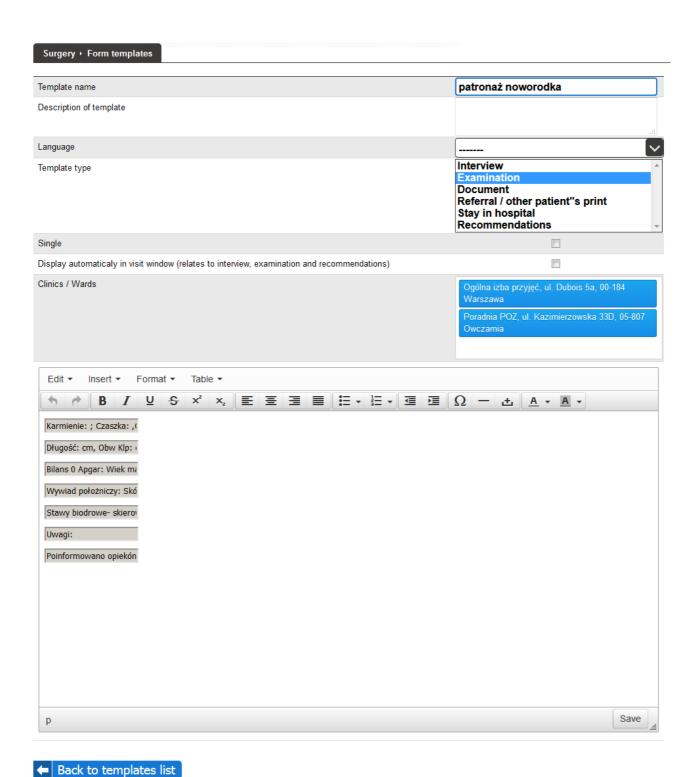
# Form templates

The "Form templates" functionality from the "Surgery" menu is used to create templates of forms as described in the "Doctor / Nurse surgery" section. Forms can be defined both by the system administrator as well as by doctors. Forms defined by the administrator for specific clinics are visible for all doctors working in these clinics. Forms defined by the doctor are visible only for himself. Doctor on his own needs can also modify the forms defined by the administrator, but the changes are not entered to the original form defined by the administrator but to its copy visible for the doctor.

After selecting the "Form templates" functionality from the "Surgery" menu there is displayed a list of all templates of forms available for logged user (administrator or doctor). At each template there are buttons to export, edit and remove particular template. Below the list of templates you can see a buttons to import template and create a new template. Buttons of editing and creating a template are linking to a form that allows defining a template or make changes to an existing template. Delete button lets you delete the template (after confirmation).



After pressing a button of editing or creating a new template there is displayed a template's form (in the first case is empty, in the second case - with the data of template).



For each template there is defined template name, an optional description and language and type of template (template may be a template of interview, template of examination, template of patient's documentation, template of referral, template of hospital stay, template of recommendations - many kinds at once) and it means that it is a disposable template (it is important only for templates in "patient's documentation" – a form completed during the visit based on a template which is marked as a disposable, you will not see on other visits of particular patient with a doctor at the clinic, a form completed during the visit based on a template which is not marked as a disposable, you will see on other visits and it will be possible to fill it by another data). The administrator has also the possibility to indicate clinic, in which defined by him template will be visible for doctors. Checking

the box "Display automatically in the visit window" will cause that the template will be automatically selected and displayed in the surgery room in the visit window when it is operated (this applies to templates of interviews, examinations and recommendations). The principal part of the template definition is its appearance and content. The appearance and content of the template is created using an editor like Microsoft Word or OpenOffice Writer, which allows formatting content, create tables, insert fields to fill, links, graphics and multimedia. In places where in the template have to be fields to entering content, relevant tags have to be inserted by placing the cursor at the point where you want the field and select the type of field from "Elements of a meta language" submenu located in the "Insert" menu of editor. There are the following fields:

- checkbox field of checking "✓"
- field of selecting date field to entering date
- text field field to entering single line of text
- long text field field to entering many lines of text
- select field list with options to select

After selecting the type of field there are displayed the parameters of the field:

- name field name
- group *unused (for future use)*
- description description of meaning of the field
- links *unused* (for future use)
- format *unused* (for future use)
- maximal length maximal number of signs, which can be entered in the field
- values list of comma-separated options which appear on the select field
- multiple option indicating whether in the select field you can select more than one option
- default value default value that should be displayed or be chosen in a field when displaying the form
- display all select options option pointing out manner of presentation of select field –
  markin it leads to display all options at once instead of default behaviour of displaying
  single option and displaying the rest after unfolding the list
- rows number of rows of text to be entered within long text field
- columns number of characters (of average width) to be entered within single row in long text field
- multiplicity *unused (for future use)*

After entering the parameters of the field and confirming with "OK" button, tag corresponding to the field is inserted in the content of the template at the cursor position. If field has default value defined then within the tag representing this field there appears entered default value, else there appears field type between doubled exclamation marks (for example: "!!text field!!").

After entering the data of template and create its content, the information should confirmed by clicking the "Save" button at the bottom of the editor.

Export button allows to save template defined in jHIS system to computer disk. By clicking this button browser stores template file to computer disk.

Import button allows to read into jHIS system a template stored on computer disk. By clicking this button there appears form in which one has to specify template file and then click the button of "Import".



Mechanism for exporting and importing templates enables easy and comfortable carrying once defined templates between different instances of jHIS system.

# **Document templates**

The "Document Templates" functionality in the "Surgery" menu is used to manage documents' templates created on base of any PDF files. Creating a template consists of marking on a PDF document places for later data entry. Once you have selected the above functionality there is displayed a list of templates and at each of them there are icons (when you hover the mouse on the icon there is a hint of what each icon means):

- Edit template data allows to edit the template's basic data such as name, description, and a PDF file that will be used to create a template
- Edit template content allows selecting on the introduced PDF file, locations for later data entry (icon is visible only for templates which have specified PDF file)
- Export template allows to download the template to the computer disk as a file with the JSON extension for later import on another instance of the jHIS system (icon is visible only for templates which have specified PDF file)
- Remove template allows to remove a template

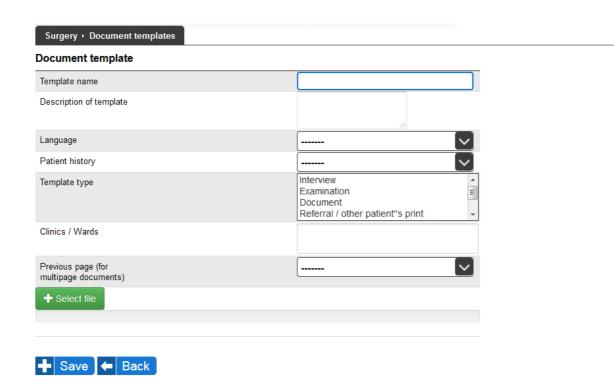
Below the list of documents' templates there are buttons:

- Add template allows to add a new template to the system
- Template import- allows to import to the system a template stored on disk in a JSON file

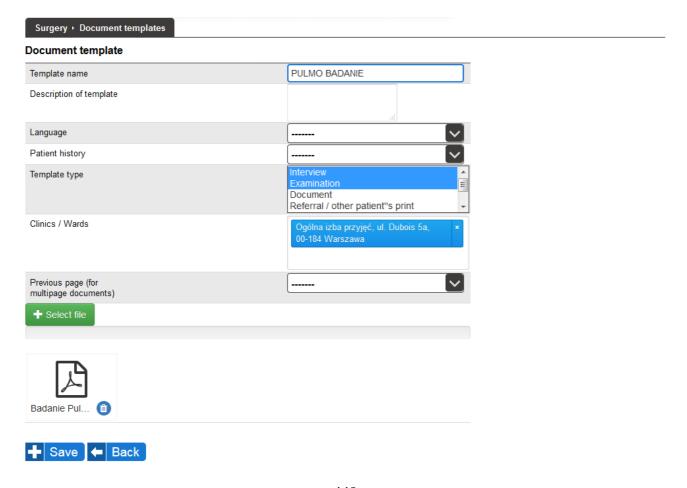
Template names, which are part of a multi-page template (that is, they cannot be used alone), are in italics.

Shov	v 10 → entries Name	<u> </u>	Creating date	User	Action	
74	Dokument dwustronny		2020-02-17 11:11	 ZOZ	Ø ₽ ×	
73	Dokument dwustronny (strona 1)		2020-02-17 11:10	zoz	<b>♂</b> A <b>&amp;</b> ×	
72	Dokument wielostronicowy		2020-02-13 09:54	ZOZ	<b> ☑ △ △ ×</b>	
71	Dokument wielostronicowy (strona 2)		2020-02-13 09:53	ZOZ	<b>♂</b> Д <b>&amp;</b> ×	
70	Dokument wielostronicowy (strona 1)		2020-02-13 09:51	ZOZ	<b>♂</b> Д <b>&amp;</b> ×	
68	PULMO BADANIE		2019-12-05 14:16	alecz	<b>♂</b> Д <b>&amp;</b> ×	
65	Badanie pulmonologiczne		2019-12-05 12:05	alecz	<b>♂</b> Д <b>&amp;</b> ×	
64	Zalecenia (różne poziomy)		2019-04-04 14:22	ZOZ	<b>♂</b> Д <b>⇔</b> ×	
63	skierowanie do pracowni diagnostycznej		2018-06-18 11:36	ariadnaziolnowska	<b>♂</b> Д <b>⇔</b> ×	
62	Skierowanie do pracowni RTG Owczarnia		2018-06-14 11:41	ermegardakrongauz	<b>♂</b> Д <b>⇔</b> ×	
ID	Name ng 1 to 10 of 35 entries		Creating date	User	Action	

To add a new template, click on "Add template" button. You will see a form of adding a template of the document in which you must enter at least the name of the template. Specifying kind of information within "Patient history" field will cause that the copies of all documents created in surgery on the basis of that marked template will automatically be getting to the "History" in the patient card and will be associated with the given information kind. Type of template determines its destiny ("Interview" - a template available in the "Interview" tab in the visits / surgery / stay window in the doctor's surgery, "Examination" - the template available in the "Examination" tab in visit / surgery / stay window at the doctor's surgery, "Patient's documentation" - unused, "Referral / others patient's prints"- a template available in the "Referral" tab in the visits / surgery / stay window in the doctor's surgery, "Hospital stay" - a template available in the "Stay" tab in the visit / surgery / stay window in the doctor's surgery, "Recommendations" - a template available in the "Recommendations" tab in the visit / surgery / stay window in the doctor's surgery; you can specify more than one destination) and clinics indicate where it can be used. The "Previous page" field allows you to combine document templates into multi-page documents. As each document template can only describe one page of a document, to create a multi-page document, create document templates for each page and then link them together using the "Previous Page" box in the correct order. For example, to create a document with three pages, you must define three document templates, e.g. "Document X (page 1)", "Document X (page 2)" and "Document X", while defining "Document X (page 2)" in the field "Previous page" indicate "Document X (page 1)" and when defining "Document X" in the field "Previous page" indicate "Document X (page 2)" - then the templates "Document X (page 1)" and "Document X (page 2) "will not be available for users to fill out (as they are components of a" Document X "multi-page document) and" Document X "will be filled in as a three-page document (" Document X "is the template that defines the last page of a multi-page document aw due to the fact that this template will be displayed for the user, do not include "(page 3)" in its name, because such a name would be misleading for the user filling the dockument). The "Select file" button is used to select the PDF file that will be used to create a template. After filling the form, save the data by clicking "Save" button and then return to the templates' list by clicking "Back" button.



To modify the template data click the "Edit template data" icon at a particular template from the list. You will see a data form of template of the document in which you can make changes (the trash icon at the PDF file allows for its removal) and then save it by clicking "Save" button and return to the list of templates by clicking "Back" button.



To export a template into file, click on the "Export template" icon at a given template from the list. There will be displayed a window of downloading the file on disk, in which should be specified a directory to download and approved downloading.

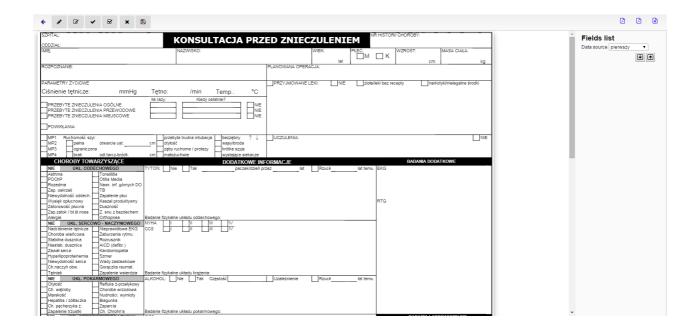
To import a template from a file, click "Template import" button under the list of templates. There will be displayed a window of loading file from disk, in which should be specified the file to load and approved its loading.

To delete a template, click the "Delete template" icon at a given template from the list.

#### **WARNING!**

In a form of adding a new template and in a form of editing data of template there should be chosen always up to one single-paged PDF file.

To modify the content of the template (to create a template based on the attached PDF file), click the icon "Edit template content" at the template from the list. You will see a view of the PDF document which is the kind of background of template and panels of tools for marking on a PDF document places for later data entry and defining their parameters.



In the upper left corner there are displayed the following icons (from left):

- Return when you click this icon, you can return to the list of document's templates
- Draw rectangle when you click on the icon, you can select on a PDF document (holding down the left mouse button and dragging the cursor on the background of a PDF document) any area intended for later data entry as text
- Point rectangle when you click on the icon and then click on the PDF document then your document is automatically check in the largest possible area without setting it to text, pictures, lines and other elements in the PDF document intended for the subsequent input of data in the form of text
- Draw checkbox when you click on the icon, you can select on a PDF document (holding

down the left mouse button and dragging the cursor on the background of a PDF document) any area intended for the subsequent input of data in the form of selections ( $\checkmark$ )

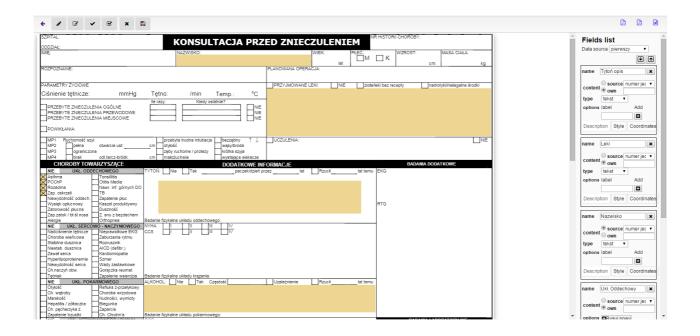
- Point checkbox when you click on the icon and then click on the PDF document then your document is automatically check in the largest possible area without setting it to text, pictures, lines and other elements in the PDF document intended for the subsequent input of data in the form of selections (✓)
- Delete figure when you click on the icon, selected (active) area intended for the subsequent input of data is removed from the PDF document
- Save fields when you click on the icon, fields and their parameters put into form are saved in a database

If already exist documents created basing on the template, then at the middle top appears a message. Such a template after the entering changes will be saved as a new template, (so as a copy of the existing template and the existing template will be no longer available to fill).

In the upper right corner there is displayed the icon which clicked displays a preview of the document corresponding to the defined template and filled with sample data (before previewing save the template using the appropriate icon in the upper left corner).

In the column on the right there are displayed the available data sources, panels with parameters of different areas marked on the PDF document and icons with arrows up and down (over panels with parameters) that allow to fold and unfold panels with parameters. Data sources define how you want to retrieve data to the document (if they have to be filled automatically as eg. patient's personal data). In turn, the selection of a new area of the document creates a new panel with the parameters of the area in the right column. Clicking on the already selected area on the document highlights (through surrounding by frame) the area and the corresponding panel with the parameters in the column on the right. Conversely, clicking on the panel with the parameters in the column on the right side highlights (through surrounding frame) of the panel and the corresponding area on the PDF document.

To select the area to input data in form of text on a PDF document, click on the toolbar icons located in the upper left corner on the "Draw rectangle" icon and then point the cursor on the PDF document in the place where the area has to be selected, press the left mouse button and by holding the button down drag the cursor to the location to which the area has to stretch and release the left mouse button. On the other hand, to select automatically the area to input data in form of text on a PDF document, click on the toolbar icons located in the upper left corner, on the "Select rectangle" icon and then point the cursor on a blank space on a PDF document where you want to select area and click on it and the system automatically selects the area. Created areas can be moved by setting the mouse cursor over the area and then pressing the left mouse button and holding the button pressed, move the mouse pointer to destination and there release the left mouse button. You can also change the size of created areas by setting the mouse pointer on the corner or the middle of the edge of the area and then pressing the left mouse button and holding the button pressed and move the mouse cursor up to the desired size and then release the left mouse button.



For both manual as well as in case of the automatic selection of area for entering data in the form of text, except the area on a PDF document, in the right column there will also appear the panel with the parameters of such area. Panel of parameters consists of three tabs:

• Description - defines the way of filling the field (area) of content, data type, and if the field type is a list then also allows you to define the values which a list should contain

The field can be filled with content automatically by downloading data from a source ("source") or manually by typing by the user ("own" option) — in first case indicate what value from the data source should be used for filling the field (area) on a PDF document, in second case default value could be entered for that field and possibly maximum number of characters that can be entered within that field could be specified.

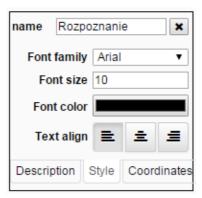
You can create three types of fields: text field ("text" type), the date field ("data" type) and a list of options to choose ("list" type).



In case of a "list" type, options should be defined by typing the following labels and clicking on the button with "+" sign at the entered name of label (already entered labels can be removed by clicking on the button with the "x" sign at the label).



• Style - allows you to specify type, size and style of font and alignment of text in a field (area) of PDF document



• Coordinates - allows to manually specify coordinates defining the position of the field (area) in the PDF document and manually resize it

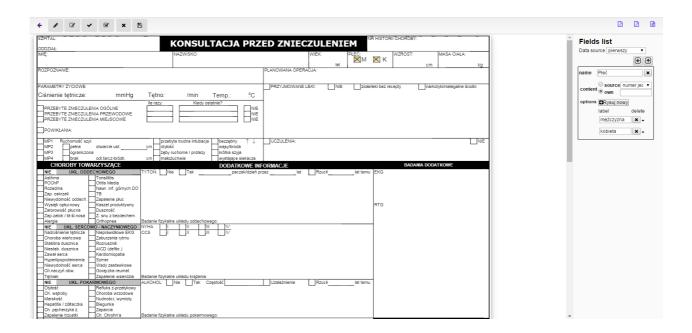


Moreover, in each of these tabs you can enter the name of the field (the area) - a name is very important for future fulfillment of a template. In the upper right corner of each panel there are three buttons:

• button with arrow up – allows to move panel with parameters up i.e. to chanage order of panels visible within right column (significance of order of panels is that fields within

- forms used to fill document templates are arranged in such an order as panels in document template)
- button with arrow down allows to move panel with parameters down i.e. to chanage order of panels visible within right column (significance of order of panels is that fields within forms used to fill document templates are arranged in such an order as panels in document template)
- button with the "x" sign allows for removal the panel and with it the removal of the area to which the panel refers.

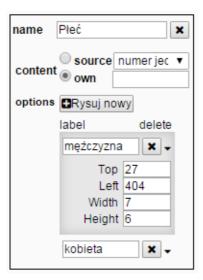
To select the area to input data in the form of selections ( $\checkmark$ ) on a PDF document, click in the toolbar of icons located in the upper left corner on the "Draw checkbox" icon and then point the cursor on the PDF document in the place where area has to be selected, press the left mouse button and holding the button down drag the cursor to the location to which the area has to stretch and release the left mouse button. On the other hand, to select automatically the area to input data in the form of selections ( $\checkmark$ ) on a PDF document, click in the toolbar of icons located in the upper left corner on the "Select checkbox" icon and then point the cursor on a blank space on a PDF document where you want to select area and click on it and the system automatically selects the area. Created areas can be move by setting the mouse cursor over the area and then pressing the left mouse button and holding the button pressed, move the mouse pointer to destination and the release the left mouse button. You can also change the size of created areas by setting the mouse pointer on the corner or the middle of the edge of the area and then pressing the left mouse button and holding the button pressed, move the mouse cursor to the desired size and then release the left mouse button.



For both manual as well as in case of the automatic selection of area for entering data in the form of selections  $(\checkmark)$ , except the area on a PDF document, in the right column there will also appear the panel with the parameters of such area. In this panel you can enter the name of the field (the area) - a name is very important for future fulfillment of a template, specify the way of fulfilment of the field (area), specify whether among all fields with the same name it will be possible to mark only one of them or any number of them while filling document template and enter values of the field. At the value of the field there is also a down arrow which clicked allows you to display coordinates specifying the location of the field (area) in the PDF document and its size (values can be changed

manually). In the upper right corner of each panel there are three buttons:

- button with arrow up allows to move panel with parameters up i.e. to chanage order of panels visible within right column (significance of order of panels is that fields within forms used to fill document templates are arranged in such an order as panels in document template)
- button with arrow down allows to move panel with parameters down i.e. to chanage order of panels visible within right column (significance of order of panels is that fields within forms used to fill document templates are arranged in such an order as panels in document template)
- button with the "x" sign allows for removal the panel and with it the removal of the area to which the panel refers.



If you need to put on a PDF document several areas to enter data in the form of selections ( $\checkmark$ ) bearing a common name then after placing the first such area in the panel of its parameters, click "Draw new" button and then put a new area on a document - for such the area does not appear a new panel with the parameters in the right column, but in the panel where you clicked the "Draw new" button there will be an additional field to enter the value for the newly created area. By repeating the operation you can add more areas of the same name.

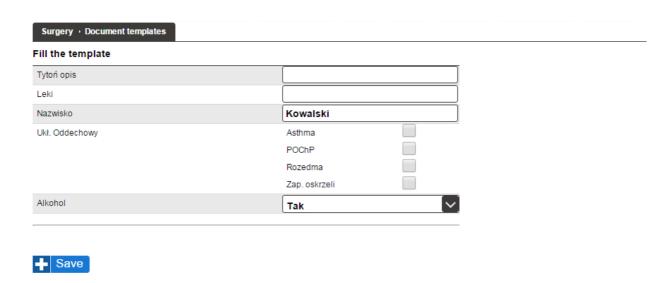
Pressing the "Draw New" button also results in that in the toolbar of icons visible in the upper left corner of the browser window there is an additional icon with "×" sign next to the name of area. As long as this icon is visible until further areas on the document will be appended to the same panel. Clicking on this icon interrupts the process of attachment to the panel another areas placed on the document. If the panel relates to many areas of the same name, click on the button with the "×" sign at the upper right corner of the panel will delete the panel and with it remove all the areas to which the panel refers.

To clear the area of document (and with it the corresponding panel with the parameters shown in the right-hand column), at first click on the area and then on the toolbar of icons located in the upper left corner on the "Delete figure" icon.

After defining the template, save it by clicking in the toolbar icons located in the upper left corner on the "Save" icon. Then you can see a preview of the finished document created on the basis of defined template and filled with sample data - to do this, click on the PDF file icon that appears in the upper-right corner of your browser window. If the effect is unsatisfactory, or work on a template has not been completed, you can then continue to work keeping in mind the need to save a template at the end of work. After work, you can return to the list of all documents' templates by clicking the "Back" icon in the toolbar of icons visible in the upper left corner of the browser window.

Filing documents based on defined template is done by filling a form (created automatically by the system based on the definition of the template). The fields correspond to the areas defined in the template - have the same names and types as specified by defining the contents of the template. Fields' values from the data source by default are filled (with the possibility of change), the other fields remain empty for manual filling. For example, for a document created using the following template:

the System displays the following data form to be placed in such a document:



Filing documents based on templates takes place in the "Documents" in the patient card (see "Registration" chapter, "Patients (active cards)" subchapter), and in the process of arranging visits ("Scheduled visits" chapter).

## Configuration

The "Configuration" functionality from "Surgery" menu allows to change the default appearance of the visit window in the doctor's surgery. After selecting this functionality there is displayed a form with configuration parameters of surgery. There are available the following settings:

- FORWARD and BACK button in visit window tabs the parameter that allows to show or hide the "Back" and "Next" buttons in all tabs of window of visit is surgery
- END VISIT button in visit window tabs this parameter allows to display the "End visit" button in all tabs of the window of visit in surgery (by default it is only displayed in the

- "Summary" tab)
- Visit window close button a parameter allows to display or hide the "x" button of closing window of visit
- Prescriptions issue button a parameter allows to set the type of button used to issuing prescriptions in the "Drugs" tab of window of visit
- Referrals issue button a parameter for setting the type of button used to issue referrals in the "Referrals" tab of window of visit
- Examination referrals issue button a parameter for setting the type of button used to issue examination referrals in the "Orders" tab of window of visit
- SUMMARY button in SUMMARY tab a parameter that allows to show or hide the "Summary" button in the "Summary" tab of window of visit
- Predefined referral to specialist parameter specifying if predefined (built in) form for issuing referral to specialist is to be visible within "Referrals" tab (hiding this form is not recommended because in case of referring for surgery it disallows to specify documents necessary to fill before surgery and patient/tool sets necessary to perform surgery)
- Predefined referral to hospital parameter specifying if predefined (built in) form for issuing referral to hospital is to be visible within "Referrals" tab (hiding this form is not recommended because in case of referring for operation it disallows to specify documents necessary to fill before operation and patient/tool sets necessary to perform operation)
- Predefined referral to spa parameter specifying if predefined (built in) form for issuing referral to spa is to be visible within "Referrals" tab
- Predefined order for device parameter specifying if predefined (built in) form for issuing order for device is to be visible within "Referrals" tab
- Specialities accesible when issuing refferal to specialist a list of VIII part of the ministerial code to be available for selection when issuing referrals to specialists in the "Referral" tab of window of visit
- Specialities accesible when issuing refferal to hospital a list of VIII part of the ministerial code to be available for selection for the issue of referrals to the hospital in the "Referral" tab of window of visit
- Vertical shift of content to print on a referral to a specialist (lines) move vertically (down) content of referral to a specialist on a referral print in lines of text
- Vertical shift of content to print on a referral to a hospital (lines) move vertically (down) content of referral to hospital on a referral print in lines of text
- Vertical shift of content to print on an examinations referral (lines) move vertically (down) content of examination referral on a referral print in lines of text
- Vertical shift of content on a recommendation print (lines) move vertically (down) content of recommendation on a recommendation print in lines of text
- Printout opening mode a parameter for setting a way of opening PDF documents to print
- Prescribed drugs suggestions display mode this parameter determines the mechanism of suggestions at prescribing medications to the patient in the tab of "Drugs" tab; There are two modes: "Suggestions displayed for drug name but containing drug name form dose and package" - suggestions are displayed only in the name of the drug field but in this field you

can enter also names and doses of drug and on the list of suggestions is displayed full information about the drug (name, form, dosage and package), "suggestions displayed separately for drug name form dose and package" - hints are displayed in each field of name, form, dosage and package of the drug, when typing the name of the drug the system displays a hint containing only names of drugs, after selecting name of drug from the list of hints, the system automatically moves a cursor to the field of form of drug and displays hints containing available forms of drug having this name. After selecting form of drug and displays hints containing available doses of drug having this name and form. After selecting dose of drug from the list of hints, the system automatically moves a cursor to the field of package of drug and displays hints containing available packages of drug having this name, form and dose, after selecting package of drug the system automatically fills default number of packages and payment for the drug.

- Limit of number of drugs suggestions this parameter determines the maximum number of items you want to appear on the lists of suggestions at prescribing drugs
- Limit of number of pharmaceutical materials suggestions parameter determining the maximum number of items to appear on the lists of suggestions when defining the composition of made drugs
- Drugs input fields magnification a parameter that determines the appearance of fields to prescribe drugs (no magnification the "drug name", "form", "dosage", "pack. x amount", "payment", "dosage", "dosage in words", "solid" and "Add" button displayed in one line, fields enlarged the "drug name", "form", "dosage", " pack. x amount", "payment", "dosage", "dosage in words", "solid" and "Add" button extended, with large font and displayed in two lines)
- Collective printing prescriptions this parameter determines the behavior of the "Print recipes" in the "Drugs" tab (each recipe only once each time click the print prescriptions button prints only these recipes which have not been printed yet; All prescriptions every time each click a print prescriptions button prints all issued prescription)
- Borders of fields in forms for filling document templates parameter defining style of forms fields borders displayed within tabs "Interview", "Examination" and "Referrals" and intended to fill document templates (standard frame around the whole field, underline only bottom edge of frame, none no frames)
- Refunded examinations ordering limit parameter defining number of refunded diagnostic
  examinations chosen by doctor for an order which when achieved will effect with warning
  displayed for the doctor and sayint that limit of refunded diagnostic examinations possible to
  order has been achieved
- Refunded examinations distribution in columns separated with commas numbers specifying quantities of refunded examinations displayed within particular columns of diagnostic examinations order form (six numbers separated with commas)
- Non-refunded examinations distribution in columns separated with commas numbers specifying quantities of non-refunded examinations displayed within particular columns of diagnostic examinations order form (six numbers separated with commas)
- Flags displayed instead descriptions in examination results printouts separated with commas flags which should be displayed within diagnostic examinations results printouts (if this parameter is empty, then descriptions will be displayed within diagnostic examinations results printouts, else specified flags will be displayed within diagnostic examinations results printouts and other flags will be omitted)

- Time after which unrealized vaccination orders are automatically canceled time in minutes after which order for vaccination that has not been realized is to be automatically canceled
- Automatic checking of drug interactions parameter specifying whether the system has to detect interactions between drugs automatically when prescribing drugs by the doctor and warn if they occur or interactions are to be checked only at the user's request
- Place nonprescription drugs on prescriptions parameter indicating whether nonprescription medicines are to be placed on prescriptions after all or not to be placed on prescriptions
- Allow prescription of abrogated drugs parameter indicating whether abrogated drugs can be prescribed to patients
- Automatically load interview template to visit if only one template exists parameter indicating whether an interview template should be automatically inserted into the 'Interview' tab at the time of undertaking visit (if there is only one such template)
- Automatically load examination template to visit if only one template exists parameter indicating whether an examination template should be automatically inserted into the 'Examination' tab at the time of undertaking visit (if there is only one such template)
- Automatically load recommendation template to visit if only one template exists parameter indicating whether an recommendation template should be automatically inserted into the 'Recommendation' tab at the time of undertaking visit (if there is only one such template)
- Possibility to copy data from history of visits to current visit parameter determining whether in the visit window it should be possible to copy data from past visits to the current visit
- Visit window layout parameter indicating what layout of the visit window the system should display
- Automatically save data while changing tab parameter enabling the mechanism of automatic saving of data in the visit window each time the tab is changed
- Specialities requiring entering interview into EHR to close visit list of VIII parts of the departmental code of the clinic for which the system is to prevent the visit from being closed without entering the interview data in the "Interview" tab of the visit window
- Specialities requiring entering examination into EHR to close visit list of VIII parts of the departmental code of the clinic for which the system is to prevent the visit from being closed without entering the examination data in the "Examination" tab of the visit window
- Tabs visibility in visit window configurator of tabs visibility for different specialties is used to determine which tabs will be displayed in particular clinic ("Home" tab is always displayed in all clinics); when click on the name of specialization there is developed a list of names of tabs with fields enable the selection of tabs which will appear in the visit window in the clinic for a given specialty, no indication of any tab for any specialty will result that all tabs will be visible to this specialty.

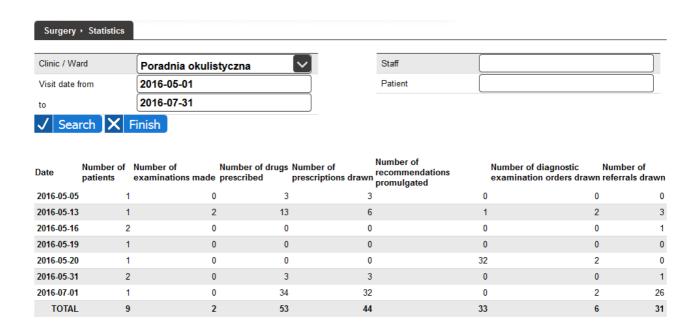
After making changes to the configuration it should be confirmed with "Save" button.

#### **Statistics**

The "Statistics" functionality from "Surgery" menu allows to browse statistics of usage of surgery module by medical staff. After choosing this functionality there appears filter that allows to narrow down statistic to particular clinic / ward, visit realization period, staff and patient. Within the field of "Staff" one can enter any combination of the following data: beginning of first name (case insensitive), beginning of surname (case insensitive), PESEL number, right to practice number and system will match staff to the given data. Within the field of "Patient" one can enter any combination of the following data: beginning of first name (case insensitive), beginning of second

name (case insensitive), beginning of surname (case insensitive), PESEL number and system will match patient to the given data. After entering criteria to the filter and clicking the button of "Search" there appears table presenting usage of surgery module divided into particular days including summary. Table contains the following statistical data:

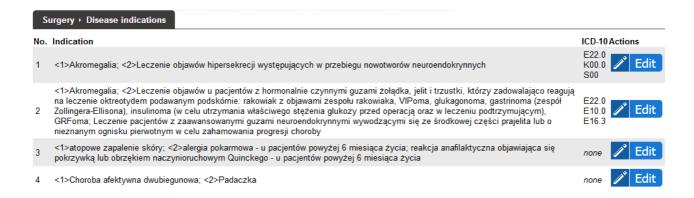
- number of patients
- number of performed examinations
- number of prescribed drugs
- number of issued prescriptions
- number o issued recommendations
- number of issued orderf for diagnostic examinations
- number of issued referrals



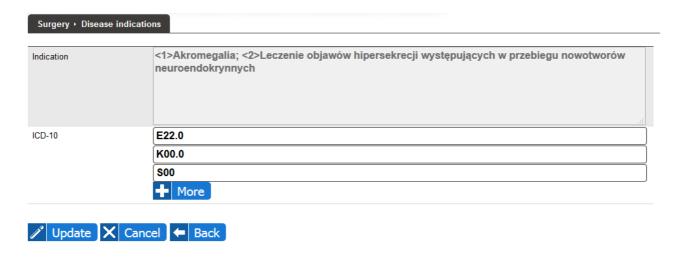
Within statistics only realized visits are taken into account.

### **Disease indications**

The "Disease indications" functionality from "Surgery" menu allows to link disease indications covered by a refund specified within the Announcement of the Minister of Health on the list of reimbursed medicines, foodstuffs for special nutritional purposes and medical devices with diagnosis codes ICD-10. After choosing this functionality there appears list of disease indications as they are defined within the announcement and by each of them there is a button "Edit".



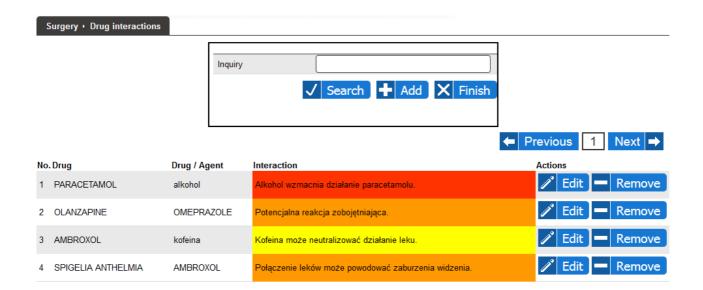
After clicking the button "Edit" by the given disease indication there appears form that allows to link diagnosis codes ICD-10 to the given indication. By default there displays single field to enter single code, if there is need to enter more codes then one should use the button "More" - each click of this button leads to display consecutive additional field to enter ICD-10 code. When entering diagnosis codes system displays suggestions simplifying to find the desired code. After entering codes one has to save data by clicking the button "Update".



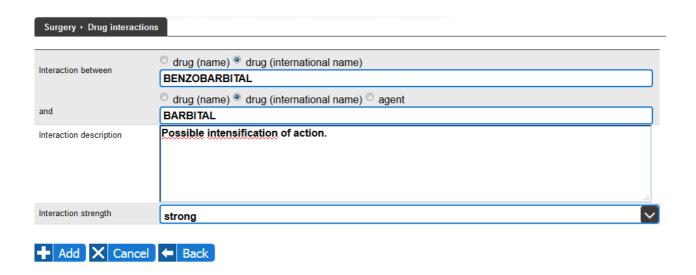
By defining diagnosis codes corresponding to disease indications system is able to automatically choose an appropriate refundation level for drugs prescribed do patients.

# **Drug interactions**

The "Drug interactions" functionality from "Surgery" menu is intended for management of drug interactions and interactions between drugs and other agents. After choosing this functionality there appears search form allowing to find defined interactions with single field of inquiry where one can enter beginning of name of interacting drug / agent (search is case insensitive). After entering name and clicking button "Search" there appears list of defined interactions and by each of them there are buttons "Edit" and "Remove". Interactions within the search results are emphasized with colors depending on tre strength: strong – red, normal – orange, weak – yellow. Moreover under the search form there is a button "Add" allowing to add new interaction.



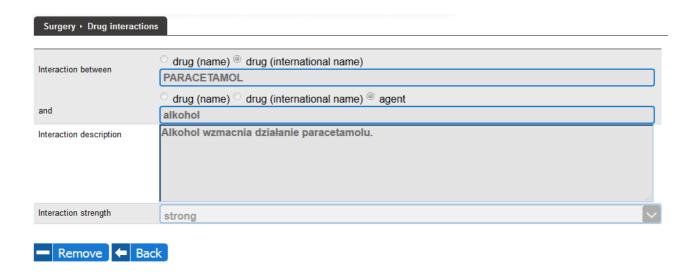
To add new interaction one has to click the button "Add" under the search form. Then form for addition of new interaction appears. Interaction can be defined between drug with the given trade name of international name and drug with the given trade name of international name or agent defined within the dictionary of interaction agents. To enter each of interaction elements one has to mark its type and then start to enter its name within the tex field – system displays list of suggestions then and one has to choose an appropriate option within this list by clicking on it, after that one has to enter interaction description, choose its strength and save data by clicling the button "Add". As multiple drugs with different trade names can have the same international name, so defining interaction using international names actually means defining the whole class of interactions between multiple drugs.



To modify interaction data one has to click the button "Edit" by the given interaction within the list of search results. Then system displays form that allows to change description and strength of the interaction. After entering changes one has to save them by clicking the button "Save".



To delete interaction one has to click the button "Remove" by the given interaction within the list of search results. System displays then form allowing to confirm one's intention to remove interaction. To confirm one's intention to remove interaction one has to click the button "Remove".



## **EHR** archive

If the system has been configured in such a way that, along with printing the summary of the visit by the doctor, the summary was automatically saved in the archive in the form of a PDF file signed by the doctor, then the "EHR archive" functionality from the "Surgery" menu allows one to view the digitally signed archive of electronic health records of patients created in this way. After selecting this functionality, a list of units is displayed, from which the documentation can be found in the digital archive. After clicking on the unit a list of clinics in the given unit displays underneath. After clicking on the clinic, a list of the medical staff in the given clinic displays underneath. After clicking on the medical staff, a list of patients of the given staff in a given clinic displays underneath. After clicking on the patient, a list of dates of his visits to the given staff in the given clinic displays. After clicking on the date of the visit, a list of links to PDF files of the patient's electronic health records is displayed. More than one link at a single visit indicates that modifications have been made to the documentation and subsequent links are subsequent versions

of the documentation.

