

User Manual



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Change history

Date	Version	Changes done
04/01/2021	1.0	Draft version
11/03/2021	1.1	update with new features



Sens4Care User manual

Welcome to Sens4Care,

through this service, it is possible to make use of all the features developed by Sens4Care.

You can access the service via the web portal (https://app-antisuperbugs.tech4care.eu) and using the credentials generated in the way explained in the first chapter.

This guide deeply explains the application features through the following chapters:

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1. First log in

In order to access the Sens4Care web portal, it is necessary to have valid credentials. In case you have already got them, you can skip to the next chapter of this guide. Otherwise, you have to click on the link received in the e-mail from reset-password@tech4care.eu. If you haven't received the e-mail for the activation, please request to your administrator or check the spam folder in your box.

New subscription to Sens4Care



Mittente r Destinatario p

reset-password@tech4care.eu 🎎
prova12@test.tech4care.eu 🎎

Data Oggi 11:53

Welcome to Sens4Care.

To activate your account, click on the link below and fill the fields with a username and a password (type the passwrod twice, for

The link is valid for the next 48 hours.

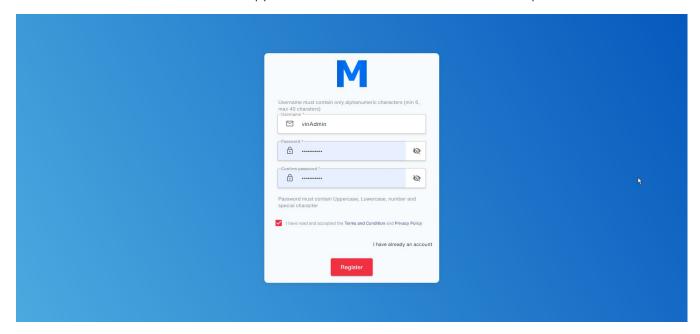
https://asb-manager.tech4care.eu/loggedOut/defineCredential?site=https://app-antisuperbugs.tech4care.eu&token=eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJjdXN0b21lcklkIjoiNjc5MjgzZjYtMWE0Zi00MjY4LWI

ACTIVATION LINK

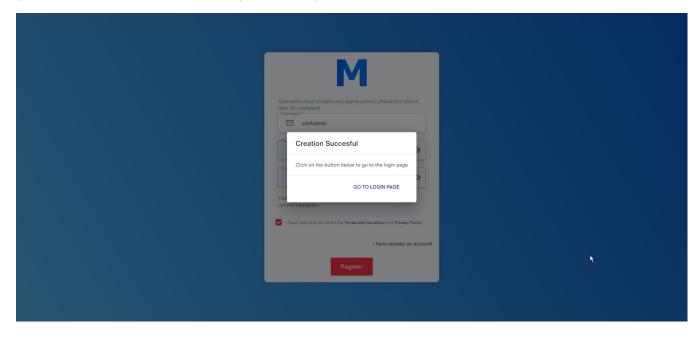


In the window that appears, you have to insert the credentials that you wish to use to access, check the Terms and conditions box and press *REGISTER*.

Please note: the username must have between 6 and 40 alphanumeric characters (only letters and numbers, no special characters nor e-mail addresses). The password must have between 8 and 15 characters and contain at least an upper case, a lower case, a number and a special character



Now you'll be able to access the portal with the chosen credentials. By pressing GO TO LOGIN PAGE you'll be redirected to Sens4Care portal, ready to access.



2. Overview and Dashboard

In this guide you will be given an overview of the several features of the application, which are accessible through the blue menu on the left side of the window. **Please note**: If this menu isn't visible but instead you see a small button with three horizontal lines in its place (), it means that

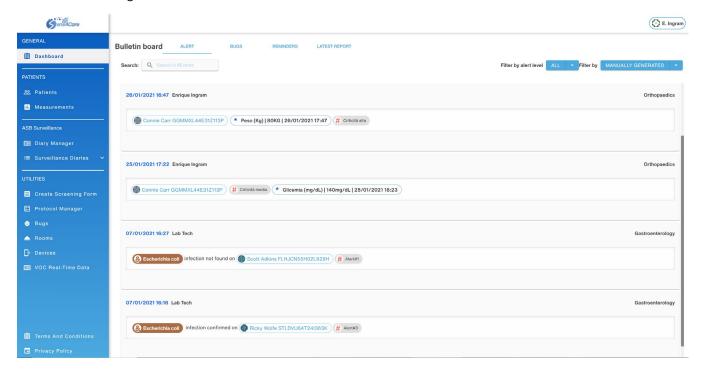


Sens4Care User manual

the browser window was zoomed in or your screen does not support an appropriate resolution. You can fix this problem by zooming out the window pressing the CTRL and – buttons at the same time, and menu should appear. Alternatively, you can still press the button with the three horizontal lines (

to make the menu appear.

The Dashboard is the landing page and contains a summary of the main events for the current timescale. It is going to be populated with the various activities that will be gradually added through time. This section, like most of those present in the application, is divided in several sub-sections accessible through tabs.



Alert provides a list of the events with the **#Alert** tag coming from Diaries and VOC Real-time Data. For each event, you can see a string containing, optionally, a description, the name of the patient, the room, the kind of bug and of course the level of alert (low, medium, high). Events can be sorted by level of alert or the way they were generated (Manually from Diaries, Automatically from VOC Real-time Data, All). For each one, input date and time are provided.

Bugs is similar to ALERT but provides a list of events tagged with the &Bugs tag.

Reminders contains a list of documents and deadlines. It is possible to view details, including attachments and notes, by pressing SHOW.

Latest report contains a list of all the events inserted in the latest diary report, regardless of tags.

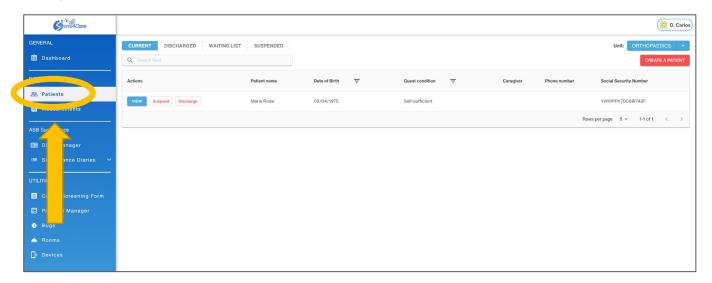
In each of these tabs, you can see details of a patient, by pressing their name. Further information on Patients' features in the next chapter.



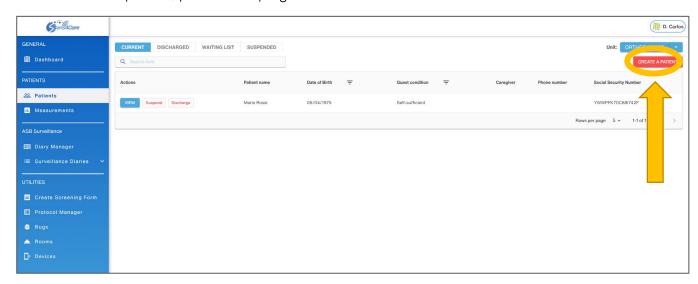
3. Patients

3.1 How to create a patient and a caregiver/reference person

By clicking *Patients* in the left side menu, a list of patients will be provided. Keep in mind that the list depends on the selected Unit. You can pick a Unit with the top right blue button (e.g. Cardiology, Orthopaedics, etc.).



To create a new patient, press the top right red button CREATE A PATIENT.



A pop-up menu will appear, in which you can insert personal data of the patient. When done, press CREATE.



