ascom

BCMA
User Manual

Version 2.0

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Contents

1. BCMA

For general and detailed information about the Product environment and the instructions for use of the Mobile Launcher software see the specific documents. The knowledge and understanding of these documents is mandatory for an appropriate and safe use of the BCMA software, described in this document.

1.1 Introduction

BCMA is a mobile application that supports the clinical staff in the documentation of the treatments administration tasks.

Treatments are prescribed on the Digistat® Therapy Prescription desktop module. BCMA is synchronized with it and with the Digistat® Therapy Execution desktop module. See the Digistat® Therapy user manual (*USR ENG Therapy*) for more information.

NOTE: BCMA connects to a gateway that is interfaced with external software via a plugin. At the moment only Digistat® Therapy is supported.

2. Orders color code

The administration orders are characterized by a specific color, indicating the kind and/or the state of an order.

The following table provides a legend indicating the meaning of the different colors in the BCMA application.

In 2 hr. AMOXICILINA 500 MG CAPS	Grey means "to be administered in the future". It characterizes orders that must be administered in the future or patients for which there are future orders administrations scheduled.
In 1 hr. PARACETAMOL 600 MG SUPOS ADULTOS	Green means "to be administered now". It characterizes orders that should be administered now, within a given time range, or patients for which there is at least one pending "ready" order (green).
11 min. ago AMOXICILINA 500 MG CAPS	Red means "late". It characterizes orders that should have been administered before, or patients for which there is at least one pending "late" order.
1 min. ago REMIFENTANILO SALA EFG 1 MG 5 VIALES	Cyan characterizes durative administrations in progress (i.e. infusions).
If condition is... AGUA OXIGENADA 250 ML	Pink characterizes conditional administrations, i.e. treatments to be administered only under specific conditions.

3. Start-up

To start the BCMA application:

➢ Tap the corresponding row on the Digistat® mobile application list (Fig 1).

The small number on the BCMA icon indicates the number of pending orders (Fig 1 **A**). The number can be either green or red, depending on the state of the most urgent pending order.
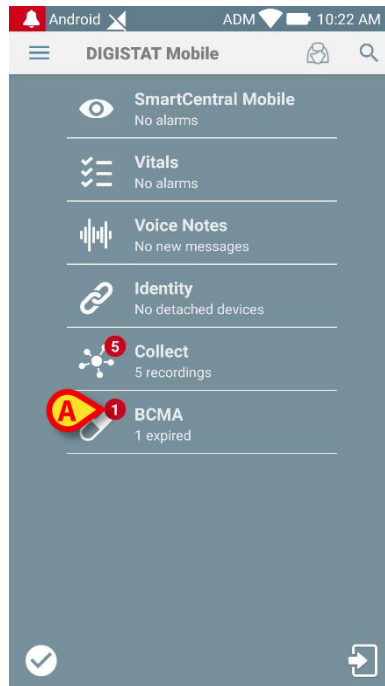

Fig 1

BCMA opens. If there are pending orders, the "Pending" screen is displayed after selection (Fig 2). If there are not pending orders, then the list of patients belonging to the configured domain is displayed (My Patients - Fig 3).
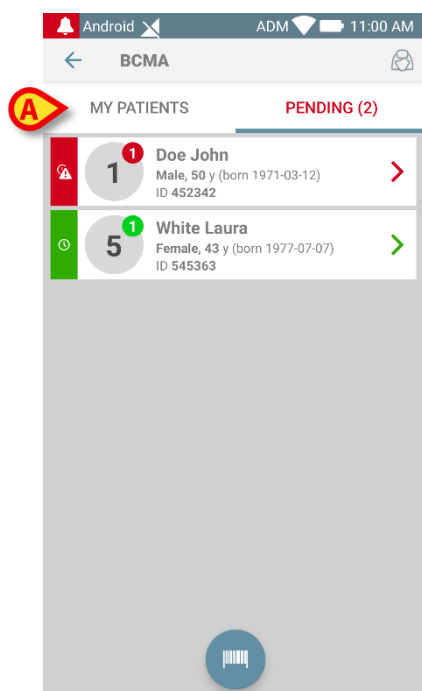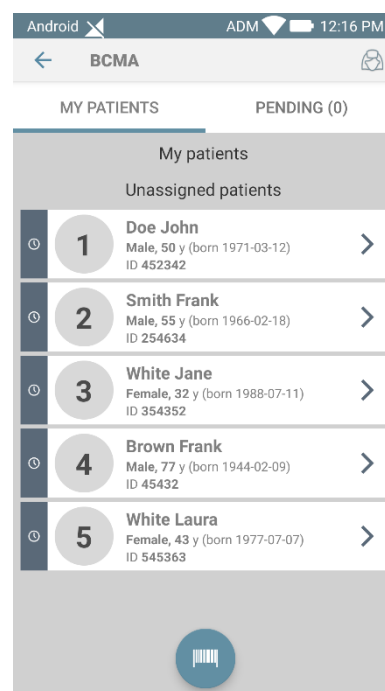

Fig 2

Fig 3

When on the "Pending" screen (Fig 2), to display the full list of patients in the domain (Fig 3):

➢ Tap the MY PATIENTS tab (Fig 2 **A**). See section 5 for the description of "My Patients" tab.