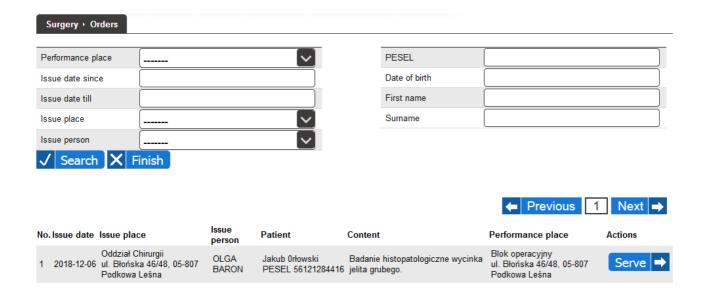


### **Orders**

Execution of orders (disposals) for performing tests is done using the "Orders" tab in the "Surgery" menu. After selecting this functionality, a search engine is displayed. Searching for orders is possible according to any combination of the following criteria:

- performance place the cell realizing the order
- issue date since date of the beginning of the period in which the order was issued
- issue date till date of the end of the period in which the order was issued
- issue place the cell in which the order was issued
- issue person the staff who issued the order
- PESEL PESEL number or the beginning of the patient's PESEL number for whom there was issued an order
- date of birth the date of birth of the patient for whom there was issued an order (chosen from the calendar which appears when you click on a text field)
- first name the firs name or the beginning of the first name of the patient to whom there was issued an order (capitalization does not matter)
- surname the surname of the patient or part of a surname of the patient to whom there was issued an order (capitalization does not matter)

After entering the search criteria and clicking the "Search" button, the search engine displays a list of orders that meet the search criteria and for each of them the "Serve" button.



To serve the order, click the "Serve" button for the order in the list of search results. The form with the order data and the place to enter the description of the result of the order will be displayed. After completing the order and entering its result, save the data by clicking the "Ready" button. The result of the order so completed will be displayed in the visit window of the surgery module in the history of patient visits, examinations and orders.



## **Benefits**

The "Benefits" functionality from the "Surgery" menu is used to enter orders for commercial benefits and their realization. After selecting this functionality, the order browser is displayed, enabling order search according to any combination of the following criteria:

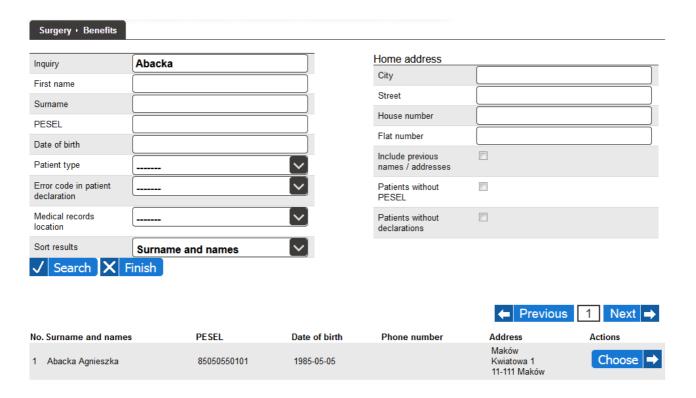
- benefit
- state of performance of the benefit
- PESEL number of the patient for whom the service is provided
- date of birth of the patient for whom the benefit is provided

- name of the patient for whose benefit the benefit is provided
- surname of the patient for whose benefit the benefit is provided

Under the search engine you can see the "Add" button for adding a new order.



To order commercial benefits, click "Add". The patient browser will then be displayed. After entering search criteria enabling finding a patient for whom benefits are to be performed and clicking the "Search" button, a list of patients meeting the search criteria will be displayed under the search engine and next to each of them the "Choose" button.

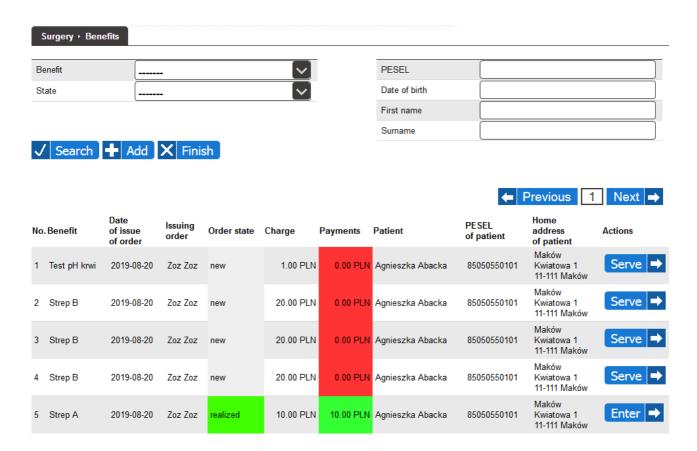


After clicking the "Choose" button next to the appropriate patient, the patient order form will be displayed.

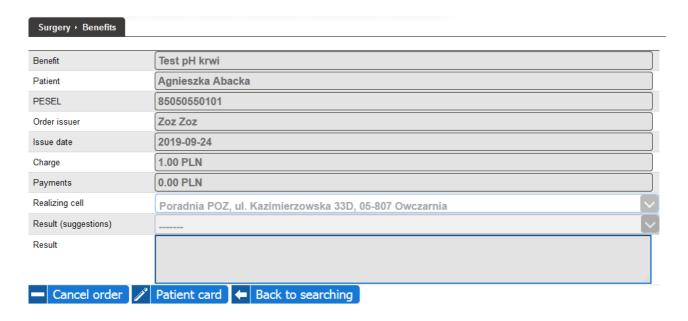


In the form, first select the store from which the funds are to be used for the performance of the service (then the list of means available in the store will expand) and then select the appropriate one(s) and confirm by clicking the "Save" button.

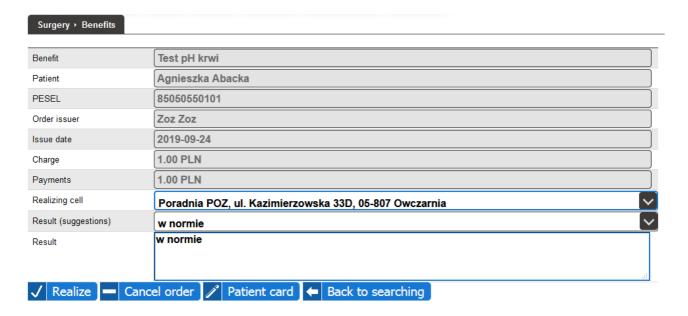
To search for commercial benefits completed and pending, enter the appropriate criteria in the search engine and click "Search". You will then see a list of benefits that meet your criteria. The cell in the 'Payments' column is highlighted in red if the patient has not yet paid the full payment for the benefit, and green if the payment has already been made.



For each of the unrealized benefits, a "Serve" button is visible, and for every completed "Enter" button. To complete the benefit, click the "Serve" button next to it. You will then see a form with basic details about the benefit and patient as well as fields to enter the place and result of the implementation. If the payment for the benefit has not yet been made, the fields for entering the place and the result of the implementation are inactive. If the logged in user has the appropriate permissions, then the "Cancel order" button is additionally displayed to cancel the given order (when the order is canceled, the means necessary to complete it return to store).



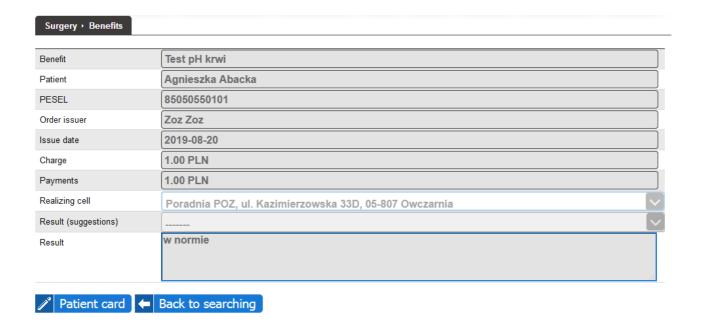
In a situation where the fields for entering the place and the result of the implementation are inactive, the patient should be charged first. If the logged in user does not have the right to handle payments, he should send the patient to register to settle the payment, and when the patient does so, re-open the patient's order. However, if the logged in user has the right to handle payments, he should click the "Patient card" button visible under the benefit form which will open the patient card in the new window in the "Payments" tab, register the fact of accepting the payment and close the patient card by clicking the "Finish" button at the bottom of the same cards (or refresh the page after closing the card in another way). Then the fields for entering the place and result of implementation will become active and it will be possible to fill them in. If possible results have been defined for a given benefit, then instead of entering the result manually, one can select one of the defined results from the list of sugestions, which will be automatically entered in the field for entering the result. After entering the data, confirm it by clicking "Realize".



After clicking the "Realize" button, the benefit receives the status "realized" and the result of the implementation goes automatically to the "History" tab in the patient's card.

If the logged in user has the appropriate permissions, then the "Cancel order" button is additionally displayed, enabling the cancellation of a given order (when the order is canceled, the funds necessary for its completion return to the store and in the "Payments" tab in the patient's card there is an overpayment to return to the patient).

To preview already realized benefit result one has to click button "Enter" by the given benefit within the list under the search form. Then form with data of benefit and the result and place of its realization will be displayed in read-only mode.



## NHF

The "NHF" module is designed for employees of RUM and is used to handling settlements with the NFZ, in the scope of which is included management of dictionaries, coding visits and correction of services, and exporting messages to the NFZ and importing messages from the NFZ.

## Visits coding

To be able to settle done services with the NFZ, visits realized in clinics covered by contracts with the NFZ should be coded. Visits coding is to account for services provided during the visit (the lists of possible services are included in the contracts with the NFZ). Visits coding is realized by selecting the "Visits coding " functionality from "NHF" menu. After selecting this functionality there is displayed the search engine of today realized visits in clinics located in the units which are accessible by the logged user. The first step is to choose a clinic and click "Search" button. You will see a list of visits realized that day in the clinic (or message of the absence of such visits). At every visit there is a button to assign services to this visit. This button can take one of two colors:

- blue when at the visit is not any service
- green when at the visit is at least one service

In the search engine of realized visits there are in addition following navigation buttons:

- > <<< allows to view realized visits on a month earlier than the current presented day
- <- allows to view realized visits on a week earlier than the current presented day
  </p>
- < allows to view realized visits on a day earlier than the current presented day</p>
- Change date" allows one to view any day, which should be indicated in the date field before pressing the "Change date" button
- "Today" alows one to view today's day
- > allows to view realized visits on a day later than the current presented day
- >> allows to view realized visits on a week later than the current presented day
- >>> allows to view realized visits on a month later than the current presented day

Clicking on any of the above buttons changes the view of realized visits for the appropriate day for which the button leads.



After pressing the "Services" button at a selected visit, the list of services realized during the visit opens in a new window. If there is any realized services, the list will be empty. Above the list there are displayed a basic information about the visit (including diagnosis and procedures, if the doctor entered any during the visit) and under the list is the total number of points (resulting from the contract with the NFZ) for realized services and "Add" button to add a new service to visit.



After pressing the "Add" button, the process of assigning services to visit begins. This process consists of two steps. At first step there is displayed the form of choice: staff realizing service, agreement, the point of agreement and a document entitling the patient to benefits. In case of visits appointing to the doctor, in the field of staff realizing the service is entered staff realizing the visit (if the field "Realizer of services reported to NFZ" in the data of staff realizing the visit is empty) or staff from the field "Realizer of services reported to NFZ" (if the field in data of staff realizing the visit is not empty). In case of visits appointing for equipment, field of staff realizing the service is empty. If there is only one contract with the NFZ under which a visit can be settled then it is already

selected in the form. Similarly, if there is only one point of agreement whereby a visit can be settled then it is also directly selected. In case of rehabilitation services agreement and point of agreement are filled accordingly to code of service appropriate for the rehabilitation service. The document conferring the right to benefits may be the electronic confirmation derived from eWUŚ system, a statement of the patient's insurance or documents confirming the insurance of the patient – here is also by default selected automatically one of the documents authorizing a patient, valid for a day of visit.

Clinic Poradnia okulistyczna (ul. Błońska 46/48, 05-807 Podkowa Leśna)
Term 2015-08-21 08:00

Duration 15 minutes
Visit type zwykła
Staff Olga Baron

Patient Pawełek 0Oooooooooo





In case of these visits prearranged to the doctor for which staff realizing the service is different than that displayed in the form and in case of all visits arranged for the equipment there is needed to indicate staff who realized the service, by clicking on the icon with a question mark on a green background visible at the "Staff" field. Then a search engine of staff is opened in a new window. Search of staff is possible by any combination of the following criteria:

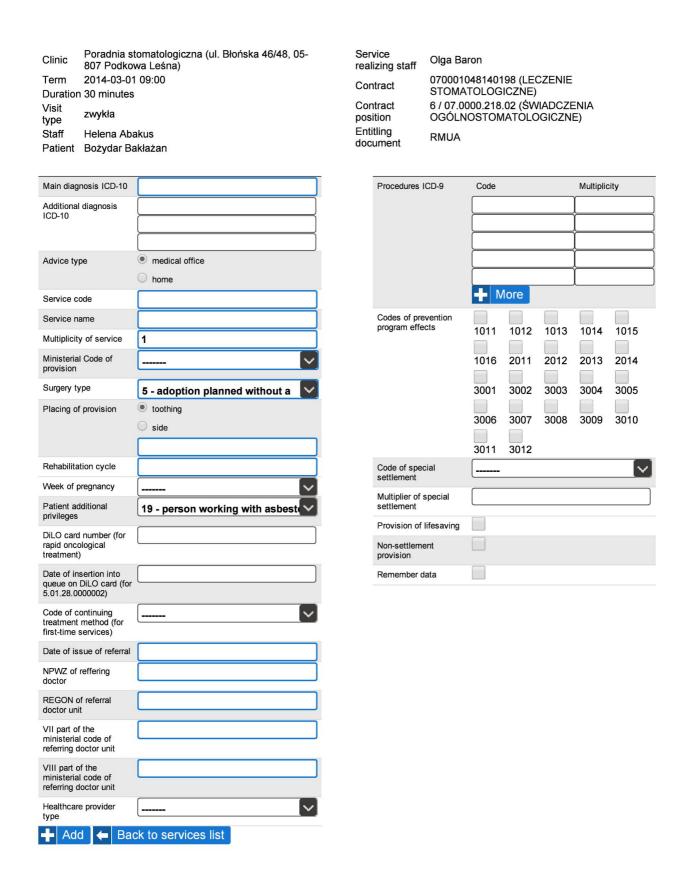
- > First name
- > Surname
- > PESEL
- > NPWZ

After entering the search criteria and pressing the "Search" button there is displayed a list of employees that meet the search criteria and at each one there is the "Select" button.



After pressing the "Select" button at the appropriate staff, the search window is closed and staff data appears in the "staff" field.

To go to the next step of the process of assigning service to visit, use the "Next" button ("Back" button to return to the list of services realized during the visit). After pressing "Next" button there is displayed the form of data service (under the form, next to the information about the visit, there are also displayed information entered in the first step of entering the service). This form differs slightly depending on the type of benefits which relates to a contract with the NFZ indicated in the first step of the process of assigning service to visit. The following screen shows the form with all possible fields and buttons (the case presented on the form is artificial, but aims to provide every possible situation - in fact, depending on the type of contract, some fields and buttons will be visible and the other hidden).



To add a service please fill out the service data form and confirm the data by pressing "Add" button. At filling a form there is a number of different types of mechanisms:

Main diagnosis ICD-10 - at entering a code, name or shortcut of the diagnosis there is displayed a list of suggestions - proper diagnosis should be selected by clicking the

- appropriate item from the list of suggestions
- Additional diagnosis ICD-10 at entering a code, name or shortcut of the diagnosis there is displayed a list of suggestions proper diagnosis should be selected by clicking the appropriate item from the list of suggestions
- Advice type type appropriate for the place of realization of visits (surgery or patient's home)
- Service code code of realized service (benefit) according to the codification and naming from a contract with the NFZ; at entering a service code (you can also enter the service name or shortcut) there is displayed a list of suggestions, select the correct service by clicking on the appropriate item from the list of suggestions; after selecting a service from the list of suggestions there will be automatically filled the name of service, multiplicity of the service, ministerial code of service (if for the selected service is specified default value of ministerial code of provision) as well as the code and multiplicity of ICD-9 procedure (if for selected service there is specified default value of code of procedure); in case of rehabilitation service, code is filled according to the service code proper for the rehabilitation service
- > Service name field only for viewing (cannot be edited manually) filled automatically when you enter service code
- Multiplicity of service determines how many times a particular service was realized during the visit, default 1, when changing service multiplicity, there will change automatically multiplicity of the medical procedures consisting for this service
- Ministerial code of provision code of provision that corresponds to the service in accordance with Regulation of the Minister of Health of 20 June 2008 on the scope of the necessary information collected by service providers, the detailed method of recording this information and its transmission to persons required to fund benefits from public funds as amended
- Surgery type type of admission of the patient; by default field filled with one of two values "adoption scheduled on the basis of a referral " or " adoption planned without a referral" depending on whether the visit was realized on the basis of a referral
- Placing of provision place in the mouth where the provision was realized; location can be determined by identifying the parties in the oral cavity or through selecting a dentition; at entering location (you can also enter the name of the location) there are displayed prompts, select the appropriate location by clicking an item from the list of suggestions; This field is only available for dental services
- Rehabilitation cycle number of rehabilitation cycle; the field is filled automatically and displayed only for information; This field is only available for rehabilitation services
- Group session number of group session; the field is filled automatically and displayed only for information; This field is only available for the benefits of session type, realized only in psychiatric, psychological and addiction treatment clinics
- Week of pregnancy the period in which occurred the current (on day of visit) week of patient's pregnancy; the field is available only for gynecological and obstetric services
- Patient additional privileges the type of patient's additional privileges specified at service
- DiLO card numer (for rapid oncological treatment) number of card of Diagnosis and Treatment of Cancer (should be entered only at the benefits of rapid oncological treatment);

- if card number was entered while planning visit then this field is automatically filled with the numer
- Date of insertion into queue on DiLO card (for 5.01.28.0000002) date of registration of the patient in the waiting list based on the card of Diagnosis and Treatment of Cancer (can be valid only for the 5.01.28.0000002 service, if it is not entered, is treated as no registration in the waiting list)
- Code of continuing treatment method (for first-time services) code specifies the commissioned method of further treatment for first-time services
- Date of issue of referral date of issue of referral which was the basis for the realization of visit (the field is visible only for visits realized on the basis of a referral and filled default by date which was written on referral)
- NPWZ of referring doctor the number of license to practice of doctor referring for the visit (the field is visible only for visits realized on the basis of a referral and filled default by number which was written on the referral)
- REGON of referring doctor unit REGON number of unit of doctor referring for visit (the field is visible only for visits realized on the basis of a referral and filled default by number which was written on the referral)
- VII part of the ministerial code of referring doctor unit VII part of the ministerial code of unit of doctor referring for visit (the field is visible only for visits realized on the basis of a referral and filled default by code which was written on the referral)
- VIII part of the ministerial code of referring doctor unit VIII part of the ministerial code of unit of doctor referring for visit (the field is visible only for visits realized on the basis of a referral and filled default by code which was written on the referral)
- > Healthcare provider type type of healthcare provider doctor referring for visit (the field is visible only for visits realized on the basis of a referral and filled default by type which was written on the referral)
- Procedures ICD-9 list of realized medical procedures that consisting on the realization of the service; each procedure is described by two values: the code and multiplicity; while entering the code of procedure (you can also enter the name or shortcut of procedure) there is displayed a list of suggestions, proper procedure should be selected by clicking on the appropriate from list of hints; after selecting procedures from a list of suggestions, field of multiplicity of the procedure is automatically filled with that value, which is the multiplicity of service rounded down to an integer; after cleared procedure from the field of code, field of multiplicity of the procedure is also cleared (automatically); under the list of procedures there is "More" button allows to view more fields to entering a greater number of procedures (the blank fields are ignored at approving the form); in case of benefits of ambulatory specialist care, under the list of procedures there is also the "Match service" button which clicked will automatically match the highest scoring services to the entered procedures – there will be automatically filled the "Service code" field and automatically will be done all the steps that are done while filling the "Service code" field (for benefits of ambulatory specialist care, filling the form of data begins with the entering procedures and usage of the "Match service" button to automatically adjust the service to specified procedures).
- Codes of prevention program effects reported for certain benefits of Prevention Program of Tobacco-related Diseases and TB Prevention Programme; a description of each of the codes is displayed in the form of a balloon when you hover the mouse over a selection box

(checkbox) for this code

- Code of special settlement at selecting a code of special settlement, there will automatically be filled a special settlement's multiplier (if the code of special settlement has specific multiplier, otherwise the value of the multiplier has to be entered manually)
- Multiplier of special settlement field filled automatically at selecting a code of special settlement if the code of special settlement has specific multiplier (for other codes of special settlement, field is completed manually)
- Corrected visual acuity (on the Snellen scale) in the case of left eye cataract surgery corrected visual acuity for the left eye registered withinin specialistics in the case of left eye cataract surgery
- Posterior capsule rupture in the case of left eye cataract surgery determination of whether the posterior articular capsule of the left eye has rupture is registered withinin specialistics in the case of left eye cataract surgery
- Occurrence of endophthalmitis in the case of left eye cataract surgery determination of whether endophthalmitis in the left eye is registered withinin specialistics in the case of left eye cataract surgery
- Corrected visual acuity (Snellen scale) in the case of right eye cataract surgery corrected visual acuity for the right eye registered withinin specialistics in the case of right eye cataract surgery
- Posterior capsule rupture in the case of right eye cataract surgery determination of whether the posterior articular capsule of the right eye has rupture is registered withinin specialistics in the case of right eye cataract surgery
- Occurrence of intraocular inflammation in the case of right eye cataract surgery determination of whether intraocular inflammation of the right eye is registered withinin specialistics for right eye cataract surgery
- Pain sensation, Exercise tolerance functions, ... results of the patient's assessment of the functioning of the patient before and after the rehabilitation cycle according to the ICF classification (shown at the last visit of the rehabilitation cycle)
- Provision of lifesaving used for marking lifesaving provisions
- Patient is a student it is used to determine whether the patient was a student on the day of the visit
- Non-settlement provision used for marking benefits that are not settlement with the NFZ (eg. in case of overlimited benefits or benefits entered for information on the internal needs of the healthcare facility)
- Remember data field is used to store data entered into the form; If checked and the service is added, then when you try to add another service, the system automatically completes the form of service with memorized data (the mechanism is applicable at entering similar services, when it's easier to change the stored data than enter the data again)

After completing the form and approving data by the button, system validates it and if they are wrong displays a message that they need to be corrected and if they are correct, service is assigned to visit. The service displays on the list of realized services during the visit, and gets the "to send" status, which means that the service should be included in the report of I phase (of SWX file) to forward to the NFZ.



At each service realized during the visit there may be three buttons:

- Edit button displays the form of service's data and enables for their modification; button becomes unavailable at the time of service's data transmission to the NFZ, and again becomes available after receipting feedback about the service from the NFZ; after modifying data of service and approving them, service gets again the "to send" status, to transfer the changes in data of service to the NFZ
- Delete enables the removal of the service; if the data of service has not yet been transferred to the NFZ, service is removed from the system; if the data of service was already at least once transferred to the NFZ, the service is not removed only receives the "to remove" status (as marked services are transferred to the NFZ to be able to remove from the NFZ systems, and only after receiving the NFZ confirmation of the removal of a service, it is also removed from the jHIS system automatically); button becomes unavailable at the time of transmission data of service to the NFZ, and again becomes available after the receipting feedback about the service from the NFZ
- View displays a preview of the form of service's data without possibility of editing data of service

"Add" button visible below the list of services allows for adding additional services according to the previously described process, whereby depending on the types of benefits there are limits of the amount of services possible to report within a single visit (eg. in case of benefits of ambulatory specialist care within the visit can be reported only one service).

"Close" button closes the window of services listed during the visit. At visits, where there were reported any services, "Services" buttons change color from blue to green.



## **Services management**

The "Services management" functionality in the "Settlement" menu is used to manage services noncommercial reported during the visits realized in clinics where logged user has an access. After selecting this functionality, there is displayed the search engine of services. The search of services can be provided by any combination of the following criteria:

- Place of service clinic where visits were realized during which there were reported services
- > Service date range of visits dates under which there were reported services
- Service staff staff who realized the service; general search field where you can enter a PESEL number, PWZ number, first name, surname of staff
- Patient patient for whom the service has been realized; general search field where you can enter a PESEL number, first name, second name, surname of patient
- Patient birth date the date of birth of the patient for whom the service has been realized
- Patient sex sex of patient for whom the service has been realized
- > Surgery type surgery type reported by the service
- Advice type to determine whether the service was realized in an outpatient or home
- > ICD-9 medical procedure code reported at the service
- > ICD-10 diagnosis code (main or one of the additional) reported at the service
- Agreement a contract with the NFZ under which the service is settled
- > Contract product code of range of benefits according to a contract with the NFZ to which the service belongs
- \rightarrow Unitary product service code according to the contract with the NFZ
- Service Id internal unique identifier of service used to identify the service in the jHIS system and the NFZ systems
- Session Id group session number under which the service was realized
- Cycle Id rehabilitation cycle number under which the service was realized
- > Service status current status of service in the process of settlement with the NFZ:
  - to send service waiting to be sent to the NFZ
  - o sent service sent to the NFZ for which a response from the NFZ was not yet received
  - accepted service accepted by the NFZ (based on the response received from the NFZ)
  - rejected service rejected by the NFZ (based on the response received from the NFZ)
  - o to remove service waiting to send information to the NFZ that this service should be removed from the NFZ systems (after receiving a response from the NFZ, service is automatically deleted from the jHIS system)
- \times Kind of error the kind of error reported by the NFZ for the rejected service

After entering the criteria in the search engine and pressing "Search" button. the search engine displays a list of all services that meet the search criteria. At each service there may be three buttons:

- Edit button displays the form of service's data and enables for their modification; button becomes unavailable at the time of service's data transmission to the NFZ, and again becomes available after receipting feedback about the service from the NFZ; after modifying data of service and approving them, service gets again the "to send" status, to transfer the changes in data of service to the NFZ
- Delete enables the removal of the service; if the data of service has not yet been transferred to the NFZ, service is removed from the system; if the data of service was already at least once transferred to the NFZ, the service is not removed only receives the "to remove" status (as marked services are transferred to the NFZ to be able to remove from the NFZ systems, and only after receiving the NFZ confirmation of the removal of a service, it is also removed from the jHIS system automatically); button becomes unavailable at the time of transmission data of service to the NFZ, and again becomes available after the receipting feedback about the service from the NFZ
- View displays a preview of the form of service's data without possibility of editing data of service

At each service there is also a field allows for the selection of a service (by default all found services are selected) and then perform operations on all selected services. Operations that can be performed on multiple services at the same time are:

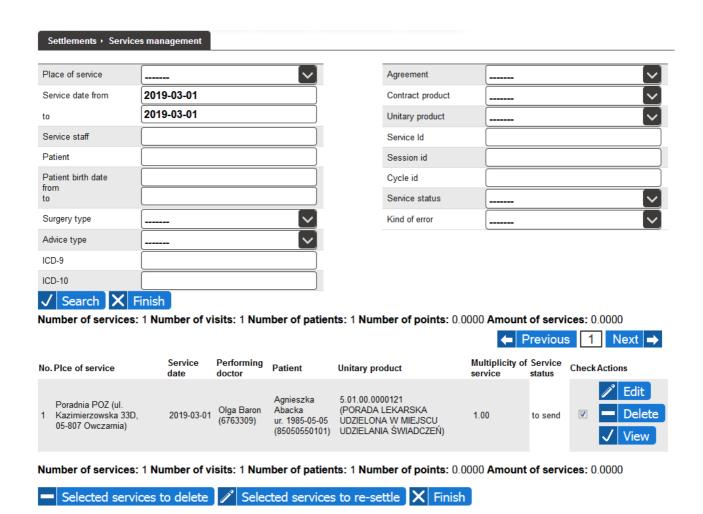
- Removal of services after pressing the "Selected services to delete" button visible under the list of services, all selected services which were not transferred to the NFZ are removed from the system, and all selected services, which have already been transferred to the NFZ are marked with the status "to remove" (that marked services are transferred to the NFZ that they can be removed from the NFZ systems, and only after receiving confirmation from the NFZ of removal of a services, they are also deleted from the jHIS system automatically)
- Selecting services to re-settle after pressing the "Select services to re-settle" button, all selected services are marked with the status "to send" and waiting for (re) sending them to the NFZ

Above the list of services and under the list of services that meet the search criteria there is displayed a summary containing the following information about found services:

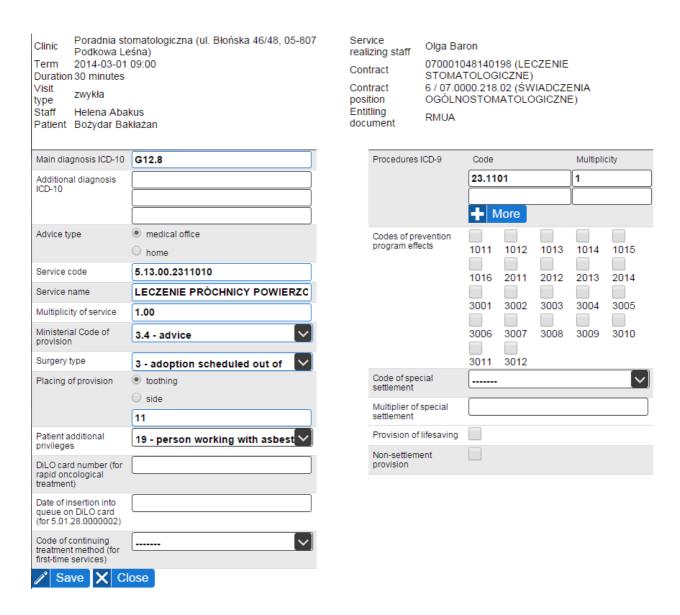
- number of services the total number of services meeting the search criteria
- number of visits the total number of visits during which the services meeting the search criteria were realized
- number of patients the total number of patients for whom services meeting the search criteria were realized
- number of points the total number of points resulting from the contract with the NFZ for realized services meeting the search criteria
- amount of services the total amount resulting from the contract with the NFZ for realized services meeting the search criteria

#### **WARNING!**

A table with a list of found services meeting the search criteria can be paged and the above summary applies to all found services - not currently visible on the page, but visible on every page together.



Pressing the "Edit" next to the selected service displays the data form of this service, which allows to make changes in data of service. After modifying data of service and approving it (by pressing the "Save" button) service gets again the "to send" status for transferring changes to the NFZ.



How to fill form of service's data described in the "Visits coding" section. If the service's data was already transferred to the NFZ and received feedback from the NFZ for the service, then under the form of service's data is displayed a list of feedback from the NFZ (if any were returned). There are three categories of feedback:

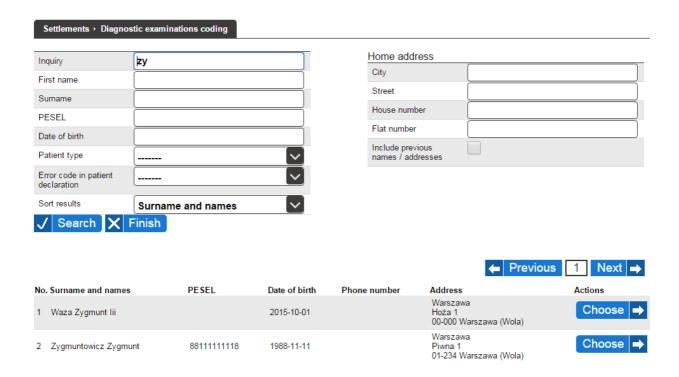
- > errors displays in red (typically transmitted in case of service rejection by the NFZ as a cause of rejection and tip what needs to be improved in data od service
- > cautions displays in yellow
- > information displays in green



# Diagnostic examinations coding

To be able to do an individual report to the NFZ of made diagnostic tests these tests should be

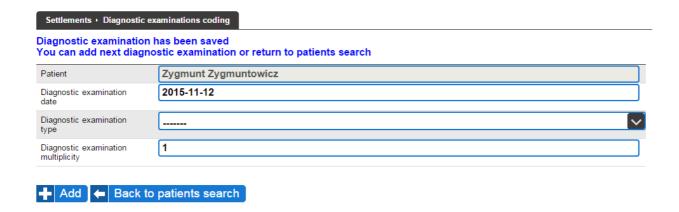
coded. This encoding is realized after selecting the "Diagnostic examinations coding" functionality in the "NHF" menu. After selecting this functionality there is displayed the search engine of patients. First step is to enter search criteria for searching the patient for whom the test has been made and click "Search" button. You will see a list of patients that meet the search criteria and for each one there is the "Select" button.



To enter the diagnostic test realized for the patient, click "Choose" button at the patient. There will be a form of adding a diagnostic test where you should enter the date of the test (there is the current date by default), select the type of test and enter multiplicity of testing (1 by default) and then save the data by clicking on "Add" button.



After saving the data of diagnostic test, form of adding the test is cleaned and allows to add another test or return to the search for patients to find another patient.



Entered diagnostic tests are stored in the system database.

# **Diagnostic examinations management**

The "Diagnostic examinations management" functionality in the "Settlement" menu is used to manage diagnostic examinations entered while encoding of diagnostic examinations. After selecting this functionality, there is displayed the search engine of diagnostic examinations. The search of examinations can be provided by any combination of the following criteria:

- Date of examination from... to... period when the examination was made
- Patient patient for whom the examination has been realized; general search field where you can enter a PESEL number, first name, second name, surname of patient
- > Diagnostic examination type type of realized diagnostic examination
- Examination Id internal unique identifier of examination used to identify the examination in the jHIS system and the NFZ systems
- > Examination status current status of diagnostic examination in the process of settlement with the NFZ:
  - to send examination waiting to be sent to the NFZ
  - sent examination sent to the NFZ for which a response from the NFZ was not yet received
  - accepted examination accepted by the NFZ (based on the response received from the NFZ)
  - rejected examination rejected by the NFZ (based on the response received from the NFZ)
  - to remove examination waiting to send information to the NFZ that this examination should be removed from the NFZ systems (after receiving a response from the NFZ, examination is automatically deleted from the jHIS system)
- \times Kind of error the kind of error reported by the NFZ for the rejected examination

After entering the criteria in the search engine and pressing "Search" button. the search engine displays a list of all diagnostic examinations that meet the search criteria. At each examination there may be three buttons:

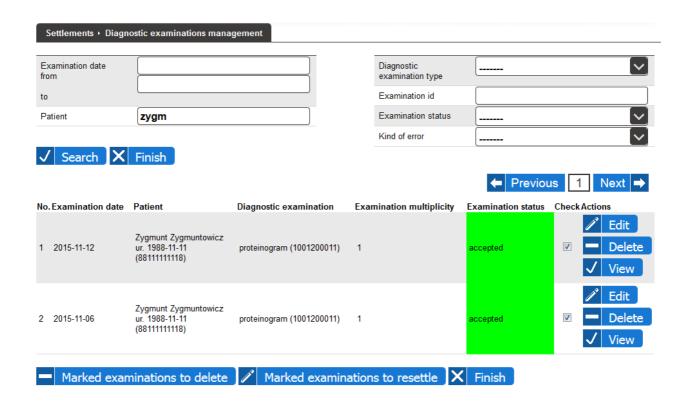
Edit - button displays the form of examination's data and enables for their modification;

button becomes unavailable at the time of examination's data transmission to the NFZ, and again becomes available after receipting feedback about the examination from the NFZ; after modifying data of examination and approving them, examination gets again the "to send" status, to transfer the changes in data of examination to the NFZ

- Delete enables the removal of the examination; if the data of examination has not yet been transferred to the NFZ, examination is removed from the system; if the data of examination was already at least once transferred to the NFZ, the examination is not removed only receives the "to remove" status (as marked examination are transferred to the NFZ to be able to remove from the NFZ systems, and only after receiving the NFZ confirmation of the removal of a examination, it is also removed from the jHIS system automatically); button becomes unavailable at the time of transmission data of examination to the NFZ, and again becomes available after the receipting feedback about the examination from the NFZ
- View displays a preview of the form of examination's data without possibility of editing data of examination

At each examination there is also a field allows for the selection of an examination (by default all found examinations are selected) and then perform operations on all selected examinations. Operations that can be performed on multiple examinations at the same time are:

- Removal of examinations after pressing the "Marked examinations to delete" button visible under the list of examinations, all selected examinations which were not transferred to the NFZ are removed from the system, and all selected examinations, which have already been transferred to the NFZ are marked with the status "to remove" (that marked examinations are transferred to the NFZ that they can be removed from the NFZ systems, and only after receiving confirmation from the NFZ of removal of examination, it is deleted also from the jHIS system automatically)
- Marking examinations to resettle after pressing the "Marked examinations to resettle" button, all selected examinations are marked with the status "to send" and waiting for (re) sending them to the NFZ



Pressing the "Edit" button next to chosen examination displays the data form of this examination allows to make changes in examination's data. After modifying the data of examination and their approval (by pressing the "Save" button) examination gets the "to send" status to make the changes submitted to the NFZ.



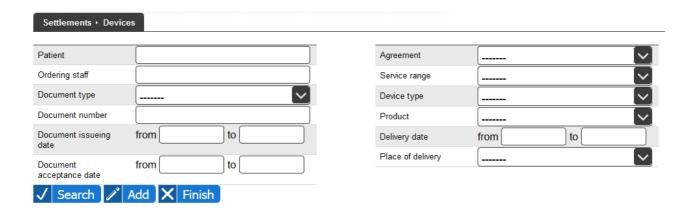
If the examination's data had already been transferred to the NFZ and received feedback from the NFZ for this examination, then under the examination's data form there is displayed a list of feedback from the NFZ (if any were returned). There are three types of feedback:

- > errors displayed in red (typically transmitted in case of rejection of examination by the NFZ as a cause of rejection and tip what needs to be improved in examination's data)
- warnings displayed in yellow
- information displayed in green

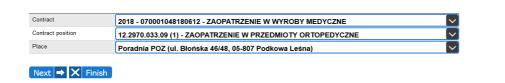
### **Devices**

The functionality of "Devices" from "NHF" menu is intended for coding of orders for provision

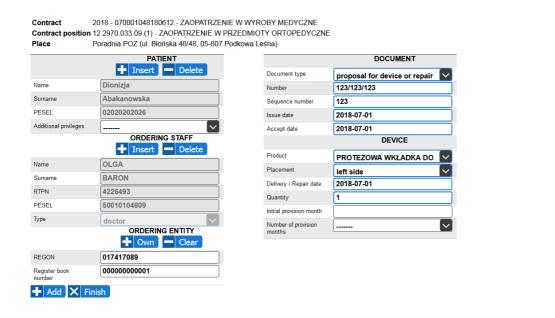
with medical devices and for managing of already registered data. After choosing this functionality there appears search form with additional button "Add" that allows to register data of new order.