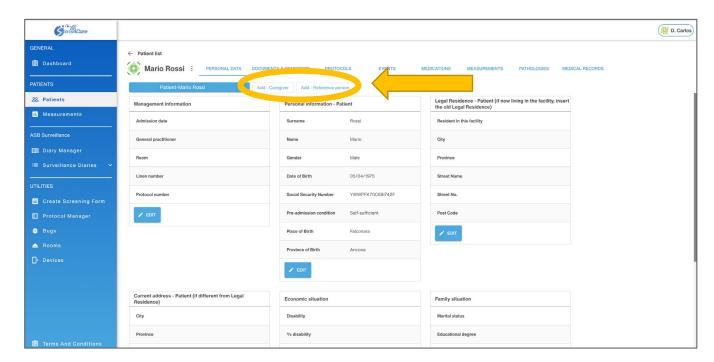


If you want to view or edit patient's data, press the VIEW button.



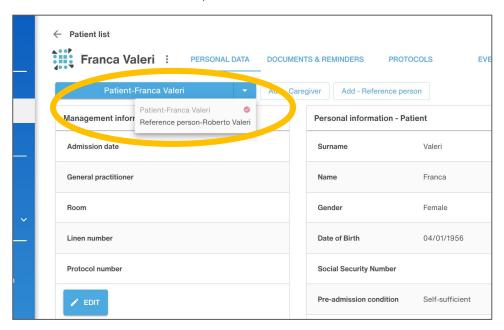
Here you have an overview of the patient, you can view or edit their data and even add a caregiver or a reference person by clicking their respective buttons.





A pop-up menu similar to that of the patient will appear. Fill in the fields and press SAVE.

Then you can switch between patient and caregiver/reference person with the blue drop-down menu button with the name of the patient.

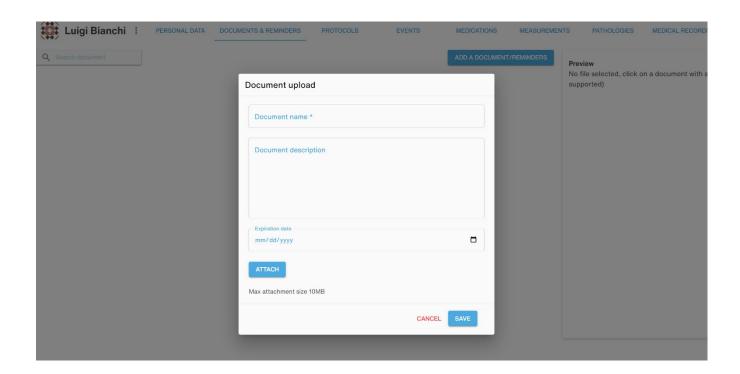


3.2 Patient tabs

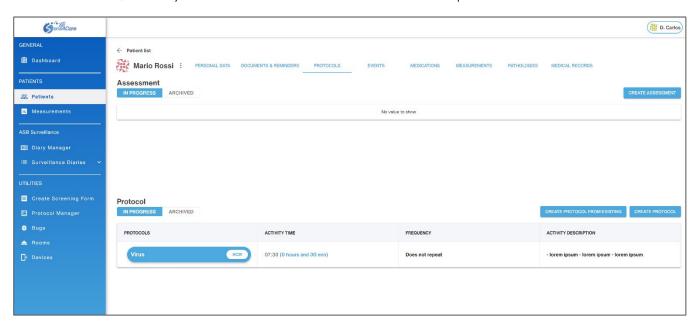
Continuing through the various patient tabs, you have:

- Documents & Reminders, where you can view and add Documents, set an expiration date and upload files.





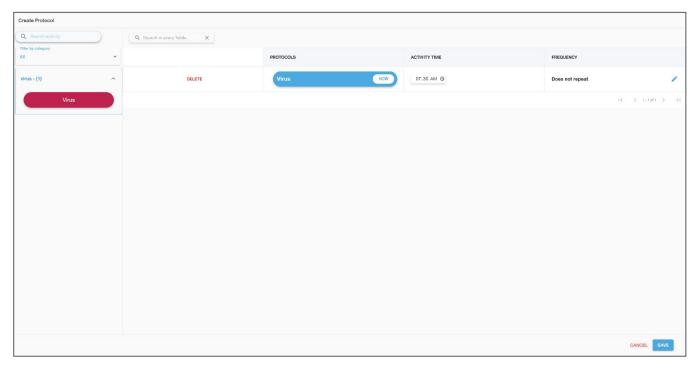
- Protocols, where you can find the risk assessments and the protocols.



The former are previously created in the *PROTOCOL MANAGER* section (for further information, please have a look at the dedicated chapter). By pressing the *CREATE ASSESSMENT* button, you can access the questionnaire and fill it in.

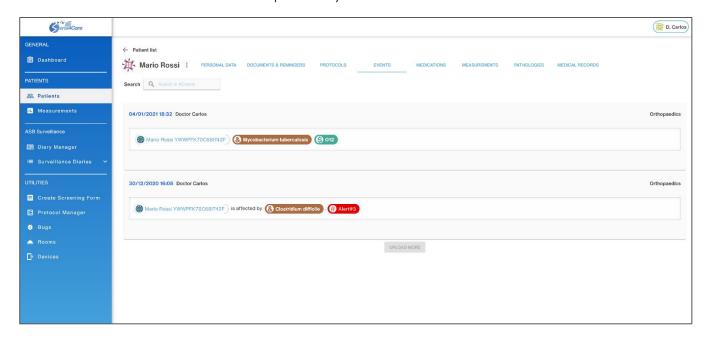
Further down, you can see a list of the protocols. With the *CREATE PROTOCOL* button, you can create a plan of tasks to be performed in a set time and with a set recurrence (daily, weekly, monthly, etc), based on a diary previously created in the *DIARY MANAGER* section (for further information, please have a look at the dedicated chapter). Once you have selected the desired settings, press *SAVE*.





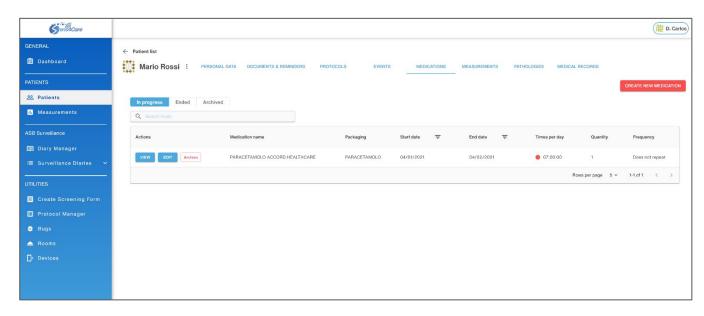
Please note: To avoid creating a protocol from the ground, you may also rely on an existing one with the proper *CREATE FROM EXISTING* button.

- Events contains a list of events previously created in the DIARY MANAGER section

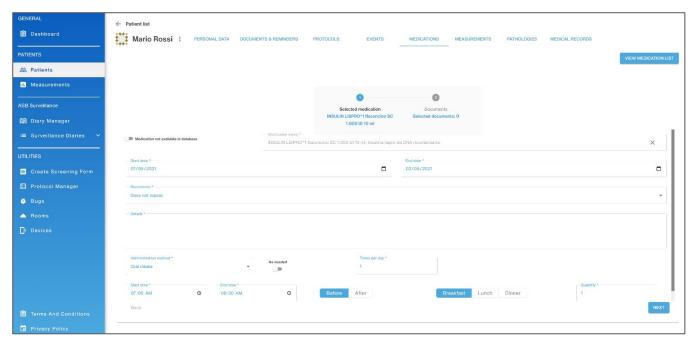


- Medications, where you can see both a list of medications for the patients and create new ones, picking them from a country-based database.



