

# Mobile Launcher User Manual

Version 15.0

2023-06-07

Ascom UMS s.r.l. Unipersonale Via Amilcare Ponchielli 29, 50018, Scandicci (FI), Italy Tel. (+39) 055 0512161 – Fax (+39) 055 829030 www.ascom.com

# Contents

1.	Mobile Launcher
	1.1 Information for the user
	1.2 Start-up       4         1.2.1 Monitoring of application execution       5
	1.3 Login51.3.1 Login with PIN code61.3.2 Ascom Myco Launcher71.3.3 Login with BadgePIN code7
	1.4 Lateral Menu10
	1.5 Upper notification bar 11
	1.6 General System Notifications12
	1.7 Sound Check procedure
	1.8 Patient search functionalities151.8.1 Textual search161.8.2 Barcode Scan search171.8.3 NFC Reader search181.8.4 Single Patient Selection18
	1.9 Patients Assignment Functionality
	1.10 Device Availability231.10.1 Setting by the User231.10.2 Setting by Docking Station25
	1.11 Widgets       25         1.11.1 Login Widget       26         Alarm Statistics Module       28         Indications Module       30
יכ	

# 1. Mobile Launcher



For information about the Product environment, precautions, warnings and intended use see USR ENG Digistat Care and/or USR ENG Digistat Docs (depending on the modules installed - 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 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 concisely.

# 1.1 Information for the user

Please carefully read 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

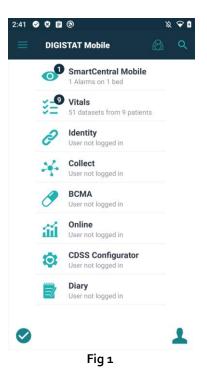


At first run, the user is requested to provide some basic authorizations and then is automatically redirected to the Settings page. Read the related paragraphs in the Digistat Suite configuration and Installation manual. Note: the first run must be performed by technical, authorized and trained personnel.

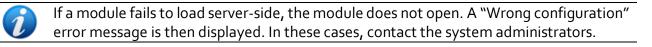
To open the Mobile launcher:



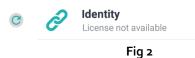
The following screen is displayed (Fig 1).



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



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.



## **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:

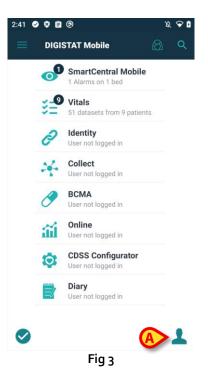
- Stop caused by configuration procedure. In this case, the service automatically restarts when the configuration procedure is completed. See the Digistat Suite configuration manual for more information;
- Manual stopping. In this case the service must be manually restarted. See the Digistat Suite configuration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

# 1.3 Login

User login is required to access most Digistat Mobile modules.

To login to Mobile Launcher

> Touch the **Login** icon on the bottom-right corner of the module list page (Fig 3 A).



The following screen will be displayed (Fig 4):



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

A notification is then displayed, indicating the name of the logged user (Fig 5).



#### 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. 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 NFC receiver that is usually on 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:

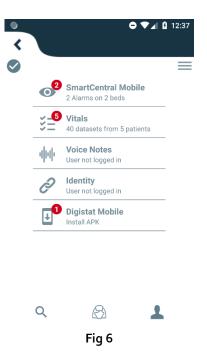
- The procedure is attempted when the mobile application is not running;
- The user is already logged in.

#### 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. Digistat Mobile version 5.1.3 or newer is required.

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



In this case the screen layout is slightly different from the one 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, as explained in paragraph 1.3.

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

Associate NFC ba	dge
To associate your badg it close to your device.	je, please put
	CANCEL

> Put the mobile device close to the user badge 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:

	: please enter a PIN our choice (minimum 5		
digits) and confirm the association			
5 ,			
5,			

Set the BadgePIN as required, 5 digits minimum.



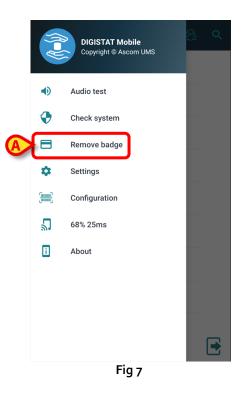
The procedure can be customized to suggest the user a random BadgePIN (still customizable, see the *Digistat Suite Configuration Manual* for further information). The above screen is then replaced with the next one:

Confirm association
Badge found: pin has been automatically generated. Pin is required for login with Badge.
46163
C
CANCEL OK

- > Touch the C symbol to generate a new random BadgePIN or touch the BadgePIN 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 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.