4. List of "Pending" patients

The "Pending" screen displays the patients for which there is at least one pending order. A pending order is either an order that should be administered now (green color) or should have been administered before (red color), according to the scheduled treatment plan. See section 2 for the orders color meaning in BCMA.
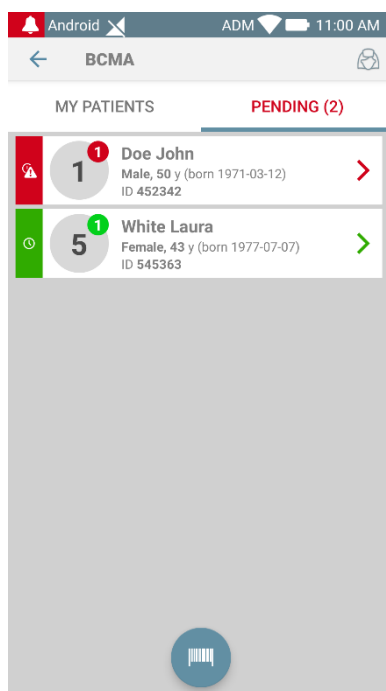

Fig 4
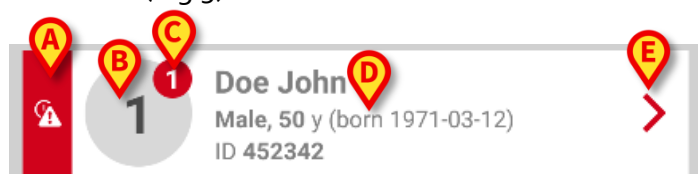
Each bed is represented as a tile (Fig 5).

Fig 5

For each bed the following information is provided:

- The state of the most urgent pending order (Fig 5 **A** - red = late; green = ready).
- The bed number (Fig 5 **B**).
- The number of existing pending orders (Fig 5 **C**).
- The available data of the patient on that bed (Fig 5 **D** - Name, Sex, Age, Birthdate, Code).

Tap the arrow indicated in Fig 5 **E** to access the orders administration screen for that patient ("Patient orders list" - See section 7).

5. Patients list

The MY PATIENTS screen (Fig 6) lists all the beds belonging to the configured domain, divided in two groups: those indicated as "My Patients" (Fig 6 **A**) and those that are currently unassigned (Fig 6 **B**). In case there is no patient on one of the configured beds, then the bed is not displayed.
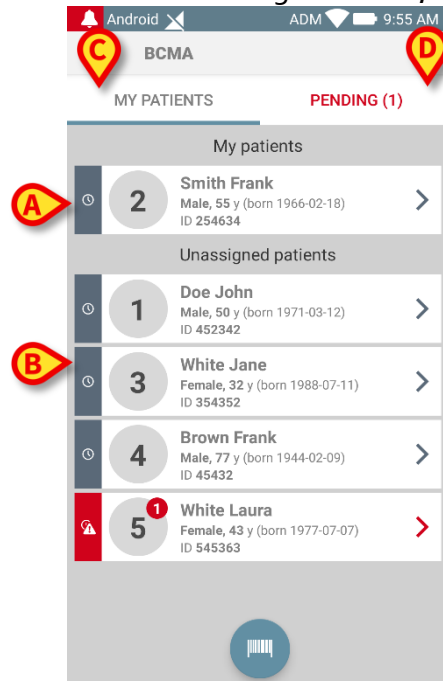

Fig 6

Tap the arrow indicated in Fig 6 **C** to go back to the Digistat® Mobile main page.
Tap the "Nurse" icon (Fig 6 **D**) to access the "My Patients" management functionalities. See the Digistat® Mobile user manual (Document *USR ENG Digistat Mobile*) for instructions on "My Patients" functionalities.

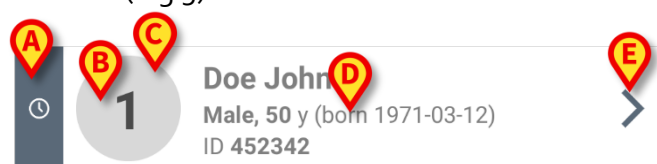Each bed is represented as a tile (Fig 5).

Fig 7

For each bed the following information is provided:
- If there is at least one pending order, the state of the most urgent pending order is indicated by the color on the left (Fig 7 **A** - red = late; green = ready).
- The bed number (Fig 7 **B**).
- If there are pending orders, the number of existing pending orders is indicated in Fig 7 **C**.
- The available data of the patient on that bed (Fig 7 **D** - Name, Sex, Age, Birthdate, Code).

➢ Tap the arrow indicated in Fig 7 **E** to access the patient orders list.

The patient orders list contains all the orders existing for the patient. See section 7.

6. Patient selection

There are two ways to select a patient and display their list of existing orders:

1) barcode selection;
2) manual selection.

⚠️ *The healthcare organization could prefer barcode technology for scanning items over manual selection to support the workflow and reduce the risk of human errors.*

6.1 Barcode selection

To use the barcode selection functionalities, on the "Pending patients" or "Patient list" screen (Fig 4 or Fig 6):

➢ Tap the barcode icon indicated in Fig 8 **A** (or press the "Scan" button on Myco 3 devices).