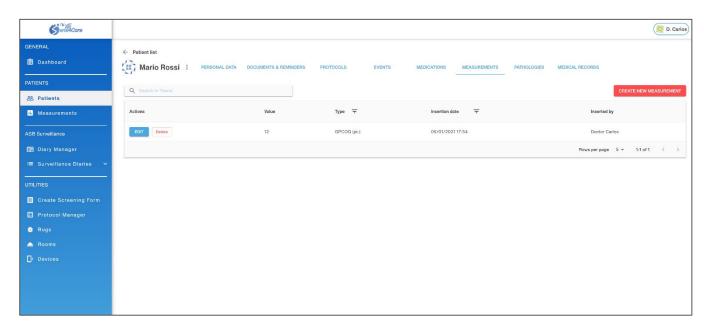


You can also select period, recurrence, administration method and time of intake, as well as upload documents like prescriptions. Click *NEXT* each step to move on.

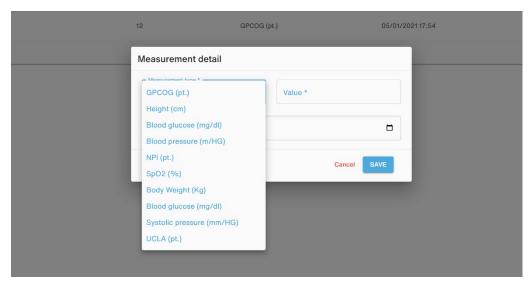


- Measurements provides a list of measurements carried out by the patient.



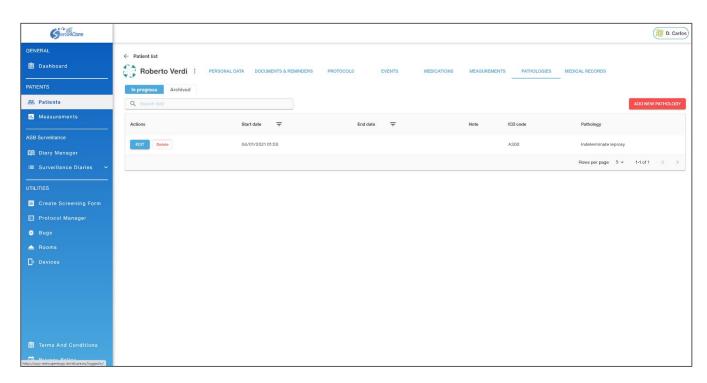


You can create new records by pressing the red *CREATE NEW MEASUREMENT* button and selecting value and type from an appropriate set. Once done, press *SAVE*

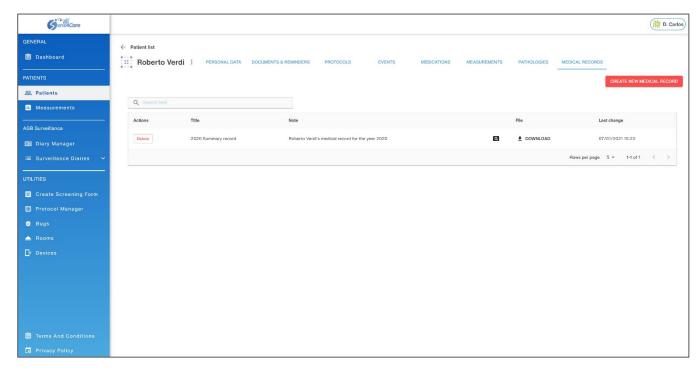


- Pathologies works in the same way as *Measurements*: you can have a list of the pathologies of the patient and add new records



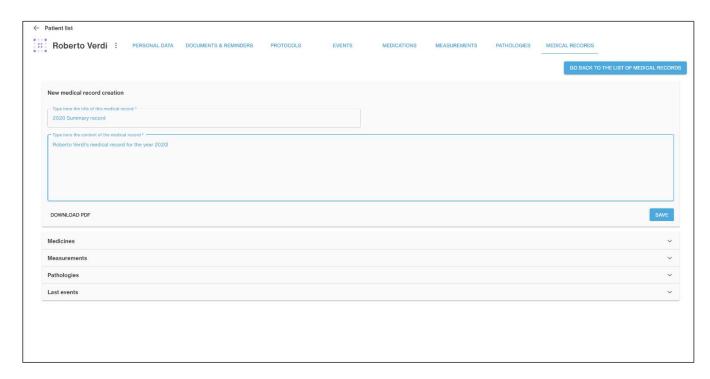


 Medical Records is a container of events, medications, measurements and pathologies of the patient.



When you create a new one, all those fields are automatically added to the record and you only need to insert a title and a description. When done, press SAVE





You can even download a pdf printable version of the record by pressing the DOWNLOAD button

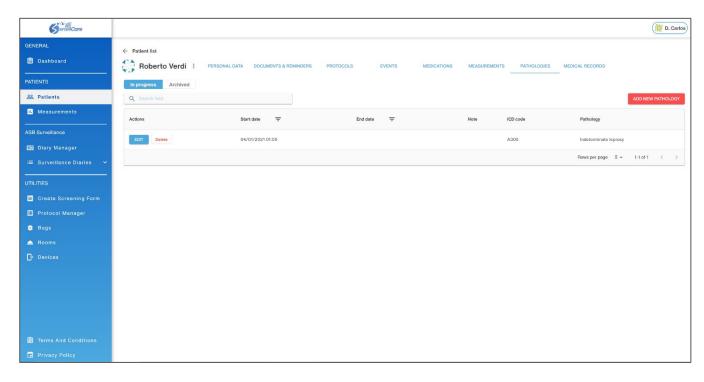
4. Measurements

The section *Measurements* provides a list of measurements of the patients you are allowed to manage, from all their units



You can create new records by pressing the red *CREATE NEW MEASUREMENTS* button. The process is the same as that seen in the previous chapter





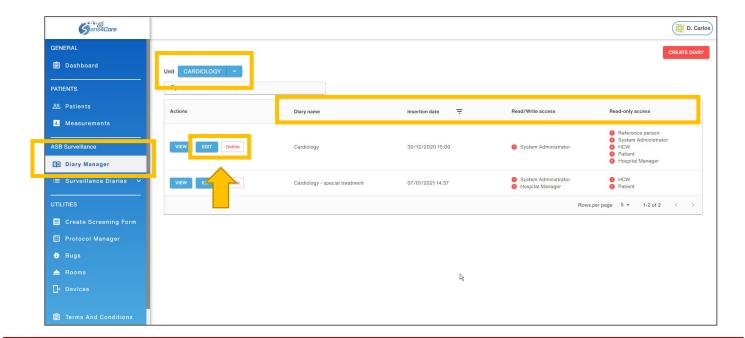
5. ASB Surveillance

5.1 Diary Manager

A diary is a shared log file that collects all the activities occurred in a specific unit/medical ward. Access level to a diary (E.g.: read or write permission) is based on the user's role.

Activities can be recorded manually by a staff member with the proper role.

New diaries can be created only by a user with the "System Administrator" or "Hospital Manager" role.

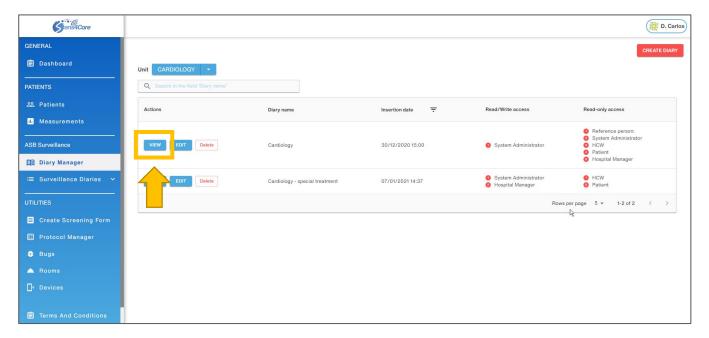




Upon accessing this section for the first time, at least one diary for each medical ward is available. You can change the *UNIT* by clicking on the drop-down menu button on the top-left corner of the screen, right over the search field.