If healthcare company has an contract with National Health Fund (NHF) for realization of profision with medical devices then each realized order for provision need to be registered within the jHIS system to do settlements with NHF. To register order one has to click the button "Add" under the search form. Then, within new window, system displays form, where one has to choose contract (if only one contract exists it is automatically chosen), contract position (if only one contract position exists it is automatically chosen) and place of delivery (if only one place exists it is automatically chosen).



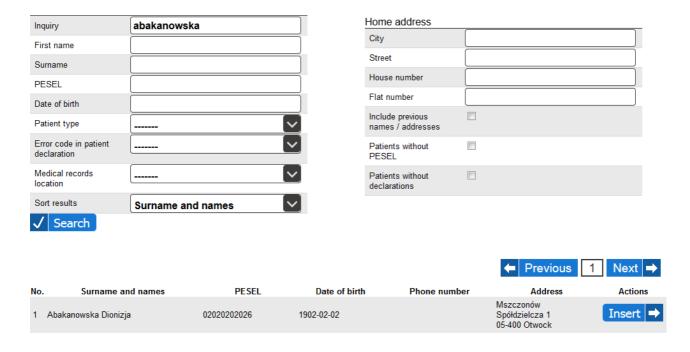
After specifying the above data and clicking the button "Next" there appears form for data of order.



This form is composed of five sections:

- data of patient (person for whom order has been realized)
- data of ordering staff (person that issued order)
- data of ordering entity (entity wher person that issued order is employed)
- data of document (order)
- data of device (provision)

If patient, for whom order has been realized, is not within the database of healthcare company, then one has to enter his data manually (only PESEL only in case when patient has it is required). If patient is within the database of healthcare company, then his data can be entered by clicking button of "Insert". New window opens then with patients search form where after entering search criteria one can search for patients from database. By each of patients found there is a button "Insert" which when clicked inserts data into order form and closes window for patient choice. (Button "Delete" by patient data is intented to delete data from form fields with patient data.)



If staff, who issued order, is not within the database of healthcare company, then one has to enter his data manually (only RTPN or PESEL and type are required). If staff is within the database of healthcare company, then his data can be entered by clicking button of "Insert". New window opens then with staff search form where after entering search criteria one can search for staff from database. By each of staff found there is a button "Insert" which when clicked inserts data into order form and closes window for staff choice. (Button "Delete" by staff data is intented to delete data from form fields with staff data.)



If ordering entity is own healthcare company, then it is enough to click the button "Onw" and system inserts its identification data to the form, else data need to be entered manually (it is required to enter at least one of identifiers: REGON number od register book number.) (Button "Clear" by entity data is intended to delete data from fields with entity data.)

Document and device data one has to enter manually on the basis of order document.

After entering data one has to save them by clicking the button "Add". If form has not been filled correctly system informs about this fact with an appropriate message and allows to correct/fill data. If form has been filled correctly system displays confirmation and three amounts: value of device from order, value of refund that NFZ is to return and surcharge that patient has to pay.



After clicking the button "Finish", the window is being closed.

To find data of provision from already registered orders one has to specify search criteria within the search form and then to click the button "Search". Searching is possible with any combination of the following criteria:

- patient within this field one can enter the beginning of name, beginning of surname, and/or PESEL number od patient for whom order has been realized, search is case insensitive
- staff within this field one can enter the beginning of name, beginning of surname, and/or RTPN number od staffthat issued order, search is case insensitive
- document type
- document number
- document issueing date time period when order document was issued
- document acceptance data time period when order document was accepted for realization
- agreement contract with NHF in case of which order has been realized
- service range service range from contract with NHF in case of which order has been realized
- device type
- product
- delivery date time period when device has been delivered to the patient / repaired

• place of delivery – place where patient received bought/repaired device

After entering criteria and clicking button "Search" under the form there appears list of devices matching the search criteria. Device statuses are emphasized with colors:

- to send white data not yet sent to NHF
- sent yellow data sent to NHF, waiting for verification
- accepted data sent to NHF, verified positive
- rejected data sent to NHF, verified negative

Moreover within the column of device status there can appear phrase "(corrected)" - this way positions modified after settlement are marked (it means positions modified after import of invoice template – ZRZ file) so for these positions it is necessary to pass correcting ZPX message to NHF.

By each position within search results list there is checkbox field intended to delete data od multiple devices at once – after selecting the specified positions and clicking the button "Delete marked devices", marked devices are deleted. (NOTICE! By default all positions within each of subpages of results list are marked.)

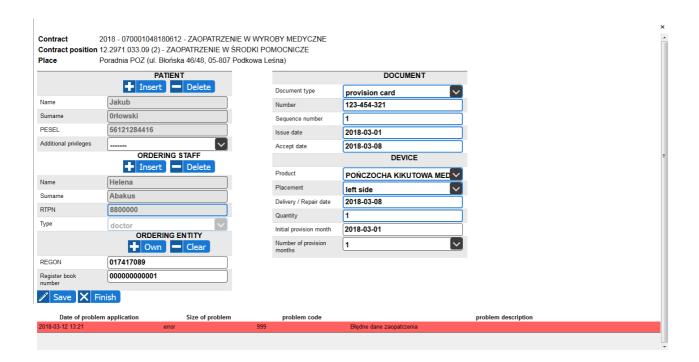
By each position within results list where can be up to three buttons:

- Edit allows to modify registered data
- Delete allows to delete registered data
- View allows to preview registered data

Buttons "Edit" and "Delete" are not available by the data sent to NHF and waiting for verification.



To modify registered data one has to click button "Edit" by the given position in search results. Then within new window there opens form with order data, whicg one can modify and then accept changes by clicking button "Save". If modified device has status of "accepted" or "rejected" then under the form there is list of informations, warnings and errors notified by NHF.



To delete device one has to click the button "Delete" by the given position within results list. After confirmation system deletes given device.

To preview data of device one has to click button "View" by the given position within results list. Then form with order data appears in read only mode.

### **Dictionaries**

The "Dictionaries" submenu in "Settlement" menu includes functionalities to manage of dictionaries necessary in the settlements, and they are:

- > ICD-10 diagnosis dictionaries
- > ICD-9 dictionaries of medical procedures
- NFZ services extension of dictionaries of benefits contained in agreements with the NFZ
- > Provision with medical products medical products dictionary

### **ICD-10**

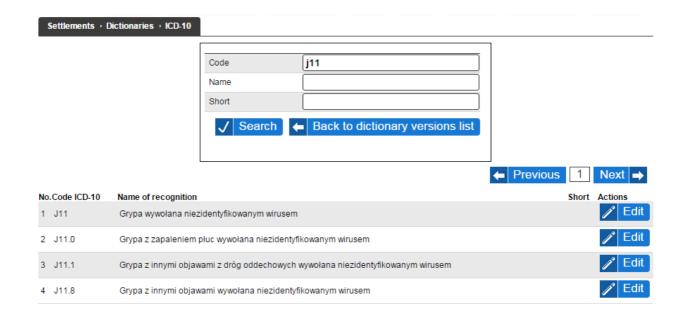
The "ICD-10" functionality from the "Dictionaries" submenu in "Settlement" menu is used for management of the dictionary. After selecting this functionality there is displayed a list of version of the ICD-10 dictionary. Each version has defined start date of validating. At every version there is the "Select" button allows to go to manage the dictionary in this version.



In the system is necessary to store all versions of the dictionary to possible correction data of older services - diagnosis codes reported by the service have to come from the version of ICD-10 dictionary, forced on the date of service realization. After pressing the "Select" button at the selected version of the ICD-10 dictionary, there is displayed a search engine of positions in the dictionary. You can search by any combination of the following criteria:

- code code or part of the ICD-10 code, capitalization does not matter
- > name part of the name of diagnosis, capitalization does not matter
- short defined shortcut of diagnosis, capitalization does not matter

After entering the search criteria and pressing the "Search" button, the search engine displays a list of items in the dictionary matching search criteria. As the ICD-10 dictionary is the standard, so there is no possibility of adding, modifying or deleting items in the dictionary. It is only possible to assign a shortcut to the diagnosis (shortcut can be used in the reporting of diagnoses in the form of data of service – when entering a shortcut of diagnosis in the data form of service, the system prompt diagnosis with assigned shortcut).



To assign a shortcut to diagnosis, press the "Edit" button at the appropriate diagnosis from the search results list. You will see a data form of diagnosis where you can enter the shortcut and approve it by pressing "Save" button.



### ICD-9

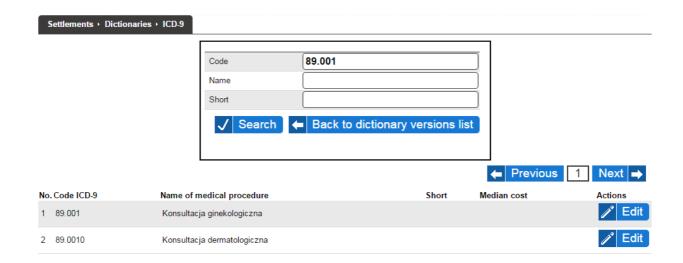
The "ICD-9" functionality from the "Dictionaries" submenu in "Settlement" menu is used for management of the dictionary. After selecting this functionality there is displayed a list of version of the ICD-9 dictionary. Each version has defined start date of validating. At every version there is the "Select" button allows to go to manage the dictionary in this version.



In the system is necessary to store all versions of the dictionary to possible correction data of older services – medical procedures' codes reported at the service have to come from the version of ICD-9 dictionary, valid on the date of service realization. After pressing the "Select" button at the selected version of the ICD-9 dictionary, there is displayed a search engine of positions in the dictionary. You can search by any combination of the following criteria:

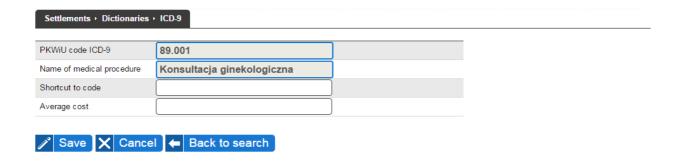
- > code code or part of the ICD-9 code, capitalization does not matter
- name part of the name of medical procedure, capitalization does not matter
- short defined shortcut of medical procedure, capitalization does not matter

After entering the search criteria and pressing the "Search" button, the search engine displays a list of items in the dictionary matching search criteria. As the ICD-9 dictionary is the standard, so there is no possibility of adding, modifying or deleting items in the dictionary. It is only possible to assign a shortcut to the medical procedure (shortcut can be used in the reporting of medical procedures in the form of data of service – when entering a shortcut of medical procedure in the data form of service, the system prompt procedure with assigned shortcut) and specify average cost of medical procedure (average cost can be used in the reports purposes).



To assign a shortcut and average cost to medical procedure, press the "Edit" button at the appropriate medical procedure from the search results list. You will see a data form of medical

procedure where you can enter the shortcut and average cost and approve it by pressing "Save" button.

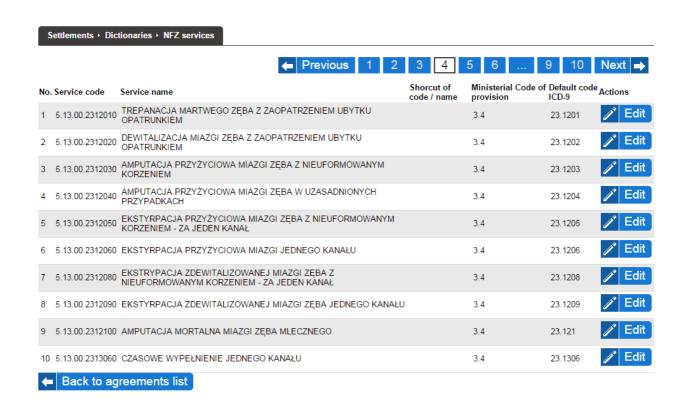


### **NFZ** services

The "NFZ services" functionality from the "Dictionaries" submenu in "Settlement" menu is used to manage dictionaries of benefits contained in agreements with the NFZ. After selecting this functionality there is displayed a list of agreements with the NFZ.



Agreements are divided into years (agreement from consecutive years are available in separate tabs). For each agreement there is displayed the "Select" button, which when pressed displays a list of benefits contained in the agreement.



Because the list of services results directly from the agreement with the NFZ, it is not possible to add and remove services, and editing data of services that are included in the agreement. However, it is to possible to supplement data of each service with shortcut, the ministerial code of provision and default ICD-9 code. To some benefits, the system automatically assigns ministerial codes of provisions and default ICD-9 codes itself, but you can modify them. At each provision there is available the "Edit" button allows you to view the data form of provision.



After entering to the form the ministerial code of benefit, shortcut and the default code of medical procedure (these fields are not mandatory) save your changes by clicking "Save" button. If the benefit will be assigned with a ministerial code of benefit and default code of procedure, then in the form of data of service, after specifying code of this benefit, the ministerial code of provision and code of medical procedure will be filled automatically. The shortcut may be used in the form of data of service while entering code of service - entering shortcut, the system will prompt code of provision (service) bearing the shortcut.

### **Provision with medical products**

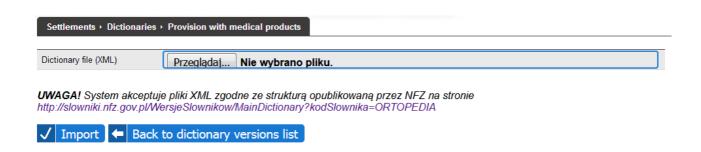
The "Provision with medical products" functionality from the "Dictionaries" submenu in "Settlement" menu is used to manage dictionaries of provision with medical products. After selecting this functionality, a list of imported dictionaries appears and at each of them a "Browse" button. Below the list of dictionaries, the "Import" button is visible.



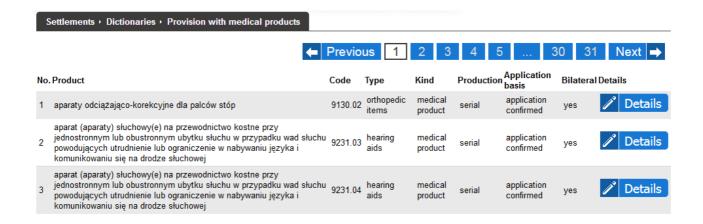
To import a new version of the dictionary published by the NFZ, click the "Import" button. The file import form will be displayed. The system accepts XML files published on the website

http://slowniki.nfz.gov.pl/WersjeSlownikow/MainDictionary?kodSlownika=ORTOPEDIA

After selecting the file and clicking the "Import" button, the dictionary is imported into the system and appears in the list of imported dictionaries.



To view the contents of the dictionary, click the "Browse" button for the given dictionary in the list. The contents of the dictionary will then be divided into subpages and a navigation panel allowing to switch between subpages.



At each position of the dictionary, the "Details" button is visible, which, in the new window, opens the detailed (all) information about the given dictionary item.

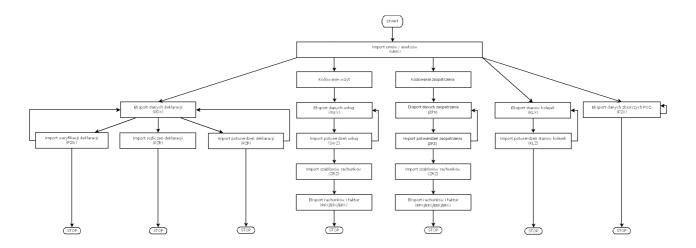
#### APARATY ODCIĄŻAJĄCO-KOREKCYJNE DLA PALCÓW STÓP

Date till2019-12-31Price limit16.00Quantity limit1Quantity limit minimum0Quantity limit for 47DN privilege0UnitaryyesRefund [%]
Quantity limit 1 Quantity limit minimum 0 Quantity limit for 47DN privilege 0 Unitary yes
Quantity limit minimum0Quantity limit for 47DN privilege0Unitaryyes
Quantity limit for 47DN privilege     0       Unitary     yes
<b>Unitary</b> yes
•
Pofund [0/1
Refund [%]
Algorithm for determining amount of refund with 47DN privilege linear with lower threshold
Algorithm for determining amount of refund with 47ZN privilege linear with lower threshold
Usage period type calendar year
Usage period length from 0
Usage period length to 3
Usage period multiplicity 1
Age from 0
Age to 999
Can code be used to issue order yes
Can code be indicated within order realization yes
Can usage period be shortened no
Is number of fistulas required no
Is ordering possible during stay in hospital no
Is ordering possible during stay in CTI no
Is code dedicated to pregnant women no



## Messages

Functionalities from submenu "Messages" in the "NHF" menu are used to support the exchange of information between the jHIS system and the NFZ SZOI system. The process of settlements with the NFZ is based on the exchange of files between the jHIS and the NFZ SZOI system - the jHIS system generates files which are imported (manually) into the NFZ SZOI system, and the NFZ SZOI system generates files that then are (manually) imported into the jHIS system. The exchanged files are in XML format with a strictly fixed structure compressed with ZIP algorithm with any name and extension appropriate to the type of file instead of the ".zip" extension (eg. Agreement\_stomatology\_2014.umx). The process of settlements with the NFZ from the point of view of the jHIS system is shown in the following diagram:



The settlement process begins by importing to the jHIS system agreement in form of a UMX file downloaded from NFZ SZOI system. The settlement process is divided into four separate subprocesses:

### > Settlement of declaration

- Step I: Details of declaration are exported from the jHIS system to PDX files the files should then be transferred to the NFZ SZOI system
- Step II: After processing PDX files by the NFZ, from the NFZ SZOI system are downloaded files of confirmation of the declaration (PZP) and verification of the declaration (PZW) - these files should be imported into the jHIS system.
- Step III: If the PZP and PZW files are imported to the jHIS system and declarations rejected by the NFZ exist in the jHIS system, then such declarations can be corrected and repeat the process of settlement of the declaration.
- Step IV: When the day of settlement of the declaration passed, files of settlements of declaration (PZR) are exported from NFZ SZOI system - these files can be imported into the jHIS system.

#### > Settlement of services

- Step I: Realized visits are coded in jHIS system
- Step II: Data of service are exported from the jHIS system to SWX files the files should then be transferred to NFZ SZOI system
- Step III: After processing the SWX file by the NFZ, files of confirmation of the services (SWZ) are downloaded from NFZ SZOI system - these files should be imported into the jHIS system.
- Step IV: If the SWZ files are imported into the jHIS system and services rejected by the NFZ exist in the jHIS system, then these services can be corrected and repeat the process of accounting for these services.
- Step V: When the day of settlement of services will pass, files of templates of bills (ZWZ) are downloaded from NFZ SZOI system - the files should be imported into the ¡HIS system.
- Step VI: For each template of bill from jHIS system there are exported RFX files with bills (until 1st July 2018) or EFX files with e-invoices or ERX files with e-bills - the files

should then be transferred to NFZ SZOI system.

#### > Settlement of devices

- Step I: Realized orders for provision with devices are coded in jHIS system
- Step II: Data of devices are exported from the jHIS system to ZPX files the files should then be transferred to NFZ SZOI system
- Step III: After processing the ZPX file by the NFZ, files of confirmation of the devices (ZPZ) are downloaded from NFZ SZOI system - these files should be imported into the jHIS system.
- Step IV: If the ZPZ files are imported into the jHIS system and devices rejected by the NFZ exist in the jHIS system, then these devices can be corrected and repeat the process of accounting (step II).
- Step V: When the day of settlement of devices will pass, files of templates of bills (ZWZ) are downloaded from NFZ SZOI system - the files should be imported into the jHIS system.
- Step VI: For each template of bill from jHIS system there are exported RFX files with bills (until 1st July 2018) or EFX files with e-invoices or ENX files with e-notes or ERX files with e-bills the files should then be transferred to NFZ SZOI system.

### > Reporting waiting queues

- Step I: Data of waiting queues are exported from the jHIS system to KLX file this file should then be transferred to the NFZ SZOI system
- Step II: After processing the KLX file by the NFZ, from the NFZ SZOI system is download file of queue states confirmations (KLZ) - this file should be imported into the jHIS system.
- Step III: If the NFZ SZOI showed errors of queues states then the process of reporting states of queues can be retried.

### > Reporting pooled data of POZ services

- Step I: Pooled data of POZ services are exported from the jHIS system to PZX file this file should then be transferred to the NFZ SZOI system
- Step II: There is a possibility of recurrence of the process of reporting pooled data of POZ services.

### **Export**

Functionalities of "Export" submenu are used to create (export) files (messages) in the jHIS system with data transferred to the NFZ SZOI system.

### Services (SWX)

The "Services (SWX)" functionality is used to generate SWX files with data of services to transfer to NFZ SZOI system. After selecting this function there is displayed a list of contracts with the NFZ. Agreements are divided into years (agreements with consecutive years are available in separate tabs).



At each agreement there is displayed the "Select" button, which when pressed displays a form of parameters of created SWX file. In this form you have to specify the creation date of the message and the range of dates of service realization (settled in the chosen contract), which data are expected to be in created SWX file.



After completing the form and pressing the "Generate" button the SWX file is created with data of services (if any services were realized within the specified time) and under the form there is displayed a link to download the created SWX file.



In one SWX file may occur up to 5000 services. If during the period specified in form were realized more than 5000 services, the system will automatically divide realized services on batches of up to 5,000 services and for each such batch is created a separate SWX file and under the form instead of

a single link there is displayed as many links as many SWX files has been created.

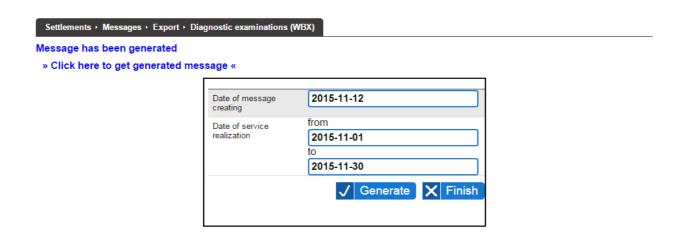
Created SWX files should be downloaded by clicking on the link, saved on disk space and transferred to NFZ SZOI system.

### Diagnostic examinations (WBX)

The "Diagnostic examinations (WBX)" functionality is used to generate WBX files with data of diagnostic examinations to transfer to NFZ SZOI system. After selecting this function there is displayed a list of contracts with the NFZ. Agreements are divided into years (agreements with consecutive years are available in separate tabs).



At each agreement there is displayed the "Select" button, which when pressed displays a form of parameters of created WBX file. In this form you have to specify the creation date of the message and the range of dates of realization of the diagnostic examinations (settled in the chosen contract), which data are expected to be in created WBX file. After completing the form and pressing the "Generate" button the WBX file is created with data of diagnostic examinations (if any examinations were realized within the specified time) and under the form there is displayed a link to download the created WBX file.



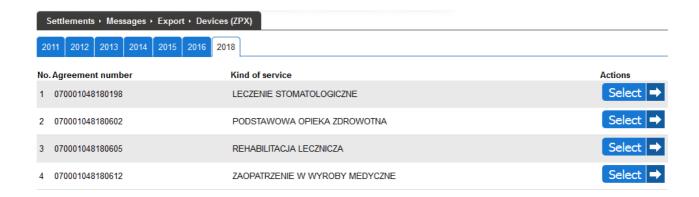
In one WBX file may occur up to 10000 services. If during the period specified in form were realized more than 10000 examinations, the system will automatically divide realized examinations on batches of up to 10000 examinations and for each such batch is created a separate WBX file and under the form instead of a single link there is displayed as many links as many WBX files has been created.

Created WBX files should be downloaded by clicking on the link, saved on disk space and

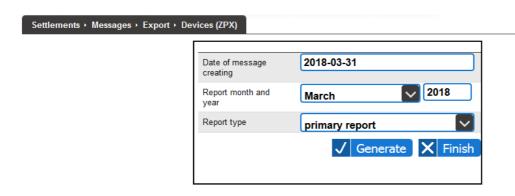
transferred to NFZ SZOI system.

### Devices (ZPX)

The "Devices (ZPX)" functionality is used to generate ZPX files with data of devices to transfer to NFZ SZOI system. After selecting this function there is displayed a list of contracts with the NFZ. Agreements are divided into years (agreements with consecutive years are available in separate tabs).



At each agreement there is displayed the "Select" button, which when pressed displays a form of parameters of created ZPX file. In this form you have to specify the creation date of the message, reporting period from which data are expected to be in created ZPX file and report type (primary – data of all devices from the specified period or correcting – data od devices from the specified period modified after importing invoice template ZRZ). After completing the form and pressing the "Generate" button the ZPX file is created with data of devices and over the form there is displayed a link to download the created ZPX file.



Created ZPX file should be downloaded by clicking on the link, saved on disk space and transferred to NFZ SZOI system.

### Declarations (PDX)

The "Declarations (PDX)" functionality is used to generate PDX files with data of declarations to transfer to NFZ SZOI system. After selecting this functionality there is displayed a list of contracts with the NFZ. Agreements are divided into years (agreements with consecutive years are available in separate tabs).



At each agreement there is displayed the "Select" button, which when pressed displays a form of parameters of created PDX file. In this form you have to specify the creation date of the message declaration type (declaration to doctor, nurse and midwife are transferred in one PDX file and declaration to school medicine in another).



After completing the form and pressing the "Generate" button the PDX file is created with data of declarations and under the form there is displayed a link to download the created PDX file.

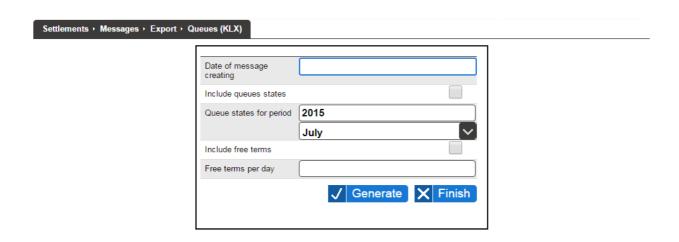


Created PDX files should be downloaded by clicking on the link, saved on disk space and transferred to NFZ SZOI system.

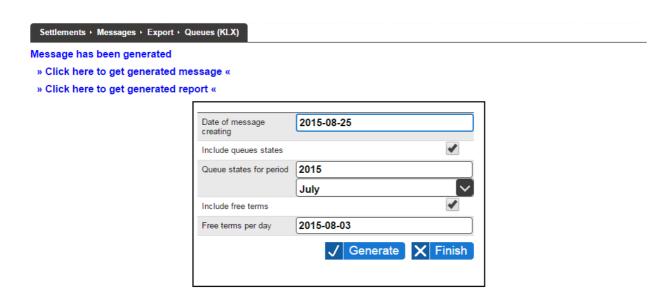
### Queues (KLX)

The "Queues (KLX)" functionality is used to generate KLX files with states of waiting queues and first available dates to transfer to NFZ SZOI system. After selecting this functionality there is displayed a form of parameters of created KLX file, where you should specify the date of creating message, reported period – year and month (for states of queues) and/or the reference date for the

free dates (for the first free dates)



After completing the form and pressing the "Generate" button the KLX file is created with states of waiting queues and first available dates and under the form there is displayed a link to download the created KLX file, and in addition, link to download and print report with states of waiting queues, if in the form there was selected option "Include queues states" (the report has PDF format)

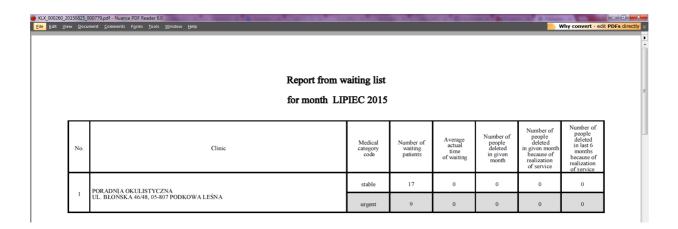


Created KLX files should be downloaded by clicking on the link, saved on disk space and transferred to NFZ SZOI system.

The report corresponding to the content of KLX file shows the states of waiting queues:

- > number of waiting patients
- > actual average waiting time (in days)
- > number of people deleted in a given month
- number of people deleted in a given month because of service realization
- number of people deleted in the last 6 months because of service realization

divided into a stable and urgent cases.



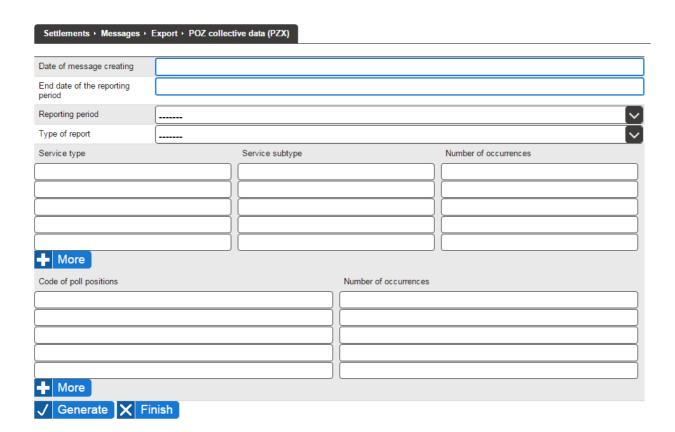
Created reports with states of waiting queues are stored in the system jHIS and available for download after selecting "Queues (KLX)" functionality from the "Data" submenu.

## POZ collective data (PZX)

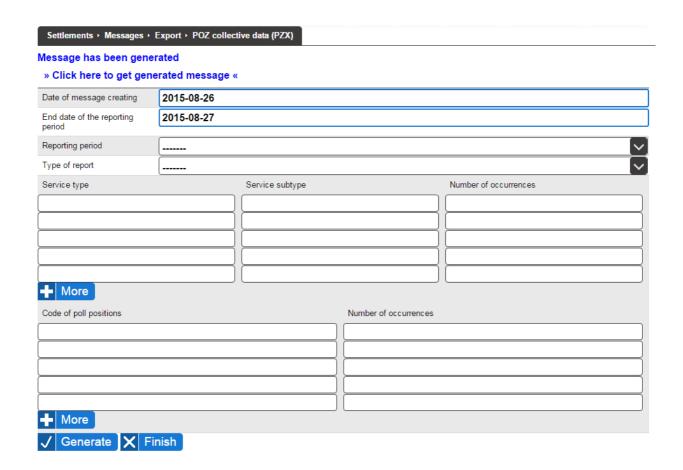
The "POZ collective data (PZX)" functionality is used to generate PZX files with collective data of POZ services to transfer to NFZ SZOI system. After selecting this functionality there is displayed a list of contracts with the NFZ. Agreements are divided into years (agreements with consecutive years are available in separate tabs).



At each agreement there is displayed the "Select" button, which when pressed displays a data form of created PZX file. In this form you have to specify the creation date of the message, date of the end of the reporting period (based on the date, there is set the reporting period to transfer in the message), the reporting period and enter the amount of the types of services and poll's positions identified by the codes contained in the annex to the contract with the NFZ. By default, there is displayed five triples of fields to entering types, sub-types and amounts of services and five pairs of fields to enter codes and the number of polls' positions. If there is a need for entering more data, use the "more" buttons visible in the form (triplets and a pairs of fields that will not be filled, will be ignored at creating the PZX file).

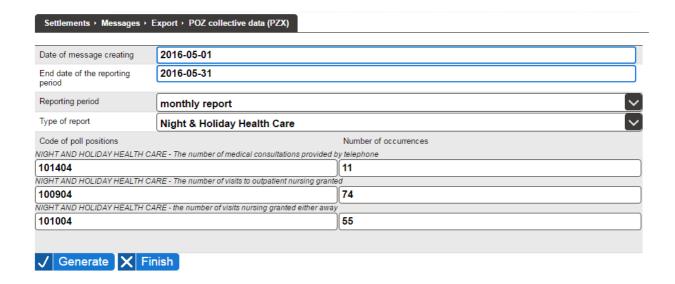


After completing the form and pressing the "Generate" button, PZX file is created with the collective data of POZ services and under the form there is displayed a link to download created file.

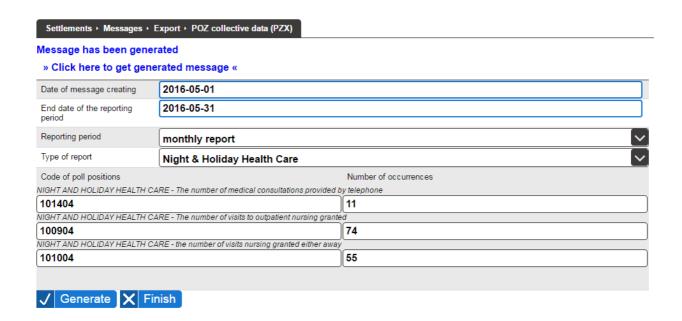


Created PDX file should be downloaded by clicking on the link, saved on disk space and transferred to NFZ SZOI system.

In this form, in addition there is field of type of report, which contains pre-defined types of reports in case of POZ contracts. After selecting the type of report, part of form intended to enter the number of the types of services and polls' positions changes the view - codes of positions and types of services are filled automatically (according to the type of the report), you cannot modify them or enter additional fields ("More" buttons disappear).



After selecting the type of report, entering the numbers of occurrences and pressing "Generate" button, the PZX file is created with the collective data of POZ services and under the form there is displayed a link to download created file.



Created PDX file should be downloaded by clicking on the link, saved on disk space and transferred to NFZ SZOI system.

If in the data form of the PDX message, the type of report will be changed on empty, then the view of the form will change to default (for self-entering codes and quantities).

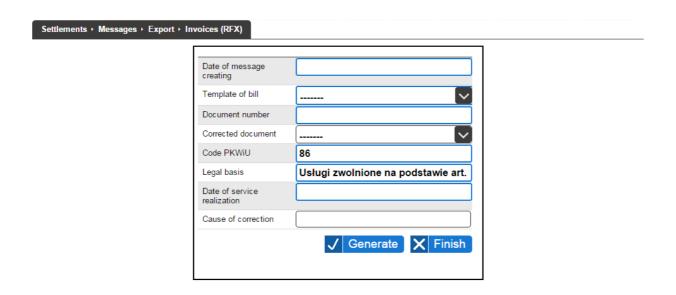
## Invoices (RFX)

The "Invoices (RFX)" functionality is used to generate RFX files with bills to transfer to NFZ SZOI system and printing invoices corresponding to these bills to transfer to the NFZ in paper form. After selecting this functionality there is displayed a list of contracts with the NFZ. Agreements are divided into years (agreements with consecutive years are available in separate tabs).



At each agreement there is displayed the "Select" button, which when pressed displays a form of parameters of created RFX file. In this form you have to specify the creation date of the message, select template of bill (ZRZ file) downloaded from NFZ SZOI system and loaded earlier to the jHIS system (templates with bill issued are marked with character ®), enter document number and in case of correctives – also select corrected document. PKWiU code and legal basis are filled by

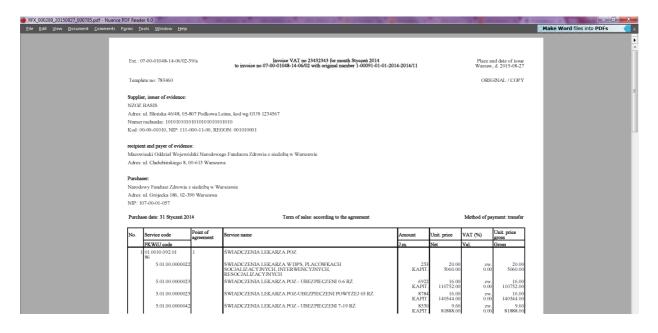
default, but they can be modifying.



After completing the form and pressing the "Generate" button, the RFX file with invoice is created and under the form there is displayed a link to download the created RFX file, and in addition, link to download and print invoice corresponding to the RFX file (invoice has PDF format).

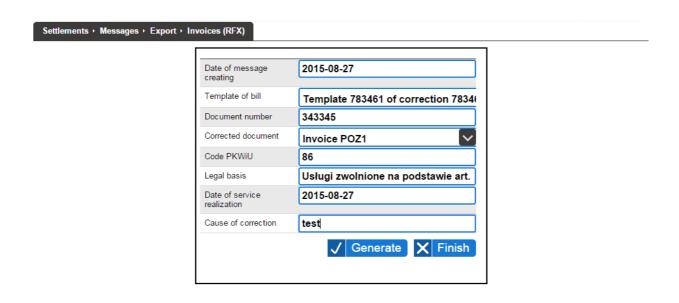


Created RFX file should be downloaded by clicking on the link, saved on disk space and transferred to NFZ SZOI system and invoice should be downloaded by clicking on the link, printed and transferred to the NFZ in paper form.

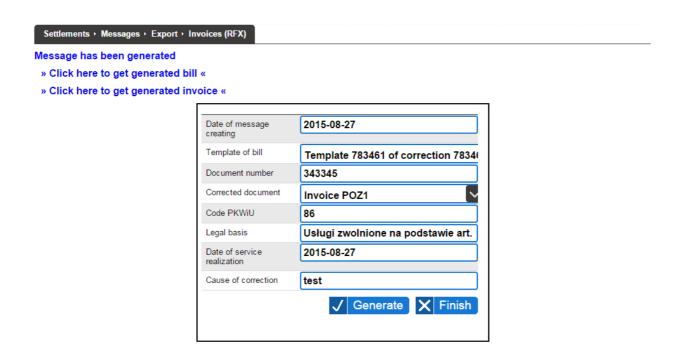




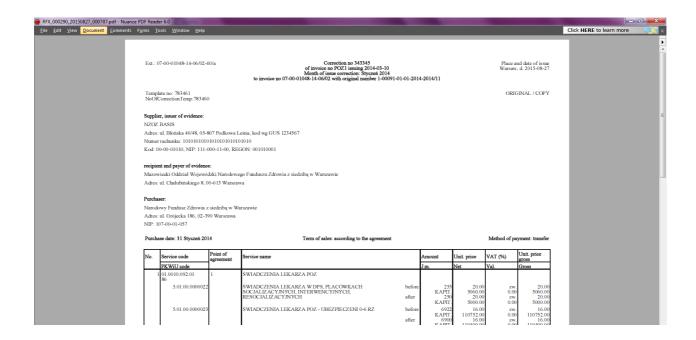
Corrective bills and corrective invoices are issued similarly. In the form there should then be selected a correction template and corrected document.



After completing the form and pressing the "Generate" button, the RFX file with corrective invoice is created and under the form there is displayed a link to download the created RFX file, and in addition, link to download and print corrective invoice corresponding to the RFX file (invoice has PDF format).



Created RFX file should be downloaded by clicking on the link, saved on disk space and transferred to NFZ SZOI system and invoice should be downloaded by clicking on the link, printed and transferred to the NFZ in paper form.