> Touch the **Remove badge** button (Fig 7 **A**) to reset both the BadgeID and the BadgePIN.

User confirmation is required:



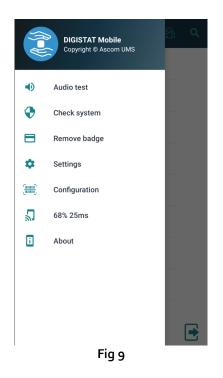
> Touch **OK** to confirm.

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 9).



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). A specific password is required to access the Settings screen.

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

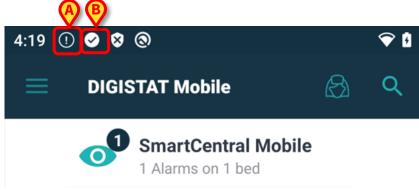


Fig 10

An icon placed on the top-left corner (only visible in non-Myco/UNITE devices - Fig 10 A) is displayed in case of alarm notifications for at least one of the patients, coming from any module.

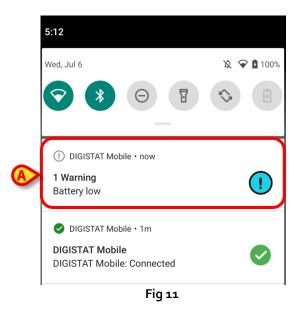
The symbol displayed in Fig 10 **B** indicates that the module is active, otherwise a bell icon 🛃 and

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 10).

# 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 11 A). The highest level notification indicates the overall alarm level of the Mobile Launcher application. Three levels of severity exist for the notifications, each one corresponding to a different color (red = high priority – yellow = medium priority – cyan = low priority); in addition an informative notification is available as reminder for the user (purple).



Swipe the notification to make it disappear.

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

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 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

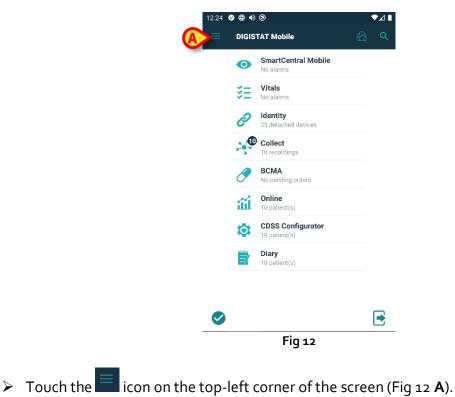


The Sound Check procedure shall be performed at least once per shift.

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

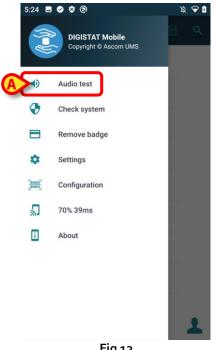
To perform the "Sound Check" procedure

> Activate the main screen of Mobile Launcher application (Fig 12).



•

The following menu will be displayed (Fig 13).





> Touch the **Audio test** option (Fig 13 **A**).

A test notification/sound will be this way provided (Fig 14).





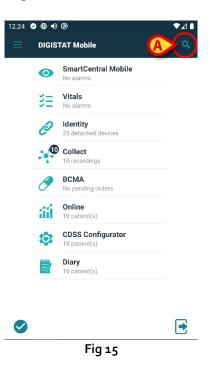
Do not use the device if you do not hear the alarm sound and/or feel the device vibration.

# 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 15 A.



The following screen will open (Fig 16).

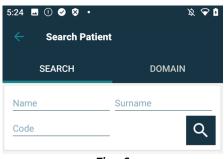


Fig 16

Three search options are available:

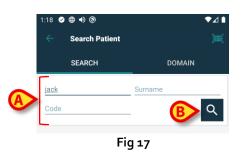
- 1. Textual search (see paragraph 1.8.1);
- 2. Barcode scan (see paragraph 1.8.2);
- 3. NFC code scan (see paragraph 1.8.3).



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 17 A (name, surname, code), then click the Search button (Fig 17 B). Partial information is allowed.



The list of patients whose data match those specified will be displayed (Fig 18).