ℹ️ *On Myco 3 devices the barcode functionalities are activated by a dedicated button on the right side of the device. Therefore, on Myco 3 devices, the barcode icon is not displayed.*
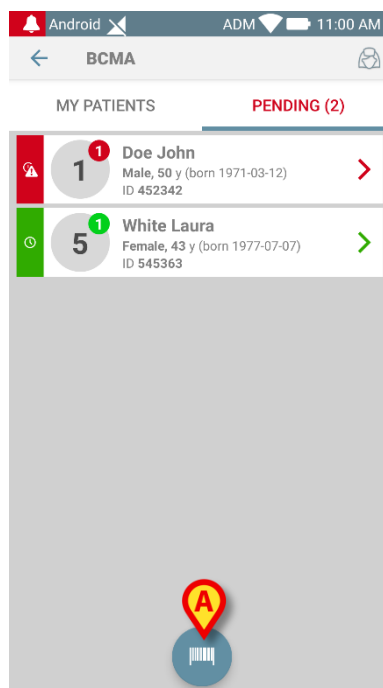

Fig 8

The "Barcode scan" functionalities are activated. The "scan" screen is displayed (Fig 9).
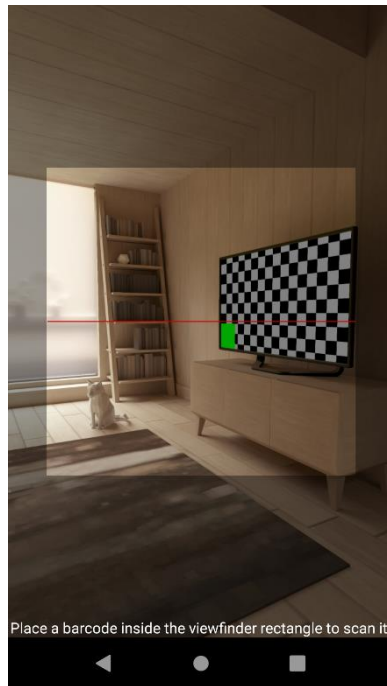
Fig 9

> ➢ Scan the patient barcode.

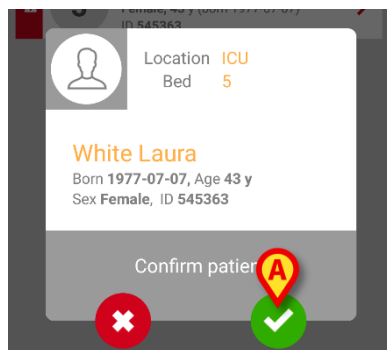Confirmation is required (Fig 10).

Fig 10

> ➢ Tap the **Check** icon to confirm and select the patient (Fig 10 **A**).
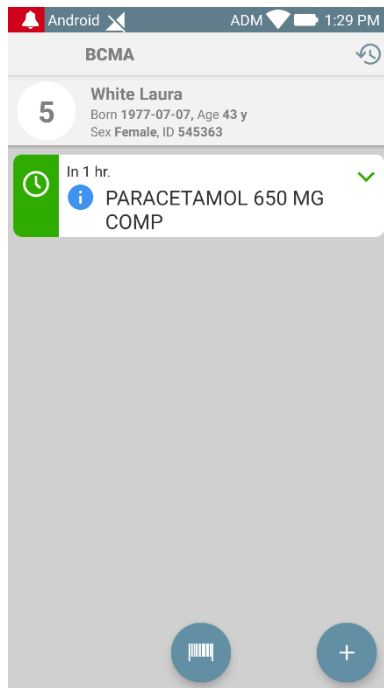
The patient orders list is displayed (Fig 11).

Fig 11

6.2 Manual selection

A patient can be selected manually if the barcode selection functionalities are not available. To do that, be it on the "Pending patients" or "Patient list" screen (Fig 4 or Fig 6), in the bed-tile referring to the required patient:
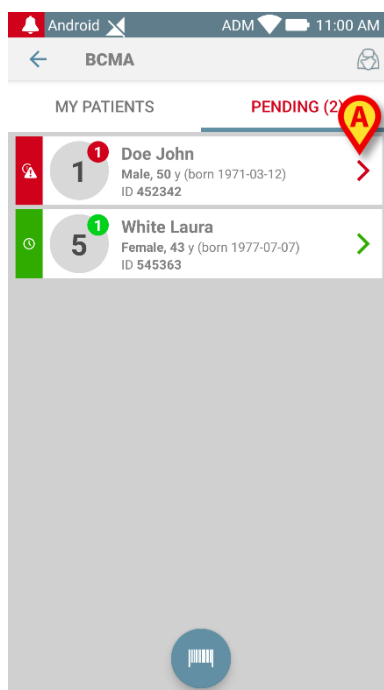
➢ Tap the arrow on the right (Fig 12 **A**).

Fig 12

The list of existing orders for that patient is displayed (Fig 13 – "Patient orders list").
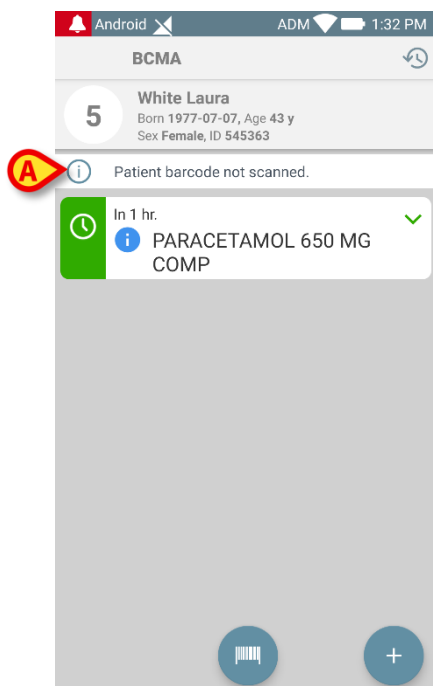
Fig 13