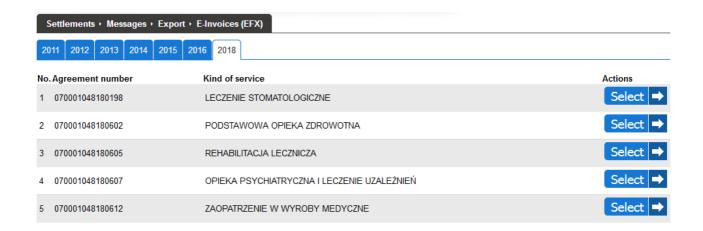




Invoices in PDF format are stored in jHIS system and are available to download in "Invoices (RFX)" functionality of "Data" submenu.

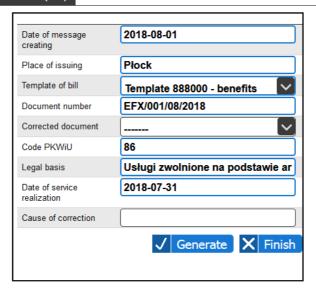
## E-Invoices (EFX)

The "E-Invoices (EFX)" functionality is used to generate EFX files with electronic invoices to transfer to NFZ SZOI system. After selecting this functionality there is displayed a list of contracts with the NFZ. Agreements are divided into years (agreements with consecutive years are available in separate tabs).



At each agreement there is displayed the "Select" button, which when pressed displays a form of parameters of created EFX file. In this form you have to specify the creation date of the message, select an appropriate template of bill (ZRZ file) downloaded from NFZ SZOI system and loaded earlier to the jHIS system (templates with electronic document issued are marked with character ®), enter document number and in case of correctives – also select corrected document. PKWiU code and legal basis are filled by default, but they can be modifying.

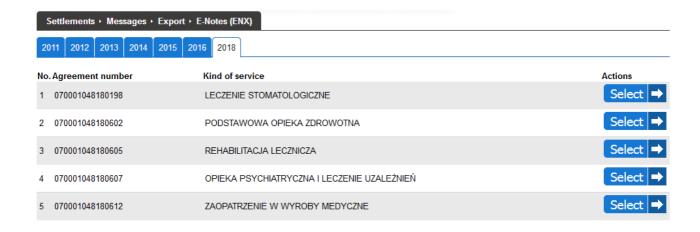
Settlements → Messages → Export → E-Invoices (EFX)



After completing the form and pressing the "Generate" button, the EFX file with electronic invoice is created and over the form there are displayed links to download the created EFX file and to download invoice printout in PDF file. Created EFX file should be downloaded by clicking on the link, saved on disk space and transferred to NFZ SZOI system.

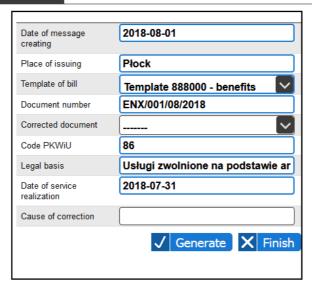
## E-Notes (ENX)

The "E-Notes (ENX)" functionality is used to generate ENX files with electronic account notes to transfer to NFZ SZOI system. After selecting this functionality there is displayed a list of contracts with the NFZ. Agreements are divided into years (agreements with consecutive years are available in separate tabs).



At each agreement there is displayed the "Select" button, which when pressed displays a form of parameters of created ENX file. In this form you have to specify the creation date of the message, select an appropriate template of bill (ZRZ file) downloaded from NFZ SZOI system and loaded earlier to the jHIS system (templates with electronic document issued are marked with character ®), enter document number and in case of correctives – also select corrected document. PKWiU code and legal basis are filled by default, but they can be modifying.

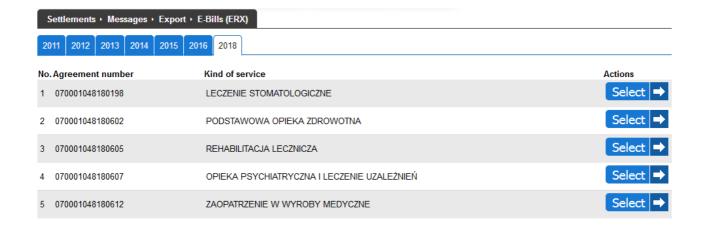




After completing the form and pressing the "Generate" button, the ENX file with electronic account note is created and over the form there is displayed a link to download the created ENX file. Created ENX file should be downloaded by clicking on the link, saved on disk space and transferred to NFZ SZOI system.

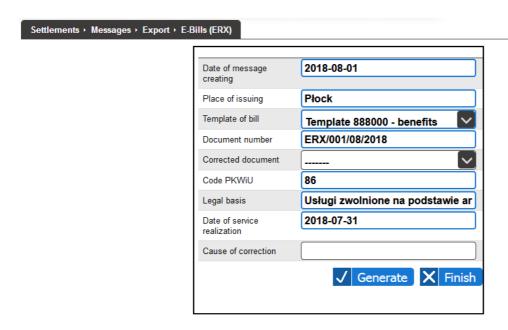
## E-Bills (ERX)

The "E-Bills (ERX)" functionality is used to generate ERX files with electronic bills to transfer to NFZ SZOI system. After selecting this functionality there is displayed a list of contracts with the NFZ. Agreements are divided into years (agreements with consecutive years are available in separate tabs).



At each agreement there is displayed the "Select" button, which when pressed displays a form of parameters of created ERX file. In this form you have to specify the creation date of the message, select an appropriate template of bill (ZRZ file) downloaded from NFZ SZOI system and loaded earlier to the jHIS system (templates with electronic document issued are marked with character ®), enter document number and in case of correctives – also select corrected document. PKWiU code

and legal basis are filled by default, but they can be modifying.



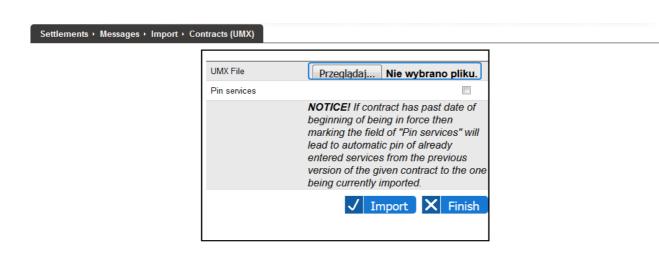
After completing the form and pressing the "Generate" button, the ERX file with electronic bill is created and over the form there is displayed a link to download the created ERX file. Created ERX file should be downloaded by clicking on the link, saved on disk space and transferred to NFZ SZOI system.

## **Import**

Functionalities from "Import" submenu are used to load (import) files (messages) from the NFZ SZOI system to the jHIS system.

### Contracts (UMX)

The "Contracts (UMX)" functionality is used to import contracts and annexes downloaded from the NFZ SZOI system in the form of UMX files. After selecting this functionality there is displayed the import form of UMX file.



After selecting the file from the disk and possibly checking the field to pin services to imported contract (if annex is being imported to the system and import is delayed i.e. annex has past date of the beginning of validity, then within the system there can exist services which have been entered to the system within the framework of previous version of contract while they should have been entered in the framework of imported annex – in that case checking the field of "Pin services" will automatically cause movement of services entered to the system in the framework of previus version of contract from that version of contract to the abbex being currently imported) and pressing the "Import" button, the file is loaded into the jHIS system. The relevant message displayed under the form informs about the completion of the loading.

Data from imported agreements are available to preview in the "Contracts (UMX)" functionality from the "Data" submenu.

## Services (SWZ)

The "Services (SWZ)" functionality is used to import services' confirmations downloaded from the NFZ SZOI system in the form of SWZ files. After selecting this functionality there is displayed the import form of SWZ file.



After selecting the file from the disk and pressing the "Import" button, the file is loaded into the jHIS system. The relevant message displayed under the form informs about the completion of the loading.

Data from imported agreements are available to preview in the "Contracts (UMX)" functionality from the "Data" submenu.

Imported SWZ files for each service are carrying information about its acceptance, rejection or removal. When importing SWZ file, the jHIS system changes states of services on "accepted" or "rejected" or removes services depending on the information contained in the SWZ file, and also saves at the service feedback information from NFZ, which are shown under the form of service's data.

## Diagnostic examinations (WBZ)

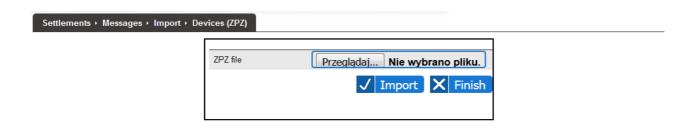
The "Diagnostic examinations (WBZ)" functionality is used to import diagnostic examinations' confirmations downloaded from the NFZ SZOI system in the form of WBZ files. After selecting this functionality there is displayed the import form of WBZ file.



Imported WBZ files for each examination are carrying information about its acceptance, rejection or removal. When importing WBZ file, the jHIS system changes states of examinations on "accepted" or "rejected" or removes examinations depending on the information contained in the WBZ file, and also saves at the examination feedback information from NFZ, which are shown under the form of examination's data.

#### Devices (ZPZ)

The "Devices (ZPZ)" functionality is used to import devices' confirmations downloaded from the NFZ SZOI system in the form of ZPZ files. After selecting this functionality there is displayed the import form of ZPZ file.



After selecting the file from the disk and pressing the "Import" button, the file is loaded into the jHIS system. The relevant message displayed under the form informs about the completion of the loading.

Imported ZPZ files for each device are carrying information about its acceptance or rejection. When importing ZPZ file, the jHIS system changes states of devices on "accepted" or "rejected" depending on the information contained in the ZPZ file, and also saves at the device feedback information from NFZ, which are shown under the form of device's data.

#### Declarations (PZP)

The "Declarations (PZP)" functionality is used to import declarations' confirmations downloaded from the NFZ SZOI system in the form of PZP files. After selecting this functionality there is displayed the import form of PZP file.



In PZP files NFZ can transfer feedback information for each declaration – after loading PZP file, included information are displayed under the data forms of declarations in the patients cards.

### Declarations verification (PZW)

The "Declarations verification (PZW)" functionality is used to import verifications of declarations downloaded from the NFZ SZOI system in the form of PZW files. After selecting this functionality there is displayed the import form of PZW file.



After selecting the file from the disk and pressing the "Import" button, the file is loaded into the jHIS system. The relevant message displayed under the form informs about the completion of the loading.

Imported PZW files for each declaration are carrying information about its acceptance or rejection. When you import a PZW file, the jHIS system changes declarations' states on "active" or "rejected". In the PZW files NFZ can transmit a feedback information for each declaration - after loading the PZW file, contained information are displayed under the forms of declarations in patients cards (typical information transferred in a PZW file is to determine the reason for the rejection of the declaration by the NFZ).

#### Declarations settlement (PZR)

The "Declarations settlement (PZR)" functionality is used to import statistics of settlement of declarations downloaded from the NFZ SZOI system in the form of PZR files. After selecting this functionality there is displayed the import form of PZR file.



Statistics of settlement of declarations are available to view in "Declarations settlement (PZR)" functionality from "Data" submenu.

## Queues (KLZ)

The "Queues (KLZ)" functionality is used to import confirmations of waiting queues states downloaded from the NFZ SZOI system in the form of KLZ files. After selecting this functionality there is displayed the import form of KLZ file.



After selecting the file from the disk and pressing the "Import" button, the file is loaded into the jHIS system. The relevant message displayed under the form informs about the completion of the loading.

Feedback information from KLZ file are available to view in "Queues (KLZ)" functionality from "Data" submenu.

#### Invoice templates (ZRZ)

The "Invoice templates (ZRZ)" functionality is used to import templates of invoices downloaded from the NFZ SZOI system in the form of ZRZ files. After selecting this functionality there is displayed the import form of ZRZ file.

Funkcjonalność "Szablony rachunków (ZRZ)" służy do importowania szablonów rachunków pobranych z systemu NFZ SZOI w formie plików ZRZ. Po wybraniu tej funkcjonalności wyświetla się formularz importowania pliku ZRZ.



Data from imported templates of invoice are available to view in "Invoice templates (ZRZ)" functionality from "Data" submenu.

#### **Data**

Functionalities from "Data" submenu are used to view data from files (messages) created by jHIS system and transferred to the NFZ SZOI system and downloaded from NFZ SZOI system and loaded to NFZ system .

#### Contracts (UMX)

The "Contracts (UMX)" functionality is used to view data from contracts with NFZ – limits and types of services. After selecting this functionality there is displayed a list of contracts with the NFZ. Agreements are divided into years (agreements with consecutive years are available in separate tabs).

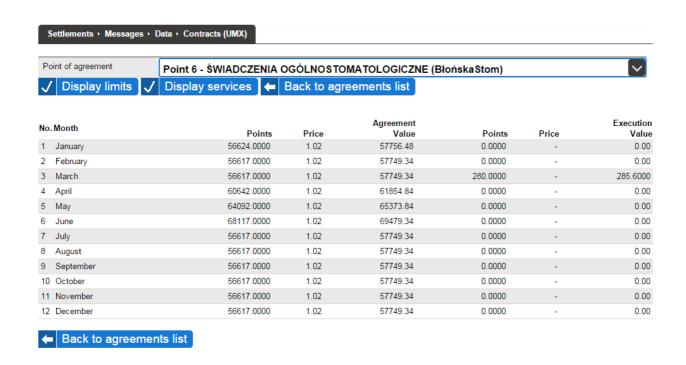


At each agreement there is the "Select" button, which when pressed displays a form to display the limits and services for selected point of the contract.



At each point of the agreements in the form, there are shortcuts of clinics names, where can be realized services from the point of agreement. After indicating the point of the agreement and pressing the "Display limits" button, there are presented the limits of services realization included in the agreement as well as in all annexes to this agreement (if any exist) and the value of the current

issue of the contract in each months. Both for the original contract as well as for each its annex and the current issue there is given the number of points, the unit price and value.



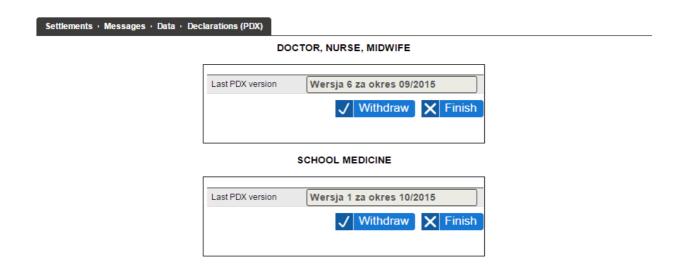
After pressing the "Display services" button there is presented a list of services possible to report within a given point of agreement with point value specified in the agreement.



#### Declarations (PDX)

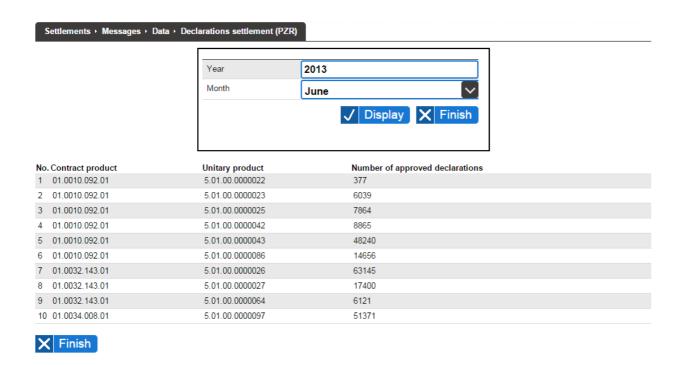
The "Declarations (PDX)" functionality is used to withdrawing the latest version of PDX message in a situation when the message was generated by mistake and was not transfer to the NFZ. As the NFZ expects continuity in the numbering of subsequent PDX messages within a given reporting period, the version of the message which was not transfer to the NFZ should be withdrawn before

generating another message. Withdrawing the last version of PDX message with declarations to doctor, nurse and midwife is independent of withdrawal of the last version of PDX message with declarations of school medicine.



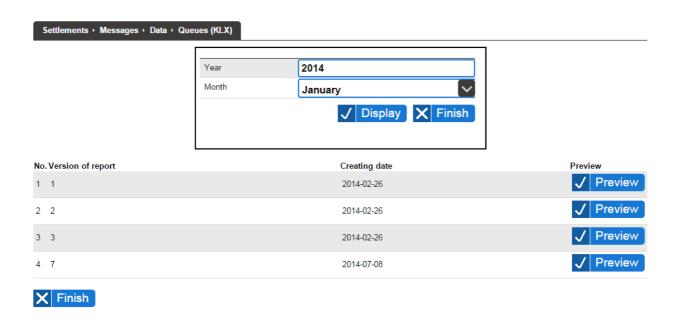
## Declarations settlement (PZR)

The "Declarations settlement (PZR)" functionality is used to view statistics of settlement of declarations loaded to jHIS system from PZR file. After selecting this functionality there is displayed the form to select the settlement period. After specifying the year and month and after pressing "Display" button there is presented a table of quantity of approved declarations divided for unitary products within particular contracts products (if for specified settlement period has been loaded PZR file).



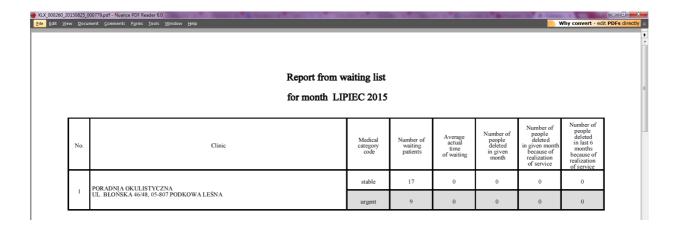
#### Queues (KLX)

The "Queues (KLX)" functionality is used to view reports with waiting queues states created earlier at exporting KLX files. After selecting this functionality there is displayed the form to select the settlement period. After specifying the year and month and after pressing "Display" button there is presented a table of reports of queues states from given settlement period. At every report there is "Preview" button.



After pressing the "Preview" button at selected report, report will be opened in the PDF format, presenting waiting queues states in given settlement period and in selected version of report:

- > number of waiting patients
- > actual average waiting time (in days)
- > number of people deleted in a given month
- number of people deleted in a given month because of service realization
- > number of people deleted in the last 6 months because of service realization divided into a stable and urgent cases.



## Queues (KLZ)

The "Queues (KLZ)" functionality is used to view problems with waiting queues states imported to the system from KLX file. After selecting this functionality there is displayed the list of clinics for which there are reported problems by the NFZ (if at any clinic there have been reported problems). At every clinic there is "Problems" button.



After pressing the "Problems" button there is displayed a list of reported problems with the waiting lists state in selected clinic. There are three categories of problems:

- > errors displays in red
- > cautions displays in yellow
- > information displays in green

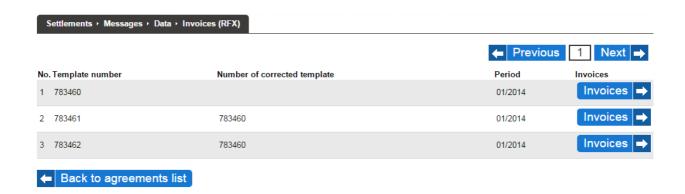


#### Invoices (RFX)

The "Invoices (RFX)" functionality is used to view invoices issued for the NFZ. After selecting this functionality there is displayed a list of contracts with the NFZ. Agreements are divided into years (agreements with consecutive years are available in separate tabs).



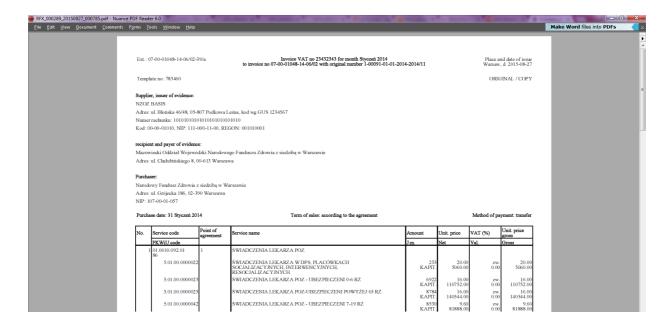
At each agreement there is the "Select" button, which when pressed displays a list of template of bills loaded into the jHIS system for the particular contract.



At each template there is the "Invoices" button, which when pressed displays a list of invoices issued based on the template of bill.



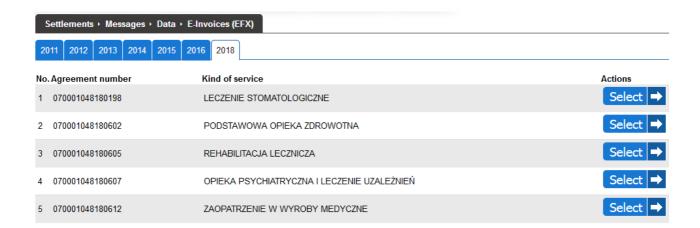
At each invoice there is "Preview" button, which pressed opens an invoice in PDF format.





## E-Invoices (EFX)

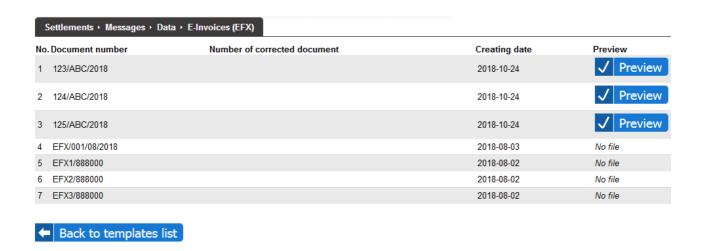
The "E-Invoices (EFX)" functionality is used to view electronic invoices issued for the NFZ. After selecting this functionality there is displayed a list of contracts with the NFZ. Agreements are divided into years (agreements with consecutive years are available in separate tabs).



At each agreement there is the "Select" button, which when pressed displays a list of template of bills loaded into the jHIS system for the particular contract.

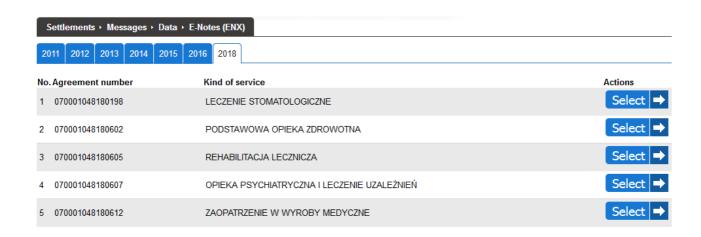


At each template there is the "Documents" button, which when pressed displays a list of electronic invoices issued based on the template of bill. For each document for which a printout was generated in the form of a PDF file, the "Preview" button is displayed, enabling the preview of a PDF file with an invoice printout.



#### E-Notes (ENX)

The "E-Notes (ENX)" functionality is used to view electronic notes issued for the NFZ. After selecting this functionality there is displayed a list of contracts with the NFZ. Agreements are divided into years (agreements with consecutive years are available in separate tabs).



At each agreement there is the "Select" button, which when pressed displays a list of template of bills loaded into the jHIS system for the particular contract.

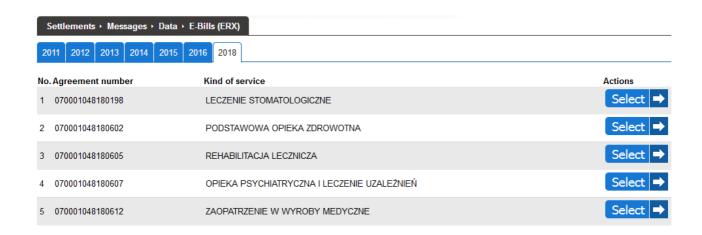


At each template there is the "Documents" button, which when pressed displays a list of electronic notes issued based on the template of bill.



#### E-Bills (ERX)

The "E-Bills (ERX)" functionality is used to view electronic invoices issued for the NFZ. After selecting this functionality there is displayed a list of contracts with the NFZ. Agreements are divided into years (agreements with consecutive years are available in separate tabs).



At each agreement there is the "Select" button, which when pressed displays a list of template of bills loaded into the jHIS system for the particular contract.



At each template there is the "Documents" button, which when pressed displays a list of electronic bills issued based on the template of bill.

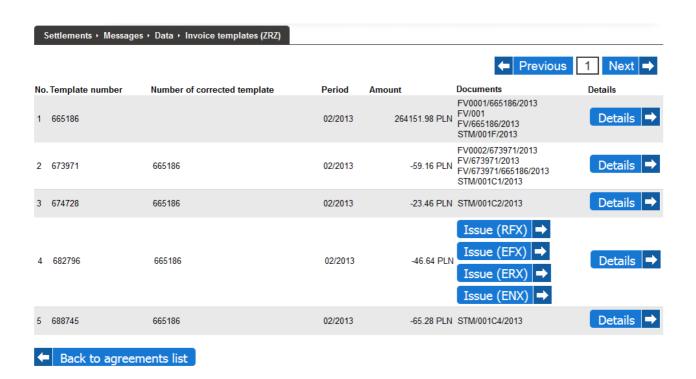


#### Invoice templates (ZRZ)

The "Invoice template (ZRZ)" functionality is used to view data from templates of invoices loaded to jHIS system from ZRZ files. After selecting this functionality there is displayed a list of contracts with the NFZ. Agreements are divided into years (agreements with consecutive years are available in separate tabs).



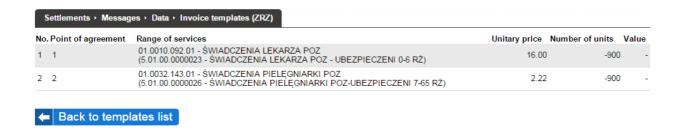
At each agreement there is the "Select" button, which when pressed displays a list of templates of invoices loaded into the jHIS system for the contract.



At each template within the column "Documents" there are visible numbers of bills / invoices / notes issued on the basis of the given template and in case of templates for which no document was issued yet (for privileged users) the buttons "Issue (RFX)", "Issue (EFX)", "Issue (ERX)", "Issue (ENX)" allowing to pass to form for issuing new document form the given template (clicking this button leads to display form described in chapter "NHF"  $\rightarrow$  "Messages"  $\rightarrow$  "Export"  $\rightarrow$  "Invoice templates (ZRZ)"). At each template there is also "Details" button, which when pressed displays a list of items to be placed in the document created based on the template of bill and invoice issued based on the template of bill. For each item there is presented the unit price, number of units (quantity) and value.

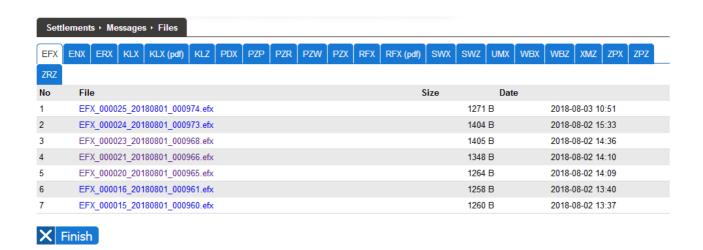


In case of corrective templates, the number of units can be negative.



#### **Files**

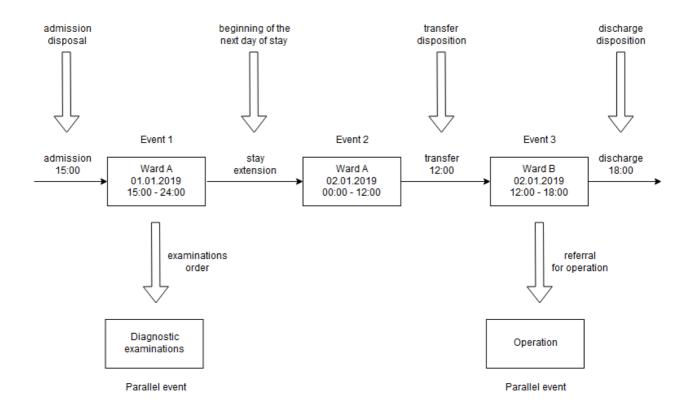
The "Files" functionality is used for viewing and downloading of messages previously generated and transmitted to the SZOI NFZ system and previously imported from the SZOI NFZ. After selecting this functionality there are displayed tabs with names corresponding to the types of message files. Clicking on a tab displays a list of files of a given type of messages stored on the server. For each file there is displayed name, size and date of creation. Clicking on the name of the file lets to download the file and save it to a computer.



# Hospital

The "Hospital" module is intended for hospitals. Admission to the hospital (to ward) is carried out on the basis of an disposal given by a doctor at the emergency room (and in the case of NHF stays

of a referral issued there). A stay in a hospital is treated as a series of events, each of which is understood as the uninterrupted period of a patient's stay in one ward in one day. According to this definition, each ward change and each extension of stay for the next day result in the occurrence of a new event in the course of events constituting a hospital stay. As a part of the stay, patients may be transferred within the ward and between wards. Transfer to another ward is based on the transfer disposal issued by the doctor in the ward. During the stay, operations, consultations, diagnostic examinations and vaccinations can be carried out in parallel. The stay ends with a discharge (due to the end of the treatment process or death of the patient) based on the disposal issued by the doctor in the ward. An example of a hospital stay schedule:



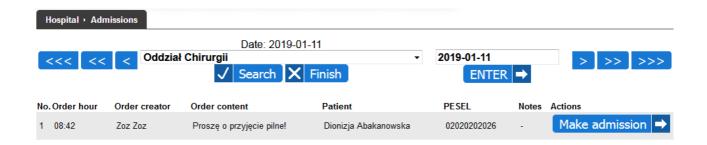
## **Admissions**

The "Admissions" functionality from the "Hospital" menu is used to handle the patient's admission disposals (accepting the patient directed to the department from the emergency room) and the disposals of patient transfers (accepting the patient transferred from another ward). After selecting this functionality, search engine is displayed to admit / transfer patients issued today. In the search engine, all wards where the logged-in staff works are available for selection. First select the ward and press the "Search" button. The list of disposals for admitting / transferring patients to a given ward issued today is displayed below the search engine (in order for the disposal to appear on the list of disposals, the visit at the emergency room must be finished). The search engine also has the following navigation buttons:

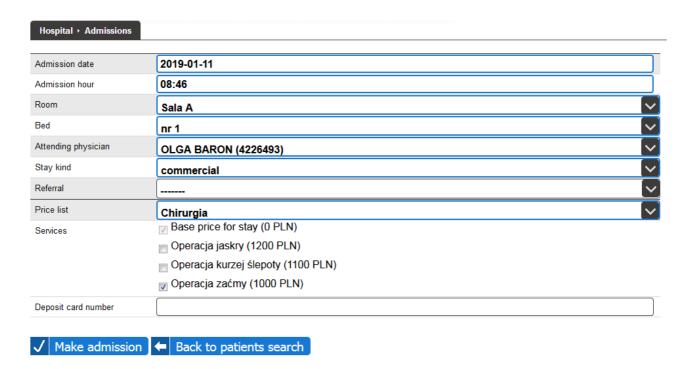
- > <<< allows to view admission / transfer orders issued to a given ward on a month earlier than the current presented day
- <- allows to view admission / transfer orders issued to a given ward on a week earlier than
   the current presented day
  </p>

- < allows to view admission / transfer orders issued to a given ward on a day earlier than
   the current presented day
  </p>
- Change date" allows one to view any day, which should be indicated in the date field before pressing the "Change date" button
- "Today" alows one to view today's day
- > allows to view admission / transfer orders issued to a given ward on a day later than the current presented day
- >> allows to view admission / transfer orders issued to a given ward on a week later than the current presented day
- >>> allows to view admission / transfer orders issued to a given ward on a month later than the current presented day

Clicking on any of the above buttons changes the admission / transfer orders issued to a given ward for the appropriate day for which the button leads.



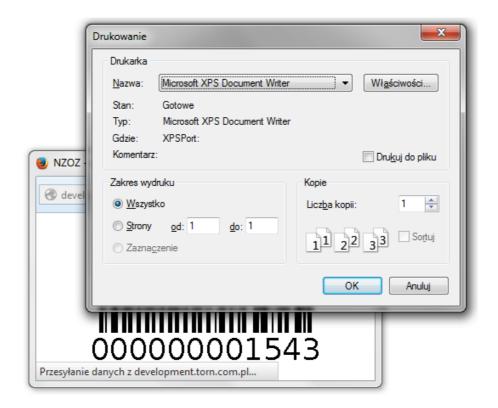
At each disposal you will see the "Make admission" button, which clicking results in displaying the admission form. The form specifies the date and time of admission, indicates the room, the bed for the patient, determines the attending physician and the type of stay. In the case of NHF stays and departments requiring a referral, the form indicates the referral (which should be issued in the emergency room together with the disposal of admission to the ward). In the case of commercial stays, a price list should be indicated and, if applicable, commercial services for implementation.



After filling in the form, if the indicated bed is free (which the system verifies), the system registers the patient's admission to the ward displaying a relevant message and a "Print band" button enabling the user to print a wristband.



After clicking the "Print band" button, a new window with a bar code opens and the printing process is automatically initiated.



After printing the band, closing the window with the bar code and clicking the "Finish" button, the view of the disposals is displayed again, but the completed disposal is no longer displayed in the list.



No patients waiting for admission

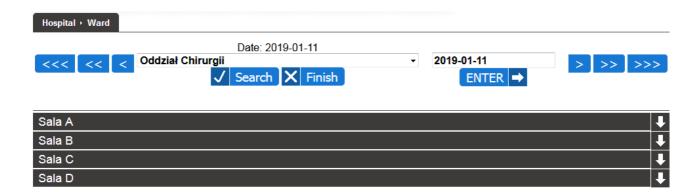
## Ward

The service of the patient's stay in the ward is carried out after selecting the "Ward" functionality from the "Hospital" menu. After selecting this functionality, the search for patient stays in the wards is displayed. In the search engine, all wards where the logged-in staff works are available for selection. First select the ward and press the "Search" button. The list of rooms on the given ward is then displayed under the search engine. The search engine also has the following navigation buttons:

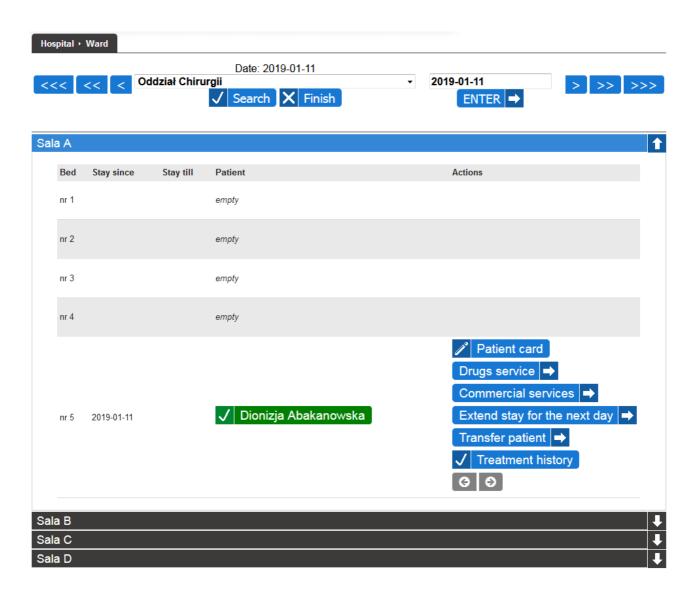
- <-- allows to view stays on a given ward on a month earlier than the current presented day
  </p>
- <- allows to view stays on a given ward on a week earlier than the current presented day
  </p>
- < allows to view stays on a given ward on a day earlier than the current presented day</p>
- Change date" allows one to view any day, which should be indicated in the date field before pressing the "Change date" button

- "Today" alows one to view today's day
- > allows to view stays on a given ward on a day later than the current presented day
- >> allows to view stays on a given ward on a week later than the current presented day
- >>> allows to view stays on a given ward on a month later than the current presented day

Clicking on any of the above buttons changes the stays on a given ward for the appropriate day for which the button leads.



After clicking on the bar with the name of the room, a list of all the beds in the given room and all the events of the stay of the patients on the beds of the given room on the given day is displayed. If a given bed was occupied on a given day by more than one patient (eg by noon, patient X, who was discharged from the hospital at noon, and in the afternoon, patient Y admitted to the same bed), then the bed is displayed as many times how many events of the stay of a given day took place on it.



The button with the patient's name can be displayed in one of two colors: in red if the patient does not have insurance and / or did not complete all the required documents and / or did not pay (in the case of payments before the stay) or in green if all the formalities have been completed. Clicking the button with the patient's name in a situation when it is displayed in red causes displaying a message informing about the formalities necessary to complete. Clicking the button with the patient's name in a situation where it is displayed in green opens the window of the stay event, the substantive content and functioning are identical as described in the chapter "Doctor / nurse surgery", except that only the attending physician has the opportunity to finish it (attending physician is the only person to see the end of stay button and this button is visible only at the last of the series of events forming a hospital stay and its clicking closes all the stay events at the same time), the "Visit" tab has a label changed to "Stay" and the "End visit" button has a label changed to "End stay".

The following buttons can be displayed for each patient:

- if the button with the patient's name is displayed in red
  - "Patient card" a button displayed in the situation when the logged in user has the right to manage patient data; by clicking on it, a patient card opens in a new window with the "Payments" tab open by default; in the patient card you can complete all the formalities necessary to begin the patient's stay at the ward

- if the button with the patient's name is displayed in green
  - "Patient card" a button displayed in the situation when the logged in user has the right to manage patient data; by clicking on it, a patient card opens in a new window with the "Payments" tab open by default
  - "Drugs service" a button that opens a new window with a preview of the history of drugs servicing to the patient; if the logged-in user has the right to serve drugs, then in this window there is also an option to record the fact of serving drugs
  - "Commercial services" a button displayed only for commercial stays opening a new window with a view of the list of commercial services provided during the stay; if the logged-in user has the right to manage services, then in this window there is an option to indicate which services have been performed for the patient
  - "Extend stay for the next day" a button enabling to extend stay in the hospital for the next day; the button is visible at the last of the series of events forming the stay only for users with permissions to extend stays and only if the stay has not been completed and no transfer / discharge disposals have been issued
  - "Transfer patient" a button that allows the patient to be transferred to another ward or within the ward where the patient is staying (change of bed / room / doctor); the button is visible only to users with permissions to transfer patients and only at the last of the series of events forming the stay only if the stay has not been completed
  - "Discharge patient" a button enabling to discharge a patient from a hospital; the button
    is visible only to users with permissions to make discharges and only at the last of the
    series of events forming the stay only if discharge is not made yet
  - "Print discharge" a button enabling to print patient discharge from the hospital; the button is visible only to users with permissions to make discharges and only at the last of the series of events that form the stay only if discharge is already made
  - "Treatment history" a button enabling previewing and downloading (in the form of a PDF file) and also printing a full history of patient treatment during hospital stay; the button is visible only to users who have access to the history of treatment
  - "←" a button enabling quick transition to the previous hospital stay event; the button is active and is green only if there is a stay event preceding the given event and it is in the ward to which the logged-in user has access, otherwise the button is inactive and is gray
  - "→" a button enabling quick transition to the next hospital stay event; the button is active and is green only if there is a stay event following the event and it is in the ward to which the logged-in user has access, otherwise the button is inactive and is gray

If the button with the patient's name is displayed in red, the formalities in patient's card should be completed in order to be able to start patient service in the ward - after completing the formalities and closing the patient card, the button will turn green. One of such formalities may be payment for stay. If the payment for the stay is made before its commencement, the fee is subject to the services selected from the pricelist when admitting the patient on the ward. If during the stay some of these services are not implemented then at the end of the stay in the patient card, a financial correction document with an overpayment for the patient's refund will be automatically created. If additional services are provided during the stay, a new payment will be automatically created at the end of the stay in the patient card (all additional services provided during the stay are settled jointly at the end of the stay regardless of the wards the patient was in during the stay, which is dictated by the fact that during the stay the patient's condition may not allow him to perform any formal activities).