1:22 🥑 🖶 🜒 🕲			♥⊿∎
<ul> <li>Search Patient</li> </ul>			
SEARCH	_	DOMAIN	
jack	Surname		
Code	-		Q
<b>F</b> 6			
Jack Male, 42 y (born 1980-02-26) ID CGNNMM80T06F020J			
<b>⊨</b> 5			
Jack Male, 42 y (born 1980-02-26) ID CGNNMM80T06F626J			
🛏 Bed 1			
Jack			
Male, 55 y (born 1967-03-08) ID CGNNMM67T12F728J			
•	•		
Fic	g 18		

The search is performed among all patients, both belonging and not belonging to the device domain. If the patient is currently in bed, the  $\vdash$  icon and the bed number are displayed, if the patient is not in bed, the  $\vdash$  icon is displayed.

Touch the box corresponding to a patient to select the patient. User confirmation is required (Fig 19).

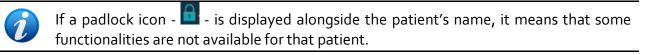


> Touch **Ok** to confirm.

The patient will be this way selected (Fig 20).



Patient data are on top of the page (Fig 20 **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).

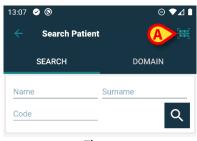


> Touch the cross indicated in Fig 20 **B** to deselect the patient and turn to "All Patients" mode again.

#### 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 21 A



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 21 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 20 (example) will be displayed. If the barcode is not recognized 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.

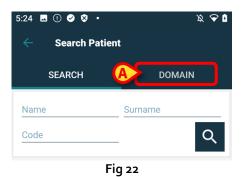
> Position the device close to the patient's Tag.

The patient will be this way selected. The screen shown in Fig 20 will be displayed.

## 1.8.4 Single Patient Selection

To select a single patient:

> Touch the circon indicated in Fig 15 A. The following screen will appear (Fig 22):



> Touch the "DOMAIN" tab (Fig 22 A). The following window will appear (Fig 23)



In Fig 23 all the patients are listed, not depending on domain. The label on the top right corner of each tile indicates the hospital unit (Fig 23 **A**).

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

> Touch the tile indicated in Fig 23 **B**. User confirmation is required (Fig 24).

Select this patient?	,				
	CANCEL	ок			
Fig 24					

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

1:24 🥝	• •	0	♥⊿∎	
≡	DIGIS	TAT Mobile	🛯 ୦	
	Born	nnor	B×	
	0	SmartCentral Mobile No alarms		
	šΞ	Vitals No alarms		
	Ì	Identity 23 detached devices		
	-	Collect 1 recordings		
	0	BCMA No pending orders		
	ай	<b>Online</b> 1 patient(s)		
	\$	CDSS Configurator 1 patient(s)		
		Diary 1 patient(s)		
		Fig 25		

Patient data are on top of the page (Fig 25 **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 25 **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 their 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:

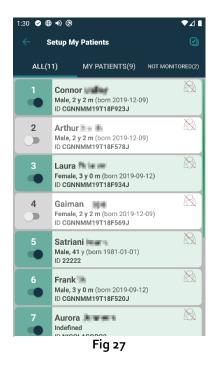
- a. The notifications related to the patients assigned (i.e. in the group "My patients");
- b. The notifications related to the patients assigned (i.e. in the group "My patients") and those related to the patients that no one has explicitly taken in charge;
- c. The notifications related to the patients 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).

12:24 ♥ ⊕ ♥ ♥					
≡	<b>a</b>				
	0	SmartCentral Mobile No alarms			
	ŝΞ	<b>Vitals</b> No alarms			
	ð	Identity 23 detached devices			
	Ū	Collect 10 recordings			
	0	BCMA No pending orders			
	ай	Online 10 patient(s)			
	٩	CDSS Configurator 10 patient(s)			
		Diary 10 patient(s)			
	Fig 26				

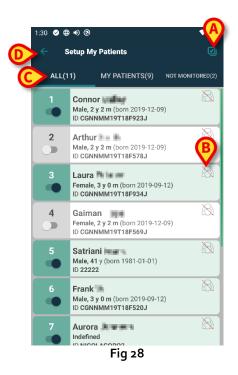
To select the list of patients a user assigns himself and forming "My patients" list, on Mobile Launcher Central screen,



The following screen will be displayed (Fig 27 - "Setup My Patients").



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 28 **A**).



The icons on the right of the patient names (Fig 28 **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 28 **C** make it possible to display:

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

The 🔄 icon indicated in Fig 28 **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  $\bigcirc$  /  $\bigotimes$  icons are not displayed. Contact your system administrators for the available options.