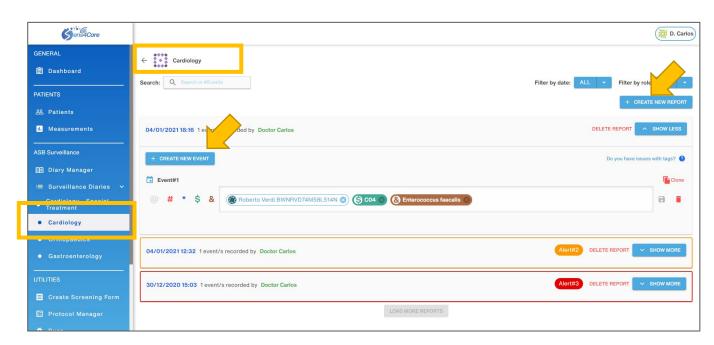
You can re-order the list of available diaries by clicking on the Category name in the list header. These categories also represent the main parameters of a diary: *Diary name, Insertion Date, Read/Write access, Read only access.*

Using the buttons on the left side of the list you can EDIT the main parameters or DELETE a diary (providing you have Write permission to do so).

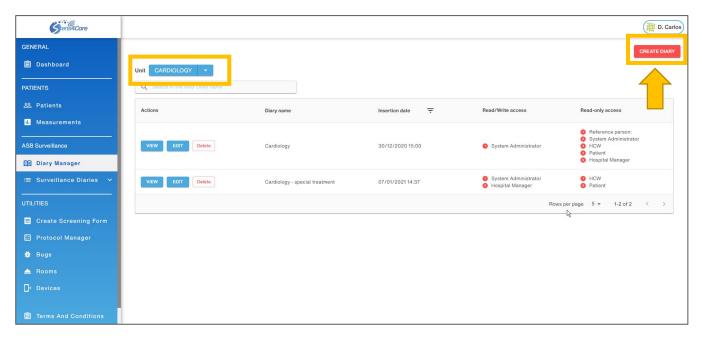


Using the VIEW button on an existing diary, you are automatically taken to the following section, SURVEILLANCE DIARIES, where you can review the details of the selected diary and perform operations based on your level of access for that diary (such as creating NEW EVENTS or NEW REPORTS or edit/delete existing ones).



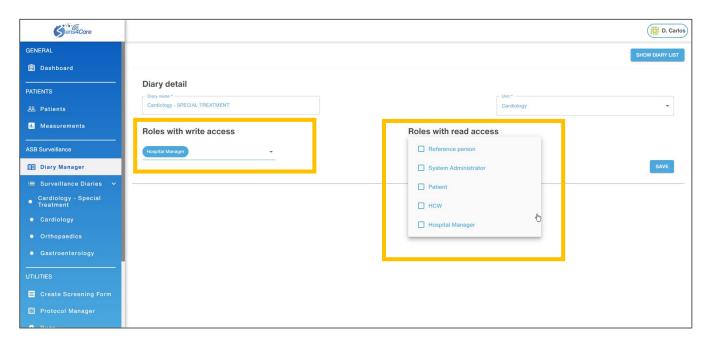


Please refer to the following paragraph for more in-depth description on how to manage events and reports in existing diaries.

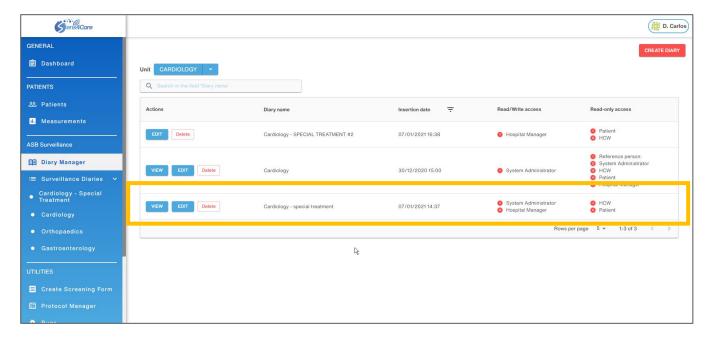


Using the CREATE DIARY button on the top-right corner, you can create a new diary for the selected unit.





In the following *Diary detail* screen, before you can SAVE the diary, make sure you have filled the 3 MANDATORY PARAMETERS: *Diary Name, Unit* and *Roles with Write access*. The fourth parameter, *Role with read access*, is optional and can be used to give permission to see the diary to user/colleagues with other roles.



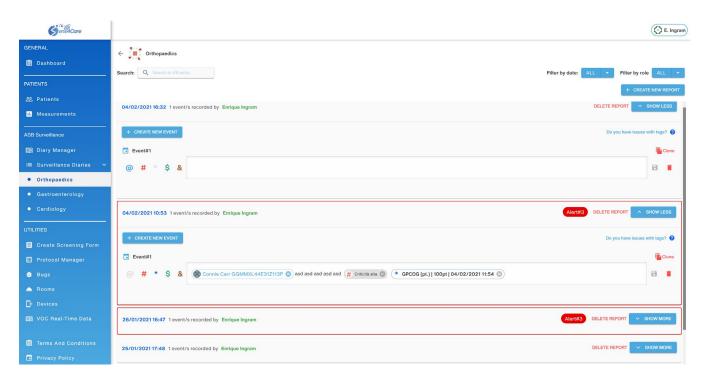
After creation, the new record will be available in the selected unit's list of diaries

5.2 Surveillance diaries

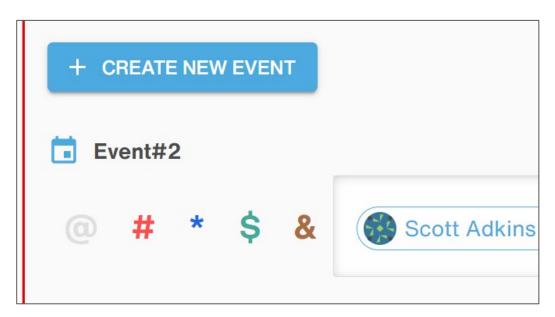
The Surveillance Diaries section provides a quick access to the created diaries. Either you click VIEW on a diary in the manager or select it in the left side menu, you will access that diary screen, which can



be populated with new events. To create a new event in the diary, press the + CREATE NEW EVENT button.



In the row that appears, you can insert a string describing the event.



You can write the string using text, tags or a combination of them. The tags can be inserted via the buttons on the left and here's how they work:

- The button permits to select a patient
- The button# permits to select the level of alert



- The button permits to select a measurement
- The button permits to select a room
- The button 及 permits to select the kind of bug

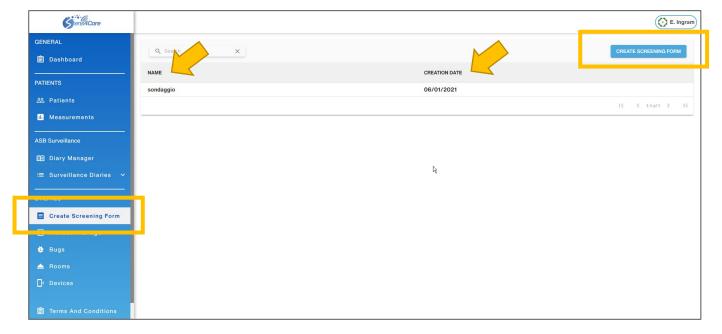
The events created here are then going to be visible in the Dashboard. Keep in mind that tags are very useful for better readability and for searches so using them is recommended.