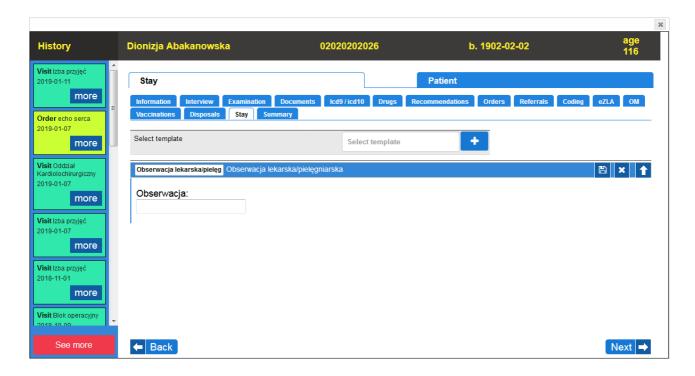
Payments for events parallel with stay events are not treated as payment for stay, but there are mechanisms to implement them in this way:

- payments for diagnostic examinations can be included in payments for stay as described in the chapter "Collection facility"
- payments for vaccinations can be included in payments for the stay as described in the chapter "Vaccination facility"
- in order for payments for operations / surgeries / consultations to be included in payments for the stay, one should not point out positions from the price list by the operations / surgeries / consultations and instead point them out by hospital stay events

The patient's service in the ward from the doctor's point of view is mainly based on:

- registration of observations from medical celebrations ("Stay" tab)
- registration of performed procedures and diagnosed diagnoses ("ICD9 / ICD10" tab)
- prescribing drugas ("Drugs" tab)
- ordering diagnostic examinations ("Orders" tab)
- routing to operations / treatments ("Referrals" tab)
- ordering vaccinations ("Vaccinations" tab)
- issuing an admission, transfer and discharge disposals ("Disposals" tab)

what is done with the help of the surgery module opened after clicking the button with the patient's name as described in the chapter "Doctor / Nurse surgery".



In the case of prescribing drugs, the issue of prescriptions is omitted as the drugs served come from departmental pharmacies.

Nurses responsible for serving drugs prescribed by the doctor record the facts of drug serving in the

system. The "Drugs service" button is used for this purpose. After clicking it, a list of prescribed drugs is displayed along with the dosage and the history of serving - at which time by whom and what dose of the drug was given. In addition, with each drug the field "new serving" appears and under the list of drugs the field "Drugs in the above doses I gave the patient at" to record the facts of serving drugs.

Drug	Ordered dosage	Ordering staff	Serving history
ASPIRIN, TABL., 0,3 G, 100 TABL.	3 razy dziennie 1 tabletka	OLGA BARON	o9:52 - dose: 0.3G - serving: OLGA BARON o9:56 - dose: 0.3G - serving: OLGA BARON new serving - dose: 0.3G - serving: OLGA BARON

Drugs in the above doses i gave to the patient at [hh:mm] 09:57



The task of the nurse serving the drugs is to enter the doses given in the field "new serving" and in the field "Drugs in the above doses I gave the patient at" hour when drugs were given and then save this information by clicking "Save". The drugs serving entered by the nurse will be displayed in the serving history.

Operation completed successfully

Drug	Ordered dosage	Ordering staff	Serving history
SPIRIN, TABL., 0,3 G, 100 ABL.	3 razy dziennie 1 tabletka	OLGA BARON	09:52 - dose: 0.3G - serving: OLGA BARON 09:56 - dose: 0.3G - serving: OLGA BARON 09:57 - dose: 0.3G - serving: OLGA BARON new serving - dose: - serving: OLGA BARON

Drugs in the above doses i gave to the patient at [hh:mm]



Depending on the procedures adopted, during the commercial stay a doctor or nurse registers commercial services provided to the patient for later settlement with the patient. The "Commercial services" button is used for this purpose. After clicking it, a new window displays with a list of commercial services implemented for all the events preceding the given one (available for

inspection) and with a list of commercial services possible to be provided at a given stay event. The services provided should be checked (and non realized should be un-checked) and saved by clicking the "Save" button.

#### Realized services since 2019-01-11 08:47 till 2019-01-12 00:00

Realized	Service		Price	
✓	Operacja zaćmy		1000.00 PLN	
Realized services since 2019-01-12 00:00				
Realized	Service		Price	
	Operacja jaskry		1200.00 PLN	
	Operacja kurzej ślepoty		1100.00 PLN	
	Operacja zaćmy		1000.00 PLN	
. / 5=1	re X Close			

Depending on the procedures adopted, the doctor or nurse at the end of the day extends the hospital stays of patients remaining in the ward for the next day so that the next day system could continue to operate the patient. To extend the patient's stay in the ward for the next day, simply click on the "Extend stay for the next day" button.

The diagnostic examinations commissioned by the doctor are carried out by the appropriate organizational units using the "Collection Facility" functionality from the "Surgery" menu as described in the chapter with the same title, and the examination results appear in the stay window of the surgery module in the patient's history of visits, examinations and orders.

The operations for which the doctor issued a referral are planned and implemented using the "Operations" functionality in the "Hospital" menu as described in the chapter under the same title. In order for the operation costs to be settled within the hospital stay, the prices of the operations should be taken into account in ward price lists and the appropriate service should be indicated by the event by clicking on the "Commercial services" button described above and should not be indicated while planning the operation.

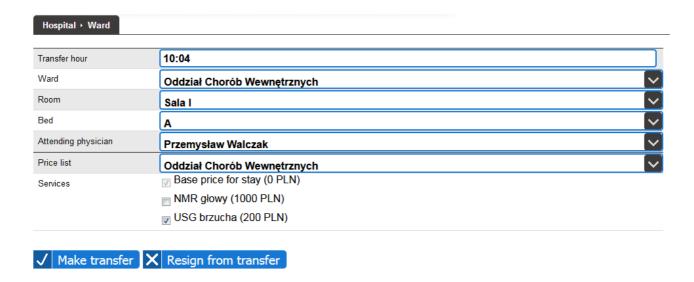
The vaccinations ordered by the physician are carried out by appropriate organizational units using the "Vaccination facility" functionality from the "Surgery" menu described in the chapter with the same title.

The other examinations commissioned by the doctor are realized by appropriate organizational units using the "Orders" functionality from the "Surgery" menu described in the chapter with the same title, and the results of order fulfillment appear in the surgery module window in the patient's history of visit, examinations and orders.

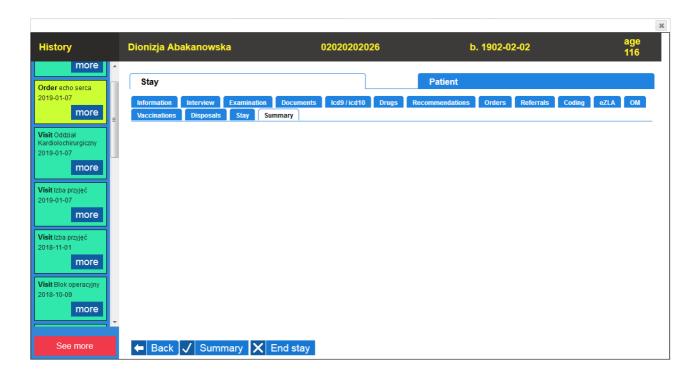
If there is a need to transfer the patient within the ward (change of bed / room / doctor) then the "Transfer patient" button should be used. After clicking it, a transfer form will be displayed where one should specify the time of transfer, indicate the room and bed and the attending physician and confirm the changes by clicking the "Make transfer" button.



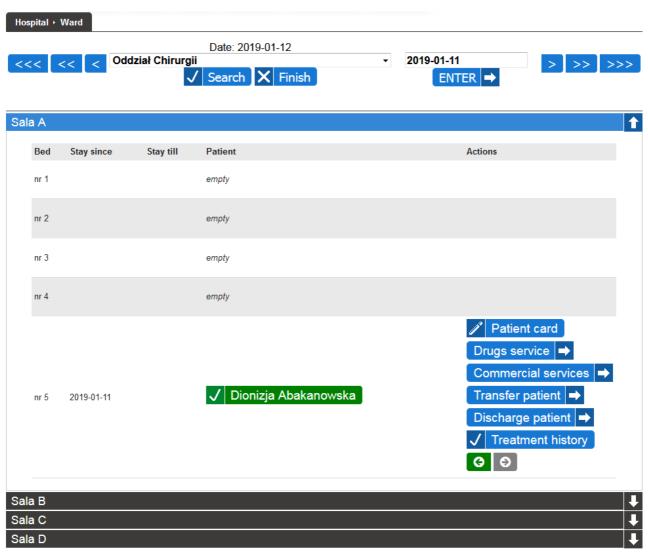
When there is a need to transfer the patient to another ward, the doctor issues disposal to transfer the patient. If the user transferring the patient works both in the ward the patient is being transferred from and in the ward to which the patient is transferred, he can use the "Transfer patient" button to transfer. After clicking it, a transfer form will be displayed in which one must specify the time of transfer, indicate the ward, room and bed and the attending physician and in the case of commercial stay also specify the services to be implemented and approve the changes by clicking the "Make transfer" button. If the user transferring the patient is not working in the ward where the patient is transferred, then in order to make transfer, he must use the "Admissions" functionality described in the previous chapter and realize the patient's admission to the ward based on the disposal to transfer him from another ward.



In the case of a decision to terminate the patient's treatment process or in case of death of the patient, the doctor issues disposal to discharge patient and then clicking the "End stay" button in the "Summary" tab closes the patient's stay in the ward.



To make a discharge, an authorized user clicks the "Discharge patient" button.

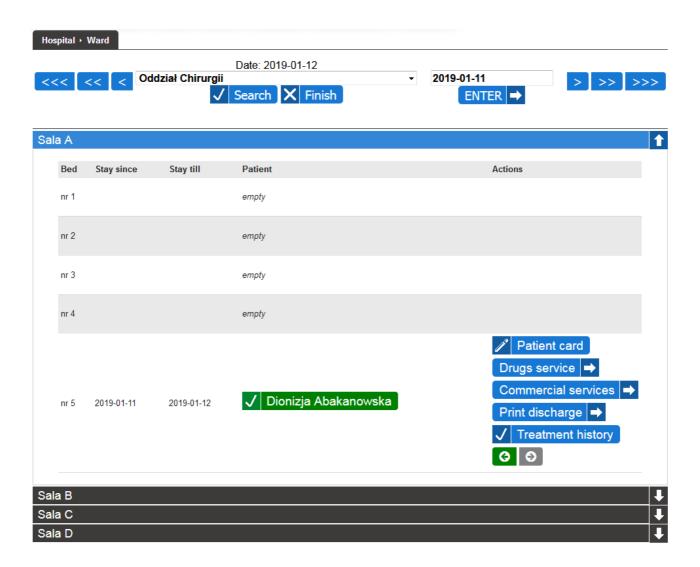


The discharge form is then displayed (pre-filled with data extracted automatically from the treatment process with the possibility of modifying them) in which you must complete the patient discharge data section or the patient death data section and confirm with the "Make discharge" button.

Hospital • Ward				
Discharge date	2019-01-12			
Discharge hour (hh:mm)	15:30			
Discharge diagnosis (ICD-10)	<b>Z41</b>			
Patient discharge destination	home			
Patient transport order				
Patient charges				
Treatment	pharmacological			
Operations and surgeries	н			
Exemption information	.#			
Recommendations	drink a lot of water			
Diagnostic examinations results	.d.			
Consultation results	.al			
Ordered drugs	.at			
Provision orders				
Consultation referrals and terms				
Epicrisis	The patient with back problems reported to the hospital. MR examination showed a hernia L4-L5. Hernia surgery was performed.			
Discharge reason and circumstances	.11			
Patient death date				
Patient death hour (hh:mm)				
Patient death reasons (ICD-10)	primary  secondary			
	Secondary			
	direct			

✓ Make discharge X Resign from discharge

The system will then return to the view of the patients' stays in the ward and the "Make discharge" button next to the discharged patient will change its name to "Print discharge" enabling downloading (in the form of a PDF file) and printing the patient's hospital discharge.



If the discharge was a consequence of the patient's death, the death card should also be printed out using the "Documents" tab in the patient's card.

The end of stay (in the case of commercial stays) results in the appearance of payment in the "Payments" tab of the patient card that the patient should pay.

# **Discharges**

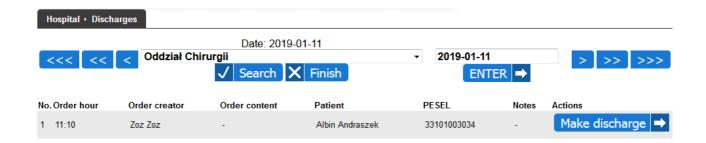
The functionality of "Discharges" from the "Hospital" menu is used to handle the disposals for discharge of patients from the hospital. After selecting this functionality, the search engine is displayed for the disposals for discharge of patients issued today. In the search engine, all wards where the logged-in staff works are available for selection. First select the ward and press the "Search" button. Then, a list of the disposals from a given ward issued today is displayed below the search engine. The search engine also has the following navigation buttons:

<<- allows to view discharge disposals issued on a given ward on a month earlier than the
</p>

current presented day

- > << allows to view discharge disposals issued on a given ward on a week earlier than the
  current presented day
  </p>
- < allows to view discharge disposals issued on a given ward on a day earlier than the
   current presented day
  </p>
- Change date" allows one to view any day, which should be indicated in the date field before pressing the "Change date" button
- "Today" alows one to view today's day
- > allows to view discharge disposals issued on a given ward on a day later than the current presented day
- >> allows to view discharge disposals issued on a given ward on a week later than the current presented day
- >>> allows to view discharge disposals issued on a given ward on a month later than the current presented day

Clicking on any of the buttons described above changes the view of the disposals from a given ward to the one applicable for the day to which the given button is leading.

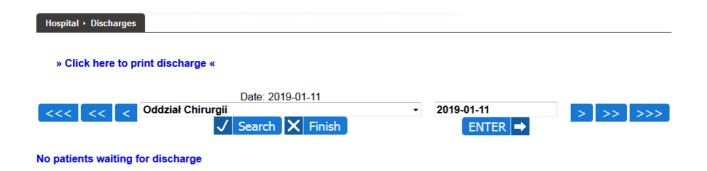


To make an discharge, an authorized user clicks the "Make discharge" button next to a given patient in the list. The discharge form is then displayed (pre-filled with data extracted automatically from the treatment process with the possibility of modifying them) in which one must complete the patient discharge data section or the patient death data section and confirm with the "Make discharge" button.

# Hospital > Discharges 2019-01-12 Discharge date Discharge hour (hh:mm) 15:30 Discharge diagnosis (ICD-10) Z41 Patient discharge home destination Patient transport order Patient charges pharmacological Treatment Operations and surgeries Exemption information drink a lot of water Recommendations Diagnostic examinations results Consultation results Ordered drugs Provision orders Consultation referrals and terms The patient with back problems reported to the hospital. MR examination showed a hernia L4-L5. Epicrisis Hernia surgery was performed. Discharge reason and circumstances Patient death date Patient death hour (hh:mm) primary Patient death reasons (ICD-10) secondary direct ✓ Make discharge X Resign from discharge

548

The system then returns to the view of the discharge disposals on the ward, with the realized one disappeared from the list, while the download link (in the form of a PDF file) is displayed so the patient's hospital discharge could be printed out.

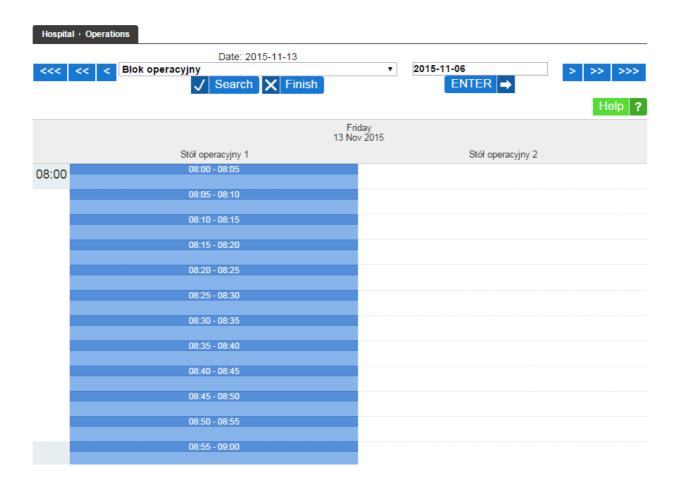


# **Operations**

The "Operations" in the "Hospital" menu is the functionality to plan operations in the operating room and to management of already planned operations.

After selecting the "Operations" functionality from the "Hospital" menu, there is displayed a search engine of the availability of equipment necessary for today operations in the cells contained in the units, which are accessible to the logged user. At first, select the cell and press "Search" button. If there are any graphics of equipment in this cell then on the page there is displayed a grid of scheduler (otherwise there is displayed an appropriate message). The grid has a column corresponding to all instruments for which there are graphics in the cell. Rows are corresponding to possible hours of admission (grid is limited to the work hours of a cell and each hour is divided into 12 parts of 5 minutes each). On the grid there are marked all the periods of availability (divided into five-minute slots to be able to start operations at any chosen time) and planned operations according to the scheme

- the availability of future periods are shown in blue
- the availability of past periods are displayed in gray
- > scheduled operations that do not require supplement the information or verification are displayed in green
- scheduled operations that require supplement the information or verification (to include insurance document, settle the payment, fill out the necessary documents) are displayed in red



In the form above the grid there are in addition the following navigation buttons:

- > <<< allows to view the schedule on a month earlier than the current presented day</p>
- <- allows to view the schedule on a week earlier than the current presented day
  </p>
- < allows to view the schedule on a day earlier than the current presented day</p>
- > "Change date" allows one to view any day, which should be indicated in the date field before pressing the "Change date" button
- "Today" alows one to view today's day
- > allows to view the schedule on a day later than the current presented day
- >> allows to view the schedule on a week later than the current presented day
- >>> allows to view the schedule on a month later than the current presented

Clicking on any of the above buttons changes the view of schedule for the appropriate day to which the button leads.

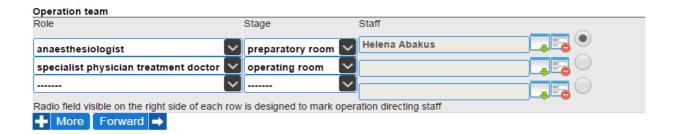
Clicking on a specific time of availability period of grid scheduler begins the process of planning operation at this time. At first, there is displayed a window with information about the clinic and the time and form of basic data of operation in which should be specified:

- duration of the operation a list of available times due to the length of available period of equipment from the selected time of which operation is planned
- type of operation the operation can be planned as NFZ's or commercial

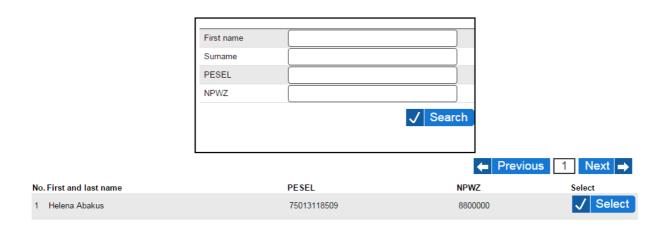
type of operation - a list of the types of operations that can be realized in the cell



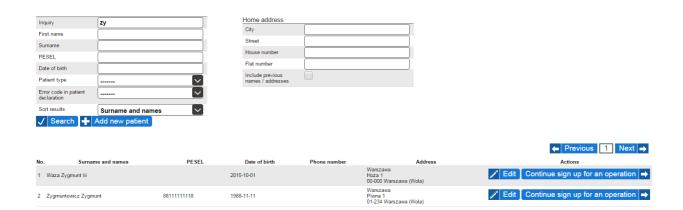
After entering basic data of operation and pressing "Next" button there is displayed a form of n entering surgical team, where are displayed the fields for specify personnel forming part of the surgical team, highlight the person heading the operation and for each person specify role and stage of work.



You can enter any number of members of the surgical team. To view more fields in order to enter more people use the "More" button. To insert a staff to form of an operational team, click on the icon with a green arrow pointing down. It opens the search window of staff, where after selecting search criteria, you can find staff available for the whole duration of planned operations (availability of staff must be planned in graphics of work). For each person in staff there is displayed "Select" button to click on the search window of staff disappears and selected staff appears in the form of the operating team. If the staff has been inserted by mistake, you can remove it by clicking on the icon with the white minus sign in a red circle. One person from the staff should be designated as heading the operation by checking the round field (radio) on the right side of the form.



After entering the operating team and pressing the "Forward" button there is displayed the search engine of patients which should be used to search for a patient for whom there will be appointed visit. The search is done on the terms described in the section "Patients (active cards)", additionally, at each of the patients from the list of patients that meet your search criteria as well as at each tab of patient card, there is an extra button "Continue sign up for an operation", which allows you to continue the process of signing up for an operation for the selected patient. There is also the possibility to edit data in the patient card.



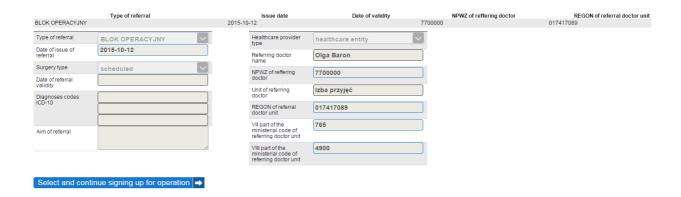
After selecting the patient (pressing the "Continue sign up for an operation"), the system checks whether the operation can be planned for a given patient (eg. For operations in the cells for children can be saved only person under 18 years of age or having special approval, etc.). If the operation can not be planned what is informed by the appropriate message and the system ask to enter another patient. If the patient can be saved for an operation the process of signing up is continued.

If the operation is commercial and the patient has outstanding payments then the system displays the patient's arrears in payments. The person registering the patient for surgery decide at this point whether the patient should be signed up (although arrears) or stop the signing process and go to the module of handling patient's payment. For NFZ's operations and commercial operations for patients without arrears, this step is skipped.



The next step is selecting the referral for surgery. Regardless of the type of operation, to allow its appointment, in the patient card mast be a referral for the operating block / delivery room. If such referral does not exist, there is displayed appropriate message and the process of signing up for the operation is canceled. If there is a referral (or referrals) usable for surgery, there is displayed a list of such referrals in the form of strips with the basic data of any referral.

When you click on the bar with information about referral develops a form with detail data of referral. Under the form there is the "Select and continue signing up for operation" button, allowing the continuation of the process of signing up the patient for surgery on the basis of the referral.

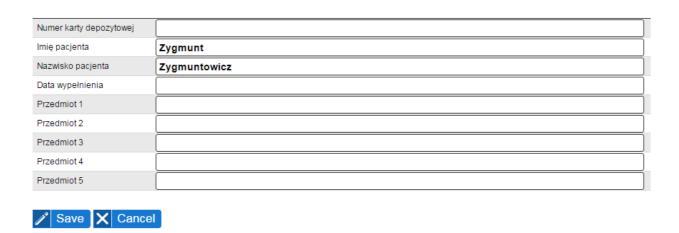


The next step in the process of signing up for operation is filling documents (including deposit card). This step occurs only if the operation is arranging on the basis of referral to which they are associated documents to fill out and they were not yet completed. In this case there is displayed a list of documents which have to be completed.



At each unfilled document there is a "Fill" button to display a form to complete the document, and at each filled document there is the "View" button to download the document in PDF format and print it. As long as there is at least one document to fill so long under the list of documents is displayed the "Skip filling (to fill later) and continue" button allows to omit the step of filling the documents, however it will be needed to fill such documents after saving operation, so the operation could be realized.

To fill the document click the "Fill" button by them,. You will see a form of completing the document, which, after entering the data should be saved by clicking "Save" button.



After saving the document's data, there is displayed again a list of documents at the referral. Once all the documents from the list will be filled, from the list of documents will disappear "Skip filling (to fill later) and continue" button and in its place there will appear the "Continue sign up for an

operation" button, which clicked takes you to the next step of the process.



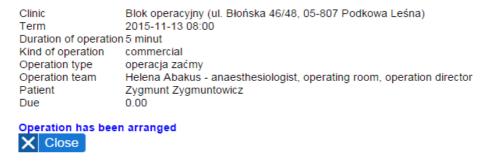
The next step in the process of signing up for the operation is to display the pricelist in the cell. This step occurs only in case of commercial operations. At first, there is displayed a list of available pricelists (applicable in the cell on the day of planned operation) from which you should choose the right one and then click "Next" to view the content of the pricelist.



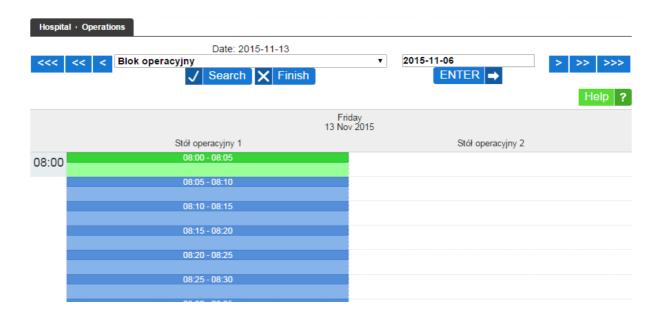
In the pricelist is determined the basic gross price per operation (which may in particular be zero) and prices of any services. Registrar may (but need not) determine which services under the operation the patient is expecting (by checking the box next to the name of service). Upon selection of any service, the total price for the operation is automatically updating and the field of quantities at the service becomes editable - the number of services can be modified and at such modification there is also updating the total price for the operation.



Pressing the "Next" bitton ends the process of signing up for the operation. There is displayed a summary with information about the planned operation.



Pressing the "Close" button closes the window of planning the operation and in the view of the schedule, color of period occupied by an operation is updated to correct for the planned operation.



From the same schedule you can also manage planed operations. After clicking on the arranged operation in the schedule is opened a window with details of the operation, in which under the basic information about the operation are information about the signed patient. At the patient there is information about the status of the operation, the deficiency relating to the operation and action buttons.



Operations can have the following statuses:

- > saved operation basic status of the planned operation
- > realized operation operation on which the patient was and doctor in charge of the operation after the execution made a note about it in the system
- y unrealized operation operation for which the patient has not appeared or which for other reasons did not take place and the doctor in charge of the operation made a note about it in the system

At the operations there can also occur following information about a deficiency (shown in red):

- Unfilled documents if the operation is carried out on the basis of a referral from which they are associated documents required to be completed by the patient and at least one of these documents has not yet been completed
- > Unrealized payment for operation if the operation should be paid in advance and the fee has not been taken from the patient (for commercial operations)
- No insurance for the day of operation if the system does not have a valid insurance

document of patient for the day of surgery (for NFZ's operations)

At the patient signed up on the operation there may be available the following buttons:

- Cancel operation button to cancel the (next) operation, whether at the request of the patient or due to the change in work schedule of personnel / equipment
- Patient card button allows access to the patient records (opening in a new window) and supplement the data in it (the structure of patient records and the principles of its filling are described in the section "Patients (active cards)"); fast access to the patient records makes it easier to complete the information of insurance for the day of operation and the fulfillment of documents if these are required for the realization of operation

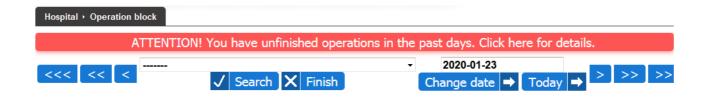
#### **WARNING!**

If the patient is insured in the NFZ and have a social security number and date of surgery is future, the message of lack of insurance can be ignored until the day of the operation - the system jHIS on the day of operation automatically connects to the system eWUŚ and downloads electronic document confirming the patient's insurance for a day of operation; if such electronic document does not confirm patient insurance you will be required to enter insurance information on the day of operation in the patient card - the "Declaration of patient insurance" button in "Patient" tab or "Insurance" tab)

Payments - button allows to view the patient's unpaid payments with the ability to manage them; this is exactly the functionality of the "Payments" tab described in the "Patients (active cards)" section.

# **Operation block**

The "Operation block" in the "Hospital" menu is the functionality to serve and document operations on operation block. After choosing this functionality, search form for planned operations appears. A warning may appear above the search engine about unfinished operations in the past days.



After clicking this warning, a new window opens with detailed information on which days in which cells which operations were not closed. By clicking on the names of cells, the system changes the view of scheduled operations to operations on a given day in a given cell where unclosed operations should be closed (marked as realized or unrealized).

#### Unclosed operations require state change

- 2020-01-15
  - o Blok operacyjny, ul. Kazimierzowska 33D, 05-807 Owczarnia
    - planned operation at 08:00



To begin using the functionality of operational block it is at first needed to choose a block and click "Search" button. Under the search engine is displayed a view of operations prearranged to the logged doctor today in the indicated block. The search engine includes in addition the following navigation buttons:

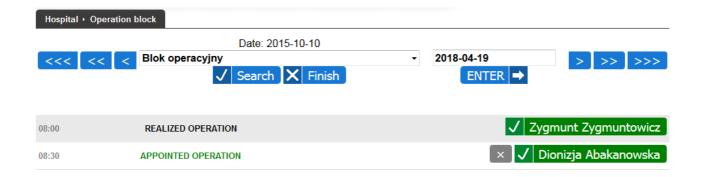
- > <<< allows to view operations arranged to logged doctor in the indicated block on a month earlier than the current presented day
- << allows to view operations arranged to logged doctor in the indicated block on a week
   earlier than the current presented day
  </p>
- < allows to view operations arranged to logged doctor in the indicated block on a day
   earlier than the current presented day
  </p>
- Change date" allows one to view any day, which should be indicated in the date field before pressing the "Change date" button
- > "Today" alows one to view today's day
- > allows to view operations arranged to logged doctor in the indicated block on a day later than the current presented day
- >> allows to view operations arranged to logged doctor in the indicated block on a week later than the current presented day
- >>> allows to view operations arranged to logged doctor in the indicated block on a month later than the current presented day

Clicking on any of the above buttons changes the view of operations arranged to the logged doctor in the indicated block for the appropriate day for which the button leads.

The view of scheduled operations for a logged-in doctor includes for each operation its time, status and button with the name of the patient which can take the following colors:

- y green means that the patient signed up for an operation fulfilled all formalities and may be adopted; when you click this button it opens a window of operation
- > red means that the patient signed up for an operations did not fulfill the related formalities and cannot be accepted; when you click this button, a window appears with information which formalities have not been completed (eg. the lack of referral, blank documents, lack of authorizations, lack of insurance, lack of fee)
- gray means that the patient did not show up for an operation and the visit has been marked as unrealized; button is inactive (clicking on it does not cause any action) is displayed for information only

In the case of prearranged operations (these are not marked nor as realized nor as unrealized) before the button of the patient's name there is also visible gray button with an "×" mark, which allows to cancel the operation (future operations) or to mark the operation as an unrealized (past operations). Button with an "×" mark is available only for main staff realizing the operation.



After clicking the green button with the patient's name, the operation window opens, the substantive content and functioning are identical as described in the chapter "Doctor / Nurse surgery", except that only the main staff realizing the operation has the ability to close it (the only one sees the button to complete the operation), the "Visit" tab has the label changed to "Operation" and the "End visit" button has the label changed to "End operation".

## **Dictionaries**

The "Dictionaries" submenu in the "Hospital" menu includes functionalities to manage of dictionaries used by the functionality of the hospital, and they are:

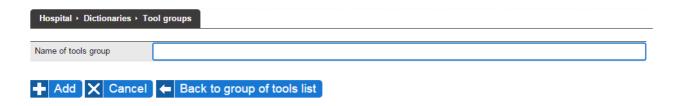
- > Tool groups
- > Tools
- > Sets

### **Tool groups**

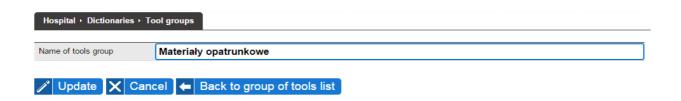
The "Tool groups" functionality from the "Dictionaries" submenu in the "Hospital" menu is used to define groups of tools (including materials) used for treatments and surgeries. After selecting this functionality there is displayed a list of defined groups of tools. At each group there are visible "Edit" and "Delete" buttons allow to view the form of edition and deletion of tool group. Under the list of tools groups there is the "Add tools group" button used to display the form of adding a new group of tools.



To add a tools group, click "Add tools group " button. You will see a form of adding a new group in which you have to enter its name and confirm by clicking "Add" button.



To edit name of group of tools you should click "Edit" button at the group from the list of groups. You will see a form of editing data of group, where you can change its name and confirm with "Update" button.



To delete a group of tools you have to click "Delete" button at the group from the list of groups. You will see a form of deleting group in which you have to confirm your intention to remove the group by "Delete" button.



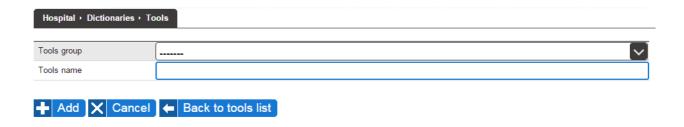
Group names have to be unique. The group cannot be removed if there are some tools assigned to it.

#### **Tools**

The "Tools" functionality from the "Dictionaries" submenu in the "Hospital" menu is used to define tools (including materials) used for treatments and surgeries. Tools are subject to resource management mechanisms. After selecting this functionality there is displayed a list of defined tools. At each tool there are visible "Edit" and "Delete" buttons allow to view the form of edition and deletion of tool. Under the list of tools there is the "Add tool" button used to display the form of adding a new tool.



To add a tool, click "Add tool" button. You will see a form of adding a new tool in which you have to enter tool's name and optionally specify the group where this tool belongs to and confirm by clicking "Add" button.



To edit data of tool you should click "Edit" button at the tool from the list of tools. You will see a form of editing data of tool, where you can change its name and optionally the group where this tool belongs to and confirm with "Update" button.



To delete a tool you have to click "Delete" button at the tool from the list of tools. You will see a form of deleting tools in which you have to confirm your intention to remove the tool by "Delete" button.



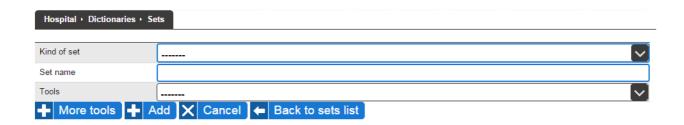
Tools names have to be unique. The tool cannot be removed if it belongs to any set.

#### **Sets**

The "Sets" functionality from the "Dictionaries" submenu in the "Hospital" menu is used to define sets of tools and patient's sets used for treatments and surgeries. Sets of tools are associated with specific treatment and generally contain reusable tools (eg. surgical tools). Patient's sets are connected with the patient in the context of a specific surgery and generally contain materials for single use (eg. dressings, medicines). After selecting this functionality there is displayed a list of defined sets. At each of tools there are visible "Edit" and "Delete" buttons allow to view the form of edition and deletion of set. Under the list of sets there is the "Add set" button used to display the form of adding a new set.



To add a set, click "Add set" button. You will see a form of adding a new set in which you have to specify set's type and enter set's name and select tools / materials belongs to the set. By default there is displayed a field to entering one tool / material. To display more fields, you should use "More tools" button. After entering data, they have to be confirmed by clicking "Add" button. Empty fields of tools will be skipped at saving data of the set.



To modify the data of set there should be clicked "Edit" button at the set from the list of sets. You will see a form of editing set, where you can change the set's type and name, and included tools / materials. To view more fields for entering tools / materials, use the "More tools" button. To remove a tool from the set you should select empty value form drop-down list. After entering the changes, they should be confirmed by clicking "Update" button. Empty fields of tools I be ignored when

saving the data of set.



To delete a set you have to click "Delete" button at the set from the list of sets. You will see a form of deleting tools in which you have to confirm your intention to remove the tool by "Delete" button.



Sets' names have to be unique. To the set can belong more than one tool.

## Sets

The "Sets" submenu in the "Hospital" menu includes functionalities for managing sets of tools / patient needed to do the surgery / operation.

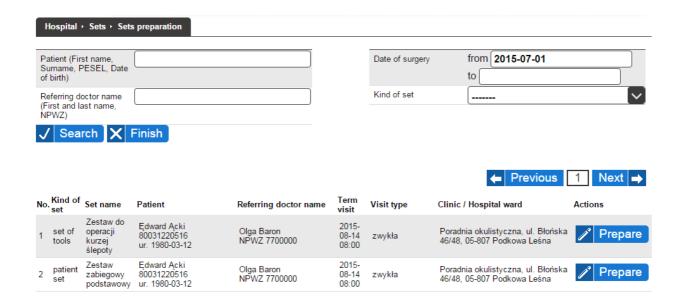
## **Sets preparation**

"Sets preparation" functionality from "Sets" submenu in the "Hospital" menu is used to record in the system the fact of preparation of set of tools and a set of patients to treatment / surgery. After selecting this functionality there is displayed a search engine of sets waiting to prepare (ie, those who were selected by the doctor issuing the referral to treatment / surgery and on basis of a referral there was appointed date of procedure / surgery). Searching is possible based on any combination of the following criteria:

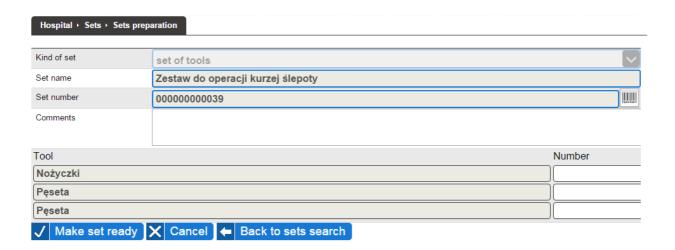
- patient field of general search of patient for who a set of tools / patient has to be prepared;
   here you can enter patient's first name, surname, PESEL, the date of birth of the patient or any combination of these elements
- referring doctor field of general search of doctor who issued the referral for treatment / surgery; here you can enter doctor's name, surname, NPWZ of doctor or any combination of these elements
- date of surgery from to the range of dates when a treatment/ surgery has been planned; If
  the start date is not filled or filled incorrectly then there are searched treatments / operations
  from the future

#### kind of set

After entering the search criteria and clicking on the "Search" button, under the search engine appears the list of sets of tools / patient waiting for preparation meeting the search criteria (or a message that there are no waiting sets if there are no suitable results sets). At each set there is the "Prepare" button.



To start preparing set, it is necessary to click at the "Prepare" button. You will see a form with the data set including automatically given number and a list of tools / materials to be included in the set.



The person preparing set should:

- physically complete set content
- enter in the form any comments about set
- enter in the form serial numbers of tools that were included in the set (if tools have such numbers and they are significant)
- print bar code with number of set

- stick the printed barcode on the prepared set
- deposit prepared set in the appropriate place in institutional health care facility
- Confirm preparation of set.