#### 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 them 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;
  - 1 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;
  - 2 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;
  - 1 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;
  - <sup>2</sup> 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.
- There are two modes to define a domain (i.e. the list of patients managed by a specific device), depending on a configuration parameter (the System Option *Userrightsmode* refer to the system administrators for more information):
  - 1 the domain is defined per device. In this case, after user change, the domain remains the same;
  - 2 the domain is defined per user, basing on the hospital locations associated to the user. In this case, after user change, the domain changes.

# 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 by the user in the mobile application or (if configured) by placing the device in its Docking Station.

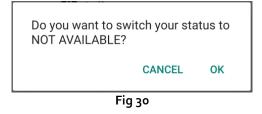
## 1.10.1 Setting by the User

It is possible to set the device as "unavailable". In that case, the beds owned by the "unavailable" device will be displayed as "unattended" on the other devices in the ward. Notifications are still received on the "unavailable" device, still triggering sounds and/or vibration.

> Touch the symbol in Fig 29 **A** to set the device as "unavailable".

12:24	⊘⊕•)	0		▼⊿∎
	DIGIS	TAT Mobile	⊗	Q
	0	SmartCentral Mobile No alarms		
	₿E	<b>Vitals</b> No alarms		
	ð	Identity 23 detached devices		
	Ū	Collect 10 recordings		
	0	BCMA No pending orders		
	ай	Online 10 patient(s)		
	٩	CDSS Configurator 10 patient(s)		
		Diary 10 patient(s)		
A				
S				•
		Fig 29		

User confirmation is required.



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

The launcher home page will change as shown in Fig 31.

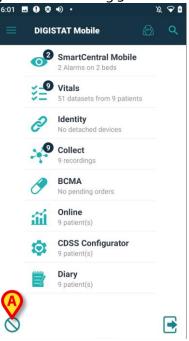
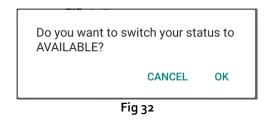


Fig 31

> Touch the symbol in Fig 31 A to set the device as "available";

User confirmation is required.



> Touch **OK** to set the device as available.

The launcher home page will change as shown in Fig 29.

## 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.



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 33 **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 34)



> Push the icon in Fig 34 A to authenticate in the Product (Fig 35).

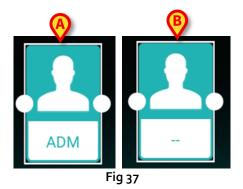




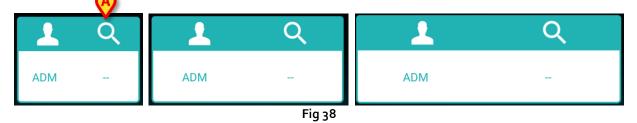
After the authentication, the Login Widget shows the user currently logged in:



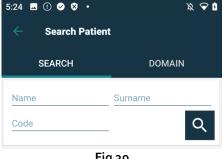
Long press the icon in Fig 34 A or Fig 36 A and then release to show grab points for widget resize (Fig 37 A if user is logged, Fig 37 B if user is not logged):



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



Touch the icon in Fig 38 A to access the Patient Search & Selection functionality (Fig 39).  $\geq$ 





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 40):

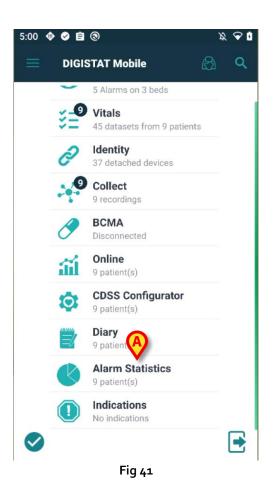


> Touch again the Login Widget to show the main page of the Mobile Application with the single patient selected.

Note: 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.

# 2. Alarm Statistics Module



The Alarm Statistics module displays alarm events in ways of bar and pie charts, summary and details reports for a selected patient.

#### To explore Alarm Statistics Module,

just launch Digistat Mobile and its tile appears on the launcher page, listed among other installed modules (Fig 41 A).

Below the module name, the number of patients present in the current domain is shown. The module doesn't require a user to be logged in.

Clicking on the **Alarms Statistics** tile a new page opens and it shows the list of patients cards, divided in two groups – "**My patients**" and "**Unassigned patients**" – with their bed number, patient data (gender, age, date of birth and ID) and the thumbnail of bar charts. The empty beds are filtered out from the list.