> *When a patient is selected manually, a notification is provided in the area indicated in* Fig 13 **A**. *Afterwards, during the administration workflow, the user will be required to provide a reason for not scanning the patient barcode. See section 8.*

7. Orders list

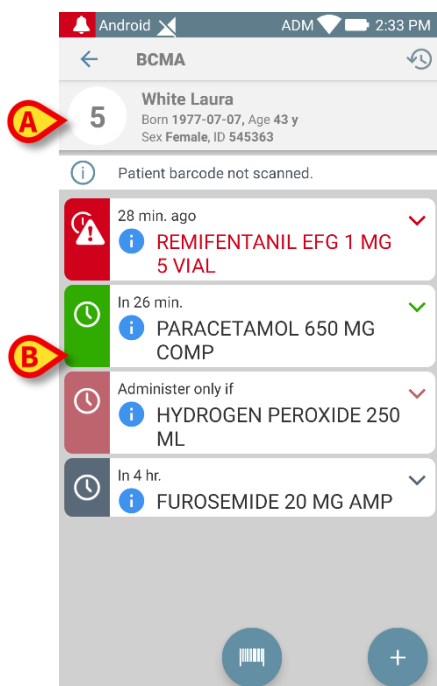The orders list displays all the orders existing for a patient (Fig 14).

Fig 14

Bed number and patient data are displayed on top (Fig 14 **A**).
The existing orders are listed below the name (Fig 14 **B**). Each order is represented as a tile (Fig 15).
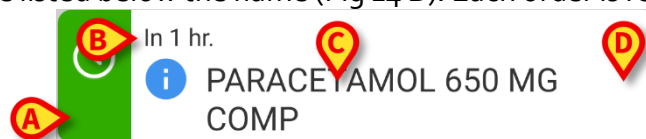

Fig 15

The colour on the left indicates the order state or type according to the overall BCMA colour code (Fig 15 **A**).

Orders Colour Code	
In 4 hr. FUROSEMIDE 20 MG AMP	Grey means "to be administered in the future".
In 26 min. PARACETAMOL 650 MG COMP	Green means "to be administered now".
28 min. ago REMIFENTANIL EFG 1 MG 5 VIAL	Red means "late".
1 min. ago REMIFENTANIL EFG 1 MG 5	Cyan characterizes durative administrations in progress (i.e. infusions).
Administer only if HYDROGEN PEROXIDE 250 ML	Pink characterizes conditional administrations.

The area indicated in Fig 15 **B** displays information on the administration timing and conditions.

- For "future" orders (grey), it is displayed the time left before the scheduled administration time (i.e. the beginning of the administration tolerance period – see Info box below).
- For "ready" orders (green), it is displayed the time remaining for administering the order on time (i.e. the time left to the end of the administration tolerance period – see Info box below).
- For "late" orders (red), it is displayed the delay in the administration.
- For "durative" orders (cyan), it is displayed the time elapsed since the beginning of the administration.
- For "conditional" orders (pink), it is displayed the administration condition.

Administration tolerance period: for every administration it is defined an administration tolerance period before and after the scheduled administration time. Within the tolerance period, the administration is considered "on time". The tile stays green for the whole

tolerance duration. The tolerance period is set by the physician at prescription time on the Digistat® Therapy Prescription desktop module.

The order details are displayed in the tile (Fig 15 **C** - name, dosage, administration way etc., according to the drug/action configuration). Tap a tile to expand it and display:

- additional information (Fig 16 **A** - i.e. text notes, dosage variations etc.).
- the available action buttons for the specific order (Fig 16 **B**).

Use the icon indicated in Fig 16 **C** to expand/collapse all the tiles.
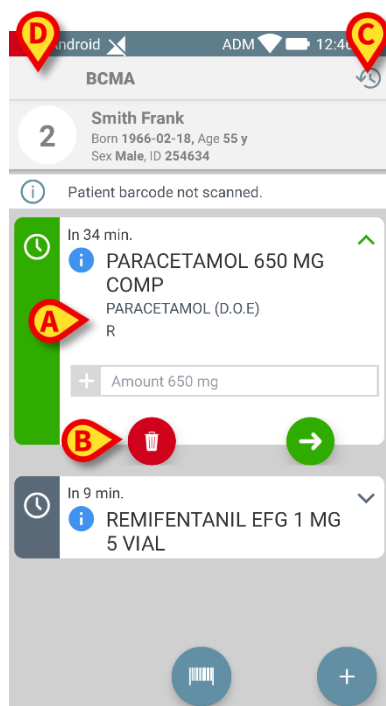
Fig 16

Use the back button (Fig 16 **D**) to go back to the "Pending patients" list.

Possible action buttons	
	Delete order.
	Administer.
	Start durative administration.
	Stop durative administration.
	Change the administration values (for durative administrations in progress).

8. Administration procedures

This section describes the different administration procedures, according to the administration type.

