



Mobile Launcher User Manual

Version 13.0

2022-07-19

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1. Mobile Launcher



For information about the Product environment, precautions, warnings and intended use see USR ENG Digistat Care (for the Digistat Suite EU) or USR ENG Digistat Suite NA (for Digistat Suite NA). The knowledge and understanding of the appropriate document are mandatory for a correct and safe use of the Mobile Launcher, described in this document.

Mobile Launcher is the common environment shared among all the modules of Digistat Mobile. Digistat Mobile is an Android application designed to bring some of the Digistat Suite functionalities directly “in the hands” of nurses and clinicians.

Mobile Launcher acts as a container for the Digistat Mobile modules. Each module is designed to provide specific information and to present it to the staff in a clear and concise way.

1.1 Information for the user

Please read carefully the following warnings.



In case of disconnection of the Mobile Launcher application a specific notification is generated, consisting of a characteristic and persisting sound and vibration. Sound duration is configurable. The sound is repeated until the connection is reestablished. Connection is automatically reestablished as soon as possible.



The mobile device should always be kept by the user either in direct contact or close enough to be clearly audible.



The Mobile Launcher application may display personal and/or confidential information. It is therefore recommended to not leave unattended the handheld device on which the Mobile Launcher application runs or, in case, to always logout before leaving it unattended.



Mobile Launcher can be closed by the user. After that, the application will not send any other notification.



Because of the Android architecture, in exceptional cases, which are hard to foresee, the operating system can close the Mobile Launcher application. After this event, the application will not send any other notification.



The mobile device must support the vibration mode.



Use the sound check procedure to verify if the audio on the workstation/handheld device is correctly working (see related paragraph for the procedure).

1.2 Start-up



At first run, the user is requested to provide some basic authorizations and then is automatically redirected to the Settings page. Read the related paragraphs in the Digistat Suite configuration and Installation manual. Note: the first run must be performed by technical, authorized and trained personnel.

To open the Mobile launcher:

➤ Touch the  icon.

The following screen is displayed (Fig 1).

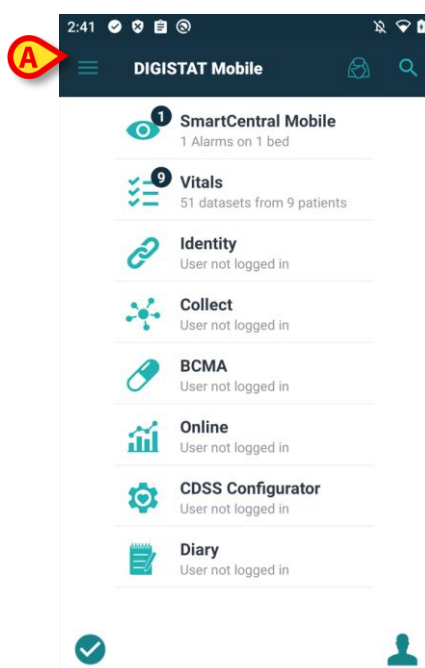


Fig 1

The available modules are listed on the page. Touch one of the rows to open the corresponding application.



If a module fails to load server-side, the module does not open. A “Wrong configuration” error message is then displayed. In these cases, contact the system administrators.



If the license for a module is not available, the module does not open. In this case a “License not available” indication is displayed below the module’s name and a “Refresh” button is displayed on the left. Tap the button to try to load the module again (a license becomes available if another device is disconnected). See Fig 2 for an example.



Identity
License not available

Fig 2

1.2.1 Monitoring of application execution

After the Mobile Launcher application is started, it is monitored to be always running. If it stops, it is restarted. This restart is immediate and automatic with the exceptions of:

- Stop caused by configuration procedure. In this case, the service automatically restarts when the configuration procedure is completed. See the Digistat Suite configuration manual for more information;
- Manual stopping. In this case the service must be manually restarted. See the Digistat Suite configuration manual for more information.

1.3 Login

User login is required to access the Digistat Mobile Launcher.

To login to Mobile Launcher

- Touch the **Login** icon on the lower-right corner of the “Applications list” screen (Fig 3 A)

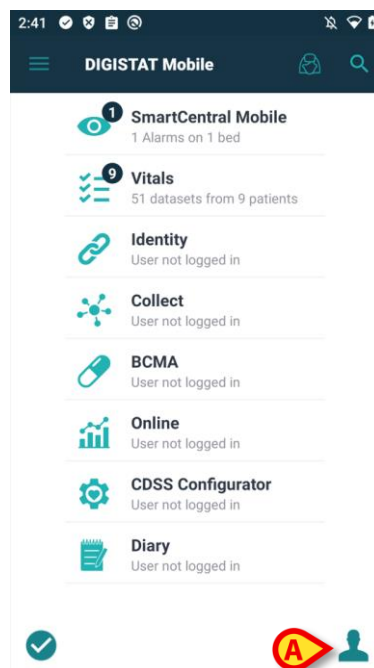


Fig 3

The following screen will be displayed (Fig 4):

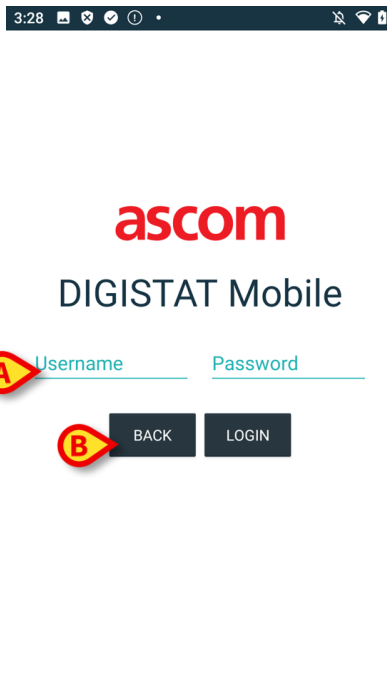


Fig 4

- Insert username and password (Fig 4 **A**).
- Touch the **Login** button (Fig 4 **B**)

1.3.1 Login with PIN code



The present procedure can be performed only if the login procedure is managed by Mobile Launcher i.e. NOT with Myco Launcher.

The “Login with PIN code” is a login procedure quicker than the usual one. For this purpose the system administrator provides the user with:

- a NFC tag, whose scheme triggers the procedure;
- a PIN code i.e. a numeric code generated when the user account is created.

To Login via PIN code:

- Put the NFC tag close to the back of the mobile device.

A window making it possible to insert the PIN code in the place of the password is shown.