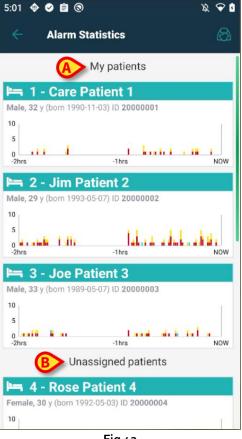
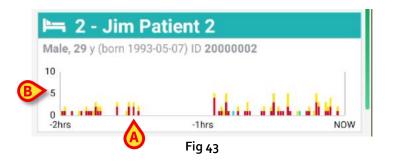


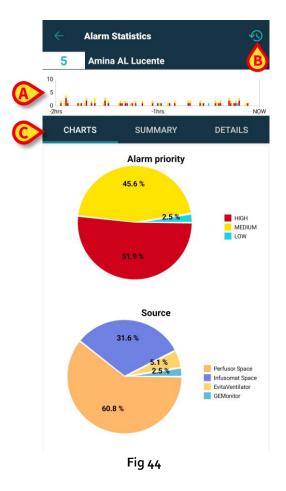
Fig 42

Each chart displays the latest alarms for the corresponding patient.



On the x-axis (Fig 43 **A**) the time is represented while on the y-axis (Fig 43 **B**) the number of alarms is recorded and displayed as bars of different heights and colored with standard priority colors according to the different types of alarms (High, Medium and Low priority). The chart shows the alarms from the oldest to the most recent ones, from left to right. If no alarm is recorded in reference time range - here 2 hours are given – the chart is not shown. To access the **statistics patient detail view** 

> just click on a **patient card**.



A new page is shown, and, in the upper part - below the patient name and bed number - it displays the same **bar chart** (Fig 44 **A**) shown as thumbnail on the patient list page. At the top right of the action bar, a **time range icon** (Fig 44 **B**) is given. In the central part **three tabs** (Fig 44 **C**) are provided and the first one is selected by default.

For information on the functionality and use of the **Alarm Statistics** module, refer to the *Smart Central Mobile* user manual (*USR ENG Smart Central Mobile*).

# 3. Indications Module

The Indication module is intended to be used to display persistent warnings or notices – indications are similar to alarms, but they can last for hours or never cease, and they do not generate proper Android system notifications - of worrying events or important reminders relating to a specific patient, action, or a workstation status generated by different components of the Digistat framework. Some examples are: a patient allergic to X, patient with mental problems, score X not yet entered etc.

	DIGIS	TAT Mobile	$\bigotimes$	Q
	<b>3</b>	SmartCentral Mobile 3 Alarms on 3 beds		
	<b>≚</b> ≞	<b>Vitals</b> 75 datasets from 15 patients		
	ð	Identity 28 detached devices		
	<b>B</b>	Collect 15 recordings		
	0	BCMA No pending orders		
	άí	<b>Online</b> 15 patient(s)		
	<b>©</b> :	CDSS Configurator 15 patient(s)		
		<b>Diary</b> 15 patient(s)		
		Alarm Statistics A		
		<b>Indications</b> 7 indications from 5 patients		
				_
$\checkmark$		<b>F</b> :		•
		Fig 45		

To open the Indications Module, just launch Digistat Mobile and its tile is listed among other installed modules (Fig  $_{45}$  **A**).



On the Indications icon, a badge with a number is given and this is the number of beds/patients with at least one indication present (Fig 46 A), whose priority level is higher than the "info" level. Below the module name, the number of indications coming from a number of patients present in the current domain is shown (Fig 46 B).

	dications	
MY P	ATIENTS	INDICATIONS (5)
	<b>upo LF Fosco</b> rn 1982-05-10)	
•	Indication 1	4:55 PM 1/26/2
🛏 2 - т	onio TC Cartonio	
Male, 33 y (bo ID TC002	rn 1989-07-28)	(
	Indication 2	4:56 PM 1/26/2
	<b>lilo MC Cotogno</b> m 1999-05-25)	0
	Indication 3	4:57 PM 1/26/2
	mina AL Lucente born 2000-04-12)	
•	Indication 1	5:58 PM 2/1/23
	Indication 2	9:39 AN
	Indication 3	9:39 AN

Fig 47

If at least one indication is present, clicking on the **Indications** tile, a new page opens on the **Indications Tab** (Fig 47 **A**) showing the **patient list** (Fig 47 **B**) arranged by cards displaying patient details (**name, gender, birthdate, ID**), a **badge** with the number of indications (Fig 47 **C**) on the upper right of the card and the **indication** or **list of indications** (ordered by severity/priority) with the corresponding icon, title, and date/time (Fig 47 **D**). If the indication refers to the current day, only the time will be displayed. Info level indications are displayed but are not counted in the counter badge.