To print bar code, click the icon



located at the "Set number" field.

To confirm preparation of set, after entering any comments and the tools numbers, click "Make set ready" button. The system will then display the appropriate message indicating that the operation is completed and will automatically return to the search page of sets waiting to prepare.

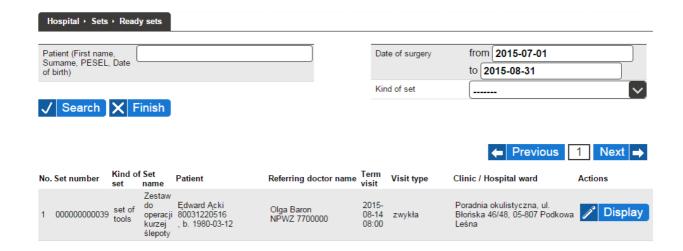


### Ready sets

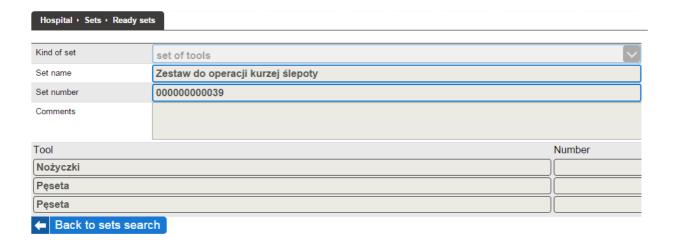
The "Ready sets" functionality from the "Sets" submenu in the "Hospital" menu is used to search for numbers of sets of tolls / patient prepared for a specific treatment / surgery. Finding the set number assigned to a particular treatment allows to find physically sets bearing this number and deliver the kit to the treatment room. After selecting this functionality, there is displayed search engine of prepared earlier sets. Searching is possible based on any combination of the following criteria:

- patient field of general search of patient for who a set of tools / patient has to be prepared; here you can enter patient's first name, surname, PESEL, the date of birth of the patient or any combination of these elements
- date of surgery from to the range of dates when a treatment/ surgery has been planned; By default fields are filled with current date because the most typical usage of the functionality is searching for set at the day of surgery
- kind of set

After entering the search criteria and clicking on the "Search" button, under the search engine appears the list of prepared sets of tools / patient meeting the search criteria (or a message that there are no prepared sets if there are no suitable results sets). At each set there is the "Display" button.



To also see the contents of the set apart from the set number shown in the list of search results, click the "Display" button. You will see a form with the data of set for view.



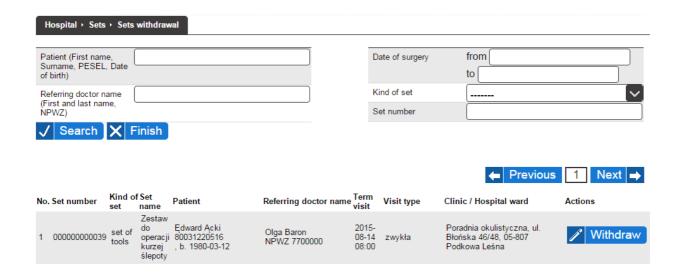
#### Sets withdrawal

The "Sets withdrawal" functionality from the "Sets" submenu in the "Hospital" menu is used to record in the system the withdrawal of previously prepared set of tools and a set of patients. After selecting this functionality there is displayed a search engine of sets to withdrawal (ie those which have been prepared for the surgery but the surgery did not take place or was canceled). Searching is possible based on any combination of the following criteria:

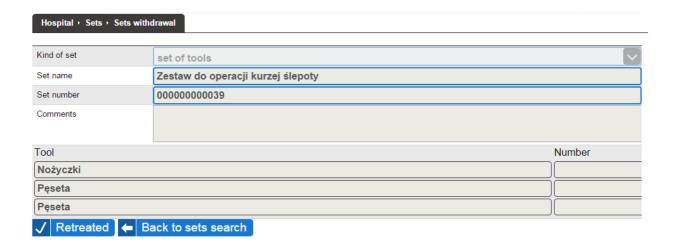
- patient field of general search of patient for who a set of tools / patient has to be prepared;
   here you can enter patient's first name, surname, PESEL, the date of birth of the patient or any combination of these elements
- referring doctor field of general search of doctor who issued the referral for treatment / surgery; here you can enter doctor's name, surname, NPWZ of doctor or any combination of these elements
- date of surgery from to the range of dates when a treatment/ surgery has been planned
- kind of set

• set number – can be used to control check whether the particular set should be withdrawn

After entering the search criteria and clicking on the "Search" button, under the search engine appears the list of sets of tools / patient for withdrawal meeting the search criteria (or a message that there are no sets for withdrawal if there are no suitable results sets). At each set there is the "Withdraw" button.



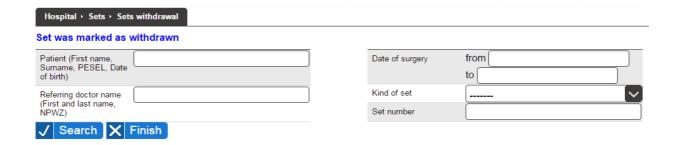
To withdraw a set, click at the "Withdraw" button. You will see a form with the data of set to view.



The person withdrawing set should:

- physically incomplete set content
- deposit particular items of set in the appropriate place in institutional health care facility
- confirm withdrawal of set.

To confirm the withdrawal of set click the "Retreated" button. The system will then display the appropriate message informing that the operation is completed and will automatically return to the search page of sets waiting for preparation.



#### **Used sets**

The "Used sets" functionality from the "Sets" submenu in the "Hospital" menu is used to display the list of sets used in the realization of surgery. After selecting this functionality, the set search engine is displayed. It is possible to search for sets according to any combination of the following criteria:

- kind of set
- date of surgery from ... to ...

After specifying the search criteria and clicking the "Search" button, a list of sets that match the search criteria is displayed. At the same time, the "Export (XLS)" button appears under the search engine to download the set list as an XLS file.



# **Books**

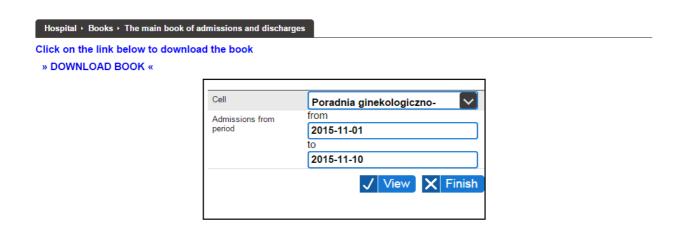
The "Books" submenu in the "Hospital" menu includes functionality allowing access to the books kept in accordance with the applicable provisions of law with the possibility of printing.

## The book of surgeries

The "Book of surgeries" functionality from the "Books" submenu in the "Hospital" menu is used to download the book of surgeries. After selecting this functionality there is displayed the form to specify the cell and period in which surgeries were made. After selecting cell, entering dates and pressing the "View" button there is displayed a link to download the piece of book of surgeries from the specified period. The book has form of a PDF document.

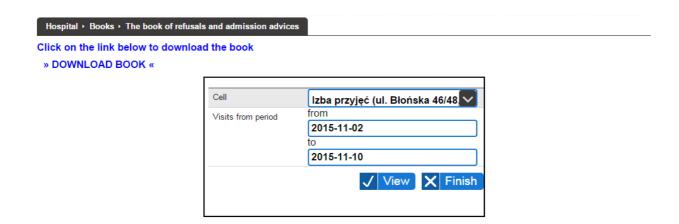
## The main book of admissions and discharges

The "Main book of admissions and discharges" functionality from the "Books" submenu in the "Hospital" menu is used to download the main book of admissions and discharges. After selecting this functionality there is displayed the form to specify the cell and the period of patients' admissions to the hospital. After selecting cell, entering dates and pressing the "View" button there is displayed a link to download the piece of main book of admissions and discharges from the specified period. The book has form of a PDF document.



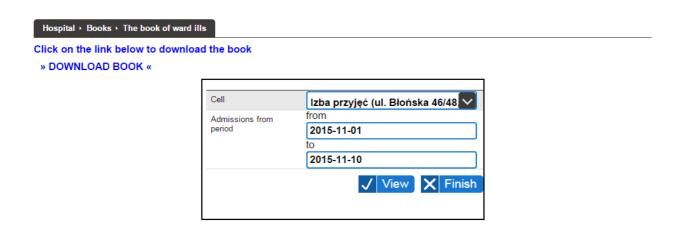
#### The book of refusals and admission advices

The "Book of refusals and admission advices" functionality from the "Books" submenu in the "Hospital" menu is used to download the book of refusals and admission advices. After selecting this functionality there is displayed the form to specify the cell and period of patients' visits in the emergency room. After selecting cell, entering dates and pressing the "View" button there is displayed a link to download the piece of book of refusals and admission advices made in the emergency room from the specified period. The book has form of a PDF document.



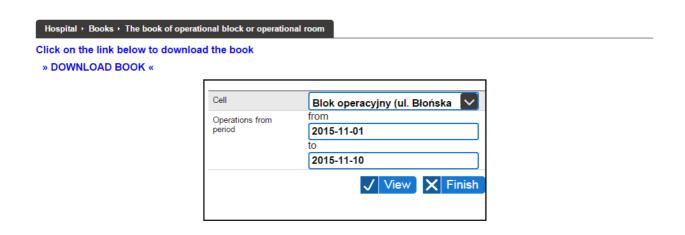
#### The book of ward ills

The "Book of ward ills" functionality from the "Books" submenu in the "Hospital" menu is used to download the book of ward ills. After selecting this functionality there is displayed the form to specify the cell and period of patients' visits in the emergency room. After selecting cell, entering dates and pressing the "View" button there is displayed a link to download the piece of book of ward ills from the specified period. The book has form of a PDF document.



### The book of operational block or operational room

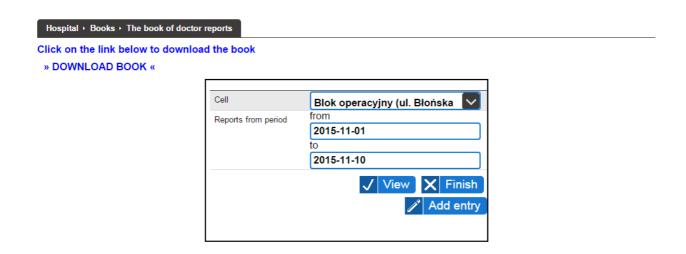
The "Book of operational block or operational room" functionality from the "Books" submenu in the "Hospital" menu is used to download the book of operational block or operational room. After selecting this functionality there is displayed the form to specify the cell and period in which surgeries were made. After selecting cell, entering dates and pressing the "View" button there is displayed a link to download the piece of book of operational block or operational room from the specified period. The book has form of a PDF document.



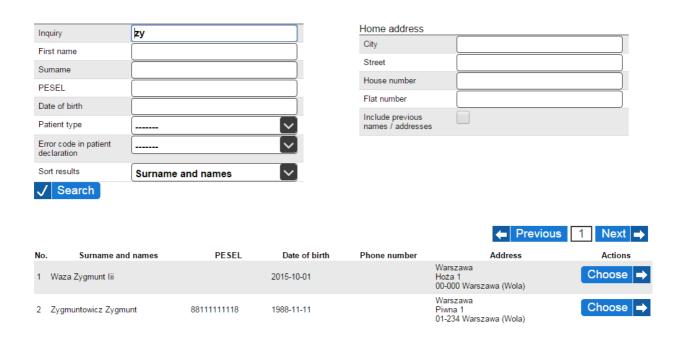
## The book of doctor reports

The "Book of doctor reports" functionality from the "Books" submenu in the "Hospital" menu is used to download the book of doctor reports. After selecting this functionality there is displayed the form to specify the cell and period in which reports were made. After selecting cell, entering dates and pressing the "View" button there is displayed a link to download the piece of book of doctor

reports from the specified period. The book has form of a PDF document.



If logged user is the medical staff, then under at the search engine there is displayed for such user additional "Add Entry" button. Pressing this button opens a new window allows to add an entry to the doctor reports. Adding an entry to the doctor report consists of several steps. After pressing the "Add Entry" button at first there is displayed a search engine of patients. In the search, enter search criteria for a patient whose report is concern, and press "Search" button. Then the search engine displays a list of patients that meet the search criteria and for each one the "Choose" button.



After pressing the "Choose" button next to the appropriate patient, there is displayed the form of data to report, in which the patient is already written (previously selected), and other data need to be supplemented / select from the list.



After completing the form and pressing "Save" button the report goes to the book of doctor reports and inform about it with the appropriate message.



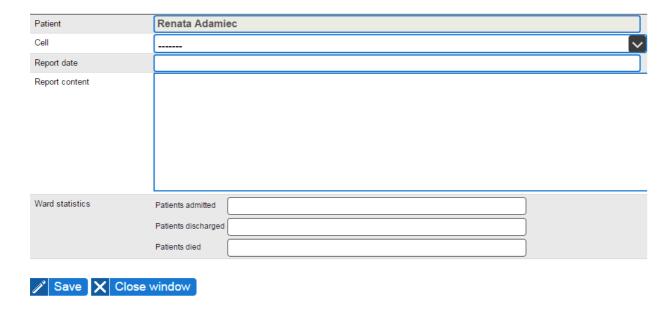
### The book of nurse reports

The "Book of nurse reports" functionality from the "Books" submenu in the "Hospital" menu is used to download the book of nurse reports. After selecting this functionality there is displayed the form to specify the cell and period in which reports were made. After selecting cell, entering dates and pressing the "View" button there is displayed a link to download the piece of book of nurse reports from the specified period. The book has form of a PDF document.

If logged user is the medical staff, then under at the search engine there is displayed for such user additional "Add Entry" button. Pressing this button opens a new window allows to add an entry to the nurse reports. Adding an entry to the medical report consists of several steps. After pressing the "Add Entry" button at first there is displayed a search engine of patients. In the search, enter search criteria for a patient whose report is concern, and press "Search" button. Then the search engine displays a list of patients that meet the search criteria and for each one the "Choose" button.



After pressing the "Choose" button next to the appropriate patient, there is displayed the form of data to report, in which the patient is already written (previously selected), and other data need to be supplemented / select from the list.



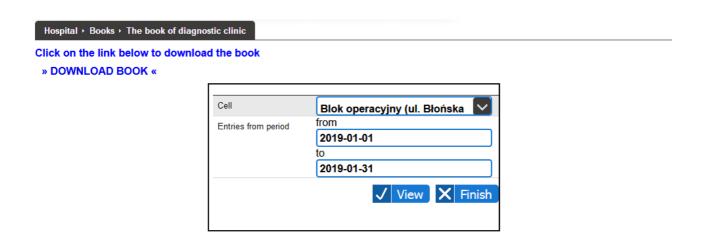
After completing the form and pressing "Save" button the report goes to the book of nurse reports and inform about it with the appropriate message.



## The book of diagnostic clinic

The functionality of the "Book of the diagnostic clinic" from the submenu "Books" in the "Hospital" menu is used for viewing and printing the contents of the diagnostic clinic book. After

selecting this functionality, a form is displayed in which you should indicate the cell (diagnostic clinic) and the period from which the given system is to be presented and then click "View". The system will then display a reference over the form enabling downloading (in the form of a PDF file) and printing a book of a given diagnostic clinic from a given period.

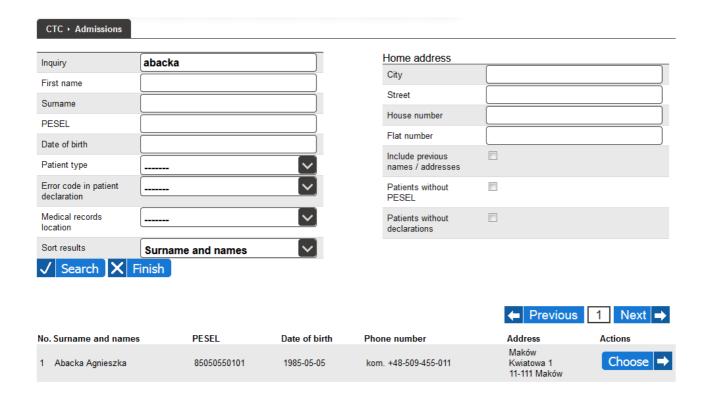


# **CTC**

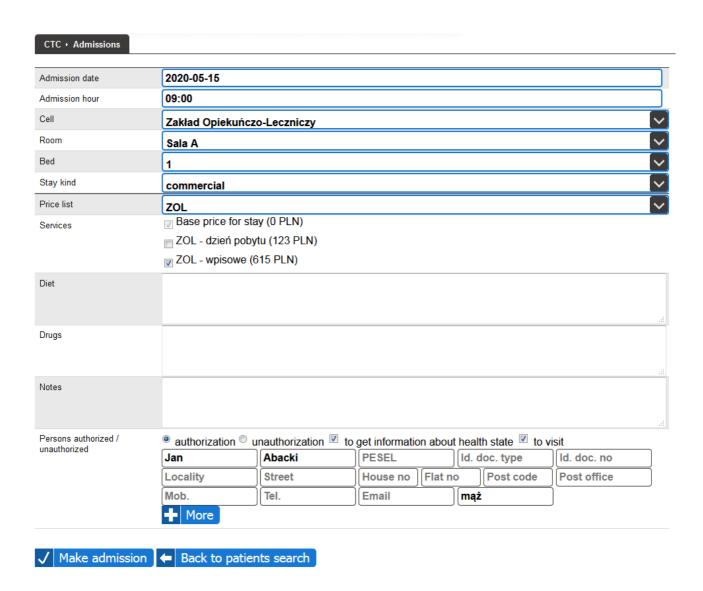
The functionalities from the "CTC" menu are used to service patients in the care and treatment center: admissions, stays and discharges.

## **Admissions**

The "Admissions" functionality from the "CTC" menu is used to handle patient admissions to the care and treatment facility. After selecting this functionality, the patient search engine is displayed. Its scope and functionality is identical as described in the chapter "Registration" in the subsection "Patients (active cards)". After entering the search criteria and clicking the "Search" button, a list of patients who meet the search criteria is displayed, with a "Choose" button next to each one. (If no patient meets the search criteria, add a new patient via the functionality described in the "Registration" section in the "New patient" section.)



To admit a patient to a care and treatment institution, click the "Choose" button next to the appropriate patient on the list. The admission form will then be displayed.



All mandatory fields must be completed in the form. When determining the type of stay, if a commercial stay is chosen, additional fields will appear in the form to indicate the price list on the basis of which the stay will be charged and any services from the price list. The form also allows one to register relevant patient information such as diet and drugs. In the form, one can enter any number of authorized and unauthorized persons to obtain information about the patient's state of health and to visit the patient. By default, fields are displayed for entering one person. If one wants to enter more people, use the "More" button - each click will display the fields for entering the next person. If all fields intended for entering the personal data of an authorized / unauthorized person are left blank, they will be ignored when saving the data. After completing the form, save the data by clicking the "Make admission" button. The system will inform you about the successful completion of the operation by an appropriate message, allowing at the same time to print the band with the code on the patient's hand.

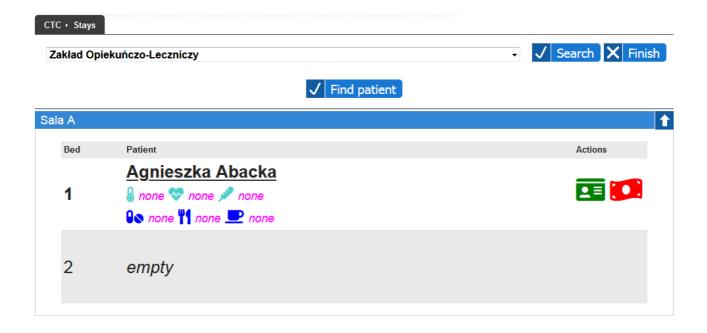


After clicking the "Print band" button, a new window with a bar code opens and the printing process is automatically initiated.

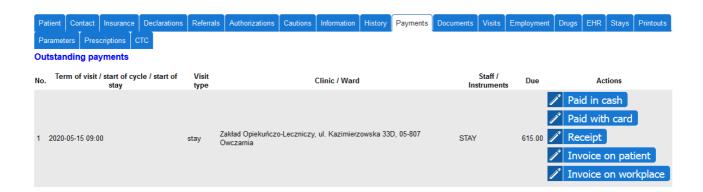


## **Stays**

The "Stays" functionality in the "CTC" menu is used to support patients' stays in the care and treatment institution. After selecting this functionality, a list of selection of care and treatment facilities operating within the healthcare facility in which the logged in user works is displayed. After selecting the care and treatment institution and clicking the "Search" button, a list of rooms in the institution is displayed in the form of bars. Clicking on the bar with the name of the room results in displaying a list of beds in the room. Each bed has either the patient's name on the bed or information that the bed is empty. Under the patient's name there are indicators about him and next to the name are icons of various activities. If the payment for the stay in the care and treatment institution is taken in advance, then next to the patient's name there are only two icons: green, opening the "Patient" tab of the patient's card in a new window, and red, opening the "Payments" of the patient's card in the new window.

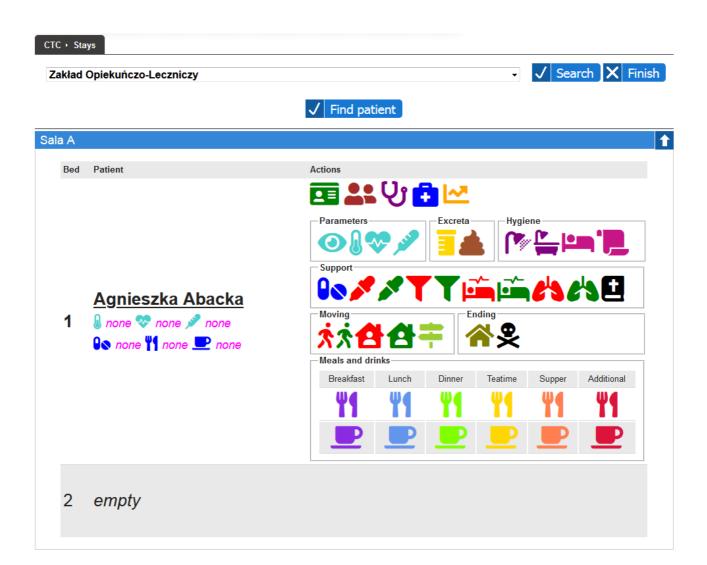


If the patient has only the two icons mentioned above, then to start servicing the patient's stay in the care and treatment institution, click this icon and settle the payment. Handling payments for a stay in a care and treatment institution takes place as described in the chapter "Registration" in the subsection "Patients (active cards)" in the sub-chapter "Payments".



After accepting the payment, the patient's card should be closed by clicking the "Close" button at the bottom of the patient's card (only then the patient view in the care and treatment facility will be refreshed). Do not close the patient card with the window close button.

If the payment for the stay is taken in advance and will be settled or if the payment is taken in arrears or if the stay is not charged with costs, then next to the patient's name is displayed a full range of icons enabling handling the patient's stay in the ward (after moving the mouse cursor over any icon appears a balloon with information about what the icon means).



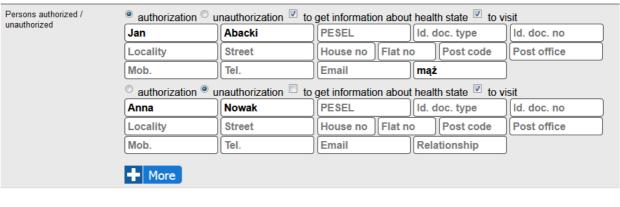
The following icons are available to support the patient's stay in the ward:

- patient card opens a patient card in a new window (if the logged in user has the rights to manage patient data)
- authorized / unauthorized persons opens in a new window a form for managing authorized persons and unauthorized persons to obtain information on the patient's state of health and to visit the patient
- services opens in a new window a form for managing services provided during the patient's stay in the facility (the icon is visible only for commercial stays and only if the logged in user has the rights to manage patient payments)
- drugs opens in a new window a panel for prescribing drugs to be given to the patient during the stay (provided that the logged in user has the right to prescribe drugs to patients)
- events opens in a new window a viewer of events recorded during the patient's stay in the care and treatment institution
- parameters a set of icons enabling the recording of measurements of basic patient parameters
  - observation opens a form in a new window that allows you to register the patient observation

- temperature opens a form in a new window that allows you to register a patient's body temperature measurement
- o pressure opens a form in a new window that allows you to register a patient's blood pressure measurement
- sugar opens a form in a new window that allows you to register the patient's blood sugar measurement
- excreta a set of icons enabling the recording of information on patient's excreta
  - urine opens a form in a new window that allows you to register urine measurement by the patient
  - stool opens in a new window a form that allows you to register the consistency assessment of the stool given by the patient
- hygiene a set of icons enabling the recording of patient hygiene information
  - washing opens a form in a new window that allows you to register the fact of washing the patient
  - bath opens a form in the new window that allows you to register the fact that you have taken a bath
  - change of bedding opens in a new window a form that allows you to register the change of bedding for the patient
  - towel change opens a form in a new window that allows you to register the fact of changing the towel to the patient
- support a set of icons enabling the registration of information regarding patient's (physical and mental) support
  - o drugs opens a form in a new window that allows you to register the fact that one have given drugs to patient
  - drip connection opens a form in a new window that allows you to register the fact of drip connection to the patient
  - drip disconnection opens a form in a new window that allows you to register the drip disconnection
  - catheter connection opens a form in a new window that allows you to register the fact that the catheter is connected to the patient
  - catheter disconnection opens a form in a new window that allows you to record the fact that the catheter has been disconnected
  - o anti-bedsore mattress connection opens a form in a new window that allows you to register the fact of connecting the anti-bedsore mattress to the patient
  - of an anti-bedsore mattress disconnection opens a form in a new window that allows you to register the fact that the anti-bedsore mattress has been disconnected
  - oxygen connection opens a form in a new window that allows you to register the fact of oxygen connection to the patient
  - oxygen disconnection opens a form in a new window that allows you to register the fact of oxygen disconnection to the patient

- o administering sacrament opens a form in a new window that allows you to register the fact of granting the sacrament to the patient
- moving a set of icons enabling the registration of information regarding the relocation of a patient within a care and treatment institution and outside it
  - going for a walk opens a form in a new window that allows you to register the fact that you are taking a walk
  - o return from a walk opens a form in a new window that allows you to register the patient's return from a walk
  - going for a pass opens a form in a new window that allows you to register the fact of leaving the patient for a pass
  - return from the pass opens a form in a new window that allows you to register the patient's return from the pass
  - transfer opens a form in a new window that allows you to register the fact of moving a patient to another bed / room
- ending a set of icons enabling the registration of information regarding the ending of a patient's stay in a care and treatment institution
  - discharge opens a form in a new window that allows you to register the fact that a
    patient has been discharged from a care and treatment institution
  - death opens a form in a new window that allows you to register the fact of patient's death
- meals and drinks a set of icons enabling the recording of information about meals and drinks consumed by the patient
  - meal opens in a new window a form that allows you to register the types and amount of products consumed as part of breakfast, lunch, dinner, teatime, supper or as an additional meal
- orink opens a form in a new window that allows you to register the amount of drinks consumed as part of breakfast, lunch, dinner, teatime, supper or as an additional drink

To access the data of authorized / unauthorized persons to obtain information about the patient's health and to visit the patient, click the "Authorized / unauthorized persons" icon. A new window will open with the data of authorized persons. Any number of authorized / unauthorized persons can be entered in the form. By default, fields with data of persons already entered are displayed. If you want to enter more people, use the "More" button - each click will display the fields for entering the next person. If all fields intended for entering the personal data of an authorized / unauthorized person are left blank, they will be ignored when saving the data. After modifying the data of authorized / unauthorized persons or entering data of new persons, they should be saved by clicking the "Save" button.



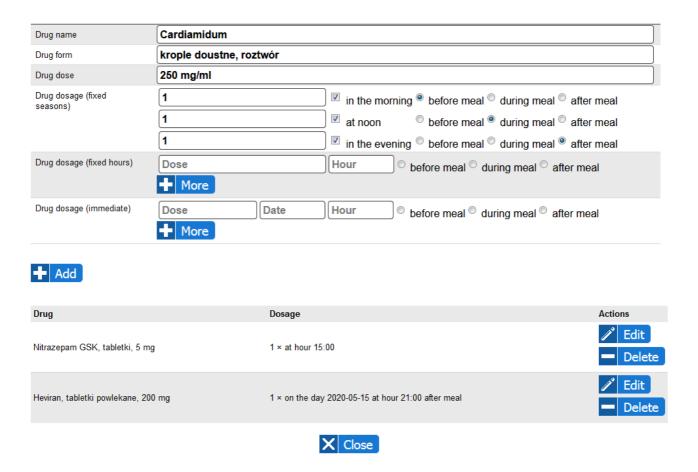


To manage commercial services provided during the patient's stay in the care and treatment institution, click the "Services" icon. A form will be opened in a new window, divided into two sections. The first section is available services, i.e. services from the price list that can be provided during your stay. To demonstrate the implementation of some services, select the appropriate services and click "Add". The second section is the services already provided during the stay. If any services have been incorrectly listed as completed (due to an error or other circumstances), then such services can be removed from the list of completed services by selecting them and clicking the "Delete" button. After clicking this button, services that have not yet been paid will disappear from the list of services performed and services that have been paid will remain on this list (after the patient's stay in the care institution is over, it will be necessary to issue a corrective financial document for such services).



To prescribe what drugs should be given to the patient, click the "Drugs" icon. A new window will then open with the prescription form and the list of prescribed drugs. In the prescription form, start entering the name of the drug, after entering at least three characters, a list of suggestions will appear. The correct drug should be selected from the list of hints and the cursor will be automatically moved to the field of the drug form and the list of hints will also be automatically displayed. The correct form of the drug should be selected from the list of hints, in which case the cursor will be automatically moved to the dose field of the drug and the list of hints will also be automatically displayed. The correct dose should be selected from the list of suggestions. Next, the time of administration should be determined for the selected drug. There are three variants here:

administration of the drug at fixed seasons (morning, noon, evening), administration of the drug at fixed hours (e.g. administration of the antibiotic three times a day every 8 hours), immediate administration od the drug. If the drug is administered at fixed seasons, specify the dose, indicate at what seasons the drug is to be administered, specify the time of administration of the drug relative to the meal, if it matters (if any of the options "before meal" / "during meal" / "after meal "option can be unchecked by clicking the checkbox again). If the drug is administered at fixed hours, the fields enabling one hour of administration are displayed by default. To indicate more application hours, use the "More" button. Each click of this button displays additional fields for adding the next serving hour. In the case of immediate drug administration, fields enabling indication of one date of administration are displayed by default. To indicate more application dates, use the "More" button. Each click of this button displays additional fields for adding another application date. After entering all data, confirm them by clicking "Add". The added drug will appear on the list of prescribed drugs below the form.



To modify the prescribed drug data, click the "Edit" button next to the drug on the list of prescribed drugs. The prescription form will then be filled in with the prescribed drug details. After modifying the data, confirm it by clicking "Save".

To delete a prescribed drug, click the "Delete" button next to the drug on the list of prescribed drugs and confirm your intention to delete the drug by clicking "OK" in the prompt window that appears.

To register an event related to the patient's stay in a care and treatment institution, click the appropriate event icon. A new window will open with the event adding form. Each event form specifies its date, time and person performing / registering. During the patient's stay in the ward, two events cannot be registered at the same time - the hours must differ by at least one second as

they form the basis for determining the correct order of events. Depending on the rights, one can only add events for which one is the person performing / registering or one can add events on his own behalf as well as on behalf of other users. For some events, in addition to the date, time and person performing / registering, other information is also recorded:

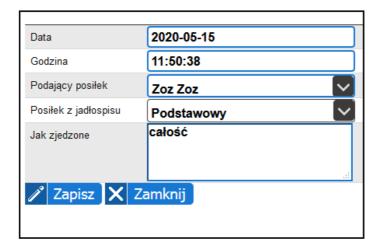
• the events "temperature", "pressure", "sugar" require entering the result of measuring the value of a given parameter

### Agnieszka Abacka Temperatura

Date	2020-05-15
Hour	11:07:56
Dokonujący pomiaru	Zoz Zoz
Temperatura [°C]	36.6
/ Save X Clo	ose

- "urine" and "drink" events require the amount of fluid to be entered
- the "observation" event requires entering observations
- the "stool" event requires stool consistency to be determined
- the "meal" event requires determining the quality of meal consumption and possibly indicating the menu from which the meal was served to the patient

Agnieszka Abacka Śniadanie (posiłek)



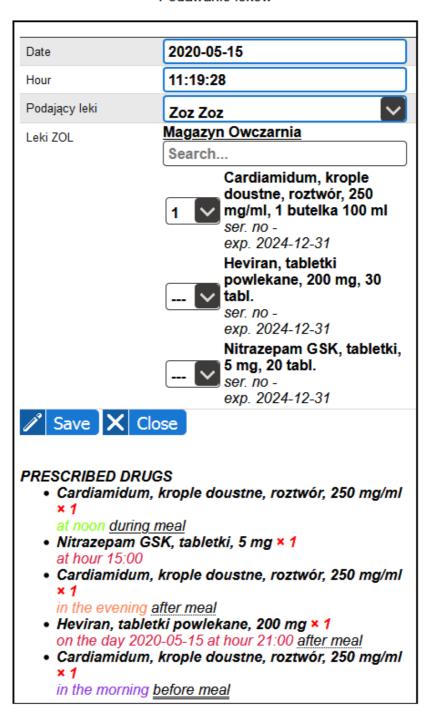
• the events "washing", "bath", "bedding change", "towel change", "catheter connection" require an indication of the store resources (hygienic materials) used in carrying out the

activity

- the "drip connection" event requires an indication of the store resources (drips) consumed as part of the activity
- the "drugs" event requires an indication of the store resources (CTC drugs) used as part of the activity

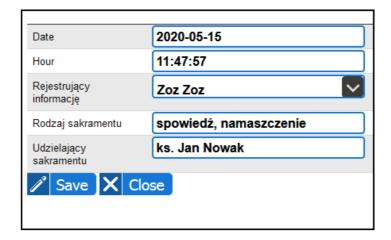
### Agnieszka Abacka

Podawanie leków



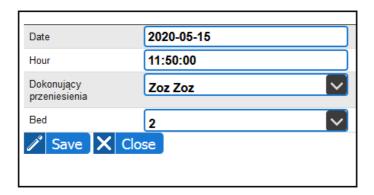
• the event "administering sacrament" requires a definition of the type of sacrament awarded / types of sacraments awarded and an indication of the minister

Agnieszka Abacka Udzielanie sakramentu



- events such as "going for a walk" or "going for a pass" require an indication of the patient's guardian on the walk / pass
- the "transfer" event requires an indication of the bed to which the patient is being moved

Agnieszka Abacka Przeniesienie



• the "death" event requires the identification of the person declaring death

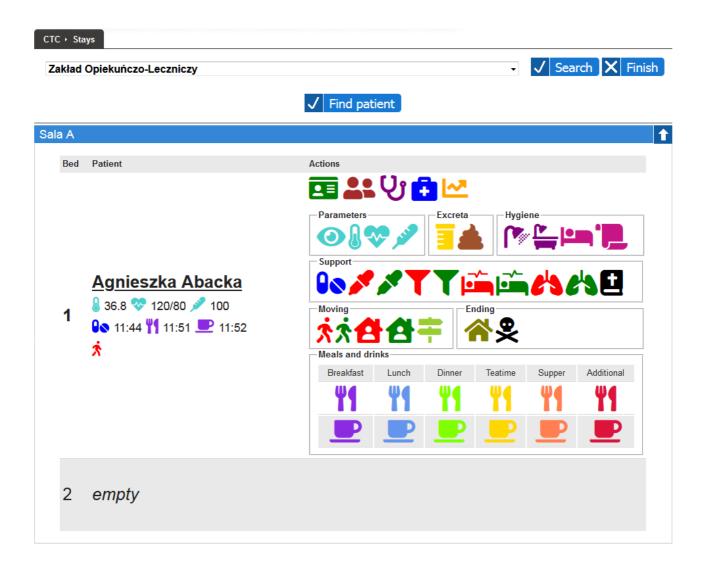
For events that require the indication of inventory, the current inventory of the resources appropriate for the event is displayed. A text box is displayed above the resource list in the warehouse - when you enter the resource name in this field, the list of resources automatically narrows to those that match the name you enter.

In the event of a "drugs" event, information about the drugs that have been prescribed to the patient is displayed under the event form (omitting immediate drugs with a past administering date). Information on prescribed drugs is, if possible, arranged in the order in which they should be administered in the near future. The date / time / season of drug administration and the current time

are taken into account and a certain margin is taken due to possible delays in drug administration. Medication times are highlighted (colors for the medication given in the morning are the same as the color of the meal and drink icon for breakfast, the color for the medication given at noon is the same as the color of the meal and drink icon for the dinner, the color for the medication given in the evening is the same as the color of the meals and drinks icon for supper, the color of the distinction for medicines given at other times is the same as the color of the icons for meals and additional drinks). Medication times with respect do meals are highlighted with different types of underlining (double line for before-meal drugs, single line for during-meal drugs, dotted line for after-meal drugs).

In the event of a "meal", it is possible to indicate the menu from which the meal was served to the patient. If a meal has been defined for a given day in a given menu, then the meal data will be automatically copied to the data of the "meal" event.

For each event, with the exception of "discharge" and "death" events, after entering event data in the form and confirming them with the "Save" button, an appropriate message is displayed, and the event adding window closes automatically. At the same time, the indicators under the patient's name are updated.



The following indicators may appear under the patient's name:

- temperature the value of the last temperature measurement today
- pressure the value of the last pressure measurement today
- sugar the value of the last sugar level measurement today
- drugs the time of the last drugs administration today
- meal the time of the last meal served today (the color of the icon changes depending on the type of the last meal served and corresponds to the color of the last meal icon)
- drink the time of the last meal served today (the color of the icon changes depending on the type of last drink served and corresponds to the color of the last drink event icon)
- drip connection the icon is displayed when the patient has a drip connected
- catheter connection the icon is displayed when the patient has a catheter connected
- anti-bedsore mattress connection the icon is displayed when the patient has an anti-bedsore mattress connected
- oxygen connection the icon is displayed when the patient has oxygen connected
- on a walk the icon is displayed when the patient is on a walk
- on a pass the icon is displayed when the patient is on a pass

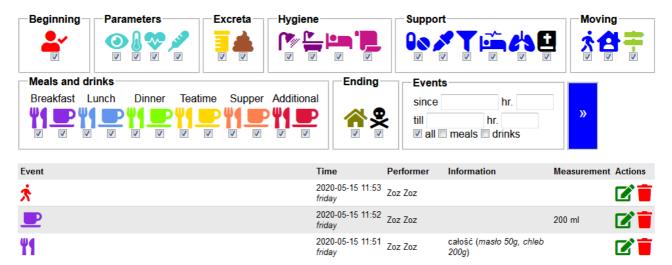
When you hover over the pointer icon, a balloon appears with information on what the pointer means. The indicator icons are identical to the icons of the corresponding events.