- Touch the “PIN” text field.

The numeric keyboard allowing the PIN code insertion is displayed:

- Insert the PIN code and touch the **LOGIN** button.



Specific messages alert the user if:

- The procedure is attempted when the mobile application is not running;
 - The user is already logged in.
-

1.3.2 Ascom Myco launcher

The Ascom Myco Launcher is one possible user interface for the Myco 1 and 2 handset and provides functionality to access central functions as alert handling, messaging, and launching apps. The Ascom Myco Launcher can replace the standard Android launcher, while still providing access to Android functionality.

The Ascom Myco Launcher is only available on Myco 1 and Myco 2 devices when integrated with Unite. It requires Digistat Mobile version 5.1.3 or newer.

The Mobile Launcher can run on the rightmost page of the Myco Launcher.

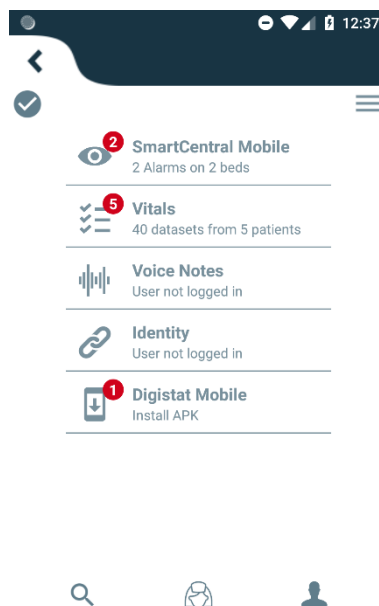


Fig 5

In this case the screen layout is slightly different from that described in this manual. The procedures are the same.

1.3.3 Login with BadgePIN code



The present procedure can be performed only if the login procedure is managed by Mobile Launcher i.e. NOT with Myco Launcher.

The “Login with BadgePIN code” procedure is very similar to the “Login with PIN code”: the user login is the same as explained in the paragraph 1.3.1.

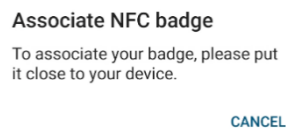
The login shall be granted once the following information are set for the user going to Configurator Web > System Administration > User Account page and Account tab:

- **BadgeID.** The ID stored in the NFC-equipped badge provided to the user;
- **BadgePIN.** A numeric code of at least 5 digits.

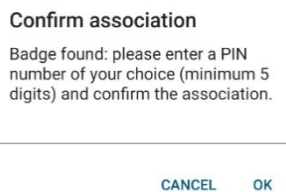
The only difference is that the user, with the specific permission from the Healthcare Organization, can set by himself the couple BadgeID/BadgePIN. For more information refer to the *Digistat Suite Configuration Manual*.

If the user has set BadgeID/BadgePIN by himself, they must perform the following actions during the first login attempt:

- Login via username/password, just as explained in the paragraph 1.3.
The following screen is shown, allowing the user to define their BadgeID via NFC tag scan:

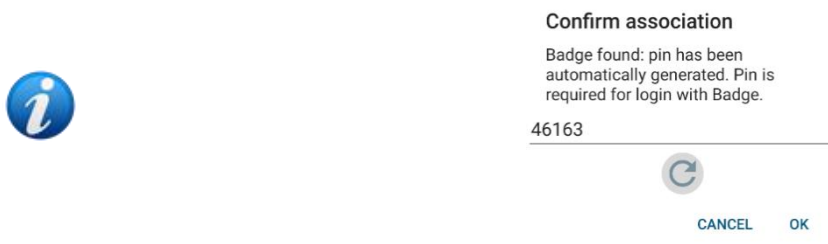



- Put the mobile device close to the user badge, in order to scan the NFC tag.
If the NFC tag of the user badge is successfully scanned, the following screen will be shown, allowing the user to define the BadgePIN:



- Set the BadgePIN as desired. Keep in mind it should be a sequence of at least 5 digits.


The procedure can be customized to suggest the user a random BadgePIN however customizable (see the *Digistat Suite Configuration Manual* for further information). The above screen will be replaced by the following:



- Touch the  symbol to generate a new random BadgePIN or touch the BadgePIN itself to edit it.

- Touch the **OK** button to confirm.

In the “Login with BadgePIN code” the user is also allowed to replace a BadgeID / BadgePIN couple: just as example, in case of loss of the physical badge. In this case the user shall do the following actions:

- Login via username / password, as explained in the paragraph 1.3.
The main page of Mobile Launcher will be shown.
- Touch the  icon allowing to open the lateral menu (see paragraph 1.4).
The following screen will be shown.

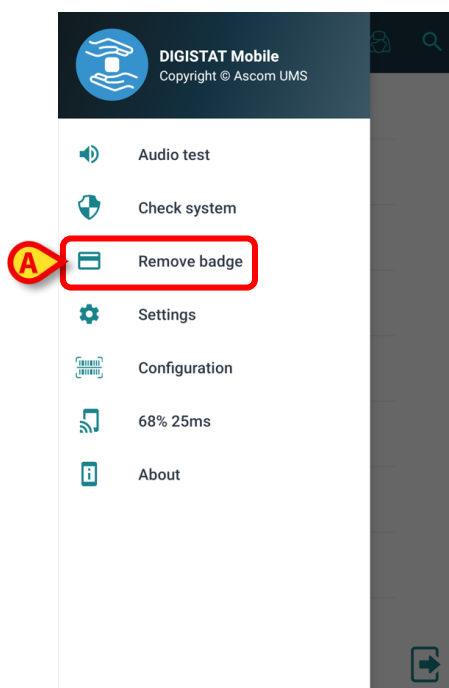
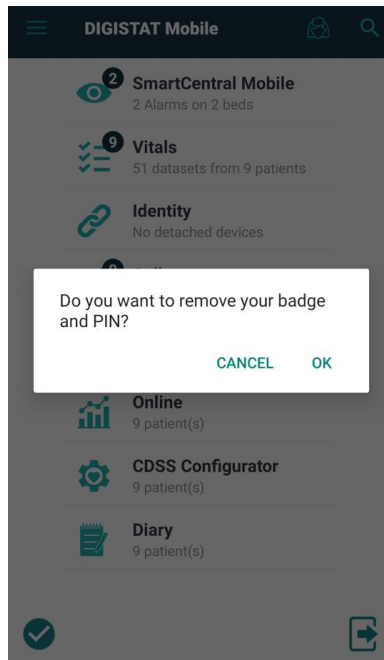



Fig 6

- Touch the **Remove badge** button (Fig 6 **A**) to reset both the BadgeID and the BadgePIN.
The following screen is shown, reporting a dialog window asking the user for confirmation:



- Touch the **OK** button to confirm.
A toast notification warns the user about the successful reset of BadgeID / BadgePIN credentials.
- Repeat the steps explained above to associate a new BadgeID / BadgePIN couple.