8.1 Administration procedure in general (Barcode)

To administer an order, in general:

➢ Tap the BCMA icon on the Digistat® Mobile launcher to access the BCMA application (Fig 17 **A**).
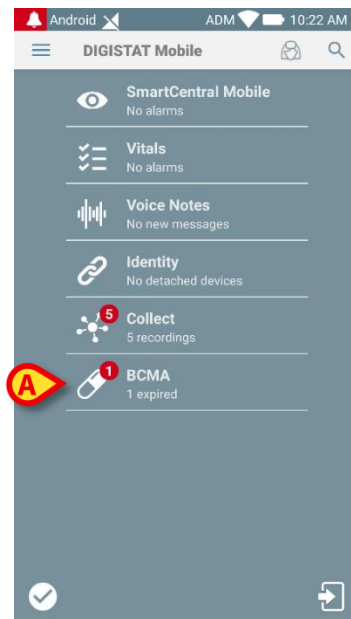
Fig 17

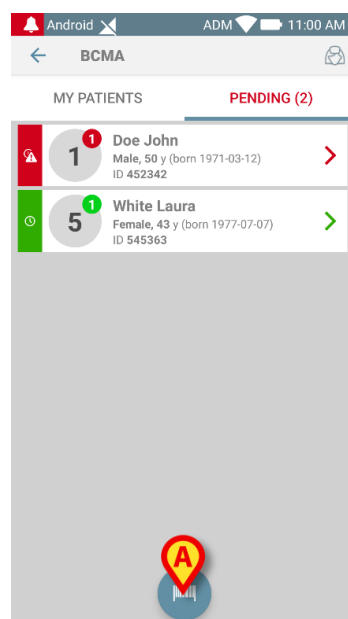The list of "Pending patients" is displayed (Fig 18).

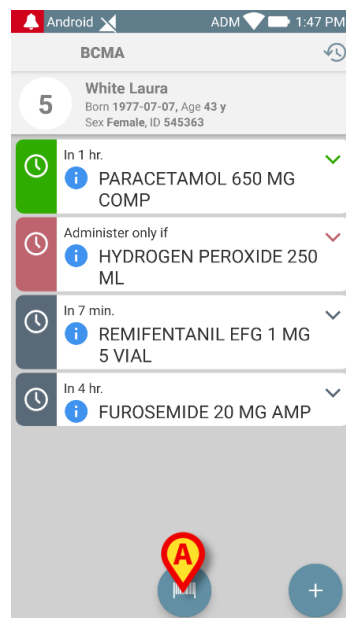**Fig 18**

➢ Tap the barcode icon (Fig 18 **A** - or press the "Scan" button on Myco 3 devices) to activate the barcode scan functionality.

On Myco 3 devices the barcode functionalities are activated by a dedicated button on the right side of the device. Therefore, on Myco 3 devices, the barcode icon is not displayed.

➢ Scan the barcode of the patient for which the treatment must be administered.

Confirmation is required.

➢ Confirm patient data.

After confirmation the patient is selected. Patient data is displayed on top. The list of existing orders for the selected patient is displayed below the patient data (Fig 19).

Fig 19

To select an order:

➢ Tap the barcode icon (Fig 19 **A -** or press the "Scan" button on Myco 3 devices) to activate the barcode scan functionality.

➢ Scan the barcode of the order to be administered.

The contextual drug administration window opens. This window changes according to the administration type. The existing types are described in the following sections. Fig 20 shows an example.

Missing information is indicated in red.

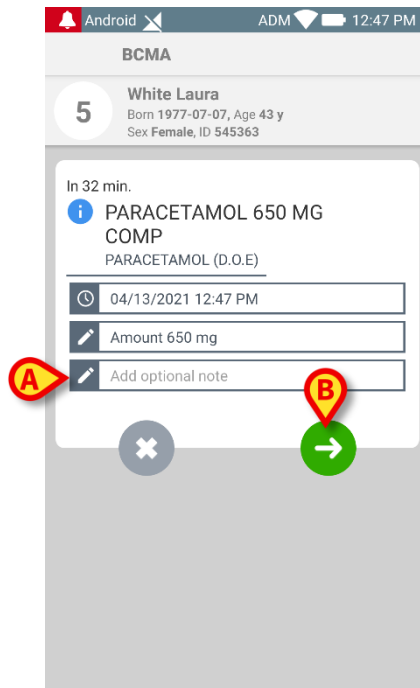➢ If necessary, fill the required fields (Fig 20 **A**).

Fig 20

> Tap the **Administer** icon (Fig 20 **B**).

The list of pending orders for the patient is displayed again, updated after the administration (Fig 19).

8.2 General procedure (Manual)

If the barcode functionalities are not available, the procedure can be completed manually. To do that:

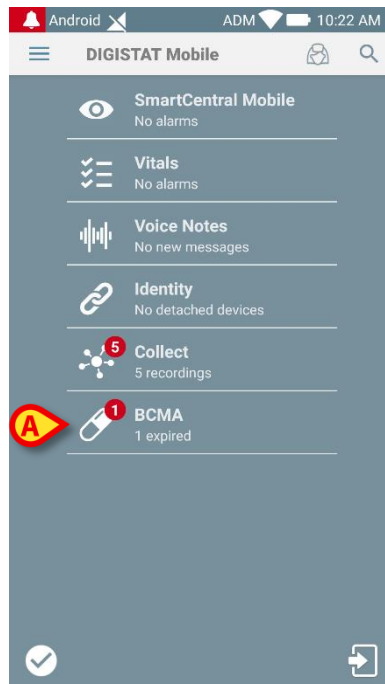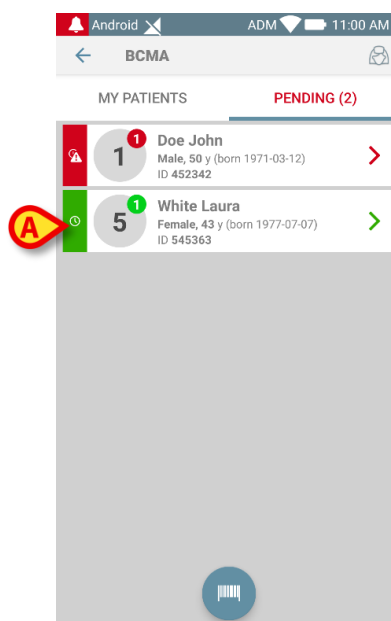➢ Tap the BCMA icon on the Digistat® Mobile launcher to access the BCMA application (Fig 21 **A**).