Access to all events recorded during the patient's stay in the care facility is provided by the "Events" icon. Clicking it opens a new window in which the event filter is visible. In the filter, the event types are marked with the same icons as the icons next to the patient's name used to record events. The filter also has an "admission" event icon, meaning that the patient has been admitted to a care facility. By default, all event types are selected, so just click the "» "button to display a list of all events. The range of displayed event types can be limited:

- by checking / unchecking boxes next to given event types
- by clicking the selected event type icon clicking the event icon works in such a way that only this event is selected in the filter and all others are deselected (it is useful to quickly select a specific event to display)
- by checking the "all", "meals", "drinks" boxes checking the "all" box selects all event types, unchecking the "all" box deselects all event types, selecting the "meals" box selects all types of meals, unchecking the "meals "deselects all types of meals, selecting the drinks "box selects all types of drinks, unchecking the drinks "box deselects all types of drinks (selecting here is additive, i.e. checking the meals box does not deselect other types of events)
- by specifying the dates and times of the beginning and end of the period from which the events are to be displayed, the time given in the filter can be specified in one of three formats hh, hh: mm, hh: mm: ss and it only makes sense with the date (otherwise it is ignored)

After specifying the criteria in the filter and clicking the "» "button below the filter, a list of events that match the search criteria is displayed. If the user has the right to register only events performed / registered by himself, then each of such events on the list (except for the "admission" event) displays icons for editing and deleting the event. If the user has the right to register events

both on his own behalf and on behalf of other users, then icons for editing and removing the event are displayed next to each event on the list (except the "admission" event).

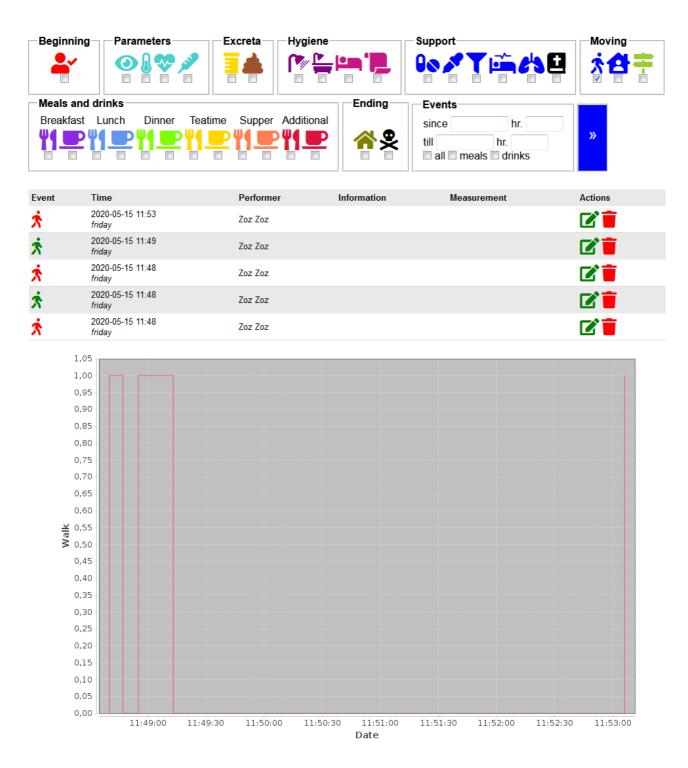


If only one type of event is selected in the filter and the event is of a measurement nature, then a chart showing the measurement values may appear under the list of events. In case of "temperature", "pressure", "sugar" events, if the number of recorded measurements is greater than one, a chart of changes in value over time will be displayed (in the case of pressure for both systolic and diastolic pressure).



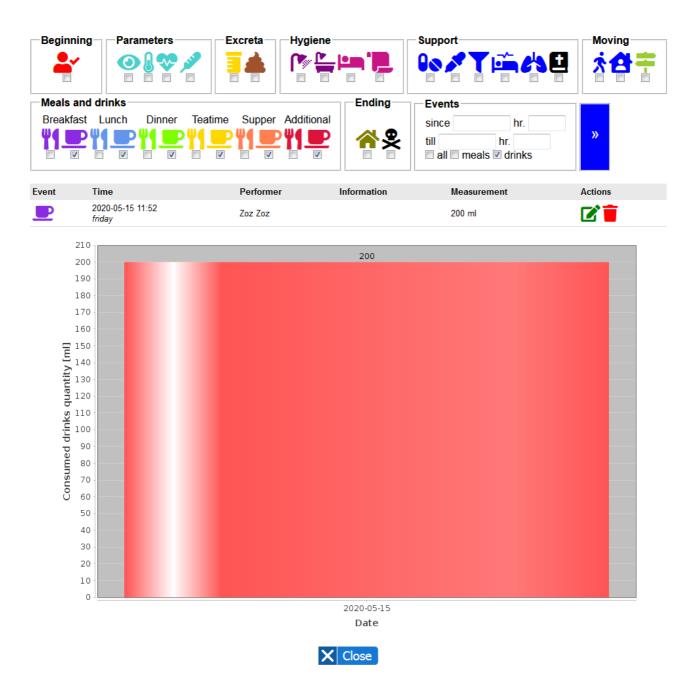
X Close

In the case of drip / catheter / anti-bedsore mattress / oxygen connection events, and walk / pass events, a chart showing the time of drip / catheter / anti-bedsore mattress / oxygen connection or walk / pass events will be displayed. The value of "1" in this chart means the period of connecting the drip / catheter / anti-bedsore mattress / oxygen or staying on a walk / pass, the value of "0" means the period of disconnecting the drip / catheter / anti-bedsore mattress / oxygen or staying in the building of a care and treatment institution.



X Close

For "urine" and "drink" events, a bar chart of daily urine collection and daily fluid intake, respectively, is presented. To ensure that the results are not falsified, the data are presented only for those days when the patient was in the care and treatment center all day (so admission and discharge days and days on the pass are omitted).



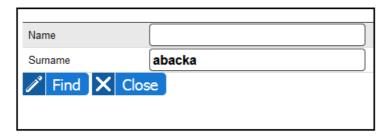
To modify event data, click the edit icon next to the event in the list. A new window will then open with the event data form almost identical to that when adding an event, except that it is filled with data and with a check box next to the menu field in the event of a "meal" event. The check box next to the menu is used to indicate whether the meal data should be updated or not: if the box is checked then the meal data at the event will be updated, otherwise the data will not be updated. This solution is dictated by the fact that if a meal is removed from the menu, its unconscious update would also result in its removal from the event. After making changes in the event editing form, save them by clicking the "Save" button. After modification of the event, the indicators under the patient's name are updated according to the new current state.

To delete an event, click the delete event icon next to the event on the list and confirm your intention by clicking "OK" in the prompt that appears. When deleting the "drip connection" / "catheter connection" / "anti-bedsore mattress connection" / "oxygen connection" event, the corresponding "drip disconnection" / "catheter disconnection" / "anti-bedsore mattress

disconnection" / "oxygen disconnection" event is also automatically deleted. When deleting the "going for a walk" event, the corresponding "returning from a walk" event is automatically deleted. If the "going for a pass" event is deleted, the corresponding "return from a pass" event is also automatically deleted. After deletion of the event, the indicators under the patient's name are updated according to the new current state.

It is not always possible to add / modify / delete an event. This operation is not possible if it disturbs the order of events, e.g. it is not possible to connect oxygen or measure the temperature when the patient is on the pass, it is not possible to take a bath while the patient is on a walk, it is not possible to delete the drip disconnection event if it is followed by the next event drip connection, since in such a situation, after the drip disconnection event was deleted, there would be two consecutive drip connection events, etc.

As part of the functionality of handling stays in a care and treatment institution, the "Find patient" button is visible above the list of rooms. Clicking it opens a search engine for patients in a care and treatment institution in a new window. Searching is possible by patient's name. After entering the search criteria and clicking "Find", a list of patients matching the search criteria is displayed. If the patient is currently on a walk or leave, then appropriate information appears next to his name indicating that he is not in the building. In addition, information is displayed in which room and on which bed the patient resides, and who is authorized and who is not authorized to obtain information about his health and to visit. All this information can be helpful, especially if a person is trying to get information about the patient's health or wants to visit the patient - then it is easy to check whether the person is authorized and whether the patient is currently in the room and if so indicate the room and bed number. The "Go" button for a given patient allows to quickly go to patient service - clicking this button closes the patient search window and displays the view of rooms and beds with the patient visible.







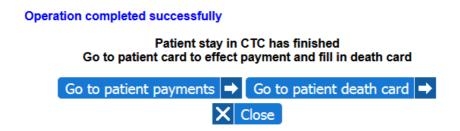
Two special types of events are "discharge" and "death". After registering any of these events, the patient's stay in the care and treatment facility is terminated (the patient disappears from the view of the rooms and beds and "empty" appears next to the bed he occupied). In addition, when registering any of these events, the event registration window is not automatically closed, and the appropriate buttons are displayed in it. When registering an "discharge" event, if the stay is commercial and the user registering the discharge has the right to handle payments, after registering the event, the "Go to patient payments" button is displayed, which click displays the "Payments" tab of the patient card in the same window, enabling same payment for the stay.

#### Operation completed successfully

#### Patient stay in CTC has finished Go to patient card to effect payment



In the event of registration of the event "death", if the stay is commercial and the user registering the extract has the right to handle payments, after registering the event the "Go to patient payments" button is displayed, which click displays the "Payments" tab of the patient card in the same window, enabling same payment for the stay. Next to it is also the "Go to patient death card" button, which, when clicked, displays the "Documents" tab of the patient's card in the same window, enabling the issuing of the death card. The order of activities on the patient card (acceptance of payment and issuing of a death card) does not matter.



## **Discharges**

The "Discharges" functionality from the "CTC" menu is used to issue hospital treatment information cards for patients who have ended their stay in a care and treatment institution. After selecting this functionality, a list of care and treatment institutions selection is displayed. After selecting the establishment and clicking the "Search" button, a list of patients for whom the event "discharge" or "death" has been registered during the stay in the care and treatment institution, and not yet issued an information card for them. A "Choose" button is displayed for each patient.



After clicking the "Choose" button for a given patient, an information card issuing form is displayed.

CTC → Discharges	
Discharge date	2020-05-15
Discharge hour (hh:mm)	13:00
Discharge diagnosis (ICD-10)	A06.1
Patient discharge destination	home
Patient transport order	
Patient charges	
Treatment	.ii
Operations and surgeries	н
Exemption information	
Recommendations	н
Diagnostic examinations results	.4
Consultation results	
Ordered drugs	
Provision orders	н
Consultation referrals and terms	н
Epicrisis	
Discharge reason and circumstances	
Patient death date	
Patient death hour (hh:mm)	
Patient death reasons (ICD-10)	primary
	secondary
	direct

✓ Make discharge X Resign discharge

After completing the form and clicking the "Make discharge" button, the view of patients for whom the event "discharge" or "death" has been registered during the stay in the care and treatment institution and the information card has not yet been issued for them and a link to download is displayed above (as a PDF file) and printing out hospital treatment information card.

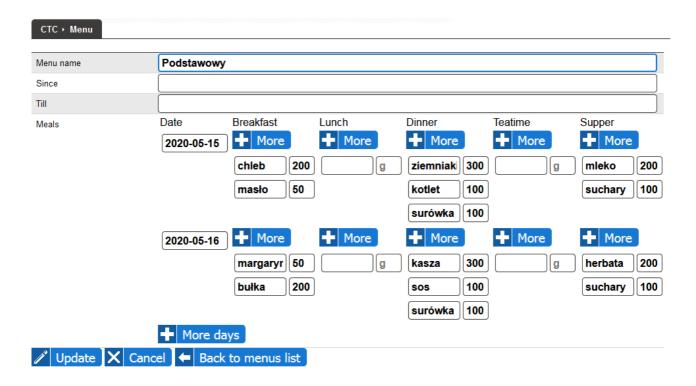


#### Menu

The "Menu" functionality in the "CTC" menu is used to define menus for the care and treatment institution. After selecting this functionality, a list of care and treatment institutions selection is displayed. After selecting a bet and clicking the "Search" button, a list of menus is displayed, with "Edit" and "Delete" next to each one. The "Add" button is displayed under the menu list.



To add a new menu, click the "Add" button below the menu list. The menu adding form will then be displayed. The form by default displays fields for entering all meals on one day of the menu. To enter more days, use the "More days" button. Each click of this button displays fields for entering the next meals the next day. Each day, one field for entering the name of one meal / meal component and one field for entering its mass in grams (optional) is displayed next to each type of meal. To display more fields that allow you to enter more meal ingredients, click the "More" button for the type of meal for the day. An additional pair of fields will then be displayed to enter the name and weight of the additional component. After entering the data, save them by clicking the "Add" button. Days on which all fields are left blank will be ignored when saving.



To modify the menu, click the "Edit" button next to the menu on the menu list. A form identical to the one used for adding a menu will be displayed, except that it is filled with the data of the edited menu. After making the changes, confirm them by clicking "Update".

To remove a menu, click the "Delete" button next to the menu on the menu list. A form identical to the menu edit will be displayed, except that it will be displayed in read-only mode. The intention to delete the menu should be confirmed by clicking the "Delete" button.

## **Processes and mechanisms**

### **Visits**

To start planning visit, following items have to be defined in the system:

- be created proper organizational structure (all levels) as described in the "Medical care" section
- be defined types of visits (indicating the purpose for the visits) as described in the "Types of visits" section
- to allow commercial appointments there have to be defined price lists in those clinics where such price lists have to function as described in the "price lists" section
- be created graphic of work of the staff / the apparatus in terms and in clinics where there will be arranging visits as described in the "Graphic personnel" and "graphics devices" sections

When these elements are defined, it is possible to arrange planned and additional visits as described in the "planned visits" and "additional visits" sections.

## Rehabilitation surgeries

To be able to start planning rehabilitation surgeries, following elements have to be defined in the system:

- be defined catalog of rehabilitation services as described in the "Rehabilitation services" section
- be created proper organizational structure (all levels) as described in the "Medical care" section (including that at the rehabilitation apparatus have to be defined surgeries from the catalog of services that can be realized on a particular apparatus)
- be defined types of visits (indicating the purpose for the visits) as described in the "Types of visits" section
- to allow commercial rehabilitation surgeries there have to be defined price lists in those clinics where such price lists have to function as described in the "price lists" section
- be created graphic of work of the staff / the apparatus in terms and in clinics where there will be arranging rehabilitation surgeries as described in the "Graphic personnel" and "graphics devices" sections

When these elements are defined, it is possible to plan rehabilitation surgeries as described in the "Rehabilitation" section.

## **Surgeries**

To be able to start planning surgeries, following elements have to be defined in the system:

- be created proper organizational structure (all levels) as described in the "Medical care" section
- be defined types of surgeries (indicating the purpose for the surgery) as described in the "Types of visits" section
- to allow commercial surgeries there have to be defined price lists in those clinics where such price lists have to function as described in the "price lists" section
- be created graphic of work of the staff / the apparatus in terms and in clinics where there will be arranging surgeries as described in the "Graphic personnel" and "graphics devices" sections

When these elements are defined, it is possible to plan surgeries as described in the "Surgeries" section.

### **Settlements with the NFZ**

The jHIS system supports settlements with the NFZ for non-commercial visits. The process of settlements with the NFZ starts with import the files of contracts with the NFZ (UMX files) as described in the "Agreement (UMX)" section. Before importing you should take care of proper setting parameters related to the settlement in the application configuration as described in the "Configuration" section and for VII and VIII part of ministerial code of clinic entered into the system were consistent with those that are contained in the contract (UMX file). During import a contract there is automatically created dictionary of NFZ services. At creating a dictionary of services, the system based on the knowledge base automatically assigns ministerial codes of benefits to the services and default ICD-9 codes of procedures. After importing the agreement, in order to facilitate subsequent encoding visits, you should verify the dictionary for automatically filled values and possibly fill the values which the system was not able to fill automatically. You should also remember to keep updated dictionaries of ICD-9 procedures and ICD-10 diagnoses, which new versions are announced by the NFZ. In order to ensure proper settlement with the NFZ you should be aware of:

• keep importing into the system all annexes to contracts with the NFZ (also UMX files) in the same way as import contracts

- keep introducing into a system the declaration of patients as described in the "Patients (active card)" section
- keep coding in the system services and diagnostic tests as described in "Coding visits" and "Coding diagnostic tests" sections

Accounting with the NFZ is based on generating in jHIS system messages in formats accepted by the NFZ, uploading them to the SZOI NFZ system, downloading from SZOI NFZ system feedback messages, import them into the jHIS system, correcting the declaration of patients / services / diagnostic tests according to the information contained in feedback messages and resume the cycle by again passing messages as described in the "Messages" section.

### **Commercial settlements**

The jHIS system supports payments for commercial visits, rehabilitation surgeries, operations, diagnostic examinations, vaccinations and rehabilitation cycles planned using packages.

Depending on the settings of clinic / ward payment can be realized after a visit / rehabilitation surgery / operatrion (post-pay) or before the visit / rehabilitation surgery / operation (advance payment). Payments for diagnostic examinations are encountered with issuing order for examinations and are realized before performing examinations. Payments are realized by the "Payment" tab in the patient card or by "Unrealized payments" functionality.

Post-pay can be realized when the visit / surgery / operation receives the "realized" status. Then in the patient payments tab appears unrealized payment. Payment may be realized by issuing a receipt or invoice. Fee can be contributed immediately or later. If payment is taken later, the bill (invoice or receipt) is displayed in the list of unpaid invoices with the possibility of noting the payment.

Payment in advance is done after appointing for visit / surgery / operation and before its realization. After appointing visit / surgery / operations, in the tab of patient payments appears unrealized payment. Payment may be realized by issuing a receipt or invoice. Fee can be accepted immediately or later. If payment is taken later, the bill (receipt or invoice) is displayed in the list of unpaid invoices with the possibility of noting the payment. If visit / surgery / operation has been realized without any changes in services planned for realization, it ends the payment process. If doctor realizing the visit / surgery / operation specifies that he has realized additional service / services that have not been planned while arranging visit / surgery / operation, then within payments tab of patient card there will appear new unrealized payment for additional service / services which is realized as post-pay. If visit / surgery / operation has not been realized or visit / surgery / operation has been realized and some of services have been realized with quantities different than planned (or have not been realized), then within payments tab of patient card there will appear unrealized payment (if patient has to pay more for a visit / surgery / operation) or overpayment (if patient is to receive return of whole or part of payment for a visit / surgery / operation). Taking of supplement pay can be realized by issuing correcting receipt or correcting invoice (depending on primary document whether it was receipt or invoice). Supplement pay can be taken immediately or later. If payment is taken later, the bill (correcting invoice or correcting receipt) is displayed in the list of unpaid bills with the possibility of noting the payment. Making return can be realized by issuing correcting receipt or correcting invoice (depending on primary document whether it was receipt or invoice). Return is realized in full amount at the moment of issuing of the bill.

Payment in advance for diagnostic examination is done after issuing order and marking visit as realized and before order realization. After issuing order, in the tab of patient payments appears unrealized payment. Payment may be realized by issuing a receipt or invoice. Fee can be accepted immediately or later. If payment is taken later, the bill (receipt or invoice) is displayed in the list of

unpaid invoices with the possibility of noting the payment. If order is realized fully, it ends the payment process. If order has been realized partly (some examinations have been postponed to realization in future), then within payments tab of patient card there appears overpayment (patient is to receive return of part of payment for an order in the amount corresponding to non-realized examinations). Making return can be realized by issuing correcting receipt or correcting invoice (depending on primary document whether it was receipt or invoice). Return is realized in full amount at the moment of issuing of the bill.

Payment in advance for vaccination is done after issuing order and marking visit as realized and before order realization. After issuing order, in the tab of patient payments appears unrealized payment. Payment may be realized by issuing a receipt or invoice. Fee can be accepted immediately or later. If payment is taken later, the bill (receipt or invoice) is displayed in the list of unpaid invoices with the possibility of noting the payment. If order is realized fully, it ends the payment process. If order has been realized partly (some vaccinations have been postponed to realization in future), then within payments tab of patient card there appears overpayment (patient is to receive return of part of payment for an order in the amount corresponding to non-realized vaccinations). Making return can be realized by issuing correcting receipt or correcting invoice (depending on primary document whether it was receipt or invoice). Return is realized in full amount at the moment of issuing of the bill.

Payment for rehabilitation cycle planned using package can be realized only in advance after planning the cycle and before start of its realization. After planning the cycle within patient payments tab there appears underalized payment for the whole cycle. Payment may be realized by issuing a receipt or invoice. Fee can be accepted immediately or later. If payment is taken later, the bill (receipt or invoice) is displayed in the list of unpaid invoices with the possibility of noting the payment. Making changes within surgeries planned within the cycle (realization of additional surgeries, lack of realization of planned surgeries) does not cause financial implications – no corrections are generated so patient does not have to make surcharge nor he acquires overpayment. If patient resignes a cycle (so a package too) during its realization, then payment for visits awaiting for service in the moment of resignation becomes returnable to the patient (such visits are automatically canceled at the moment of cycle resignation), except that when paying for the whole cycle, patient paid amount with discount defined within the package, but resignation a package means, that visits already serviced should be treated as if they were serviced without using package ant it menas without doscount, so patient is entitled to obtain amount equal to the difference between package price and nominal price (without discount) of visits already serviced (marked ad realized / unrealized / canceled during package usage – before resignation). This case is prezented within the following example:

```
Patient has planned following surgeries:

3 surgeries x 100 zl, 3 surgeries x 70 zl, 3 surgeries x 50 zl (nominal prices)

He uses package with the following discount:

10%

Amount to be paid for the package is then:

3 * 100 zl * (100% - 10%) + 3 * 70 zl * (100% - 10%) + 3 * 50 zl * (100% - 10%) = 594 zl

At some time patient resignes a package. Let's assume that at the moment of resignation the following surgeries are already served (marked as realized / unrealized / canceled):

1 surgery x 100 zl, 2 surgeries x 70 zl, 2 surgeries x 50 zl (nominal prices)

It means that at this moment the following surgeries are waiting for service:
```

```
2 surgeries x 100 zł, 1 surgery x 70 zł, 1 surgery x 50 zł (nominal prices)
```

Nominal price of serviced surgeries is (patient would pay for surgeries without package using such prices):

```
1 * 100 zl + 2 * 70 zl + 2 * 50 zl = 340 zl
```

Amount to be returned to the patient is:

```
594 zl - 340 zl = 254 zl
```

If the above amount were negative, patient would not obtain any return.

Amount to be returned is divided proportionately to nominal prices of surgeries waiting for service:

```
2 surgeries x 100 zł / (100 zł + 100 zł + 70 zł + 50 zł) * 254 zł = 2 surgeries x 79.38 zł
1 surgery x 70 zł / (100 zł + 100 zł + 70 zł + 50 zł) * 254 zł = 1 surgery x 55.56 zł
1 surgery x 50 zł / (100 zł + 100 zł + 70 zł + 50 zł) * 254 zł = 1 surgery x 39.69 zł
```

which gives in total 254.01 zl (result of roundings). Because patient is entitled to obtain return at most 254 zl so one has to make corrections to the above amount so that total amount was not greater than the amount to be returned (254 zl). Corrections are arbitrary – let's assume we make correction of -0.01 zl to the third amount which gives:

```
2 surgeries x 79.38 zł
1 surgery x 55.56 zł
1 surgery x 39.68 zł
and in total 254 zł.
```

To issue vaild correcting invoice / correcting receipt one has to introduce artificial corrected discounts for particular surgeries that is:

```
2 x (100 zl - 79.38 zl) = 2 x 20.62 zl
1 x (70 zl - 55.56 zl) = 1 x 14.44 zl
1 x (50 zl - 39.68 zl) = 1 x 10.32 zl
```

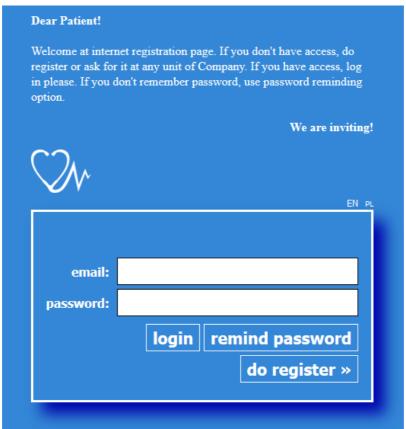
When applying the above discounts, within the correcting invoice / correcting receipt there appears amounts for surgeries thar sum up to the amount to be returnerd to the patient. The above discounts are gross amounts. Net amounts required to issue correcting invoice / correcting receipt are calculated according to VAT rate from price list valid from the surgeries. If for any of gross amounts, net amount cannot be calculated, then one has to increase gross amount by 0.01 zł, 0.02 zł, 0.03 zł and so on trying to calculate net amount each time till reaching such a gross amount for which net amount could be calculated (for example: with VAT rate of 23% and gross amount of 113.03 zł, net amount cannot be calculated because by such VAT rate for net amount of 91.89 zł gross amount is 113.02 zł and for net amount of 91.90 zł gross amount is 113.04 zł and that's why gross amount of 113.03 zł should be increased by 0.01 zł and then net amount would be 91.90 zł).

For each visit waiting for service at the moment of package resignation, within patient payments tab there appears overpayment. Making return can be realized by issuing correcting receipt or correcting invoice (depending on primary document whether it was receipt or invoice). Return is realized in full amount at the moment of issuing of the bill.

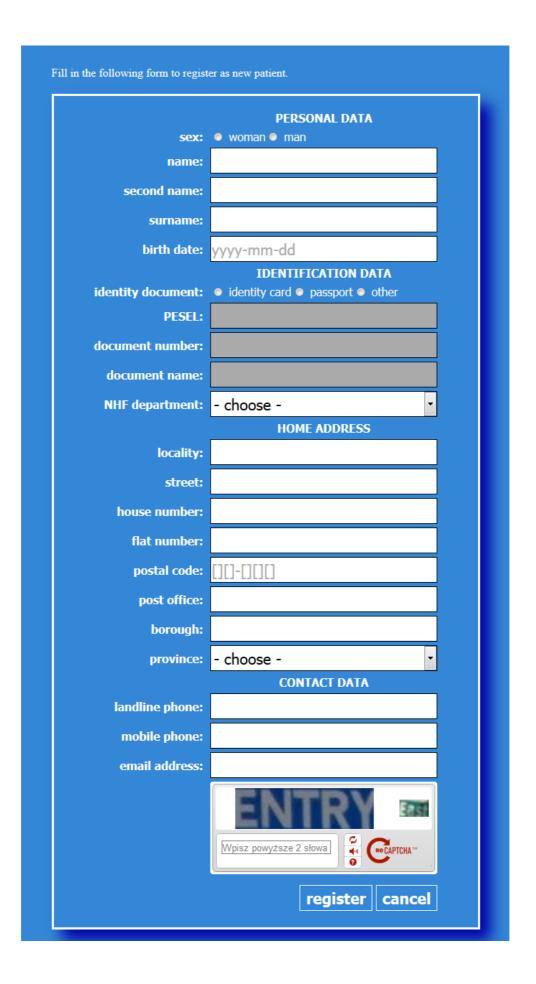
# Portal for patients

For jHIS system dedicated internet portal has been created that allows patients for arranging visits using internet, canceling visits arranged using internet, insight into the history of the disease, preview of prescriptions issued and browsing diagnostic examinations results. Access to portal is granted for patients which reported to registration of any unit of health care company a wish to use

portal and that fact has been marked within the jHIS system (field "Access to internet registration" in "Contact" tab within patient card) and for patients that have registered themselves using internet. Login for portal is patient e-mail address and password is generated automatically by jHIS system and is sent to patient e-mail address at the moment when he declares intention to use portal or when registration application becomes verified.



To register oneself using internet one has to click the button "do register" (this button is available only if health care company allows to register patients using internet which is configured while introducing portal). Then there appears registration form, which is to be filled and accepted by clicking the button "register".



If application for has been filled correctly, system informs with an appropriate message about its accepting (in case of error message one has to correct data within the form and renew an attempt of registration).



Accepted application has status of unconfirmed. While accepting order, message to patient email address is sent with link that allows to conform application. After clicking the link within email message by the patient, there appears information about application confirmation.



Confirmed applications are verified (manually by employees of health care company or automatically when possible as described within the chapter of "Patients (internet applications)"). When application is verified positively, patient receives message with access password for the portal to his email addres.

If patient has already an account within portal and he forgets his password, he can report to any unnit of healthcare company and ask for generation of new password (that's what registration employee can do by clicking the button "Generate new password for internet registration" in "Contact" tab within patient card) or he can enter his email address into portal login form and click the button "remind password". In both cases password allowing to log into portal will be sent do patient e-mail address.

After logging to portal there appears start page whicg contains:

- header (repeated on each page of portal) ant within it
  - system logo by clicking logo patient is directed to start page independently what page he is currently viewing
  - menu allowing to access particular functionalities of portal
  - linkt to language versions allowing to change user interface into different language
  - o patient login
  - link allowing to logout from portal
- content appropriate for logged user, including informations about planned visits and results of diagnostic examinations recently introduced (since the user last logged in to the portal) and visit history with access to details of each visit

- footer (repeated on each page of portal) ant within it
  - name and version of system
  - o logo of jPALIO technology by clicking this logo software producer web page appears there in new window/tab of the browser

Portal contains the following functionalities:

- Password functionality allowing to change patient pasword
- Visits functionality allowing to appoint visits by patient, to browse visits already appointed and to cancel visits appointed by patient using portal
- Examinations functionality allowing to browse results of diagnostic examinations of patient
- Prescriptions functionality that allows you to view issued paper prescriptions and eprescriptions

Moreover within menu there is position "Start" which when clicked allows to go to start page of portal, also in the menu there can be additional positions defined by jHIS system administrator.



#### **Dear Patient!**

Use menu at the top of the page to change your password, appoint a visit, see your visits or cancel visit appointed with portal. When you finish using portal remember to log out by clicking the link of "logout" at the right top corner.

Ma ana implifimat

						v	ve are inviting!			
Visits history										
Date	Hours	Clinic / Ward	Staff / Equipment	Visit type	Formalities	Visit state	Details			
2020-03-24	10:00 - 10:10	Poradnia POZ ul. Kazimierzowska 33D, 05-807 Owczarnia	Olga Baron	public wideokonsultacja	all formalities attended	visit appointed	More →			
2020-03-12	15:00 - 15:15	Poradnia Kardiologiczna ul. Kazimierzowska 33D, 05-807 Owczarnia	Olga Baron	commercial standardowa	all formalities attended	visit appointed	More →			
2020-03-12	08:00 - 08:15	Poradnia POZ ul. Kazimierzowska 33D, 05-807 Owczarnia	Olga Baron	public standardowa	all formalities attended	visit appointed	More →			
2020-03-06	10:00 - 10:15	Poradnia Kardiologiczna ul. Kazimierzowska 33D, 05-807 Owczarnia	Olga Baron	commercial standardowa	all formalities attended	visit realized	More →			
2020-03-01	13:00 - 13:10	Poradnia POZ ul. Kazimierzowska 33D, 05-807 Owczarnia	Olga Baron	commercial standardowa	payment is missing	visit realized	More →			

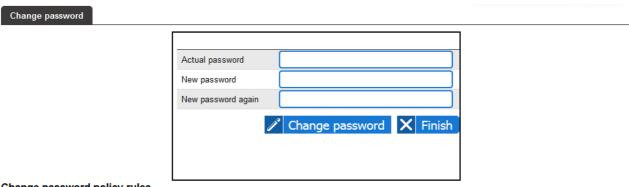
## **Password**

Using the "Password" functionality in the menu, logged patient has the ability to change his own password currently used to access the portal. To change password, one has to enter current password and new password twice repeated to the form. The new password must meet the following requirements of security policy:

> must have at least 8 characters

- must contain lowercase and uppercase letters, numbers and special characters
- must be different from the most recently used passwords of at least three characters
- must differ from each of the three most recently used passwords of at least one character

After completing the form and pressing the "Change Password", system verifies the correctness of data entered to the form. If verification is successful, then the password is changed and displays information about successful password change. If the verification fails, you will see an error message informing about incorrect filling out the form (indicating the type of irregularity). In this situation, you must fill out the form again according to the information contained in the message and try again to change password.



#### Change password policy rules

- · Password must have at least eight charcters
- · Password have to containt at least one lowercase letter
- · Password must have at least one uppercase letter
- · Password must have at least one number or keyboard symbol
- . new password must have at least three new characters than the old one had
- new password must differ at least with one character than last three ones

### **Visits**

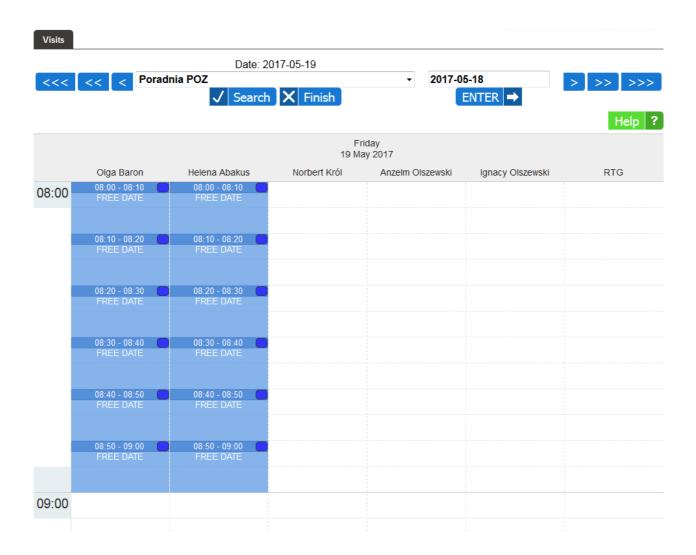
After selecting from menu the "Visits" functionality there is displayed search engine of available dates and arranged today visits in all of the of health care company where exists timetables with terms marked to be displayed within portal and these within which patient has/had visits. Depending on the system configuration, either all future free dates or free dates starting from tomorrow may be displayed.

The first step is to choose a clinic and click "Search" button. If there are any timetables of work of the staff or equipment in the clinic (even empty), then the page displays a grid of timetable. The grid has a column corresponding to all employees and equipment for which there are timetables of work in the clinic. Rows correspond in turn to possible hours of visits (grid is limited to the clinic's working hours and every hour is divided into 12 parts for 5 minutes). At the grid there are marked all the available terms (only terms starting from tomorrow are displayed, past and today terms are omitted) and scheduled visits of patient (all) according to the scheme

- future available dates are displayed in blue
- arranged visits that do not require supplement the information or verification are displayed in green
- arranged visits that require supplement the information or verification (attach referral, attach

- an insurance document, settlement of payments, cancel the visit because of changes in work timetable of doctor or equipment) are displayed in red
- if the type of the visit appropriate for a given free date or appointed visit has defined color of highlighting, then in the upper right corner of the date / visit there is displayed spot in this color.

When you move the mouse cursor over a free date, availability or an appointment, in a tooltip there is displayed detailed information about the date, availability or visit accordingly (quick view).



In the form above the grid there are in addition the following navigation buttons:

- > <<< allows to view the schedule on a month earlier than the current presented day</p>
- <- allows to view the schedule on a week earlier than the current presented day
  </p>
- < allows to view the schedule on a day earlier than the current presented day</p>
- Change date" allows one to view any day, which should be indicated in the date field before pressing the "Change date" button
- "Today" alows one to view today's day
- > allows to view the schedule on a day later than the current presented day

- >> allows to view the schedule on a week later than the current presented day
- >>> allows to view the schedule on a month later than the current presented

Clicking on any of the above buttons changes the view of schedule for the appropriate day to which the button leads.

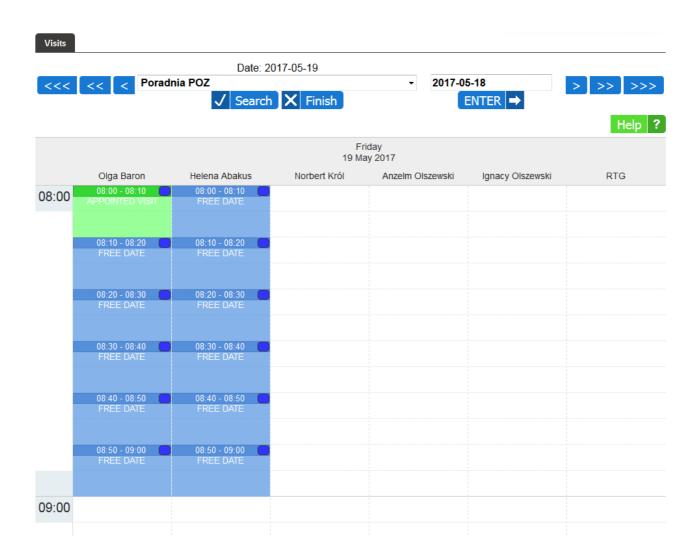
Clicking on a free date on the grid of schedule opens new window within which threre is button "Make reservation".



After clicking this button visit at this term is being reserved for patient and appriopriate message informs about that fact or there appears information about lack of possibility to reserve the term (if somebody else has reserved this term in meantime, if patient has another visit appointed at the same time, etc.)



After clicking button "Close" reservation window is closed and within timetable grid there appears reserved visit (if reservation was possible to be done).



After clicking on reserved visit there appears new window with information about visit state. If visit was appointed by patient using portal and is in future, then there is button "Cancel visit" visible that allows to cancel planned visit. In the case of visits with the videoconsultation option, as long as the visit has not been marked as realized nor nurealized, the "Videoconsultation" button is additionally visible.

Visit appointed

✓ Videoconsultation Cancel visit → X Close

After clicking the "Video Consultation" button, depending on the system configuration, a chat window will open with the option of switching to video communication mode or video communicator window. If the system has been configured in such a way that the chat window opens, then at the bottom of the window there is a field for entering the text messages to be exchanged (the message is sent after clicking the Enter button on the keyboard) and a field for sending files (the file is sent after selecting the file from the disk; the progress bar indicates the file transfer progress). Next to the field for entering exchanged text messages there is a "VIDEO" button enabling switching the messenger into the video communication mode.

10:32:28: Dzień dobry

10:32:49: Czy endoskop z pracowni przy ul. Lazurowej został już naprawiony?

10:33:37: Tak, naprawa została zakończona.

10:33:49: Kiedy będzie można odebrać urządzenie?

