



# **Mobile Launcher User Manual**

**Version 8.0**

**28/12/2020**

# Contents

<b>1. Mobile Launcher.....</b>	<b>3</b>
1.1 Information for the user .....	3
1.2 Start-up.....	4
1.2.1 Monitoring of application execution .....	5
1.3 Login .....	6
1.3.1 Login with PIN code.....	8
1.3.2 Login with BadgePIN code .....	9
1.4 Lateral Menu .....	14
1.5 Upper notification bar .....	15
1.6 General System Notifications.....	16
1.7 Sound Check procedure .....	18
1.8 Patient's search functionalities .....	20
1.8.1 Textual search.....	21
1.8.2 Barcode Scan search .....	23
1.8.3 NFC Reader search .....	24
1.8.4 Single Patient Selection .....	25
1.9 Patients Assignment Functionality.....	27
1.9.1 Patient selection/assignment, modules and domain .....	29
1.10 Device Availability .....	30
1.10.1 Setting by the User .....	30
1.10.2 Setting by Docking Station .....	31
1.11 Widgets.....	32
1.11.1 Login Widget.....	32

# 1. Mobile Launcher



For general and detailed information about the Product environment see the specific documents. The knowledge and understanding of these documents is mandatory for an appropriate 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 shall 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 which time 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 such event, the application will not send any other notification.

---



The mobile device shall 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



The Ascom Myco Launcher is one possible user interface for the SH1 handset and provides functionality to access central functions such 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 SH1 devices when integrated with Unite Product. In these cases Digistat Mobile can run on the rightmost page when configured to do so.



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 Installation manual (*INST ENG Digistat Suite*). Note: the first run shall be performed by technical, authorized and trained personnel.

On the Ascom Myco device, when integrated with Myco Launcher, the Mobile Launcher can run on the rightmost page of the Myco Launcher itself.

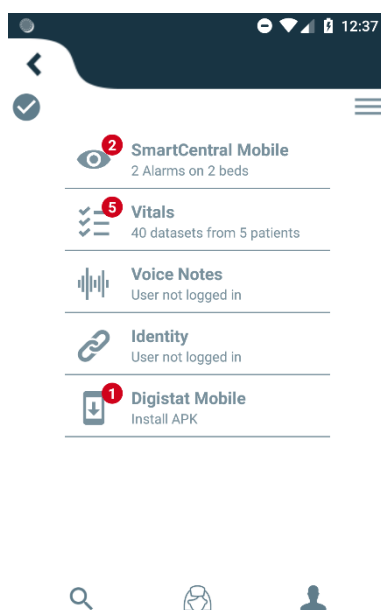



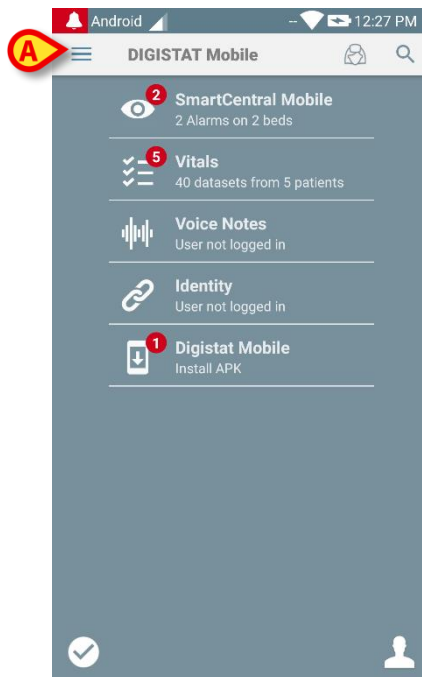
Fig 1

The available modules are listed on the page. Touch the row corresponding to the module to open it.

On the handheld device different than SH1 devices with Ascom Myco Launcher integration enabled,

- Touch the  icon.

The following screen will be displayed (Fig 2).



**Fig 2**

The available modules are listed on the page. Touch the row corresponding to the module to open it.

### **1.2.1 Monitoring of application execution**

Once the Mobile Launcher application is started, it is monitored to be ever in execution. Should happen that the application is stopped, it is restarted. Such a restart is immediate and automatic except cases in which the service stop is caused by:

- Configuration procedure. In this cases the service automatically restarts once the configuration procedure ends. See the document *CFG ENG Digistat Suite* for more information;
- Manual stopping. In this case the service has to be manually restarted. See the document *INST ENG Digistat Suite* for more information.

## 1.3 Login

Login procedure can be handled from Mobile Launcher application itself or from a supported SSO provider (e.g. Unite Product), if present within the hospital organization.



For details regarding the login on the SSO provider in use in your healthcare organization, refer to the instructions for use of the SSO provider

For application versions until 5.1.3, login procedure is strictly related to Myco launcher integration: if mobile application login comes from Unite, only the Myco Launcher mode is available.

Application versions later than 5.1.3 allow login procedure separated from Myco Launcher: Mobile Launcher or Unite login can be used indifferently if mobile application is running with Myco Launcher or not.

The procedure described below is referred to the case in which the Login is performed by means of Mobile Launcher. Such a feature is signaled by the presence in the home page of the usual icons for login and logout:

	Login	Logout
Without Myco launcher		
With Myco launcher		

To login to Mobile Launcher

- Touch the **Login** icon on the lower-right corner of the “Applications list” screen (Fig 3 A or Fig 4 A)

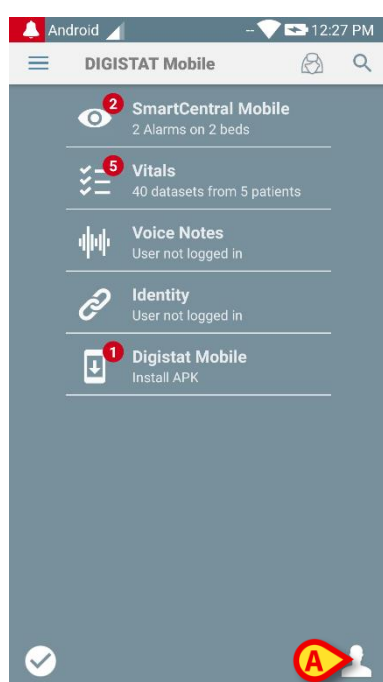


Fig 3

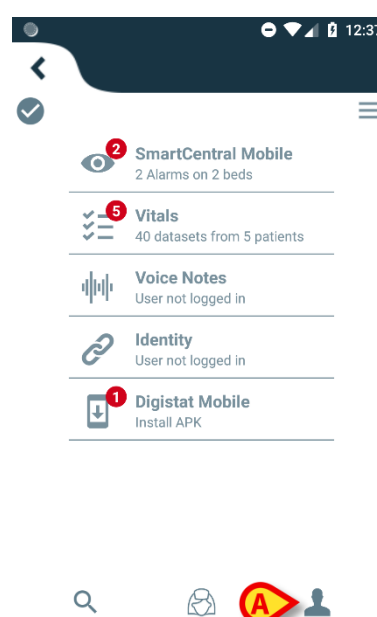


Fig 4

The following screen will be displayed (Fig 5 or Fig 6):