1.4 Lateral Menu

The  icon on the home page opens a menu containing different options (Fig 7).

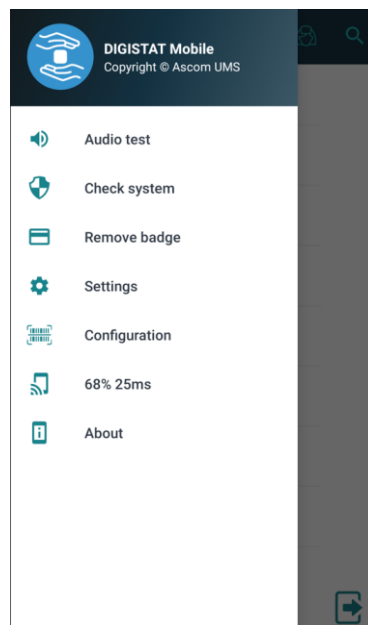


Fig 7

These are:

Audio test

Touch the **Audio Test** button to test the sound-vibration associated to the notifications (see paragraph 1.7).

Check system

Touch this item to perform the Check System procedure (see the Digistat Suite configuration manual).

Remove badge *(only present in some configurations of the Mobile Launcher).*

Touch this item to remove a registered BadgeID allowing to login via NFC. Read the paragraph 1.3.3 for more information.

Settings

Touch this option to access the Settings screen (see the Digistat Suite configuration manual for more information).

Configuration

Touch this item to access the configuration update feature via QR code (see the Digistat Suite configuration manual for more information).

Wireless connection status

Indicating the wireless connection status.

About

Touch this option to open a screen containing general info about the Product and Manufacturer. Please read the Product Manual for a complete information on this topic.

1.5 Upper notification bar

The upper notification bar (Fig 8) is always visible and displays general information. It is not available when running on Myco launcher.

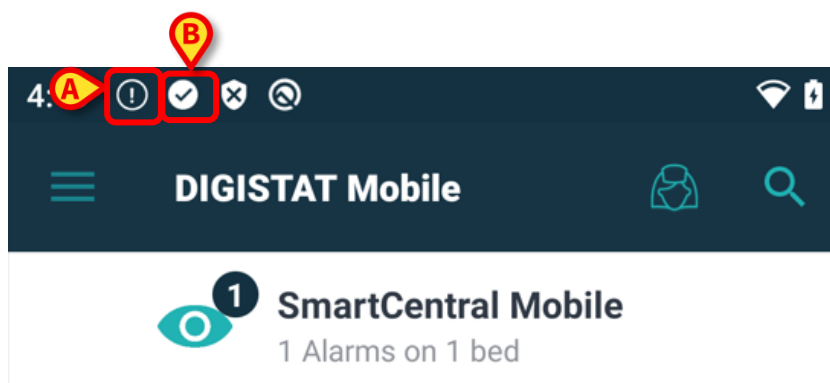




Fig 8

An icon placed on the top-left corner (only visible in non-Myco/UNITE devices - Fig 8 **A**) is displayed in case of alarm notifications for at least one of the patients, coming from any module. The symbol displayed in Fig 8 **B** indicates that the module is active, otherwise a bell icon  and a crossed circle icon  will be displayed to respectively indicate that the service has stopped working and the application is disconnected. On the top-right corner the Wi-Fi connection status and Battery charge status information is displayed (Fig 8).

1.6 General System Notifications

Mobile Launcher provides short notifications of alarms/messages coming from any installed module when the application is not active as well (Fig 9 **A**). The highest level notification indicates the overall alarm level of the Mobile Launcher application. At the moment are implemented three levels of severity for the notifications, each of them corresponding to a different color (red = high priority – yellow = medium priority – cyan = low priority); in addition a purely informative notification is foreseen just as reminder for the user (purple).

For each module a row in the notification area is foreseen. Any change in the notifications is performed within the row related to the module triggering notification change.

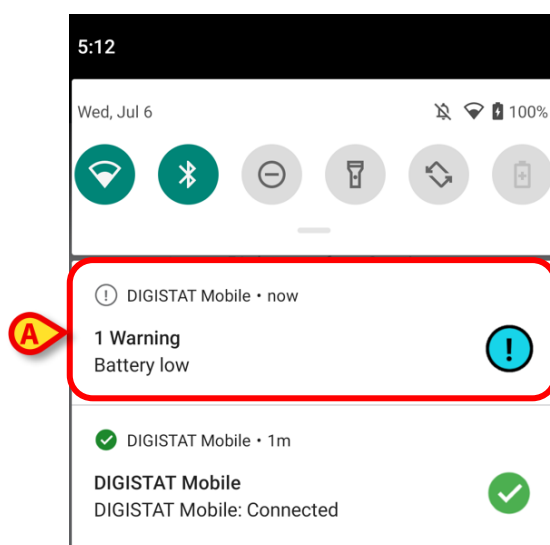


Fig 9

- Swipe the notification to make it disappear.
- Touch the notification to directly access the relevant module/patient (see an example in Fig 10).

If the alarm notification from a module is related to one patient, then by touching it the alarmed patient tab is displayed; moreover, if the alarm notification is raised for more than one patient, by touching it the list of alarmed patient is displayed.

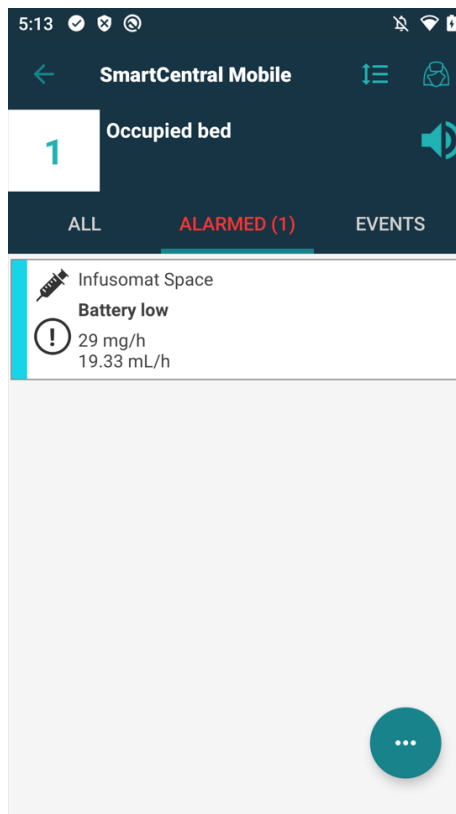


Fig 10

According to the device type, notifications concurrently coming from different applications of the Product mobile suite have a different LED color behavior

- **Myco 3.** The LED always reflects the higher priority alarm at any time;
- **Non – Myco 3.** The LED reflects the latest notification color.