10:34:01: W godzinach 14:00-16:00

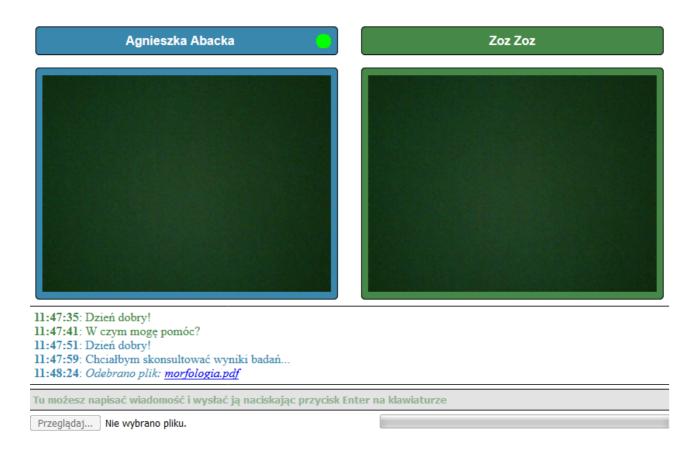
10:34:03: Dziękuję

Tu możesz napisać wiadomość i wysłać ją naciskając przycisk Enter na klawiaturze

VIDEO

Przeglądaj... Nie wybrano pliku.

If the system has been configured in such a way that the chat window opens and the "VIDEO" button is clicked in it, or if the system has been configured in such a way that the video communicator window opens, then the video communicator window will open. In the upper left part the doctor name and surname and image from the doctor's camera is displayed (if the indicator next to the doctor's name is red, it means that the doctor has not turned on the video communicator yet, if it is green, it means that the doctor has established a connection), in the upper right the name, surname and image from the patient's own camera is displayed (as the doctor will see it), in the lower part a chat and a field for entering exchanged text messages (sending a message follows after clicking Enter on the keyboard) and a field for transferring files (the file is sent after the file is selected from the disk; the progress bar indicates the progress of the file transfer). The connection between the patient and the doctor is established automatically after turning on the videocommunicators by both sides. To start video communication, you need a Firefox 61+, Chrome 67+, Opera 67+ or Safari 12+ browser.

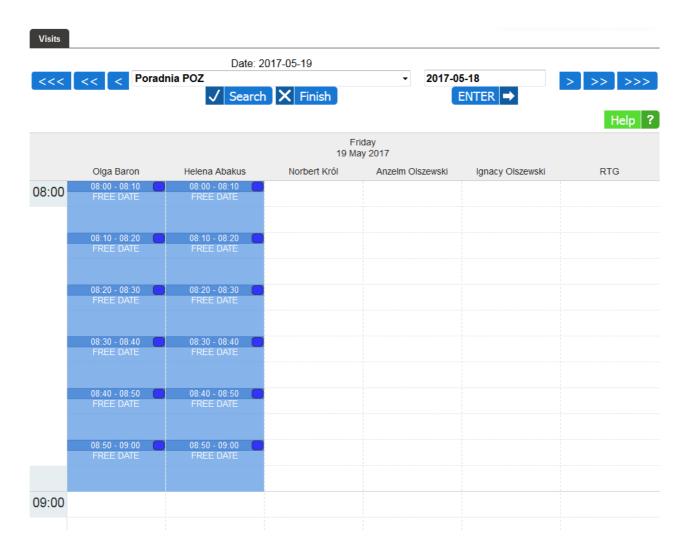


Clicking the button "Cancel visit" releases reserved term and an appropriate message informs about that fact.

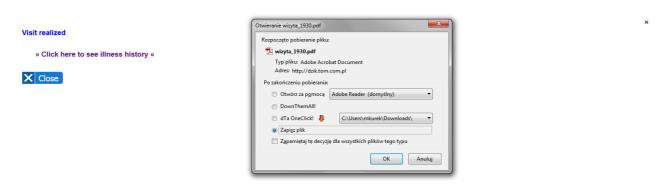
#### Visit has been canceled

#### X Close

After clicking button "Close" reservation window is closed and the view of timetable grid is refreshed (if visit has been canceled it desappears from timetable grid and free term appears within its place).



In case of realized visits after clicking on visit within new window with information about visit state there is link also displayed allowing to preview disease history entered by the doctor during the visit (in PDF format).



In addition to scheduled visits visible on the schedule grid, a list of additional patient visits from a given day in a given clinic (if any) is displayed under the grid. By each of the additional visits there is the "More" button, which opens the details window of the visit as for scheduled visits.



#### **Examinations**

After choosing functionality "Examinations" from menu there appears list of patient orders for diagnostic examinations in order from the newest to the oldest. By each order within the column of "Results" there is button "View" available.



Clicking the button "View" allows to preview (as PDF file) results of diagnostic examinations within the given order.

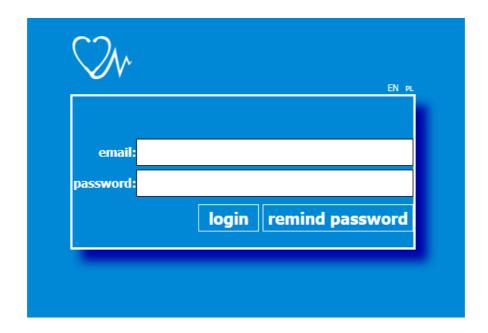
## **Prescriptions**

After selecting the "Prescriptions" functionality from the menu, a list with details of all paper and electronic prescriptions (e-prescriptions) issued for the patient is displayed, from the most recent to the oldest.



## **Portal for institutions**

A dedicated portal has been created for the jHIS system enabling institutions to plan occupational medicine visits for their employees as part of the contracts realization. Access to the portal has institutions for which within the jHIS system there is marked that they will use the internet portal and there is entered login (email) and password.



If an institution with access to the portal forgets its password can either report to any unit of the health care company with a request to generate a new password (which the administrator can do by editing the institution's data and entering a new password), or enter the email address in the portal login form and click the button "remind password". In both cases, a password will be sent to the institution's email address to log in to the portal.

After logging to portal there appears start page which contains:

- header (repeated on each page of portal) ant within it
  - system logo by clicking logo user is directed to start page independently what page he
    is currently viewing
  - menu allowing to access particular functionalities of portal
  - linkt to language versions allowing to change user interface into different language
  - institution login
  - link allowing to logout from portal
- content appropriate for logged user
- footer (repeated on each page of portal) ant within it
  - o name and version of system
  - o logo of jPALIO technology by clicking this logo software producer web page appears there in new window/tab of the browser

Portal contains the following functionalities:

- Password functionality allowing to change institution pasword
- Contracts functionality enabling the institution to arrange occupational medicine visits for its employees as part of the contract implementation

Moreover within menu there is position "Start" which when clicked allows to go to start page of portal, also in the menu there can be additional positions defined by jHIS system administrator.



Use menu at the top of the page to take advantage of portal functionalities. When you finish using portal remember to log out by clicking the link of "logout" at the right top corner.

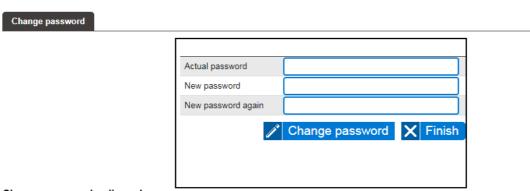
We are inviting!

#### **Password**

Using the "Password" functionality in the menu, logged institution has the ability to change his own password currently used to access the portal. To change password, one has to enter current password and new password twice repeated to the form. The new password must meet the following requirements of security policy:

- must have at least 8 characters
- must contain lowercase and uppercase letters, numbers and special characters

After completing the form and pressing the "Change Password", system verifies the correctness of data entered to the form. If verification is successful, then the password is changed and displays information about successful password change. If the verification fails, you will see an error message informing about incorrect filling out the form (indicating the type of irregularity). In this situation, you must fill out the form again according to the information contained in the message and try again to change password.



#### Change password policy rules

- · Password must have at least eight charcters
- Password have to containt at least one lowercase letter
- · Password must have at least one uppercase letter
- · Password must have at least one number or keyboard symbol

#### **Contracts**

Using the "Contracts" functionality, the institution has the option of arranging occupational medicine visits for its employees as part of the performance of contracts. After selecting this functionality, a list of institution contracts with a health care facility using jHIS system is displayed.

At each contract, the "Choose" button is visible.

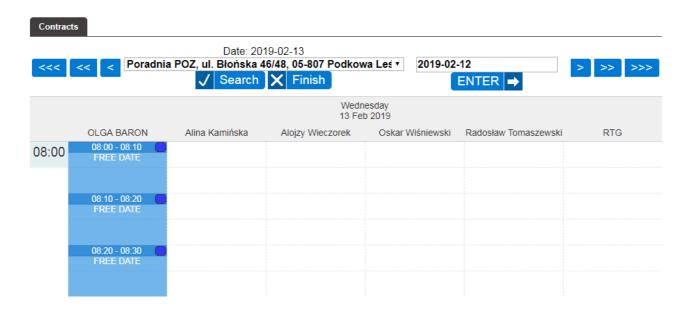


To go to the details of the contract, click "Choose" button on the given contract in the list. A list of patients (employees of the institution) with their posts, occupational medicine ranges and examinations to be implemented will be displayed. Each line of contract details corresponds to a single visit (specifies the range of occupational medicine and examinations to be carried out as part of a single visit). The last column contains either information about the date and place of the visit (if the visit has already been arranged) or the "Plan visit" button (if the visit has not yet been arranged).

Contracts				
No. Patient	Post	Occupational medicine	Examinations	Visit
1 Jakub 0rłowski	Monter	prophylactic examination     periodic examinaton     health status monitoring     embrace with care as worker	kardiologiczne (additional examination)	2019-02-05 16:00 Poradnia kardiologiczna ul Błońska 46/48, 05-807 Podkowa Leśna
2 Jakub 0rłowski	Monter	prophylactic examination     periodic examinaton     health status monitoring     embrace with care as worker	ogólne (doctor examination) okulistyczne (additional examination)	2019-02-05 08:00 Poradnia POZ ul. Błońska 46/48, 05-807 Podkowa Leśna
3 Jan Nowak	Monter	prophylactic examination     periodic examinaton     health status monitoring     embrace with care as worker	kardiologiczne (additional examination)	Plan visit →
4 Jan Nowak	Monter	prophylactic examination     periodic examinaton     health status monitoring     embrace with care as worker	ogólne (doctor examination) okulistyczne (additional examination)	Plan visit →

To schedule the occupational medicine visit, click the "Plan visit" button for a given patient. Then there will be displayed search engine for free terms today in all clinics, where there are schedules with dates marked as visible in the online registration and in which at the same time the appointment is also provided.

The first step is to choose a clinic and click "Search" button. Then the page displays a grid of timetable. The grid has a column corresponding to all staff and equipment for which there are timetables of work in the clinic. Rows correspond in turn to possible hours of visits (grid is limited to the clinic's working hours and every hour is divided into 12 parts for 5 minutes). At the grid there are marked all the available terms within contract validity period (only terms starting from tomorrow are displayed, past and today terms are omitted). When you move the mouse cursor over a free date, availability or an appointment, in a tooltip there is displayed detailed information about the date, availability or visit accordingly (quick view).



In the form above the grid there are in addition the following navigation buttons:

- <<-- allows to view the schedule on a month earlier than the current presented day
  </p>
- <- allows to view the schedule on a week earlier than the current presented day
  </p>
- < allows to view the schedule on a day earlier than the current presented day</p>
- > "ENTER" allows you to view any day, which should be indicated in the date field before pressing the "ENTER" button (in the date field there is always entered by default today's date to be able to view quickly today's schedule)
- > allows to view the schedule on a day later than the current presented day
- >> allows to view the schedule on a week later than the current presented day
- >>> allows to view the schedule on a month later than the current presented

Clicking on any of the above buttons changes the view of schedule for the appropriate day to which the button leads.

Clicking on a free date on the grid of schedule opens new window within which threre is button "Make reservation".



After clicking the "Make reservation" button, the system checks the possibility of arranging a visit for a given patient at a given time and if such a possibility exists, then the visit is planned and the relevant message informs about it.

Term has been reserved

After clicking the "Finish" button, the system returns to the details view of the contract and information about it is displayed next to the patient for whom the visit was planned.

Contracts				
No. Patient	Post	Occupational medicine	Examinations	Visit
1 Jakub 0rłowski	Monter	prophylactic examination     periodic examinaton     health status monitoring     embrace with care as worker	kardiologiczne (additional examination)	2019-02-05 16:00 Poradnia kardiologiczna ul Błońska 46/48, 05-807 Podkowa Leśna
2 Jakub 0rłowski	Monter	prophylactic examination     periodic examinaton     health status monitoring     embrace with care as worker	ogólne (doctor examination) okulistyczne (additional examination)	2019-02-05 08:00 Poradnia POZ ul. Błońska 46/48, 05-807 Podkowa Leśn:
3 Jan Nowak	Monter	prophylactic examination     periodic examinaton     health status monitoring     embrace with care as worker	kardiologiczne (additional examination)	Plan visit →
4 Jan Nowak	Monter	prophylactic examination     periodic examinaton     health status monitoring     embrace with care as worker	ogólne (doctor examination) okulistyczne (additional examination)	2019-02-13 08:00 Poradnia POZ ul. Błońska 46/48, 05-807 Podkowa Leśn:

## **jHDR**

jHDR (jHIS Drugs Repository) is a repository of medicinal products authorized for marketing in Poland updated every day, used by jHIS system. It contains:

- data of all medicinal products entered in the Register of Medicinal Products Authorized for Marketing on the territory of the Republic of Poland and the Community Register of Medicinal Products as of today
- warnings regarding the operation of medicinal products in accordance with the latest edition of the Polish Pharmacopoeia
- lists of psychotropic substances and narcotics according to the current Regulation of the Minister of Health on the list of psychotropic substances, narcotic drugs and new psychoactive substances
- information on the level of reimbursement in accordance with the currently binding notice of the Minister of Health on the list of reimbursed drugs, foods for particular nutritional uses and medical devices
- characteristics of medicinal products in accordance with the Act on the Office for Registration of Medicinal Products, Medical Devices and Biocidal Products

You can search for medicinal products in the repository by trade or international name as well as displaying the full index of medicinal products also by trade or international names.

Search	• t	⊚ trade names ⊙ international names											»													
Trade names index		В	С	D	Ε	F	G	Н	1	J	K	L	M	N	0	Р	Q	R	S	Т	U	٧	W	X	Υ	Z
International names index		В	С	D	Ε	F	G	н	T	J	K	L	M	N	0	Р	Q	R	S	Т	U	V	W	X	Υ	Z

**jHDR** is a repository of medicinal products authorized for marketing in Poland updated every day. You will find in it:

Quetiapine Krka

Quetiapine Orion

· Quetiapine Passauer

Quadramet

Quamatel

Quecor

- data of all medicinal products entered in the Register of Medicinal Products Authorized for Marketing on the territory of the Republic of Poland and the Community Register of Medicinal Products as of today
- warnings regarding the operation of medicinal products in accordance with the latest edition of the Polish Pharmacopoeia
- lists of psychotropic substances and narcotics according to the current Regulation of the Minister of Health on the list of psychotropic substances, narcotic drugs and new psychoactive substances
- information on the level of reimbursement in accordance with the currently binding notice of the Minister of Health on the list of reimbursed drugs, foods for particular nutritional uses and medical devices
- characteristics of medicinal products in accordance with the Act on the Office for Registration of Medicinal Products, Medical Devices and Biocidal Products

After entering the beginning of the name of the medicinal product in the search engine field and clicking the "» "symbol next to this field or pressing the Enter button on the keyboard, or after clicking the index letter, a list of medicinal products with names beginning with the given phrase / letter is displayed.

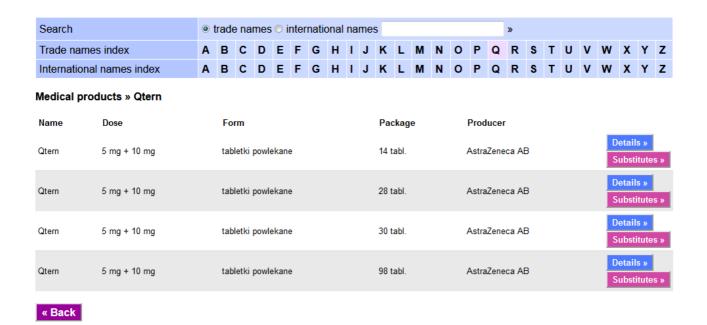


After clicking on the name of the medicinal product, a list of all medicinal products with a given name is displayed, with "Details" and "Substitutes" next to each.

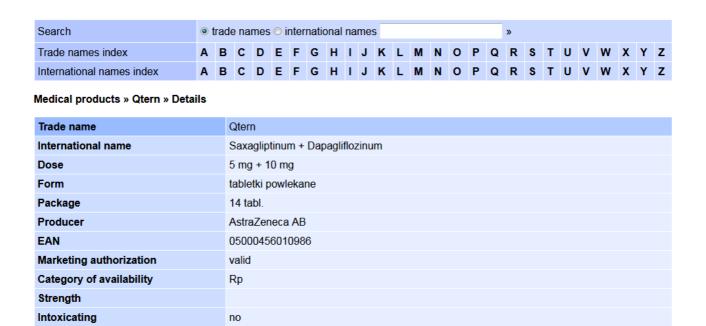
Quodixor

Qutenza

Qvar



To display detailed data of a medicinal product, click the "Details" button next to the given medicinal product. A table with detailed information about the product will be displayed. If a summary of characteristics exists for the medicinal product, then a link to download it in PDF format is displayed.



« Back

drugs

**Psychotropic** 

Group of intoxicating / psychotropic

Summary of product characteristics

To display substitutes for a medicinal product, click the 'Substitutes' button next to the given

no

100%

medicinal product. You will then see a list of replacements for the medicinal product (and for each of them the "Details" and "Substitutes" buttons as on the list of medicinal products) or information about the lack of replacements for the medicinal product.



Medical products » Qtern » Substitutes

No medical products

« Back

# **jERP**

jERP is a financial and accounting, HR and payroll system created on the basis of jPALIO platform. It is possible to automatically transfer data of contractors (patients and patients' workplaces) as well as primary invoices from the jHIS system to the jERP system. (**NOTE! The jERP system API does not allow for the automatic sending of corrective invoices to this system!**) To make this possible, the following conditions must be met:

- jERP system must be configured and ready for operation and the server on which this system has been installed must be visible from the server on which the jHIS system is installed (the connection configuration is made by the server administrator on which the jERP system is installed, the system configuration is made by jERP system administrator)
- the jHIS system must have a remote connection configured with the jERP system (the configuration is made by the server administrator where the jHIS system is installed)
- in the jHIS system the mechanisms of integration with the jERP system must be enabled (the configuration is made by the server administrator where the jHIS system is installed)
- as part of the "Configuration" functionality in the "Administration" menu, all parameters related to integration with the jERP system must be entered (the configuration is made by the jHIS system administrator)

If the above conditions are met then:

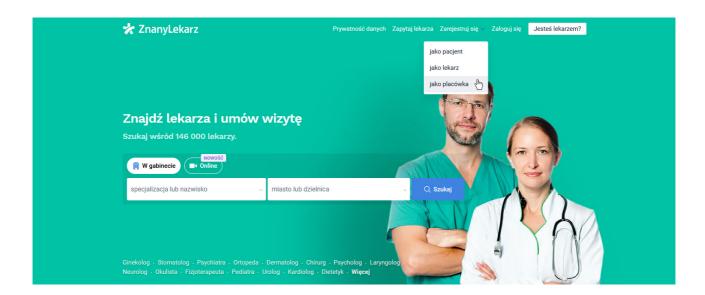
- for each operation of issuing a primary invoice on a patient in the jHIS system, the patient's
  data as a contractor and the primary invoice data are automatically transferred to the jERP
  system
- for each operation of issuing a primary invoice to the patient's workplace in the jHIS system, the data of the workplace as a contractor and the original invoice data are automatically transferred to the jERP system
- primary invoices sent to the jERP system are numbered by the jERP system, so it is necessary to ensure the correct numbering format and its initial value in the jERP system when integrating with the jERP system, and setting the correct "Next invoice order number" in the jHIS system configuration in the case of disabling integration with the jERP system
- primary invoices sent to the jERP system are printed according to the template specific to

# ZnanyLekarz

The jHIS system has built-in mechanisms of integration with the ZnanyLekarz website in terms of publishing free dates from the jHIS system on the ZnanyLekarz website and recording visits arranged via the ZnanyLekarz website in the jHIS system.

To start communication in the jHIS system with the ZnanyLekarz service, you need to take several steps.

First, you must register as an facility on the ZnanyLekarz website. To do this, go to the ZnanyLekarz website (https://www.znanylekarz.pl/) and click 'Zarejestruj się' in the menu and select 'jako placówka'.



Then you need to complete the facility's registration process on the ZnanyLekarz website, i.e. provide all necessary facility details, including service addresses, types of services performed, and doctors working at the facility. When the registration process is completed, please contact the ZnanyLekarz service advisor (via the contact form on the website). In the message you should:

- 1. Ask to enable mechanisms for integrating the ZnanyLekarz website with the jHIS system.
- 2. Ask for access data, i.e. login (also known as "client id") and password (also known as "secret"), which the jHIS system will use to authorize on the ZnanyLekarz website.
- 3. Ask that the ZnanyLekarz service will send notifications to the appropriate address in the jHIS system (this address should be copied from the field "Address to which the ZnanyLekarz service should send notifications" visible in the form that appears after selecting the "Configuration" functionality from the "Administration" menu in jHIS system)

After receiving a message from an advisor of the ZnanyLekarz website (containing access data), select the "Configuration" functionality in the "Administration" menu in the jHIS system and then enter the data received into the "Login for integration mechanisms to autorize in ZnanyLekarz service" service and "Password for integration mechanisms to autorize in ZnanyLekarz service" and save them by clicking the "Update" button at the bottom of the form.

After completing the configuration of the jHIS system connection with the ZnanyLekarz website, the process of data synchronization between the jHIS system and the ZnanyLekarz website is automatically started. As the synchronization process may take a few minutes, please wait before continuing.

When the synchronization process is completed, the data in the jHIS system should be linked to the data entered into the ZnanyLekarz service. To do this:

- from the "Administration" menu in the "Dictionaries" submenu, select the "Commercial services" functionality and edit each of the services (which will operate on the ZnanyLekarz service) indicating in the "Service defined within ZnanyLekarz service" field corresponding to the service from the ZnanyLekarz
- from the "Administration" menu, select the "Price lists" functionality and edit each of the price lists (which will operate on the ZnanyLekarz service) by checking the "Price list used for ZnanyLekarz web site" box next to such price lists (there can be only one price list marked in this way in each clinic; if a given service appears in two different price lists marked in this way, both must have the same price)
- from the "Administration" menu in the "Organizational structure" submenu, select the "Medical care" functionality, then go to the "Units" and edit each of the unit (which will operate on the ZnanyLekarz website) indicating in the field "Facility in ZnanyLekarz service" the corresponding facility from ZnanyLekarz website
- from the "Administration" menu in the "Organizational structure" submenu, select the "Medical care" functionality, then go to the "Clinics / Departments" tab and edit each of the clinics (which will operate on the ZnanyLekarz service) indicating in the field "Address in ZnanyLekarz service" corresponding address from the ZnanyLekarz website
- from the "Staff" menu, select the "Staff" functionality and edit each person (which will function on the ZnanyLekarz website) indicating in the field "Person in ZnanyLekarz service" the corresponding person from the ZnanyLekarz website

Entering of the above connections completes the process of configuring integration mechanisms. From this point on, it is possible to use the integrated jHIS-ZnanyLekarz environment, which means that:

- slots planned in timetables in jHIS with the field "Visibility within ZnanyLekarz web site" will be automatically transferred to the ZnanyLekarz website
- informations about plans / transfers / cancellations of visits made within jHIS on slots with the field "Visibility within ZnanyLekarz web site" checked, will be automatically sent to the ZnanyLekarz website
- informations about planning / transfering / canceling visits on ZnanyLekarz website will be automatically transferred to the jHIS system and patients' data with it (the patient in the jHIS system corresponding to the patient from the ZnanyLekarz website is determined based on the email address; if the patient with the given email address does not exist in jHIS, then it is automatically added to jHIS and marked as a patient registered by the ZnanyLekarz service and requiring verification / completion of data)

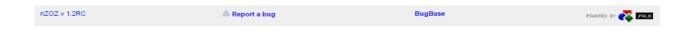
Integration of the jHIS system with the ZnanyLekarz website has a restriction that slots can be created / modified / deleted only on the jHIS system side. The creation / modification / deletion of the slot on the ZnanyLekarz site will cause the synchronization process to overwrite changes made to the ZnanyLekarz system with the actual state of the jHIS system.

# **BugBase**

The BugBase is a module used to managing notifications concerning jHIS system. It allows users to report problems that arise while they are working with the system. Reported problems, bugs, suggestions, etc. get into the database, accessed by service technicians of jHIS system. Serviceman after receiving the notification solves the problem or provide all the necessary information to resolve the problem.

Access to the BugBase module is provided by the links placed in the footer of the system:

- Report a bug opens a window of reporting a bug
- BugBase opens a window of managing reported bugs



Access to the BugBase module is provided by three privileges:

- BUGBASE możliwość zgłaszania błędów gives the ability to report problems and provides access to the notified problems by this user
- BUGBASE możliwość wyświetlenia błędów wszystkich zgłaszających gives the ability to view and manage problems reported by all users
- BUGBASE możliwość wyceny błędów gives the ability to value reported problems

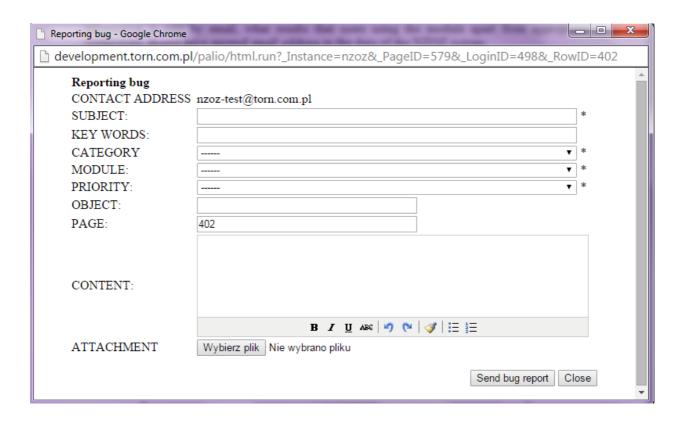
These privileges should be assigned to the appropriate roles and the roles should be given to users authorized for reporting / managing / valuating problems.

The BugBase has a built-in mechanism to inform users about the reported problems. The information is sent by email, what results that users using the module apart from appropriate permissions should have entered email address in the data of the jHIS system.

The assignment of privileges to the roles is realized by "Privileges" functionality in the "Administration" menu and assignment of roles and email addresses to users by the "Users" functionality also from the "Administration" menu.

## **Reporting bugs**

To report a problem, bug, suggestion, etc., click on the "Report a bug" button placed in the footer of each page of the system. There will be opened window of reporting a new problem with the form in which mandatory fields are marked by an asterisk.



In CONTACT ADDRESS line there is user's e-mail address, if the address has been entered in the user data in the jHIS system. Otherwise, there is the message about the lack of email address and need to contact the administrator to its entry.

In the TITLE field, enter the subject of the notification.

In the KEY WORDS field, you can specify additional words that describe the notification.

In the CATEGORY field, select the type of notification.

In the MODULE field, choose to which part of the system it relates.

In the PRIORITY field, there should be determined the urgency of the notification.

The field OBJECT is not in use (has been preserved because of the backwards compatibility).

The PAGE field is filled automatically (there is entered identifier of page in the system that caused the error).

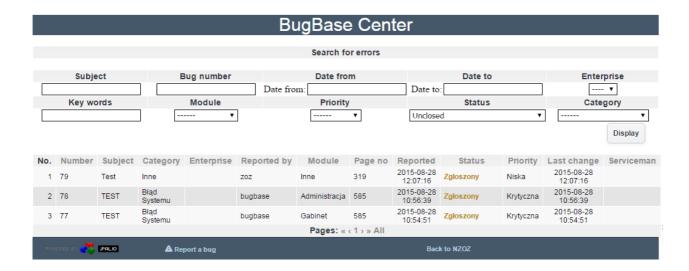
In the DESCRIPTION field, specify a maximum fine details and circumstances of a problem.

In the ATTACHMENT field, there is the opportunity to add attachment associated with the notification.

After filling all the required fields, click "Send bug report" button. If the report will be stored in the database, blue message about the successful operation will appear (and the report will receive the REPORTED status). Otherwise, there will be a red message with information about an error. The window can be closed with the "Close" button.

## **BugBase Center**

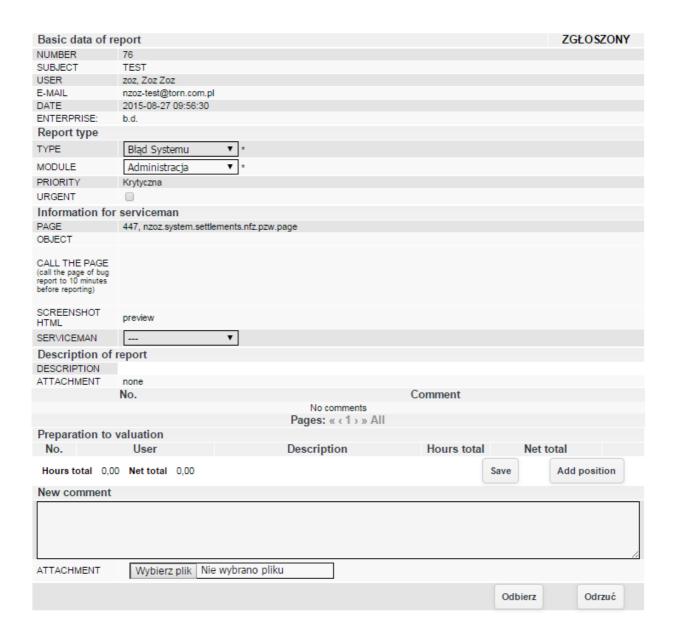
To see a list of reported problems, click on the "BugBase" link placed in the footer of the system. Then a window with a list of reports will be opened.



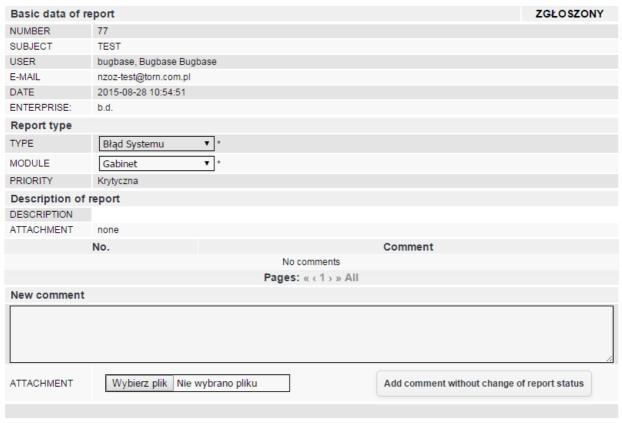
In the upper part of the window there is a search engine of reports. After specifying search criteria and pressing the "Display" button, there is presented a list of reports that meet the search criteria. Depending on privileges there are displayed only reports of logged user or reports of all users. In the second case, in the search results are displayed additional columns of the table: "Enterprise" from which is the report and the "Serviceman" that is assigned to it.

To view details of the report, click on the appropriate row of the table. There will displayed window with the details of the notification. The content of the window is dependent on privileges.

For users who have access privileges to all reports, in the upper right corner is displayed the current status of the report. Below are given details of the reporting user and entered information by him from the notification. Next, there is a form to change the category and module (only for notifications with REPORTED status). If the notification should be handled at first, you can mark it as URGENT. Below there is the information about the page number on which it was an error and preview button allows you to display a screenshot saved when reporting the error. In the SERVICEMAN field should be selected serviceman who will be handling the notification. If the logged user has the privilege of valuating reports, in the window there is displayed section that allows for the valuation. There is also a form of adding a comment.

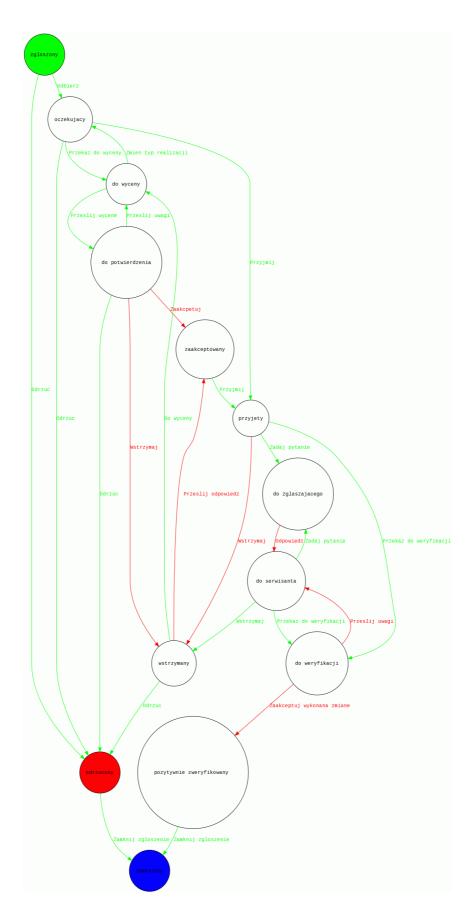


For users who have access privileges only to their own reports in the details of the notification window there is displayed information from the report, form of change the type and the module (only for notifications with REPORTED status) and form of adding a comment.



Depending on the status of the report, at the bottom of the window there are displayed the appropriate action buttons.

Servicing reports is a process, which diagram looks like this:



The circles correspond to the possible states of the report, the arrows correspond to activities which in a given state can be done to change the status of report.

At the time of reporting problem, notification receives REPORTED state (green circle) and after its processing it receives CLOSED state (blue circle). Green arrows indicate transitions available only for the administrator / serviceman, and red arrows are the transitions available to the reporting user.

Servicing report process looks like this:

- REPORTED state in this state administrator determines whether the report should be realized or not. If so he receives it by pressing the "Accept", if not rejects by pressing the "Reject" button.
- WAITING state in this state, the administrator should assign a serviceman to handling the report by selecting it from the list. From this moment, serviceman will be responsible for report. If the serviceman starts handling of report, he should confirm its acceptance to realization by pressing the "Accept" button. In this state, it is also possible to move to the valuation of the notification, if the user has the appropriate privilege. To go to the valuation, use the "Go to valuation" button. Report can be also rejected by pressing the "Reject" button.
- FOR VALUATION state this is the initial state of the pricing mechanism of reports. Valuations may be done by serviceman / administrator as well as the reporting user. To cancel the valuating of report, press the "Change type of execution" button (the button is available only for serviceman / administrator). To valuating the report, press "Add position" button.

There will be fields where it should be pointed serviceman who will handle the order, enter a description and the number of working hours. The system automatically calculates net rate. You can add additional items, if, for example, under the order is working more servicemen.

After entering the data, click "Save" button and then saved information will be visible for both the serviceman and the reporting user. To send a valuation for approval, use the "Send to valuation" (the button is available only for serviceman / administrator).

- FOR CONFIRMATION state a state in which the report come back to the reporting user, who is expected to accept valuation prepared by a serviceman / administrator. If he agrees with the valuation, he clicks "Accept" button. If he considers that the valuation is inadequate, he can suspend such report by typing in the comment message for the serviceman / administrator regarding the reason of suspend and pressing the "Suspend" button. Serviceman / administrator apart from the buttons available for the reporting user, he has also "Submit comments" button used when reporting user made the valuation and serviceman / administrator wants to ask him to its change. If the serviceman / administrator does not agree with the valuation submitted by the reporting user, he can reject this notification immediately by clicking the "Reject" button.
- ACCEPTED state a state similar to a state of waiting except that it occurs after the valuation and approving by the reporting user. If the serviceman starts handling the report he should confirm its acceptance to realization by pressing the "Approve" button.

- APPROVED state in this state, a notification is handling by a serviceman. At any time, both the administrator / serviceman and the reporting user may suspend realization of report (by pressing the "Hold" button) if there will be any unexpected previously circumstances (eg. revaluation). Then the serviceman interrupts the execution of the report. If the serviceman has any questions to the reporting user, he clicks the "Ask a question" button. Then the report goes to the reporting user pending the forwarding of his answers. When the report is completed, the serviceman transmits them to the verification by the reporting user so that he can determine whether it has been correctly realized use the "To verification" button.
- TO REPORTER state in this state report waits for a response of reporting user to a question of serviceman. Reporter should answer this question by typing the comment and clicking "Reply" button.
- TO SERVICEMAN state when the reporting user sent answer to serviceman's question, or if notification has not been positively verified by the reporting user, then it receives this state. If the answer of reporter makes that the report may not be further realized in its current form, such report should be paused by clicking on "Pause" button. Serviceman can ask another question to the reporter by clicking the "Ask a question" button. If the report has been realized, it should be passed to verify with the "To verification" button.
- TO VERIFY state the state is given to the report which has been realized by a serviceman. The reporting user has to specify whether it was realized properly. If so should click "Accept made change" if not should send comments to the serviceman by clicking "Submit comments" button.
- SUCCESSFULLY VERIFIED state- state indicating that the notification has been properly realized, so can be closed by a serviceman / administrator using the "Close report" button.
- PAUSED state in the process of handling the report, it is possible to pause both by the reporting user and by a serviceman / administrator. When the reporting user will pause notification during the approval of the valuation, serviceman / administrator can reject such report (the "Reject" button) or pass to a revaluation (the "To value" button). Also during the execution of the report by a serviceman, it is possible to pause the report to be revaluated or rejected. When the application is in the PAUSED state and does not require a revaluation, then both serviceman / administrator and the reporting user may submit comments, and the report will go to the ACCEPTED state and start a re-realization.
- REJECTED state meaning to stop processing the report without its realization. Rejected report should be closed using the "Close the report" button.
- CLOSED state the state indicating completion of processing the report.

At each change of status of notification the system sends to the reporting user and to serviceman assigned to the notification an e-mail informing about the change. Any comments and attachments added in the report form are attached to sending message. Do not reply to received messages - they are only intended to inform users that there is a change in the application. After receiving such a message you should go to the BugBase Center, search for the appropriate report and react adequately to the state of report.

## Summary

The jHIS system provides a comprehensive solution in the use of public and private health care institutions realizing ambulatory, home, hospital (one-day) and CTC treatment. It has implemented

mechanisms for data management of patients and staff, creating work schedules of staff and medical equipment, planning and servicing visits, surgeries and operations (including service of surgery room), commercial settlements (with patients and workplaces) and non-commercial (with the NFZ). The system integrates with diagnostic laboratories (using the MARCEL system and using the eLab system), with the Electronic System of Beneficiaries Eligibility Verification (eWUŚ), electronic ordering system for provision with medical products (eZWM), PUE ZUS platform (in the scope of handling electronic exemptions), P1 platform (in the field of e-prescriptions), queuing systems (Nemo-Q), ZnanyLekarz website, internet thermometers (TME) and fiscal printers (Novitus Online). It has also dedicated portal allowing patients to register for visits themselves using internet. Its advantages are the simplicity and ergonomics, so important from the point of view of users. By providing a user interface via web browser, system does not require installation on workstations and can be used on mobile devices (eg. tablets). The use of the jPALIO platform provides high scalability, efficiency and reliability.