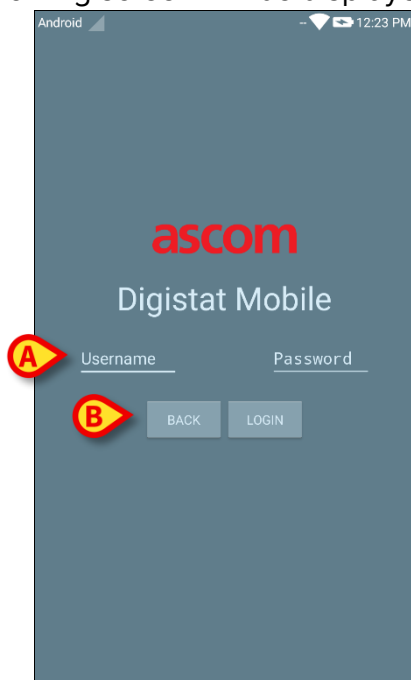


Fig 5

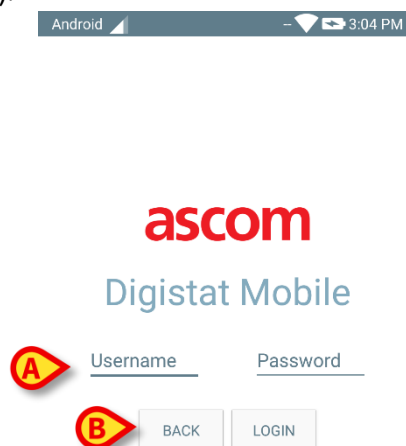


Fig 6

- Insert username and password (Fig 5 **A** or Fig 6 **A**).
- Touch the **Login** button (Fig 5 **B** or Fig 6 **B**)

The acronym indicating the logged user will then be displayed either on the upper notification bar (for generic Android handheld devices - Fig 7 **A**), or on the “Applications list” screen (for Myco/UNITE version - Fig 8 **A**).

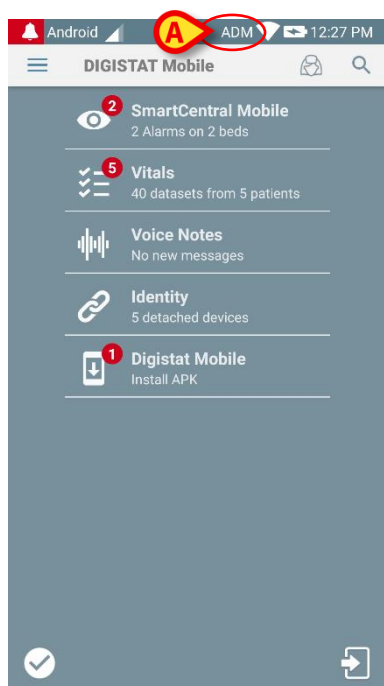


Fig 7

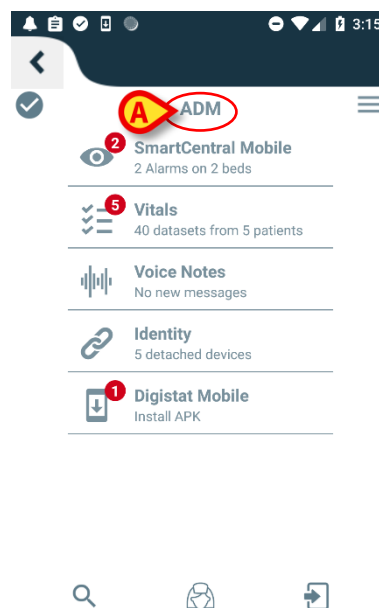


Fig 8

### 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.

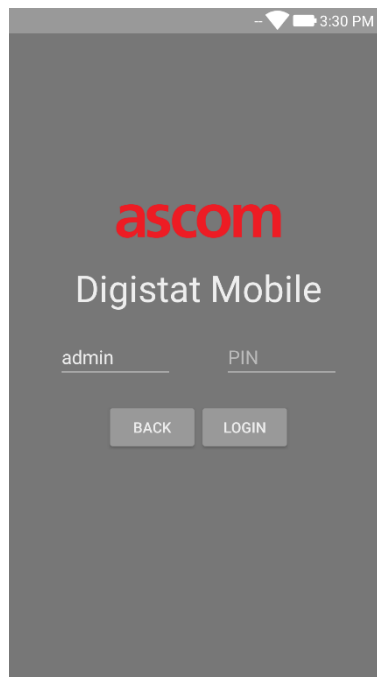
The “Login with PIN code” is a login procedure quicker than the usual one. For this purpose the system administrator provides the user with:

- 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.

The following window is shown (the “admin”):

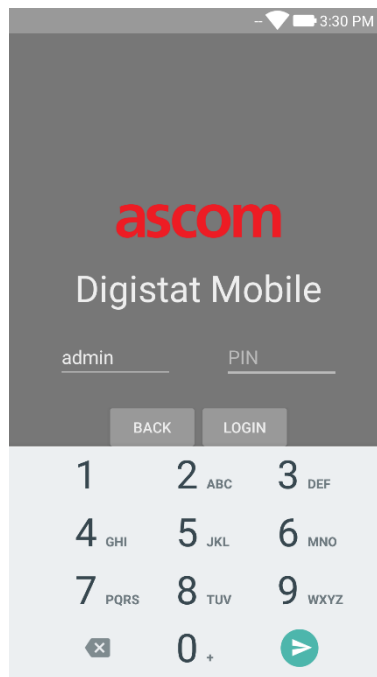


**Fig 9**

- Touch the “PIN” text field.

The numeric keyboard allowing the PIN code insertion is shown:





**Fig 10**

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



Specific messages alert the user if:

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

### 1.3.2 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”: indeed the user shall login basically doing the same actions explained in the paragraph 1.3.1.

The login shall be granted once for the user are defined the following information:

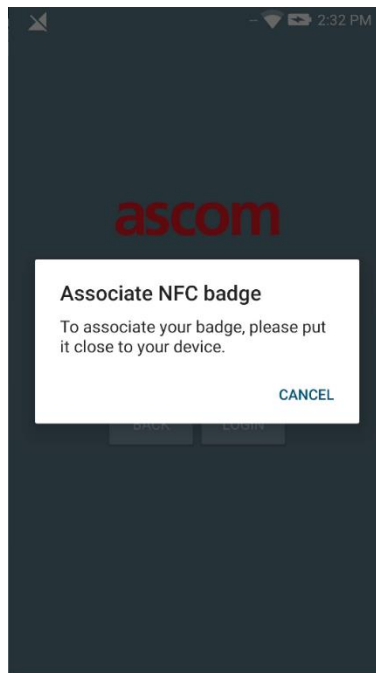
- **BadgeID**. The ID stored in the NFC-equipped badge provided to the user;
- **BadgePIN**. A numeric code of at least 5 digits.