You can add new reports, which basically are containers of events, through the + CREATE NEW REPORT button. It is also possible to edit, duplicate, delete and filter events and reports with the corresponding buttons in the diary screen.

6. Utilities

6.1 Create Screening Form

In this section you can create new infection risk assessment surveys that can be administered to patients in the *PATIENTS* section (using the *CREATE ASSESSMENT* button in the *Protocols* tab of each patient's profile – see the relevant paragraph for more detail).



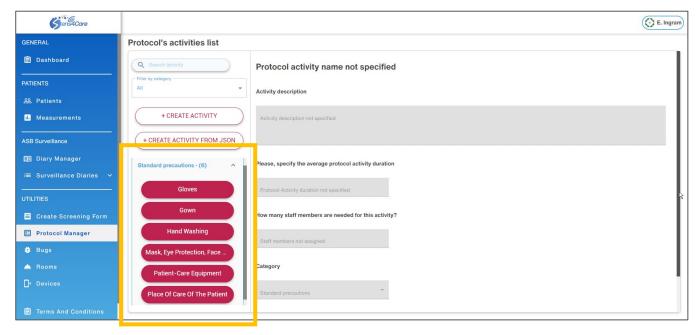
You can also review the list of all the previously created/administered surveys, searching for a specified survey or ordering the list by survey *Name* or *Creation Date*.

Click on the CREATE SCREENING FORM button to start creating a new survey.

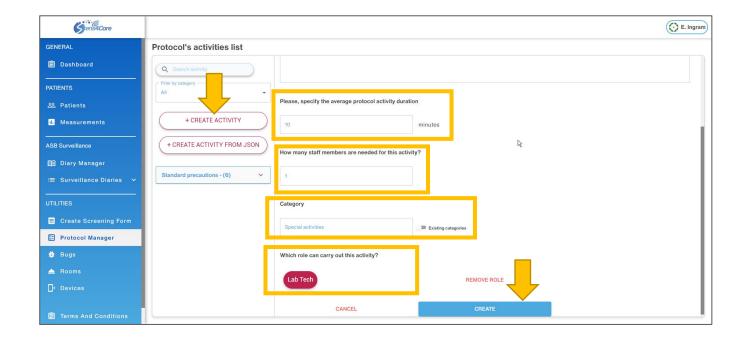


6.2 Protocol Manager

In this section you can create protocol activities that can be assigned to patients in the PATIENTS section (using the CREATE PROTOCOL or CREATE PROTOCOL FROM EXISTING buttons in the Protocols tab of each patient's profile – see the relevant paragraph for more detail)

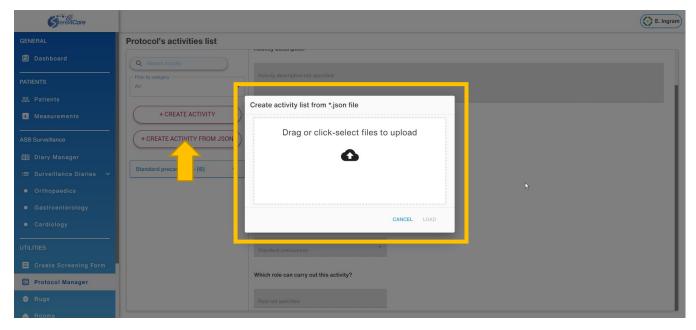


Upon accessing the section for the first time, a list of default activities, complete with descriptions and parameters, is immediately available. These activities are already available for creating personalized protocols for each patient, as described in the relevant paragraph).

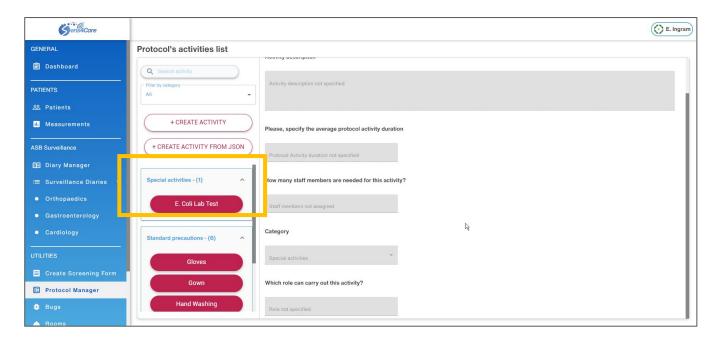




To create new protocol actions, you can use the +CREATE ACTIVITY button, to create activities from scratch, by filling all the form fields (Mandatories) and saving the activity clicking the CREATE button at the end of the form.



Alternatively, you can use the +CREATE ACTIVITY FROM JSON button, to import a JSON file with previously saved actions or actions' lists.

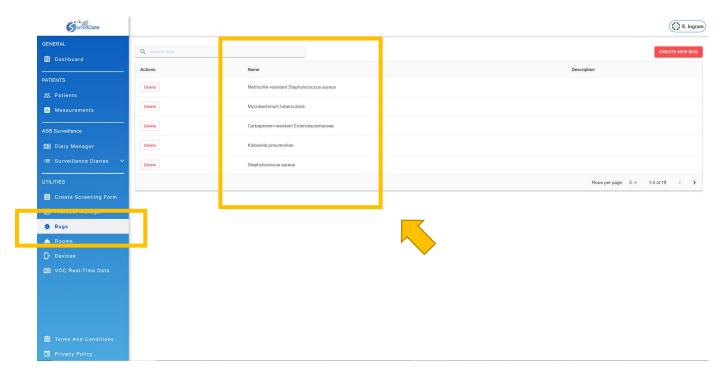


Once saved, the new protocol actions will be available in the activity list and can be used/selected in all the relevant features throughout the Sens4Care platform.



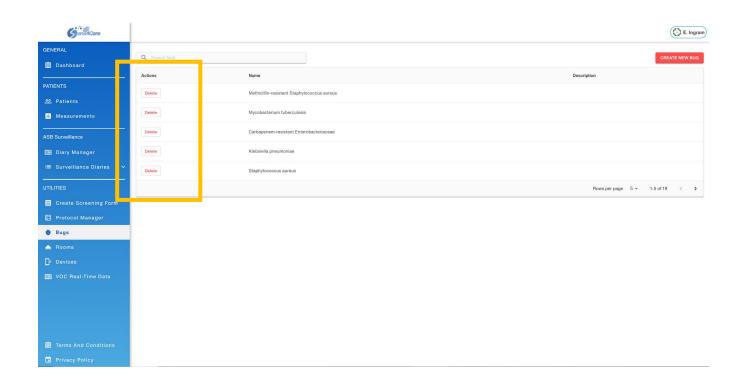
6.3 Bugs

In this section you can find a list of all the bacteria in your Sens4Care database, complete with name and description. All (and only) the entries in this list can be tagged or used throughout the rest of the Sens4Care platform for enhancing other features. For example, a bug in the list can be tagged to create a report in the *SURVEILLANCE DIARY SECTION* (see the relevant chapter for more detail).

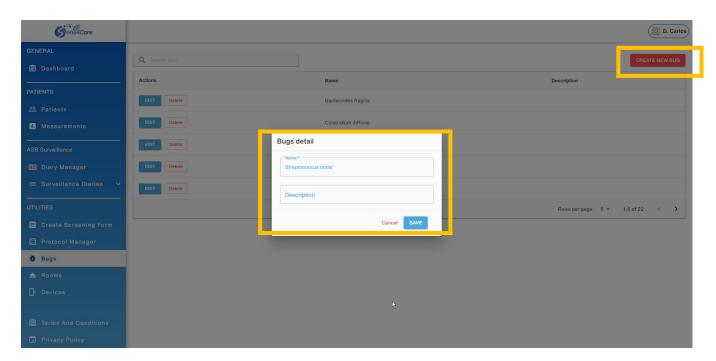


Upon accessing the section for the first time, a pre-loaded list of default entries is immediately available.