Fig 21

The list of "Pending" patients is displayed (Fig 22).

Fig 22

➢ Tap the tile corresponding to the wanted patient (Fig 22 **A**).

Patient data is displayed on top. The list of existing orders for the selected patient is displayed below the patient data (Fig 23). A note is displayed, indicating that the patient barcode was not scanned (Fig 23 **A**).
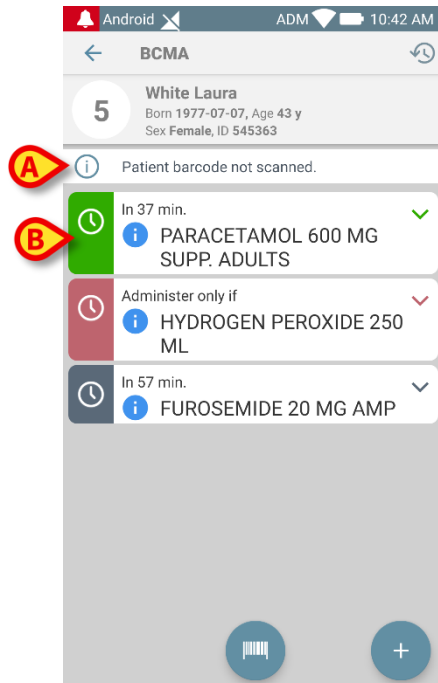
Fig 23

➢ Tap the tile corresponding to the treatment to be administered (Fig 23 **B**).

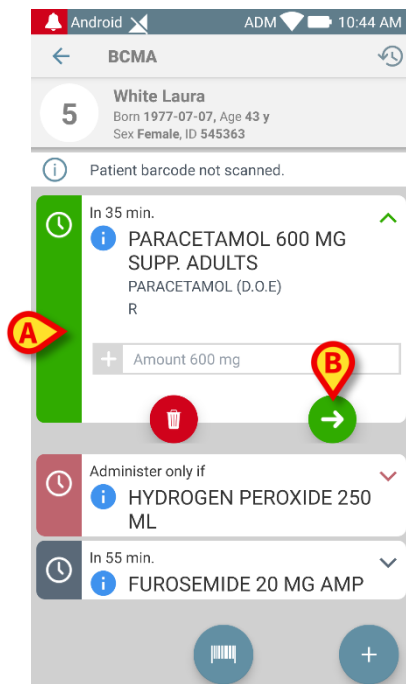The tile is enlarged, showing the available order information and the action icons (Fig 24 **A**).

Fig 24

➢ Tap the **Administer** icon (Fig 24 **B**).

The contextual drug administration window opens (Fig 25). This window changes according to the administration type. The existing types are described in the following sections. Fig 25 shows an example.

Fig 25

A reason for not scanning the patient barcode must be provided. To do that:

➢ Tap the field indicated in Fig 25 **A**.

The following window is displayed (Fig 26).

Fig 26

➢ Type the reason in the field indicated in Fig 26 **A**.

If configured, a drop-down menu containing a list of pre-defined reasons can be available for quick selection (Fig 26 **B**).

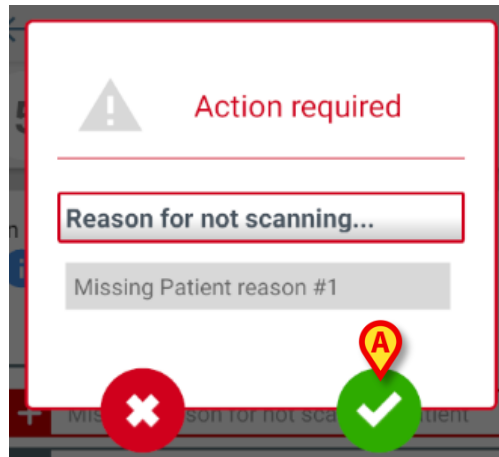After specification, the **Check** icon activates (Fig 27).

Fig 27

> ➢ Tap the **Check** icon (Fig 27 **A**).

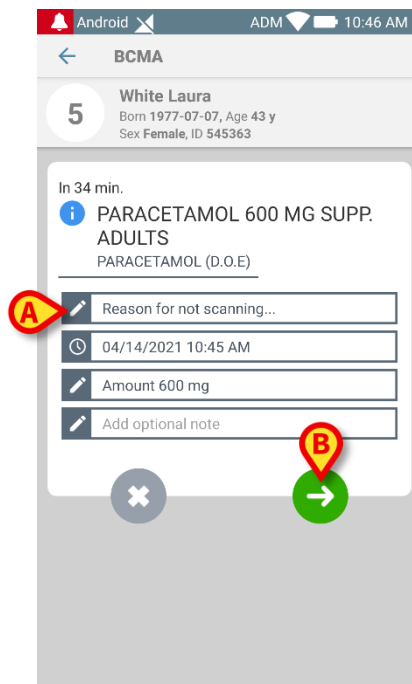The reason is displayed in the administration window (Fig 28 **A**).