This means in case of multiple notifications, when swiping the higher priority one on a Myco3 device, the LED color is the one of the next notification. On non Myco3 devices, the LED is disabled after a swipe.

In addition to screen notifications, the Product is able to handle sound notifications by means of the device speaker and light notifications by means of the notification led.

In the case of sound notifications, the Product ever plays the notification with higher priority; if a notification is being executed and a new alarm has to be raised, then the Product restarts the notification with higher priority. Notifications with low priority level don't have any sound associated.

In case of service stop, a notification is provided to the user: it has the highest level of severity and it's not swipable.

In case of disconnection, the Product mobile client attempts to reconnect to the Product server. If this attempt fails, a not-swipable system notification is provided to the user, according to the following two different options:

- **Android previous than 8.0.** One notification, non swipable, highest priority level. The user can mute it by pushing the **Mute** button;

- **Android 8.0 and later.** Two notifications, one non swipable without sound or LED color, the second one swipable with the highest priority level, reporting useful information about the cause of the disconnection. Moreover, the second notification will not be shown anymore since the user pushes the **Mute** button.

1.7 Sound Check procedure



The Sound Check procedure shall be performed at least once per shift.

The Sound Check Procedure makes it possible to verify if the sound notification of alarms is working properly.

To perform the “Sound Check” procedure

- Activate the main screen of Mobile Launcher application (Fig 11).

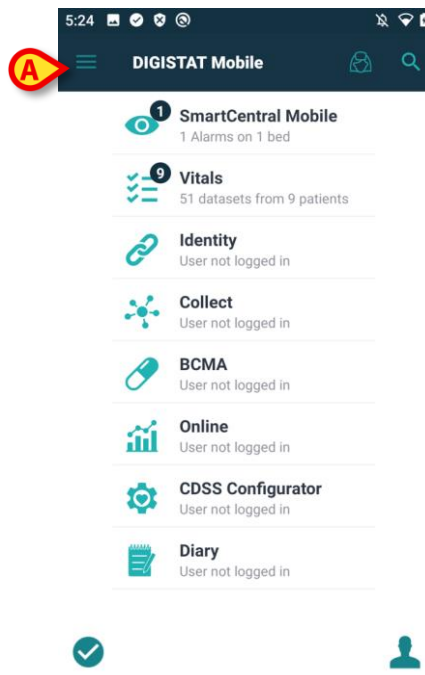



Fig 11

- Touch the  icon on the top-left corner of the screen (Fig 11 **A**)

The following menu will be displayed (Fig 12).

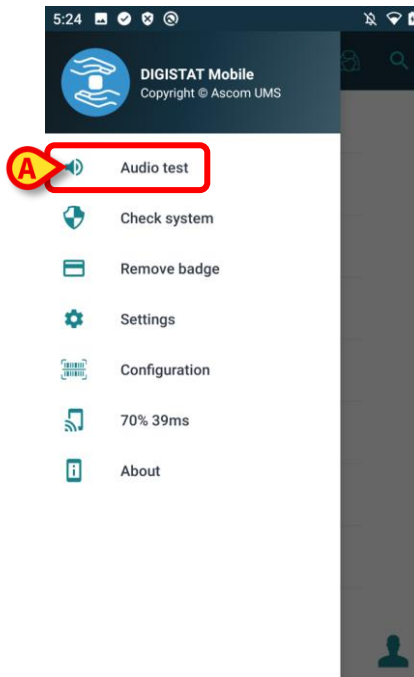


Fig 12

- Touch the **Audio test** option (Fig 12 **A**).

A test notification/sound will be this way provided (Fig 13 **A**).

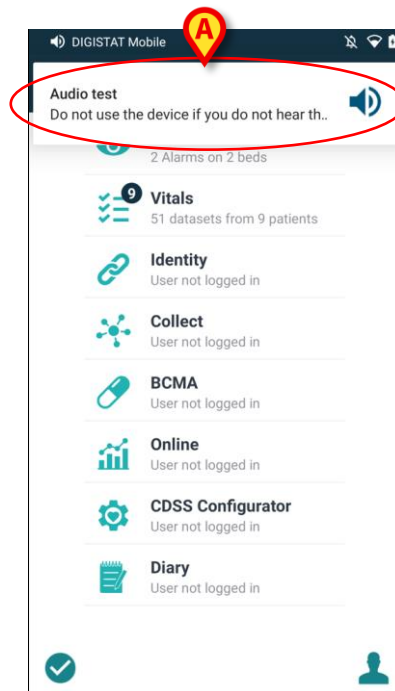


Fig 13



Do not use the device if you do not hear the alarm sound and/or feel the device vibration.

1.8 Patient search functionalities

The Product implements several patients search tools. These tools can be accessed from the Patients List screen.

To access the search functionalities

- Touch the icon indicated in Fig 14 **A**.

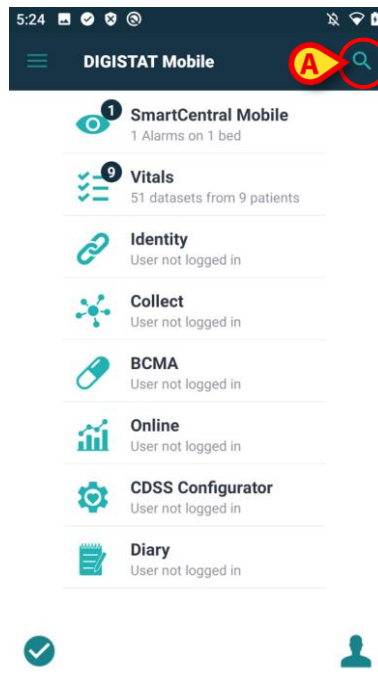


Fig 14

The following screen will open (Fig 15).