The main difference is that, if specifically allowed by the Healthcare Organization, the user can set by himself the couple BadgeID / BadgePIN. For more information refer to the document *CFG ENG Digistat Suite*.

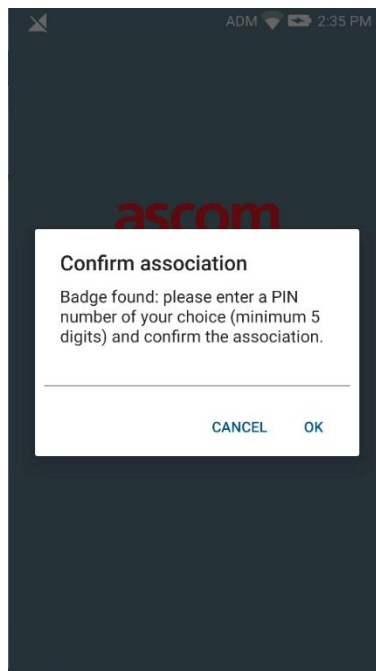
In case the user has to set by himself the BadgeID / BadgePIN couple, at first login the following actions shall be done:

- Login via username / password, just as explained in the paragraph 1.3.

The following screen is shown, allowing the user to define his BadgeID via NFC tag scan:



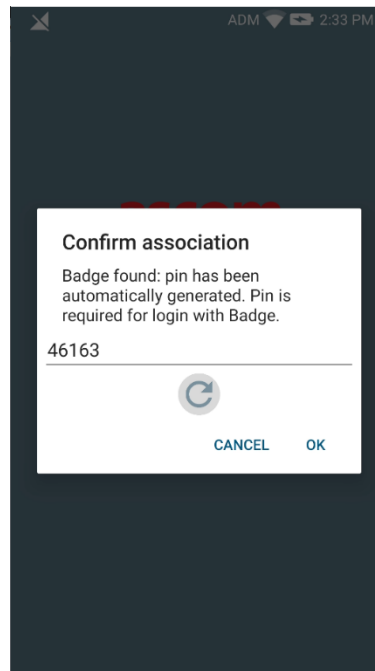
- Put the mobile device close to the user badge, in order to scan the NFC tag. If the NFC tag of the user badge is successfully scanned, the following screen will be shown, allowing the user to define the BadgePIN:




- 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 (read the document *CFG ENG Digistat Suite* for more information). The above screen will be replaced by the following:

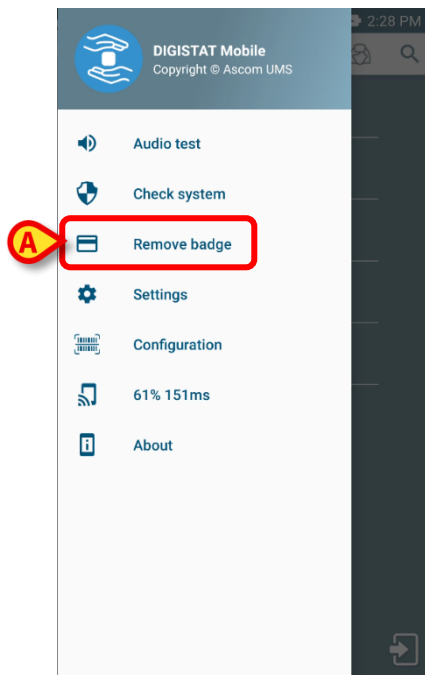


- Touch the  symbol to generate a new random BadgePIN or touch the BadgePIN itself to edit it.

- 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:

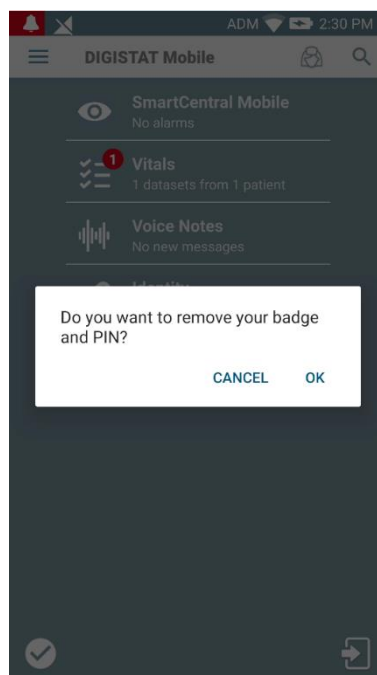
- Login via username / password, as explained in the paragraph 1.3.  
The main page of Mobile Launcher will be shown.
- Touch the  icon allowing to open the lateral menu (see paragraph 1.4).  
The following screen will be shown.



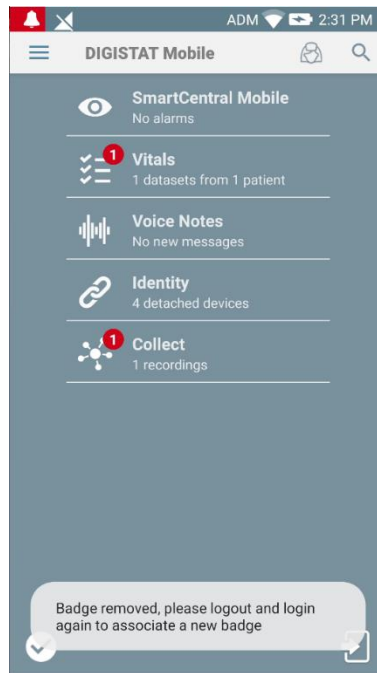
**Fig 11**

- Touch the **Remove badge** button (Fig 11 **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.  
The following window is shown: a toast notification informs 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 12 or Fig 13).