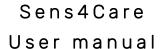




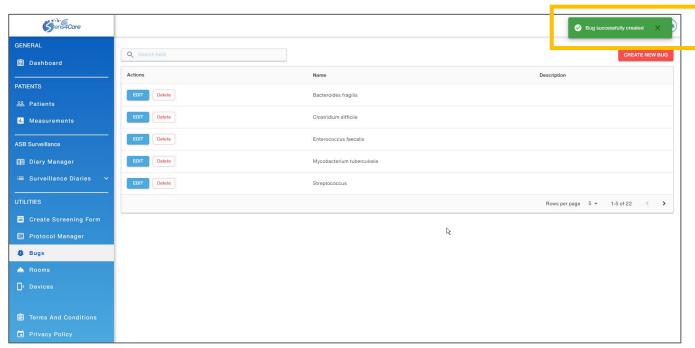
Bugs detected by devices are automatically inserted in this list and can only be deleted, not edited.



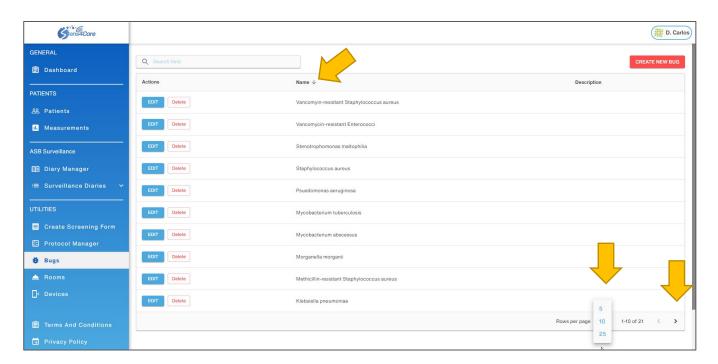
You can create a new bug entry using the *CREATE NEW BUG* button on the top right corner. Simply enter a new name (mandatory) and a description (optional) and then click the *SAVE* button.







A green confirmation feedback on the top-right corner will indicate that a new bug has been created and will now appear in the list.

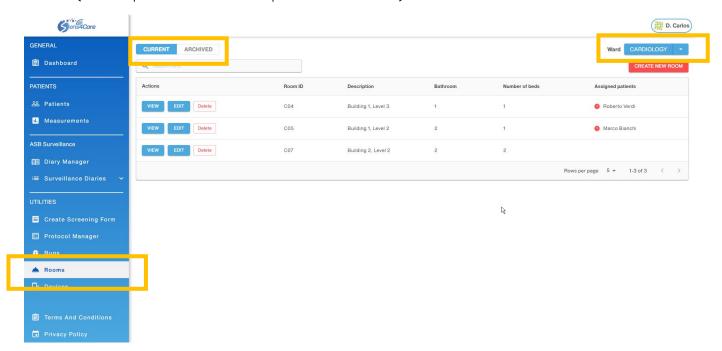


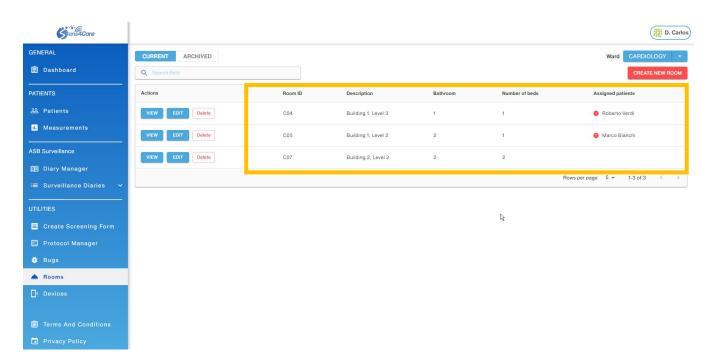
The list can be ordered alphabetically by single clicking the "Name" or the "Description" column title. You can also choose the maximum number of entries per page (5, 10 or 25) using the dedicated dropdown menu. To change page just click on the arrow button on the bottom-right corner of the list



6.4 Rooms

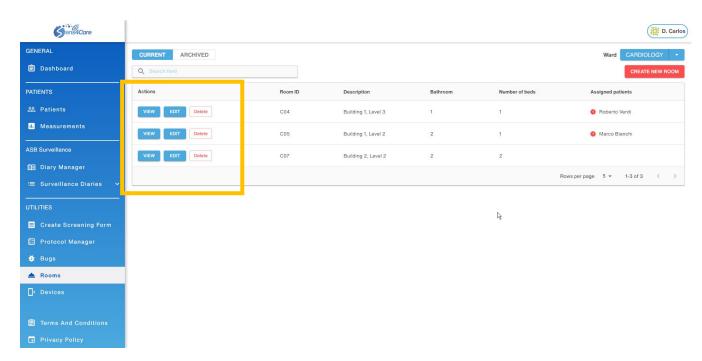
In this section you can find the list of all the rooms you have created for your facility, grouped by unit/medical ward and divided in CURRENT and ARCHIVED. All (and only) the entries in the CURRENT list can be tagged or used throughout the rest of the Sens4Care platform for enhancing other features. For example, a room in the CURRENT list can be tagged to create a report in the *SURVEILLANCE DIARY section* (see chapter the relevant chapter for more detail).



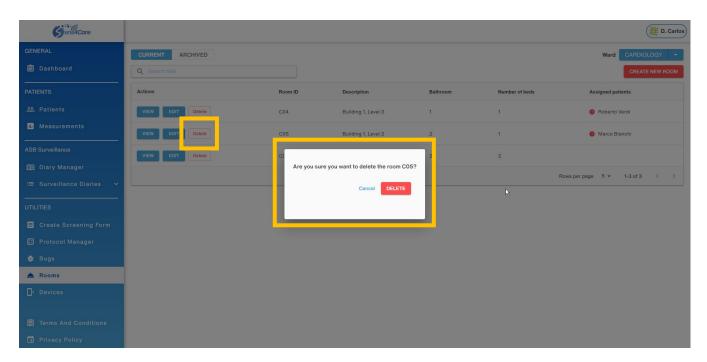


Each room entry is composed by the following parameters: room ID (mandatory), Description, Number of Bathroom, Number of beds, Assigned patients.



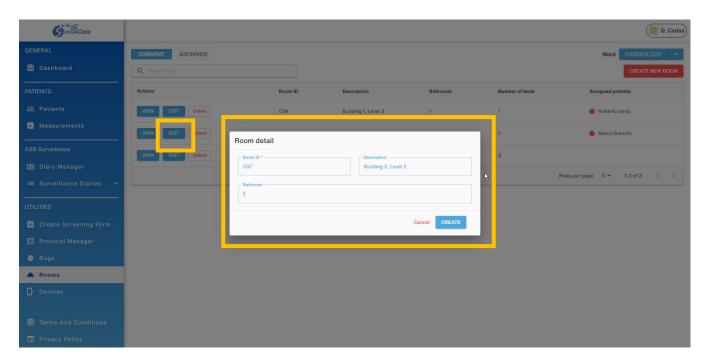


To DELETE, VIEW or EDIT a room entry, you can use the buttons on the left side of the table, under the Actions category.