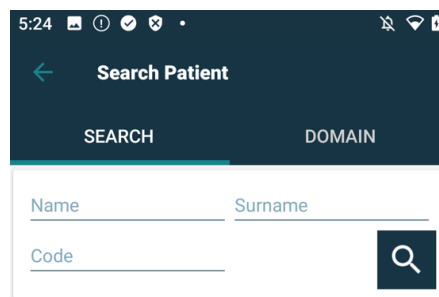


Fig 15

Three search options are available:

1. Textual search (see paragraph 1.8.1);
2. Barcode scan (see paragraph 1.8.2);
3. NFC code scan (see paragraph 1.8.3).



It is possible to configure the Patient Search functionality to limit the search of dismissed patients to a fixed time interval. Contact your system administrators for the available options.

1.8.1 Textual search

- Insert patient data in the fields indicated in Fig 16 **A** (name, surname, code), then click the **Search** button (Fig 16 **B**). Partial information is allowed.

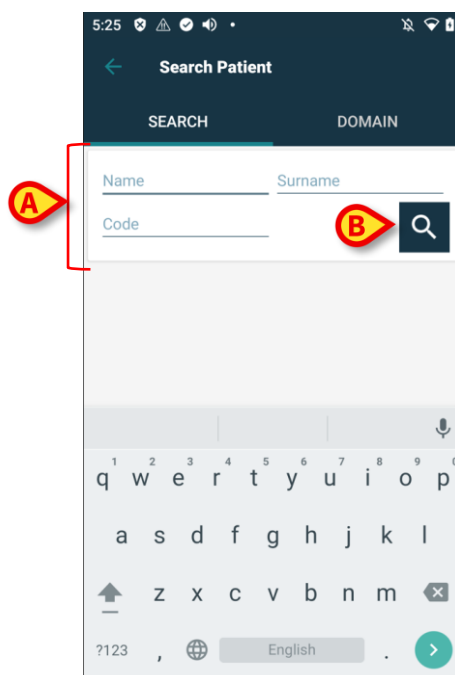


Fig 16

The list of patients whose data match those specified will be displayed (Fig 17).

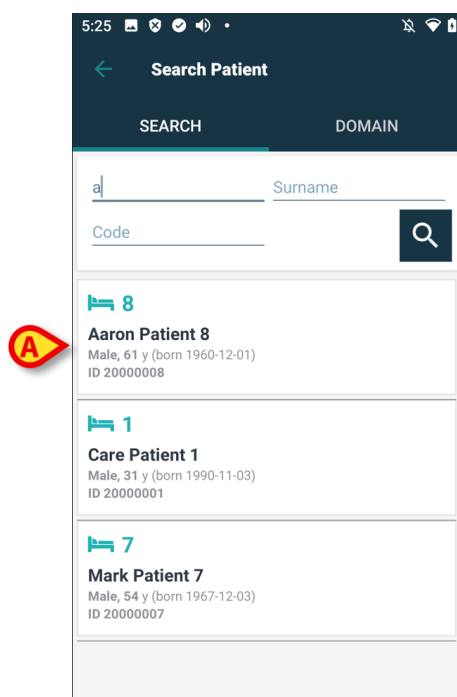


Fig 17

The search is performed among all patients, both belonging and not belonging to the device domain. If the patient is currently in bed, the bed number is displayed on the left.

- Touch the box corresponding to a patient to select the patient. User confirmation is required (Fig 18).

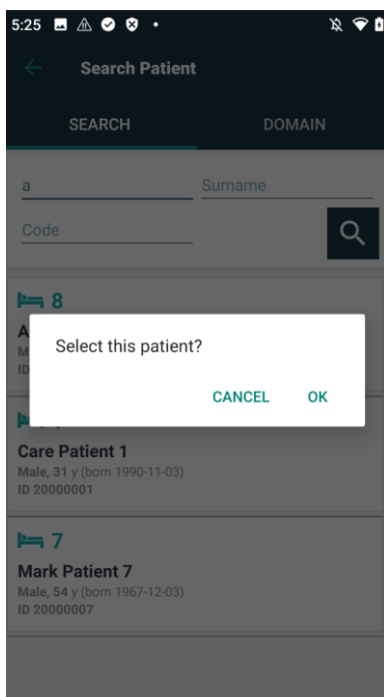


Fig 18

- Touch **Ok** to confirm.

The patient will be this way selected (Fig 19).

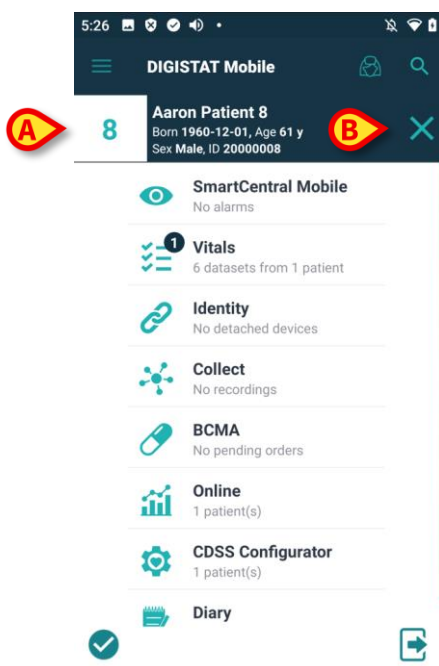



Fig 19

Patient data are on top of the page (Fig 19 **A**). All the data in all the Mobile Launcher modules are now filtered by patient (i.e. all and only the selected patient alarms/notifications are displayed).

- Touch the cross indicated in Fig 19 **B** to deselect the patient and turn to “All Patients” mode again.

1.8.2 Barcode Scan search

The Barcode Scan functionality makes it possible to select a patient by scanning his/her code. To access the Barcode Scan functionality on non-Myco 3 devices:

- Access the search page as described in paragraph 1.8.
- Touch the  icon indicated in Fig 20 **A**

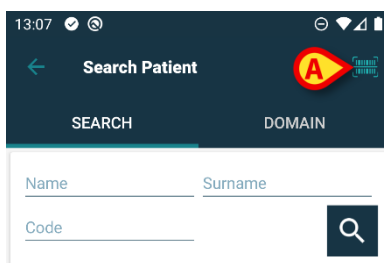


Fig 20

The device camera will be in this way activated.

- Scan the wanted patient's barcode.