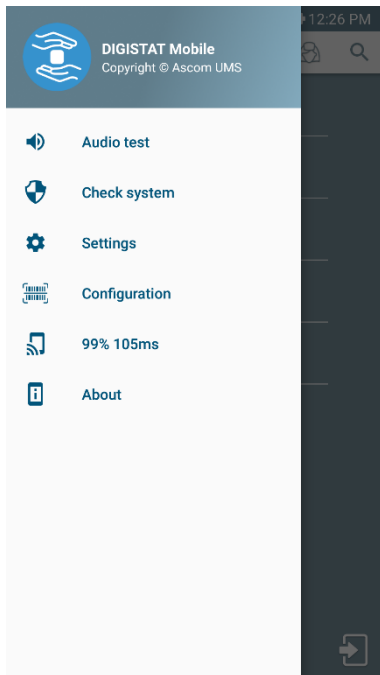


Fig 12

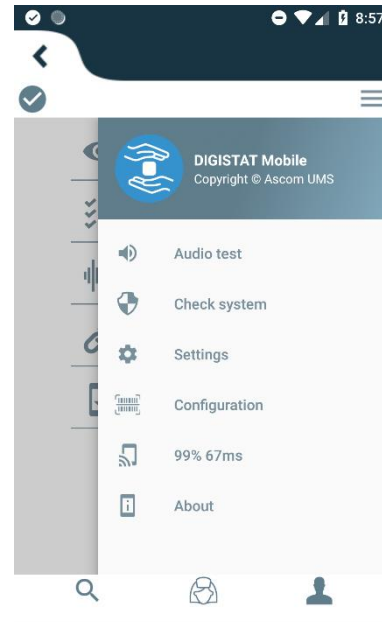


Fig 13

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 document *CFG ENG Digistat Suite*).

**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 1.3.2 for more information.

### Settings

Touch this option to access the Settings screen (see the documents *CFG ENG Digistat Suite* and *INST ENG Digistat Suite Server*).

### Configuration

Touch this item to access the configuration update feature via QR code (see the document *CFG ENG Digistat Suite*).

### 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 14 **A**) is always visible and displays general information. It is not available when running on Myco launcher.



Fig 14

The red bell icon placed on the top-left corner (only visible in non-Myco/UNITE devices  - Fig 14 **A**) is displayed if there are notifications for one of the patients, coming from any module. It is as well displayed if the module is not active.

On the top-right corner the following information is displayed (Fig 14 **B**):

- Acronym of the logged user (non-Myco/UNITE devices);
- Wi-Fi connection status;
- Battery charge status;
- Time.

## 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 15 **A**). The highest level notification indicates the overall alarm level of the Mobile Launcher application. Actually 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.

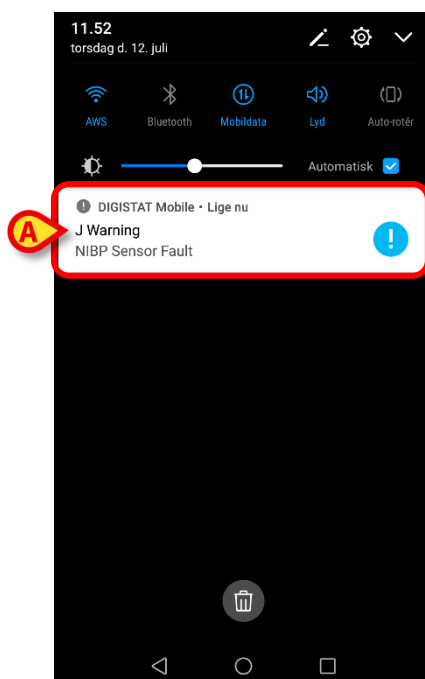
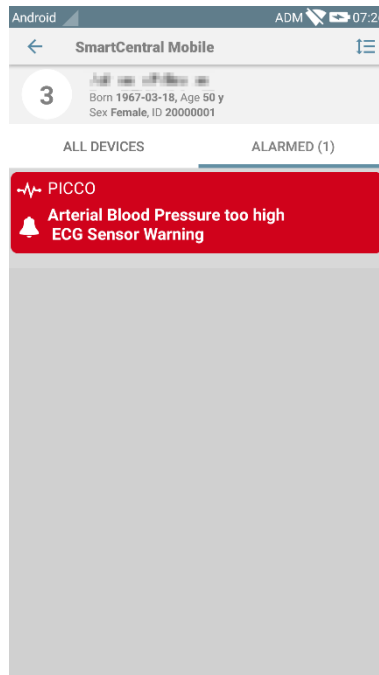


Fig 15

- Swipe the notification to make it disappear.
- Touch the notification to directly access the relevant module/patient (see an example in Fig 16; see further paragraphs for a description of the specific modules).

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 16**

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

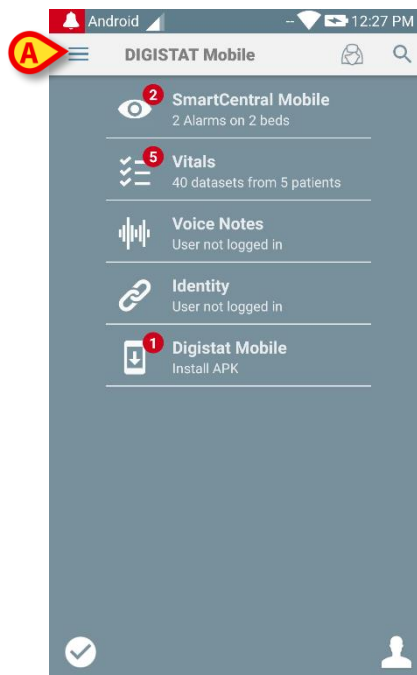


The Sound Check procedure shall be performed at least once per shift.

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

To perform the “Sound Check” procedure

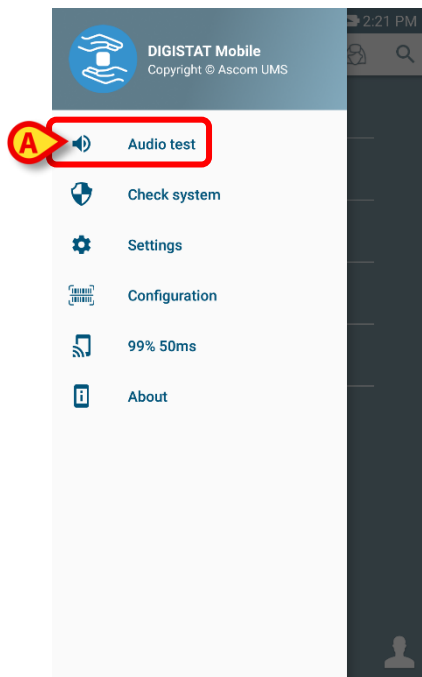
- Activate the main screen of Mobile Launcher application (Fig 17).



**Fig 17**

- Touch the  icon on the top-left corner of the screen (Fig 17 **A**)

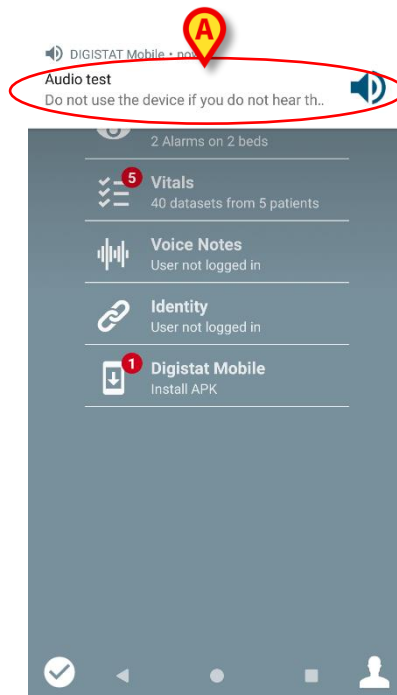
The following menu will be displayed (Fig 18).