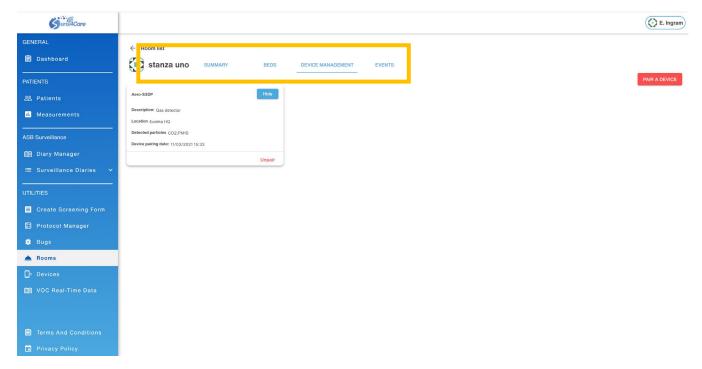


If you *DELETE* an entry, the room is actually ARCHIVED and no longer available for other operations in the Sens4Care platform.





If you *EDIT* an entry, you can change <u>only the following parameters:</u> room ID, Description and Number of Bathroom.

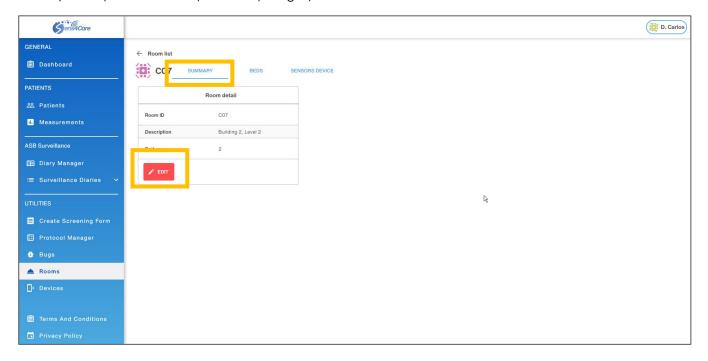


If you VIEW a room entry you are taken into a sub-section with 4 SELECTABLE TABS: **Summary, Beds Device Management** and **Events**.



Summary

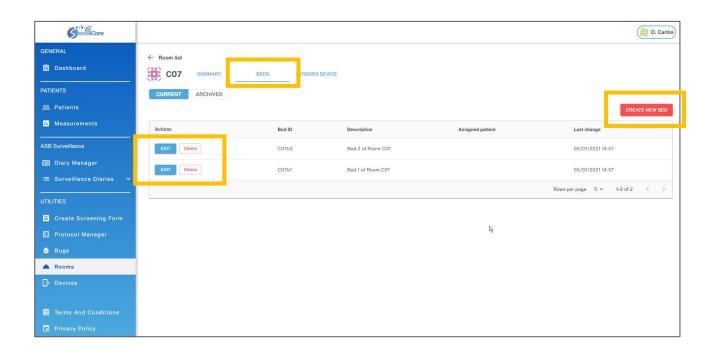
Inside the *Summary* tab you can review the three main room parameters for each room: *room ID, Description* and *Number of Bathroom.* You can also change these parameters using the *EDIT* button, exactly as explained in the previous paragraph for the main Room section.

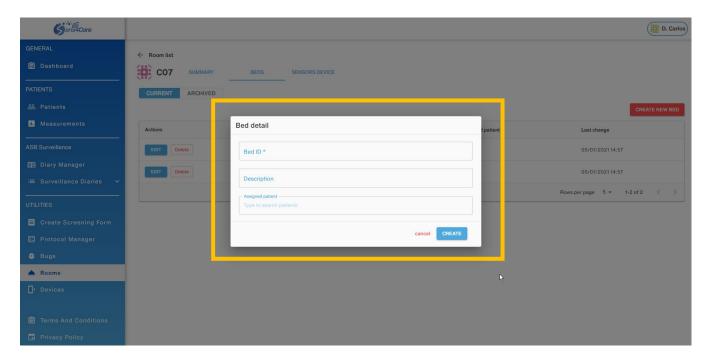


- Beds

Inside the *Beds* tab you can manage existing beds for a specific room, using the *EDIT* and *DELETE* buttons under the *Actions* category. You can also create new beds with the *CREATE NEW BED button*.

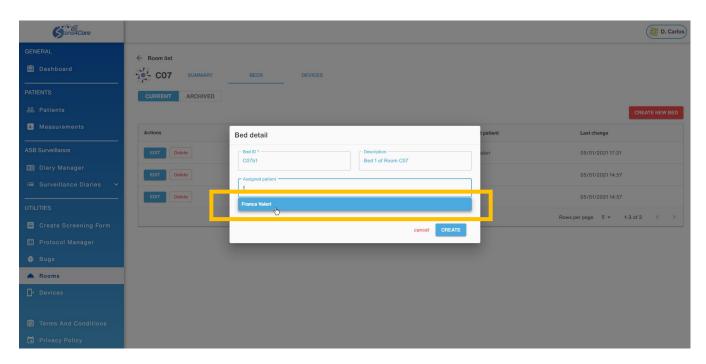






Accessing the *Bed detail* pop-up (either though the EDIT button on existing entries, or the CREATE NEW BUTTON for the new ones) you are can always change the main bed parameters: *Bed ID* (mandatory), *Description* and *Assigned patient*.

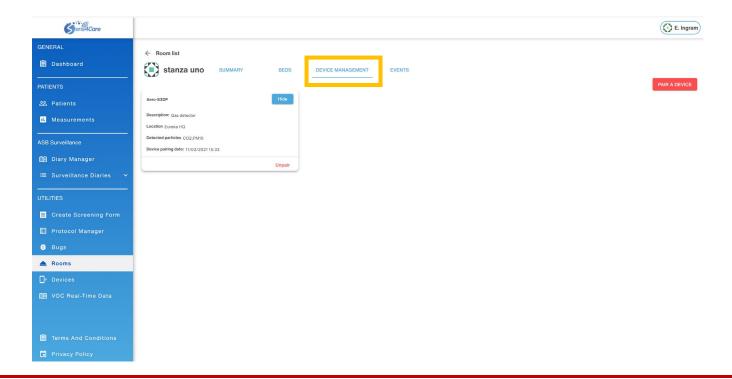




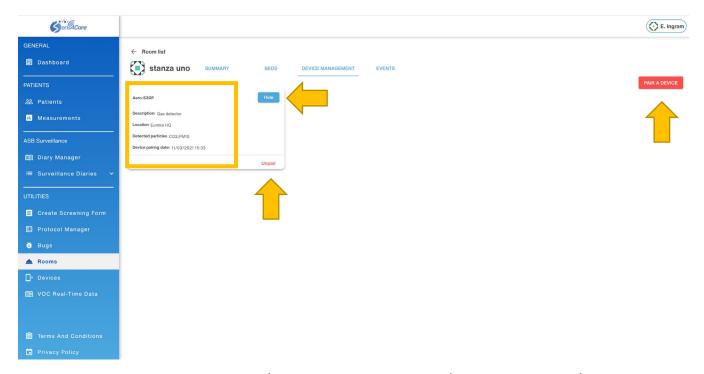
<u>IMPORTANT</u>: before you can assign a patient to a room, a patient entry must be created in the *PATIENTS* section first. Otherwise, you won't be able to select the patient's name in the *Bed detail* popup (refer to the relevant paragraph for more detail)

- Device Management

Inside the *Device Management* tab you can view and manage all currently active sensors in the selected room, as well as assign (pair) new sensors to the room itself.



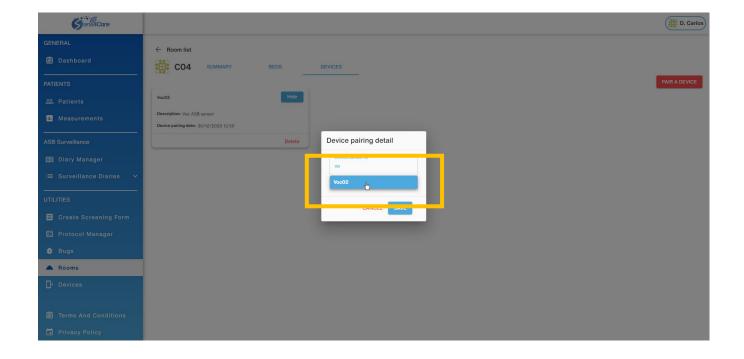




Each sensor is represented by a tile (expandable via the SHOW/HIDE toggle button), containing the detail of the sensor: Name/Sensor ID (Mandatory), Description, Location, Detected particles and Device pairing date (auto-generated).