To access the Barcode Scan functionality on Myco 3 devices:

- Access the search page as described in paragraph 1.8.
- Touch the side button dedicated to barcode scan (the button indicated in Fig 20 **A** is not present in this case);

The flash camera turns on to help the user to shoot the barcode. At the same time, a message is shown to the user signaling the barcode scanning:

The patient is this way selected. The screen shown in Fig 19 (example) will be displayed.

If the barcode is not within a certain configured time, a “Timeout” message is displayed.

1.8.3 NFC Reader search

The NFC Scan makes it possible to select a patient using the device's own Near Field Communication sensor.

To do that:

- Access the search page as described in paragraph 1.8.

The device NFC reader will be this way activated.

- Position the device close to the patient's Tag.

The patient will be this way selected. The screen shown in Fig 19 will be displayed.

1.8.4 Single Patient Selection

To select a single patient:

- Touch the icon indicated in Fig 14 **A**. The following screen will appear (Fig 21 **A**):

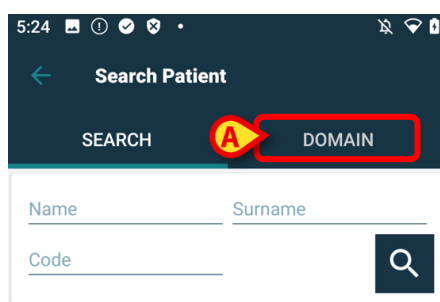


Fig 21

- Touch the “**DOMAIN**” tab. The following window shall appear (Fig 22)

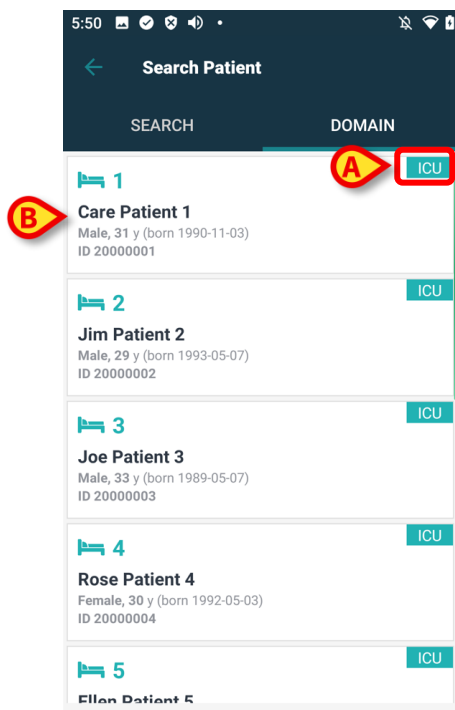


Fig 22

In Fig 22 all the patients are listed, without regard to their domain. The label on the top right corner of each tile highlights the domain of the patients (Fig 22 **A**).

One single patient can be selected by touching the tile corresponding to his/her bed. Just for example:

- Touch the tile indicated in Fig 22 **B**. User confirmation is required (Fig 23).

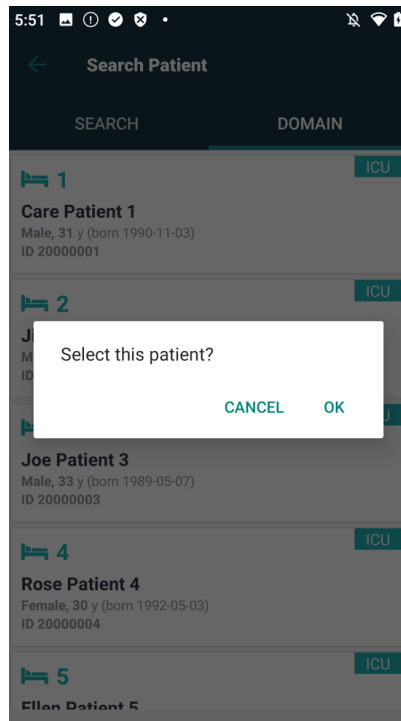


Fig 23

- Touch **Ok** to confirm. After confirmation, the following screen is displayed.

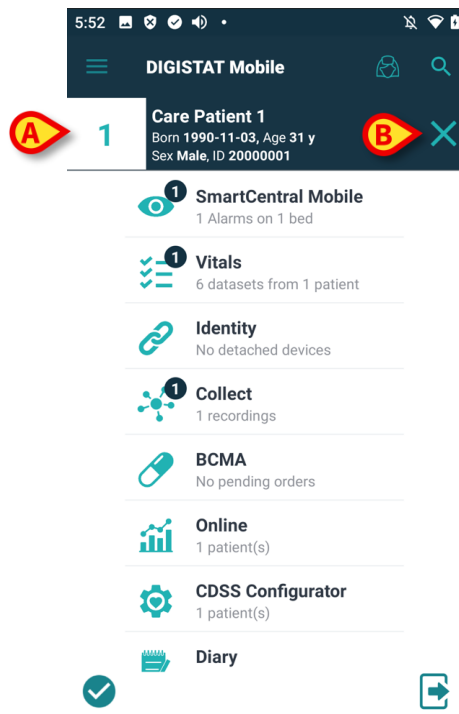


Fig 24

Patient data are on top of the page (Fig 24 **A**). All the data in all the Mobile Launcher modules are now filtered by patient (i.e. all and only the selected patient alarms/notifications are displayed).

- Touch the cross indicated in Fig 24 **B** to deselect the patient.

1.9 Patients Assignment Functionality

Patient's assignment makes it possible for a user to select one or more patients and create a group of patients who are under his charge. The name of this group in the Mobile Launcher application is "My Patients".

Since the user assigns himself some patients, the following notifications can be displayed on the handheld device:

- The notifications related to the patients assigned (i.e. in the group "My patients");
- The notifications related to the patients assigned (i.e. in the group "My patients") and those related to the patients that no one has explicitly taken in charge;
- The notifications related to the patients assigned (i.e. in the group "My patients"), those related to the patients that no one has explicitly taken in charge and those related to other patients if the devices which had them in charge "lose" them (for any reason, low Wi-Fi signal for instance).

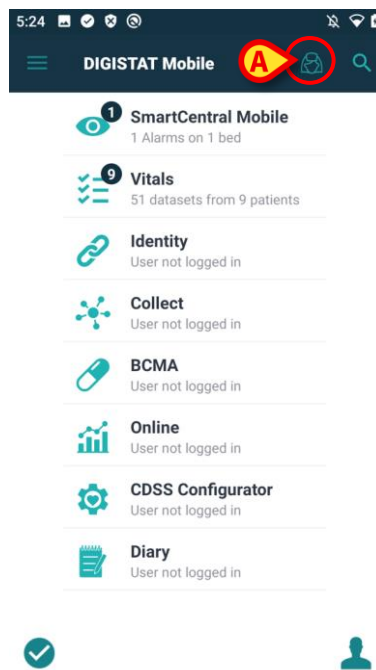



Fig 25

To select the list of patients a user assigns himself and forming "My patients" list, on Mobile Launcher Central screen,

- Touch the  icon (Fig 25 **A**).