**Fig 18**

- Touch the **Audio test** option (Fig 18 **A**).

A test notification/sound will be this way provided (Fig 19 **A**).



**Fig 19**



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

## 1.8 Patient's 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 20 **A** for devices without Myco/Unite integration or in Fig 21 **A** for devices with Myco/Unite integration.

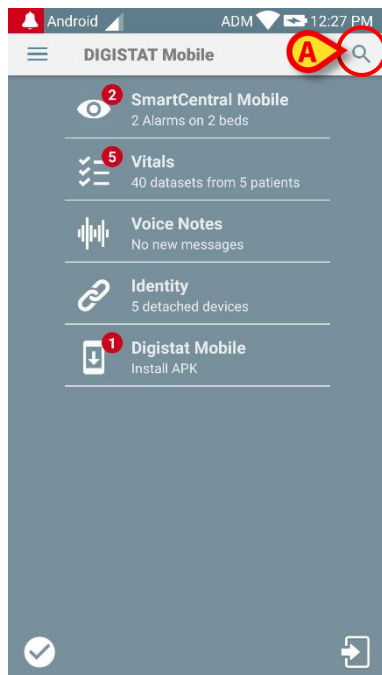


Fig 20

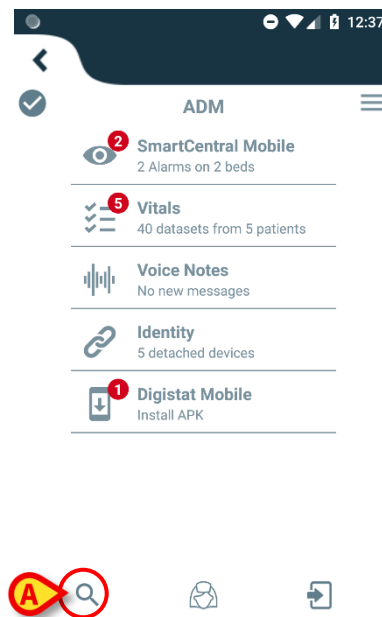


Fig 21

The following screen will open (Fig 22).

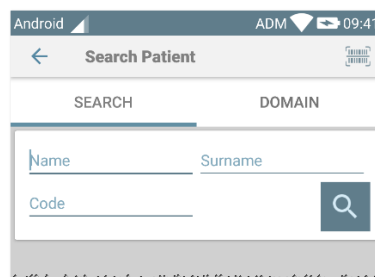


Fig 22

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).

## 1.8.1 Textual search

- Insert patient data in the fields indicated in Fig 23 **A** (name, surname, code), then click the **Search** button (Fig 23 **B**). Partial information is allowed.

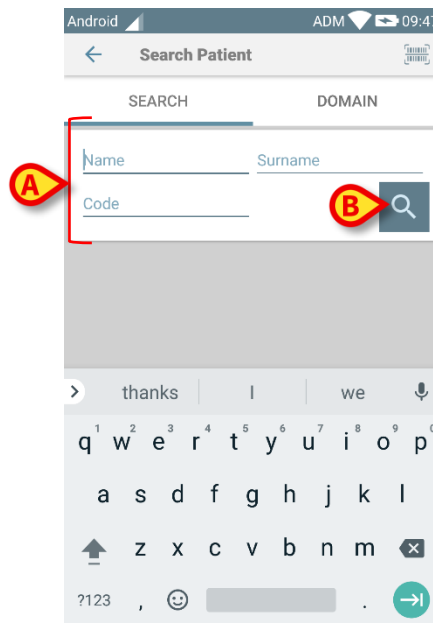


Fig 23

The list of patients whose data match those specified will be displayed (Fig 24).

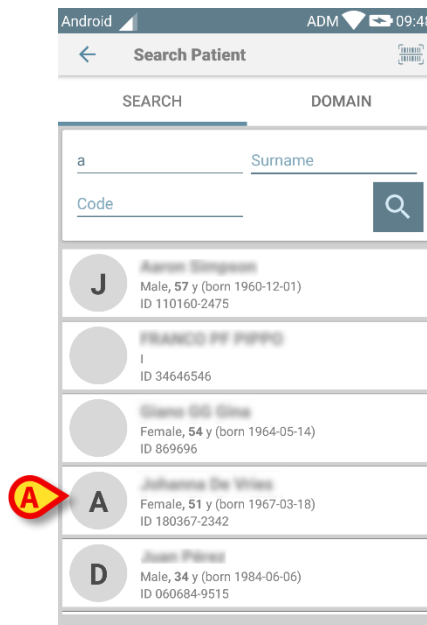
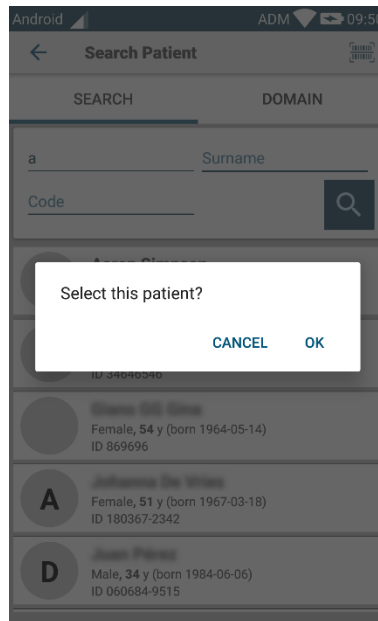


Fig 24

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.

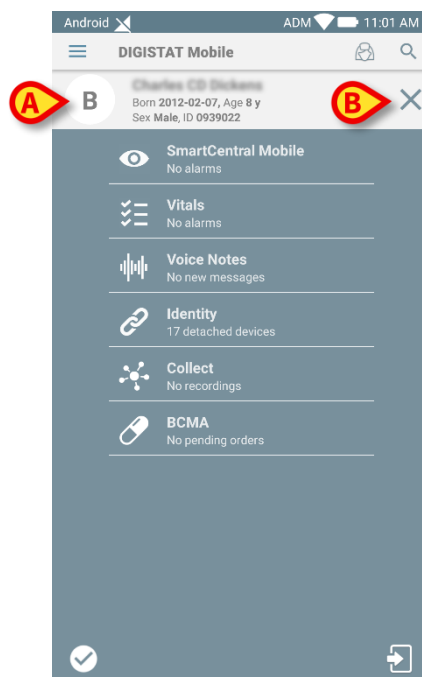
- Touch the box corresponding to a patient to select the patient. User confirmation is required (Fig 25).