Indications	ß
MY PATIENTS	INDICATIONS (5)
My patie	ents
1 - Lupo LF Fosco Male, 40 y (born 1982-05-10) ID LF001	0
Indication 1	4:55 PM 1/26/23
Male, 33 y (born 1989-07-28) ID TC002	• 1
Indication 2	2 4:56 PM 1/26/23
Male, 23 y (born 1999-05-25) ID MC003	0
Indication 3	<b>3</b> 4:57 PM 1/26/23
4 - Fata FL Lina Female, 34 y (born 1988-08-10) ID FL004	
i Indication	4 4:57 PM 1/26/23
Fig 2	<sub>+</sub> 8

Clicking on "**My Patients**" tab, the relative visualization (which has already been explained and it is the same across all Digistat Mobile modules) is shown and it also includes patients with no active indications.

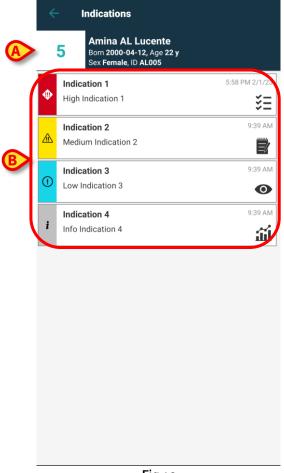


Fig 49

To access the patient detail view, select a patient tile. In the upper part of the page, the **bed number** and **patient data** are displayed while in the central part, the **indications** are listed and sorted by **priority** first and then by **date** (from those with higher priority to those with no priority, from the most recent to the oldest).



Each indication card contains the **priority icon** (Fig 50 **A**), the **title** (Fig 50 **B**) and **description** (Fig 50 **C**) of the indication (if the description is not present, an abstract is given instead), **date** and **time** (Fig 50 **D**), an **optional icon** (Fig 50 **E**) of the module to which the indication refers.

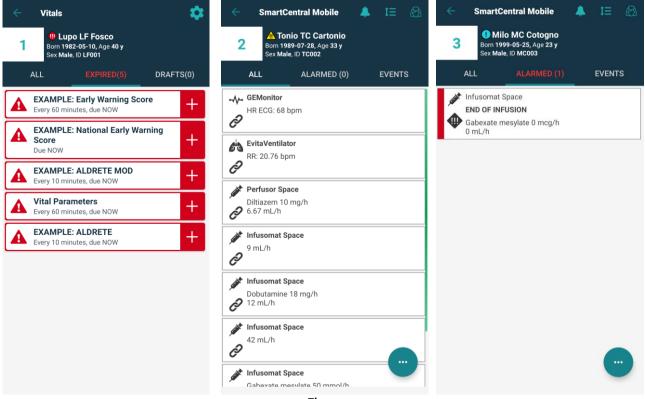
The example (Fig 50) shows 4 indications of different types:

• a high priority related to the Vitals Mobile module;

- a medium priority related to the **Diary Mobile** module;
- a low priority related to the Smart Central Mobile module;
- an info indication related to the **Online Mobile** module.

<ul> <li>Vitals</li> </ul>	
Amina AL Lucente Born 2000-04-12, Age 22 y Sex Female, ID AL005	
ALL EXPIRED(5)	DRAFTS(0)
<b>EXAMPLE: Early Warning Sco</b> Every 60 minutes, due NOW	re +
EXAMPLE: National Early Wa Score Due NOW	rning +
<b>EXAMPLE: ALDRETE MOD</b> Every 10 minutes, due NOW	+
<b>Vital Parameters</b> Every 60 minutes, due NOW	+
EXAMPLE: ALDRETE Every 10 minutes, due NOW	+
Fig 51	

Clicking on an **indication**, it is possible to move to connected modules without going through the Launcher page. If a patient has one or more indications, the **highest severity/priority alert icon** is displayed next to the patient's name (Fig 51 **A**) in the patient card of the patient detail view of each Digistat module. If the indication has priority of "info" type, no icon is displayed. The following pictures show patients with indications of different priority levels, across different modules.





Clicking on the **Indication icon** in the patient card (Fig 53 **A**), the user accesses the module page where the content of the active indication can be read in full and, eventually, the list of all the indications (Fig 53 **B**) available for that patient is given.