The following screen will be displayed (Fig 26 - "Setup My Patients").

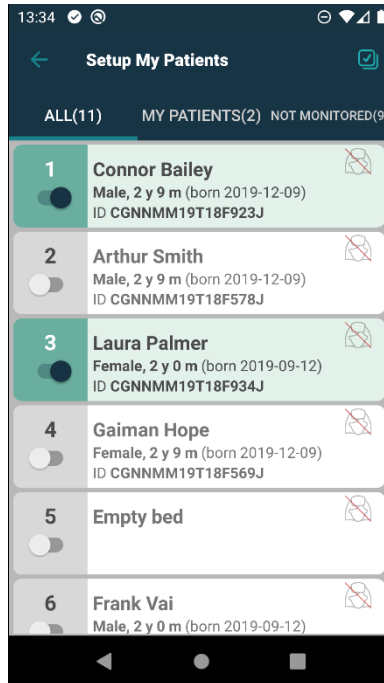


Fig 26

A patient can be selected/deselected by touching the corresponding “tile”. Each tile corresponds to a bed. Also, it is possible to select or deselect all the patients by checking the box on the top right corner (Fig 27 **A**).

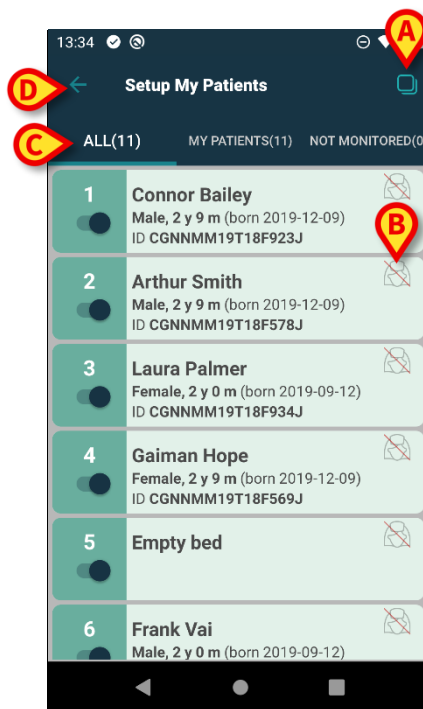




Fig 27

The icons on the right of the patient names (Fig 27 **B**) have the following meanings:

 - Patient is part of “My patients” of another user. It is still possible to select the patient. If two users select the same patient, the patient will be grouped under “My patients” for both users.

 - Patient is not monitored. I.e. another user has him/her in charge, but at the moment, due (for example) to Wi-Fi connection failure, no one is monitoring him/her.



No icon means that no one has the patient in their “My patients” list, so the patient is not monitored.

The filters indicated in Fig 27 **C** make it possible to display:

- All patients;
- Only the assigned patients;
- Only the patients that are not monitored.

The  icon indicated in Fig 27 **D** makes it possible to go back to “My Patients” list screen.



It is possible to configure the Mobile Launcher to automatically assign to the mobile device all patients belonging to the device domain. In this case, it is not necessary to manually handle the “MyPatients” group; the  /  icons are not displayed. Read the documentation related to the Digistat Suite *System Options* for more information.

1.9.1 Patient selection/assignment, modules and domain

In the present document the phrase “patient selection/assignment” was used to generically refer to the operations in which a patient is selected in order to perform some operations on him within the Mobile Launcher environment. Nonetheless, for some of the modules detailed below it would be preferable to talk about “bed selection/assignment”.

The main differences are detailed as follows:

- An application can operate within the domain or without the domain;
 - The Smart Central, Vitals and Voice Notes module operate within the domain. This implies that they can select beds or patients within the same domain of the user;
 - The Identity module operates without the domain. This means that Identity can establish an association patient/device even for patients outside the user domain;
- An application operating in the domain can handle beds or patients;
 - The Smart Central module handles a bed selection (because it could be important to track data from devices coming from a bed occupied by a patient not yet identified). This implies that Smart Central can select or assign empty beds;
 - The Vitals and Voice Notes modules handle a patient selection (because it is supposed that planned parameter acquisition is performed on patients yet admitted and identified). This implies that Vitals and Voice Notes cannot select an empty bed.

1.10 Device Availability

The setting of device availability is useful if the user has to be considered as “unavailable” for a temporary condition. This can be triggered from the user by proper actions in the mobile application or (if configured) by placing the device in its Docking Station.

1.10.1 Setting by the User

Within the product mobile application the user can set the device as “unavailable”. For all devices of its ward, the beds owned by the “unavailable” device will be considered as “unattended”. Nonetheless, the device set as “unavailable” continues receiving alarms and messages. In this case such alarms will continue triggering sounds and/or vibration.

- Touch the symbol in Fig 28 **A** to set the device as “unavailable”;

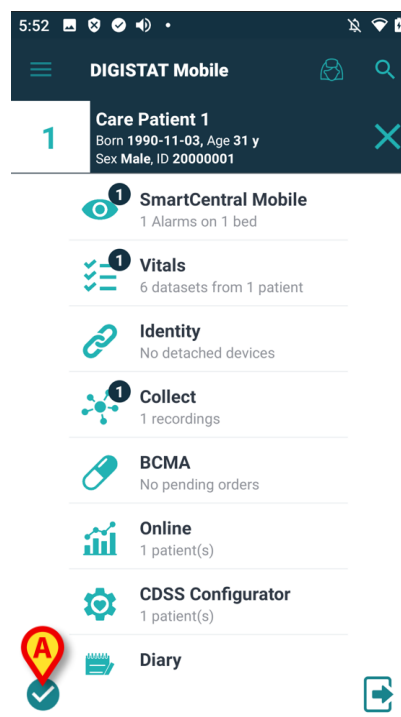


Fig 28

User confirmation is required.

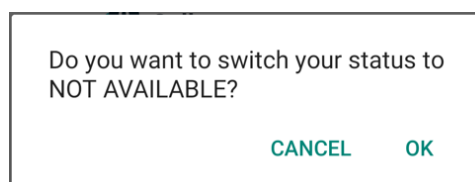


Fig 29

- Touch **OK** to set the device as unavailable.