**Fig 25**

- Touch **Ok** to confirm.

The patient will be this way selected (Fig 26).



**Fig 26**


Patient data are on top of the page (Fig 26 **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).

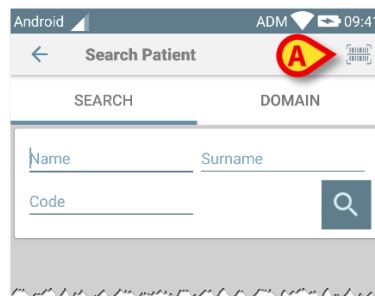
- Touch the cross indicated in Fig 26 **B** to deselect the patient and turn to “All Patients” mode again.

## 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 27 **A**



**Fig 27**

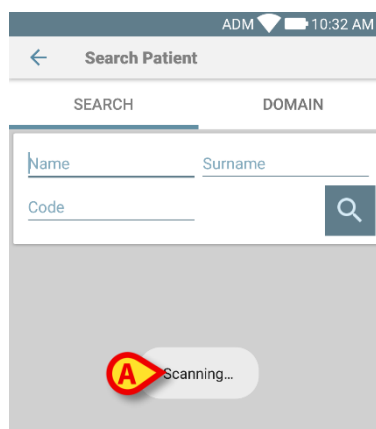
The device camera will be in this way activated.

- 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 27 **A** is not present in this case);

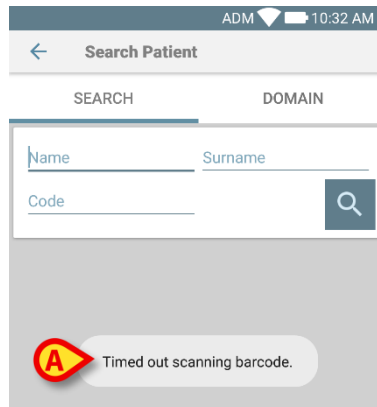
The flash camera turns on to help the user to shoot the barcode. At the same time, a message is shown to the user signaling the barcode scanning (Fig 28 **A**):



**Fig 28**

The patient will be this way selected. The screen shown in Fig 26 (example) will be displayed.

The barcode scanning can be done within a certain configured time; if such a time elapses and no barcode is recognized then a message is shown to the user (Fig 29 **A**):



**Fig 29**

### **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 26 will be displayed.



## 1.8.4 Single Patient Selection

To select a single patient:

- Touch the icon indicated in Fig 20 **A** for devices without Myco/Unite integration or in Fig 21 **A** for devices with Myco/Unite integration. The following screen will appear (Fig 30 **A**):

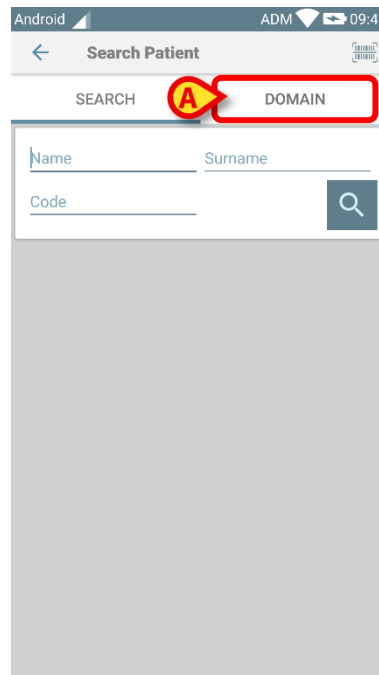


Fig 30

- Touch the “**DOMAIN**” tab. The following window shall appear (Fig 31)

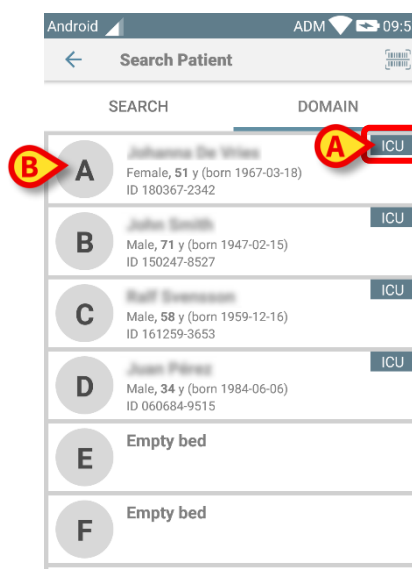


Fig 31

In Fig 31 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 31 **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 31 **B**. User confirmation is required (Fig 32).

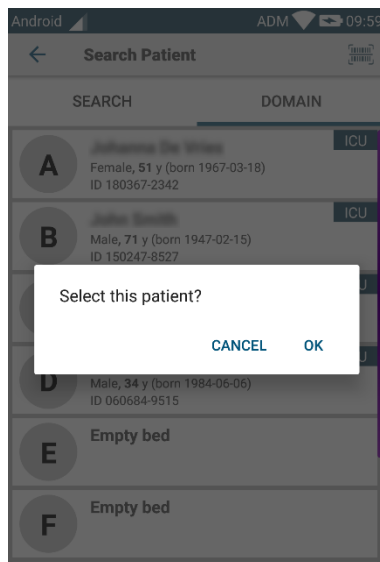


Fig 32

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

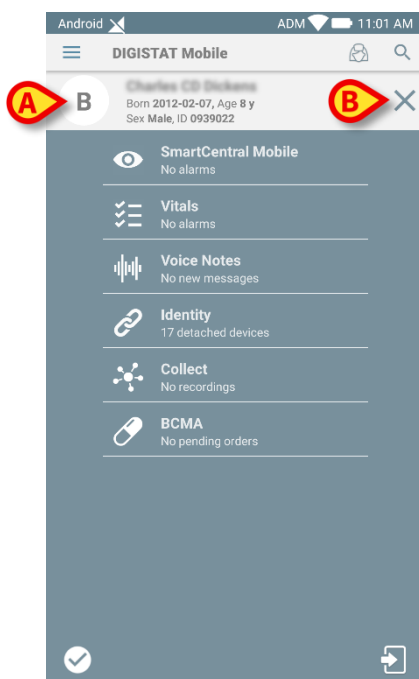


Fig 33

Patient data are on top of the page (Fig 33 **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).