You can UNPAIR an assigned sensor by clicking the UNPAIR button.

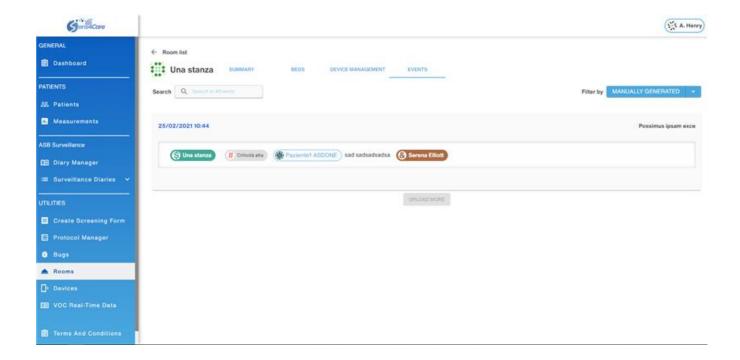
You can PAIR an unassigned sensor by clicking the red PAIR A DEVICE button.





- EVENTS

The tab *Events* contains all the events of the room. You can filter them with the blue drop-down menu on the top right between manually generated, automatically generated (from VOC Real-time Data) and all. See the events sections in previous chapters for more information about managing events.



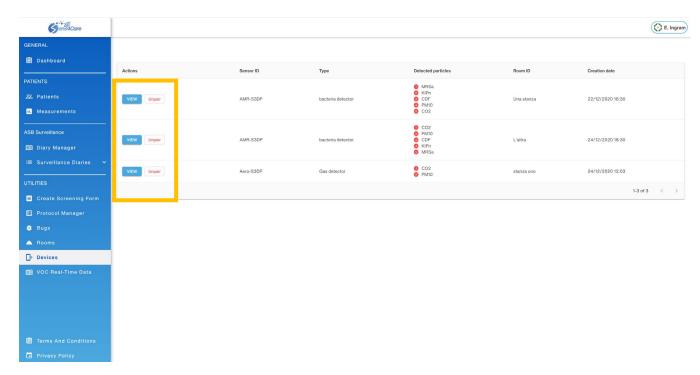
6.5 Devices

In this section you can review and manage all the ASB devices available in your facility,

Upon accessing the section for the first time, the device list is already populated with a set of available ASB devices provided by the Sens4Care consortium, with type, detected particles and the room where they are located (if paired).

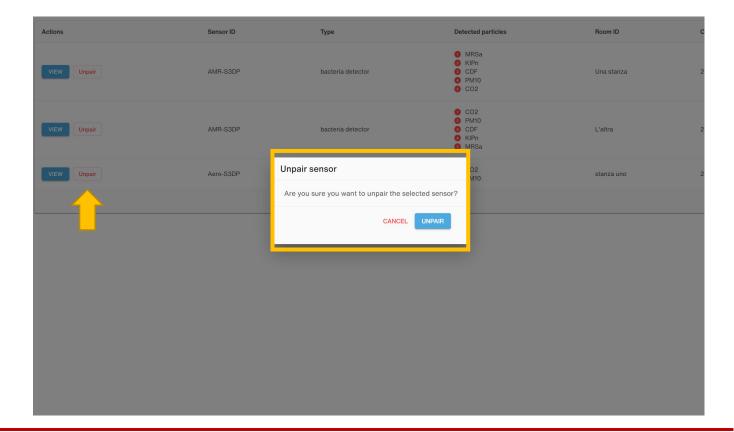
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Using the buttons on the left side of the table, you can VIEW device data or you can PAIR/UNPAIR the device (upon confirmation).

PAIRING/UNPAIRING a sensor in this section creates the same results as the corresponding action in the *ROOMS* section: the paired/unpaired sensor will (not) be active (anymore) on the room it is assigned. See the previous paragraph for more information.

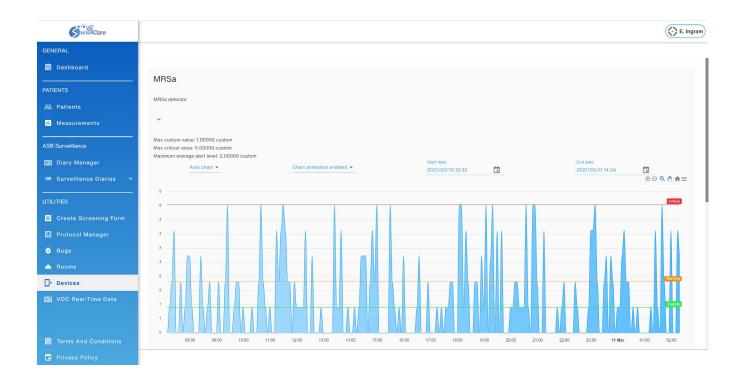




By pressing VIEW, you will be shown a list of the detected particles of the device.



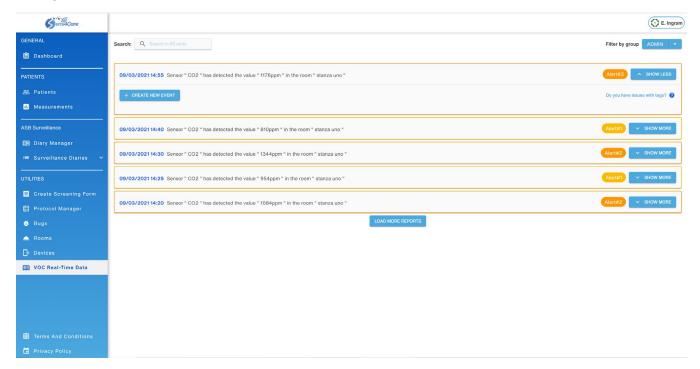
If you expand one of them, you get a chart of the data collected and you can select a timeframe and the kind of chart. It is recommended to select a small interval (2-3 days) in order to have a more readable chart and to load it fast.





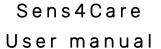
6.6 VOC Real-Time Data

In this section you can find a list of the latest critical data coming from all the sensors. Each record contains the kind and value detected by a sensor, the room where it is located, persons associated with that room and the level of alert. You can filter them by group with the drop-down button on the top right.

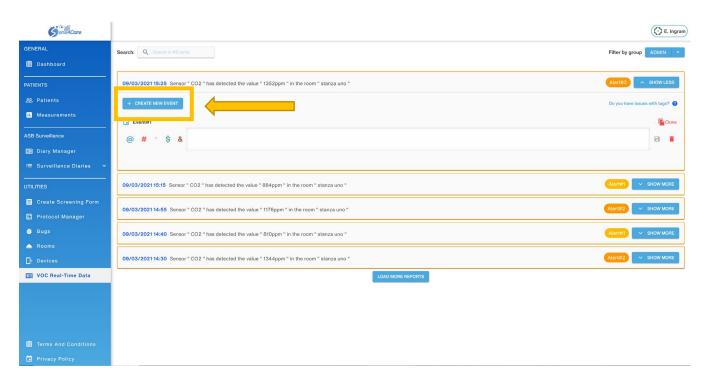


These records are automatically created by the device with data coming from the sensors.

To add information or to manage the report, you can create an event for that record by pressing the blue "+ CREATE NEW EVENT" button.







See the events sections in previous chapters for more information about managing events.