The launcher home page will change as shown in Fig 30.

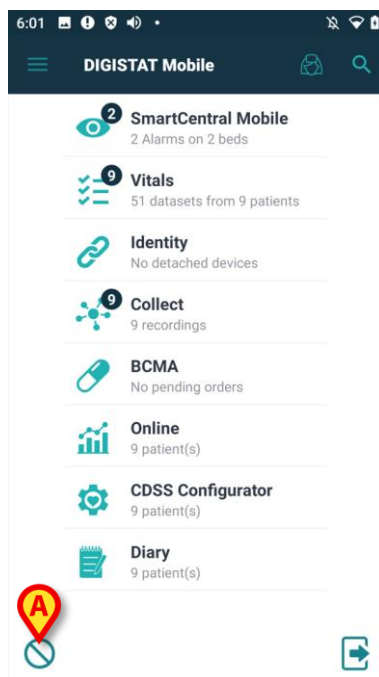


Fig 30

- Touch the symbol in Fig 30 **A** to set the device as “available”;

User confirmation is required.

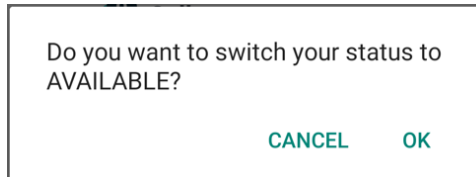


Fig 31

- Touch **OK** to set the device as unavailable.

The launcher home page will change as shown in Fig 28.

1.10.2 Setting by Docking Station

The Docking Station is an accessory device able to charge mobile devices and maintain network connection. It can host a certain number of mobile devices, thus allowing the user to change an uncharged device with a full charged one.

A specific configuration parameter has to be set in order to consider the device as “unavailable” if placed in the Docking Station.

The beds owned by the “unavailable” device will be considered as “unattended” and user will be logged out. Nonetheless, the device set as “unavailable” remains connected to mobile server and continues receiving alarms and messages. In this case such alarms will not trigger any sound or vibration.

1.11 Widgets

The Product implements a set of widgets i.e. graphic controls intended to facilitate some specific actions from the user.

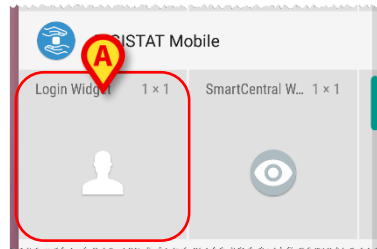


Fig 32

In the present paragraph the widget related to the overall Product mobile environment is shown.

1.11.1 Login Widget

The Login Widget allows the user to authenticate in the Product mobile application and to search and select patients. To use such a feature the user has to do the following actions:

- Push the icon shown in Fig 32 **A** and release it on the device screen.

The Login Widget as default will be placed on the device screen with size 1 x 1 (Fig 33)



Fig 33

- Push the icon in Fig 33 **A** to authenticate in the Product (Fig 34).

ascom

DIGISTAT Mobile

Username Password

BACK LOGIN

Fig 34

After the authentication, the Login Widget shows the user currently logged in:



Fig 35

- Long press the icon in Fig 33 **A** or Fig 35 **A** and then release to show grab points for widget resize (Fig 36 – left if user is logged, right if user is not logged):

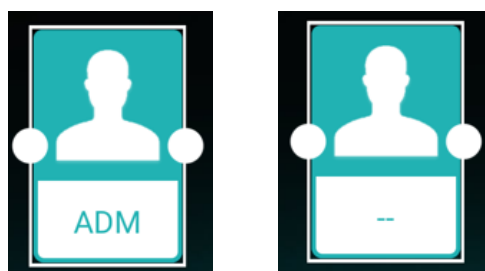


Fig 36

- Touch and move one of the two grab points and then push the desktop background to resize the widget to the size 2 x 1, 3 x 1, 4 x 1:

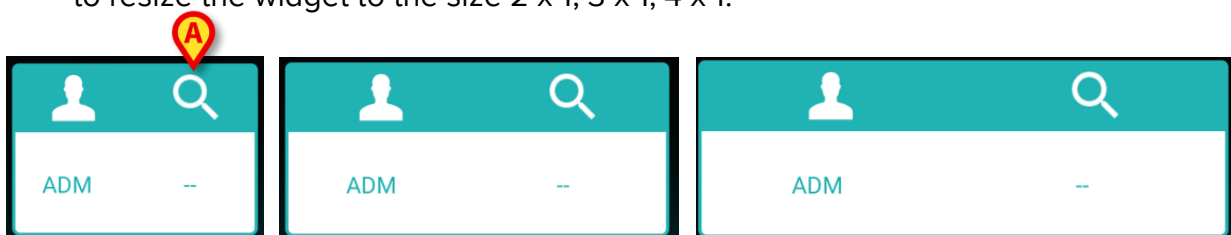


Fig 37

- Touch the icon in Fig 37 **A** to access the Patient Search & Selection functionality (Fig 38).

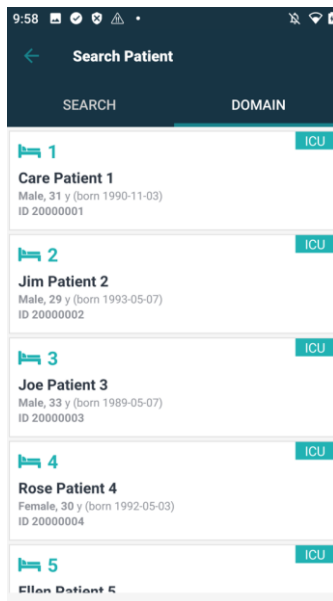


Fig 38

Such a feature is accessible only if the user is logged in.

After the Patient Selection, the Login Widget shows the patient currently selected (Fig 39):

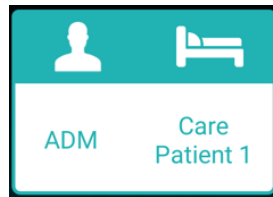


Fig 39

- Touch again the Login Widget to show the main page of the Mobile Application with the single patient selected (Fig 40):



Fig 40

Please note that in the Widget's size 2 x 1 some patient names could result too long to be correctly displayed. In this case, it is suggested to extend the size of the Widget.

If the user logs out while a patient is currently selected, the Login Widget will show a "blank view", i.e. no user and no patient will be shown.