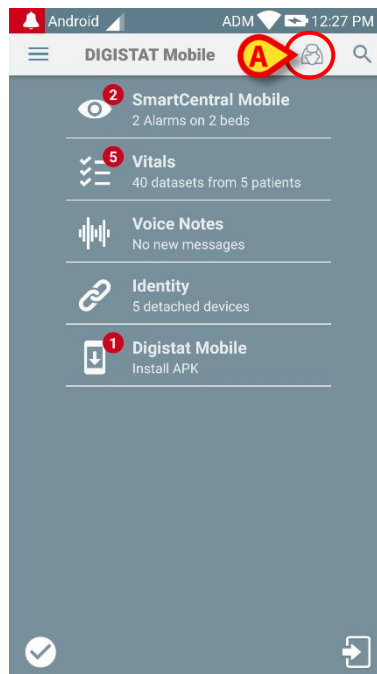
- Touch the cross indicated in Fig 33 **B** to deselect the patient.

## 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).

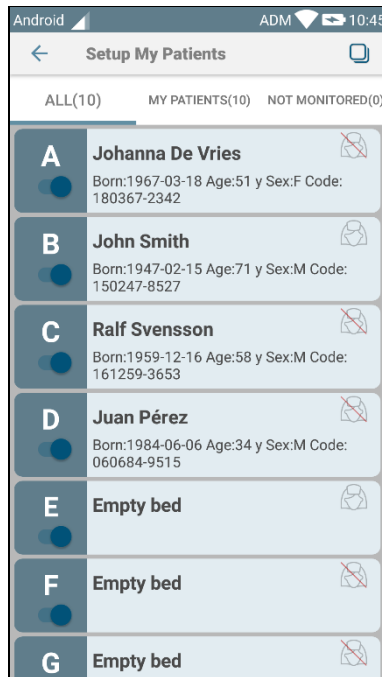


**Fig 34**

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

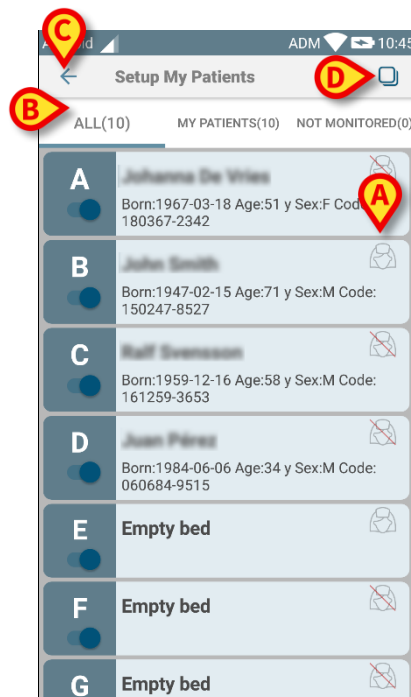
- Touch the  icon (Fig 34 **A**).

The following screen will be displayed (Fig 35 - "Setup My Patients").



**Fig 35**

A patient can be selected/deselected by touching the corresponding “tile”. Each tile corresponds to a bed. In addition, the user can select or deselect all the patients by checking the box on the top right corner (Fig 36 **D**).



**Fig 36**

The icons on the right of the patient names (Fig 36 **A**) 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 36 **B** make it possible to display:

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



The icon indicated in Fig 36 **C** makes it possible to go back to “My Patients” list screen.

### 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 applications 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 37 **A** or Fig 38 **A** to set the device as “unavailable”;

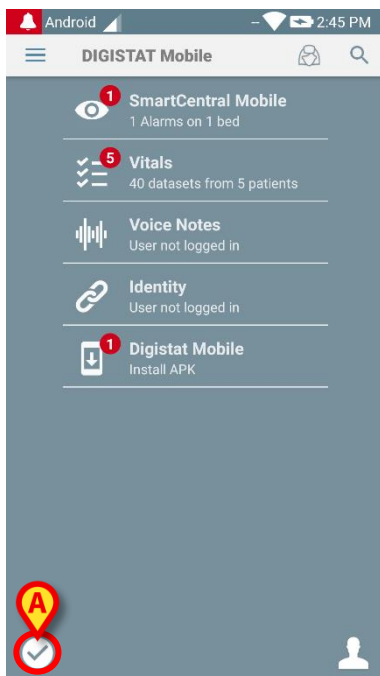


Fig 37

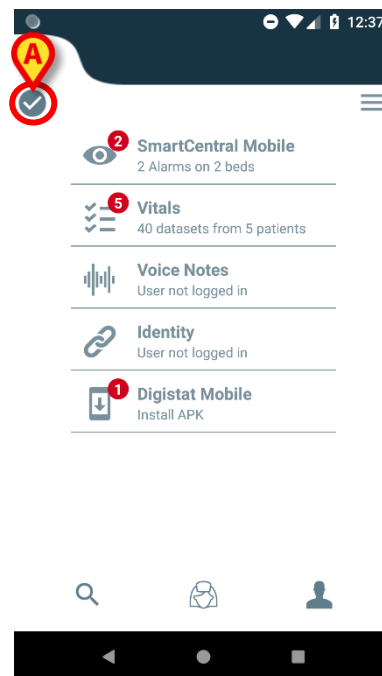


Fig 38

The following dialog message will appear, asking a confirmation from the user:

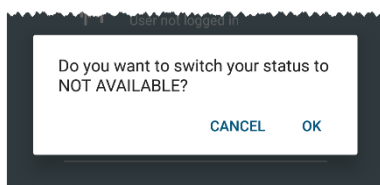


Fig 39

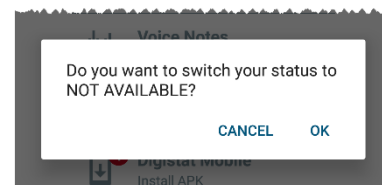


Fig 40

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

The launcher home page will change as shown in Fig 41.

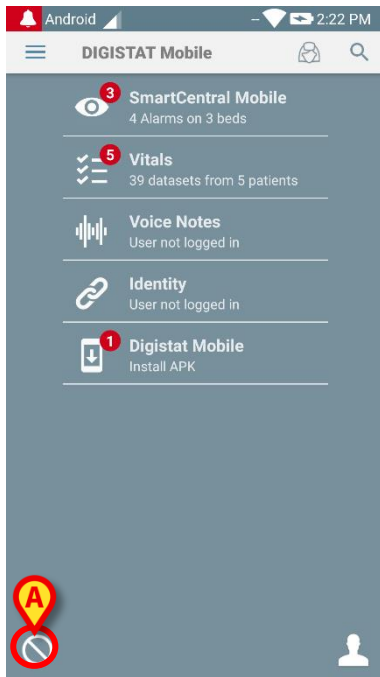


Fig 41

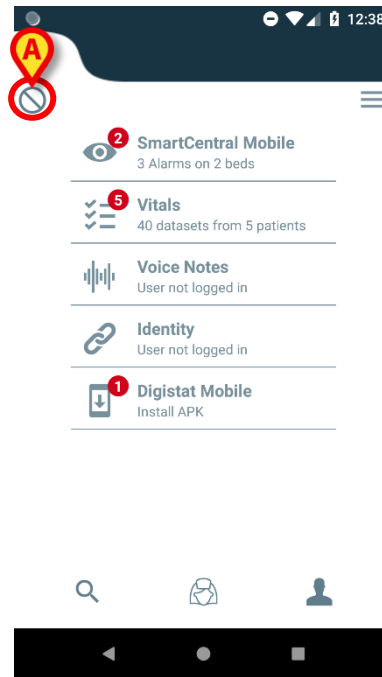


Fig 42

- Touch the symbol in Fig 41 **A** or Fig 42 **A** to set the device as “available”;