Fig 28

> ➢ Tap the **Administer** icon (Fig 28 **B**).

The list of pending orders for the patient is displayed again, updated after the administration (Fig 23).

8.3 Durative administration procedure

For the administration of durative treatments (as, for instance, infusions or drips) the procedure requires to start/stop the administration at two separate times.

> **WARNING:**
> *The BCMA application **does not manage stop orders** for started durative administrations. I.e. the BCMA application notifies when a durative administration (for example infusions or drips) should start but does not notify when the same administration should stop.*

8.3.1 Start

To start a durative administration:

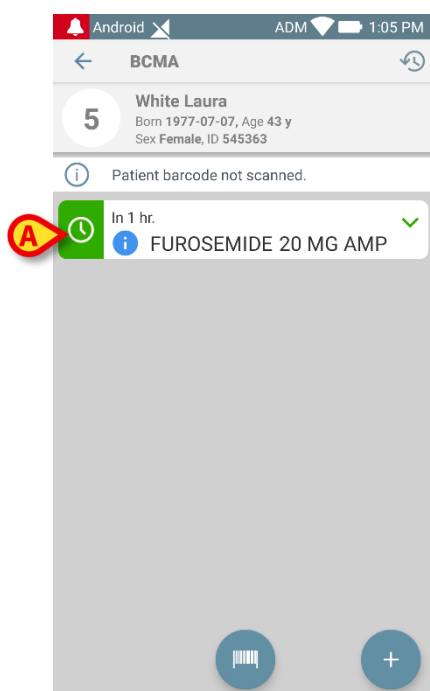➢ Access the "Patient orders list" (Fig 29).

Fig 29

➢ Select the relevant order, either manually or by barcode scan (Fig 29 **A**).

The order changes in the following way (Fig 30 - for barcode procedure, the administration window shown in Fig 31 is directly displayed).
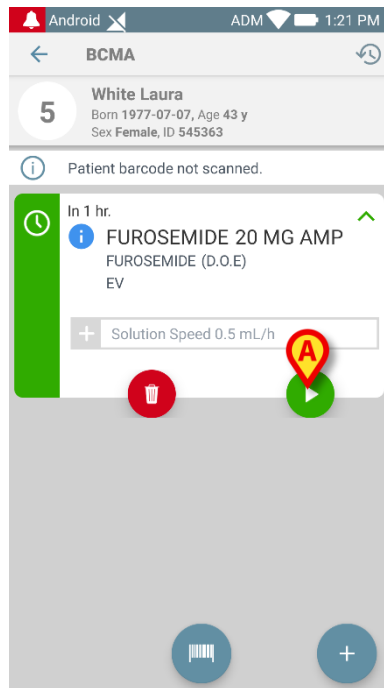
Fig 30

> Tap the **Start** icon (Fig 30 **A**).

The administration specification window is displayed (Fig 31).

Fig 31

If there are required fields to be filled, they are red (see Fig 31 **A**, for example).

> Fill the required fields.

> Tap the **Start** icon (Fig 31 **B**).

The order turns to "in progress" state (cyan).

8.3.2 Stop

To stop a durative administration:
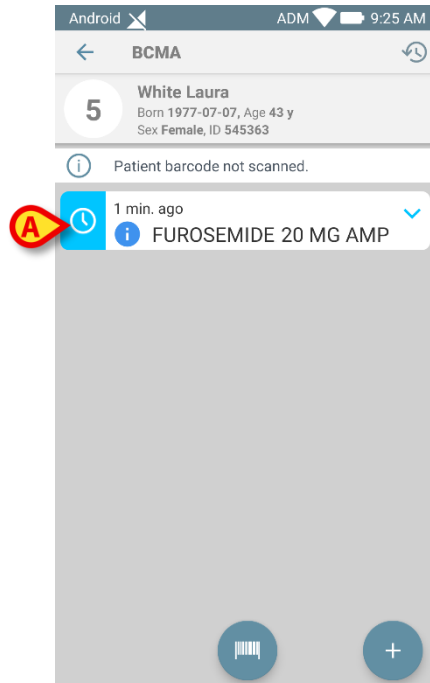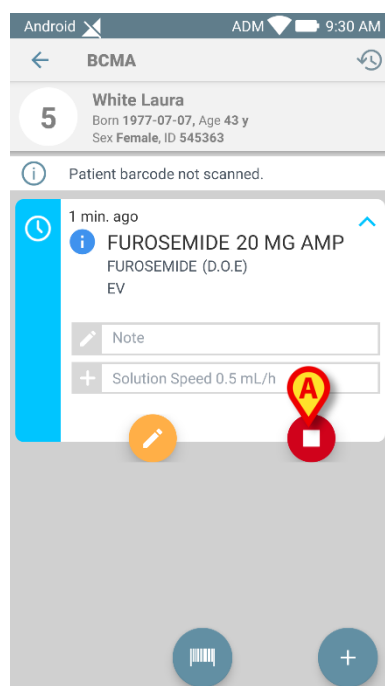
➢ Access the "Patient orders list "screen (Fig 32).