The following dialog message will appear, asking a confirmation from the user:

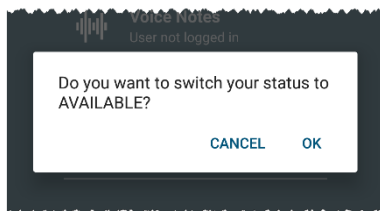


Fig 43

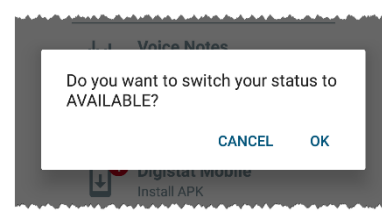


Fig 44

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

The launcher home page will change as shown in Fig 37.

### 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.

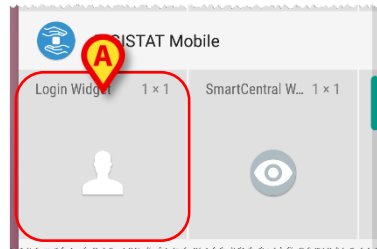


Fig 45

In the present paragraph will be showed the widget related to the overall Product mobile environment.

### 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 45 **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 46)

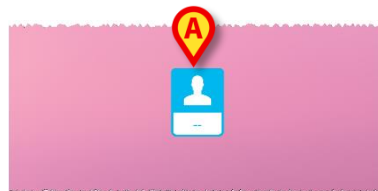


Fig 46

- Push the icon in Fig 46 **A** to authenticate in the Product (Fig 47).

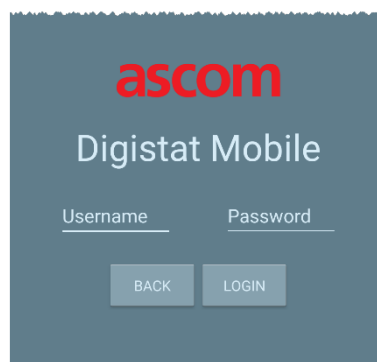


Fig 47

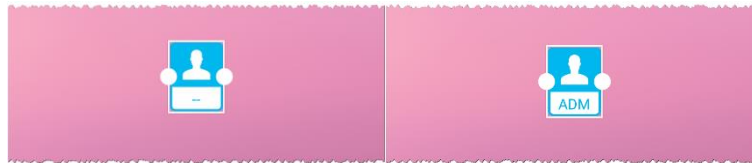
After the authentication, the Login Widget shows the user currently logged in:





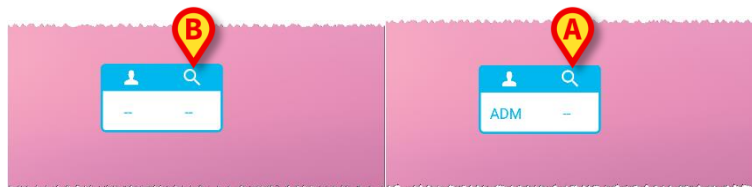
**Fig 48**

- Long press the icon in Fig 46 **A** or Fig 48 **A** and then release to show grab points for widget resize (Fig 49 – left if user is not logged, right if user is logged):



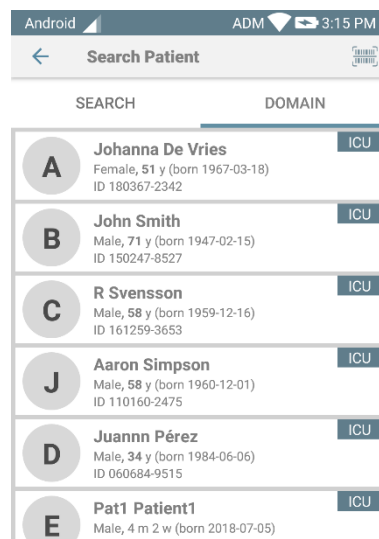
**Fig 49**

- 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:



**Fig 50**

- Touch the icon in Fig 50 **A** or **B** to access the Patient Search & Selection functionality (Fig 51).



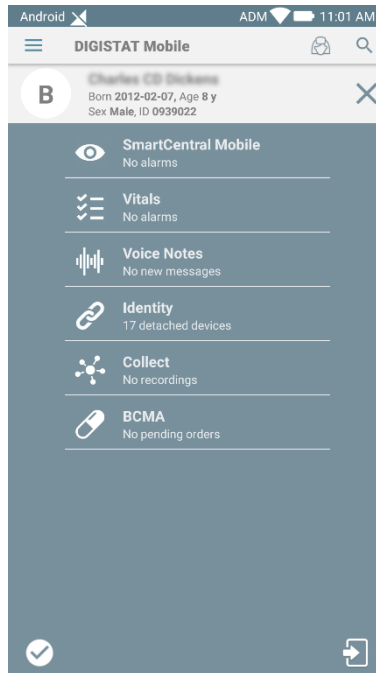
**Fig 51**

Such a feature is accessible only if the user is logged in. If the user is not logged in and the icon in Fig 50 **B** is pressed, then the authentication window is moreover displayed. After the Patient Selection, the Login Widget shows the patient currently selected (Fig 52):



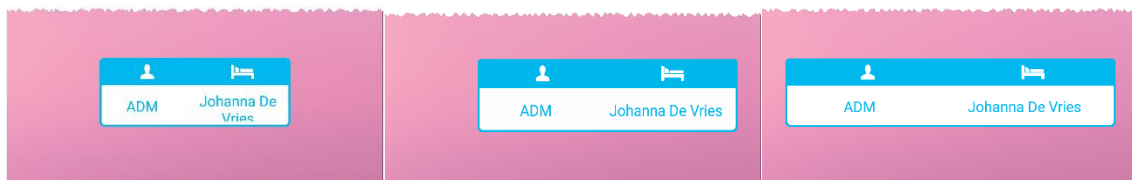
**Fig 52**

- In this situation, touch again the Login Widget to show the main page of the Mobile Application (Fig 53):



**Fig 53**

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 again the size of the Widget. The Login Widget can be indeed resized to 3 x 1, 4 x 1 and 5 x 1:



**Fig 54**

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.