Fig 32

➢ Select the relevant order (cyan color), either manually or by barcode scan (Fig 32 **A**).

The order changes in the following way (Fig 33 - for barcode procedure, the administration window shown in Fig 34 is directly displayed).

Fig 33

➢ Tap the **Stop** icon (Fig 30 **A**).
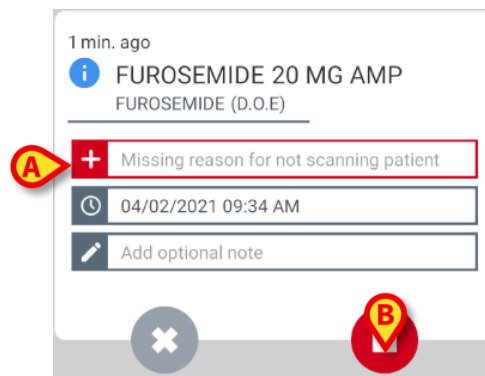
The specification window is displayed (Fig 34).

Fig 34

If there are required fields to be filled, they are red (see Fig 34 **A**, for example).

➢ Fill the required fields.
➢ Tap the **Stop** icon (Fig 31 **B**).

The administration is stopped. The orders list is displayed again, updated after the administration.

8.3.3 Changing the values of an administration in progress

To change the values (for example the solution speed) of a durative administration in progress:

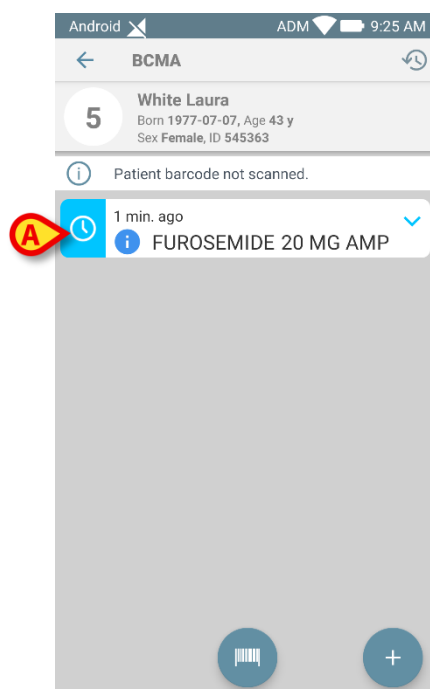➢ Access the "Patient orders list "screen (Fig 35).

Fig 35

➢ Select the relevant order, either manually or by barcode scan (Fig 35 **A**).

The order changes in the following way (Fig 36).
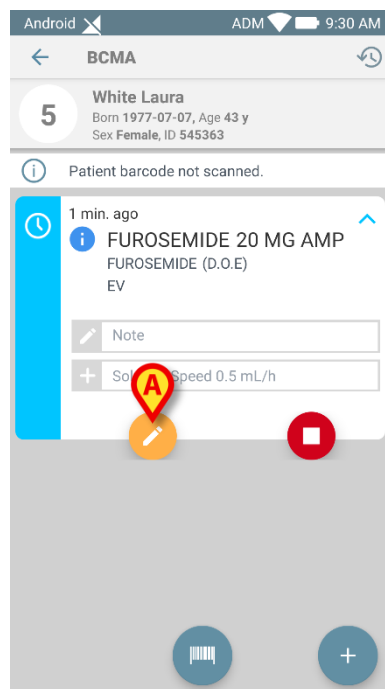

Fig 36

➢ Tap the **Write** icon (Fig 36 **A**).
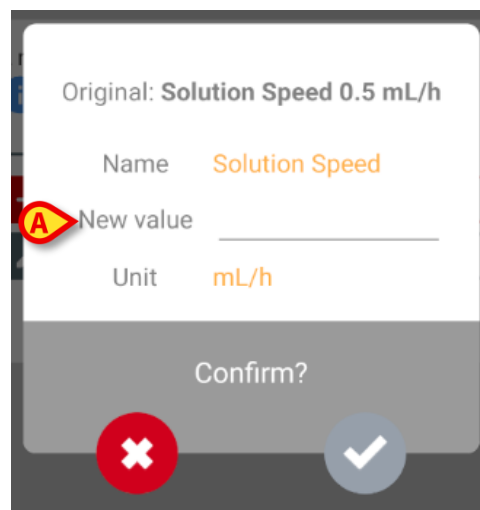
The following window is displayed (Fig 37).

Fig 37

➢ Type the new value in the **New Value** field (Fig 37 **A**).
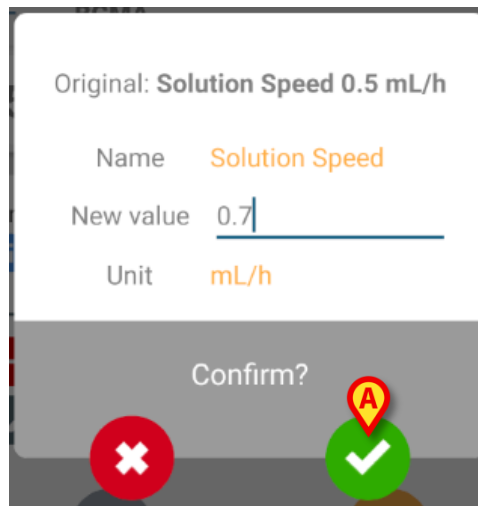
The check icon activates (Fig 38).

Fig 38

> Tap the **Check** icon (Fig 38 **A**).

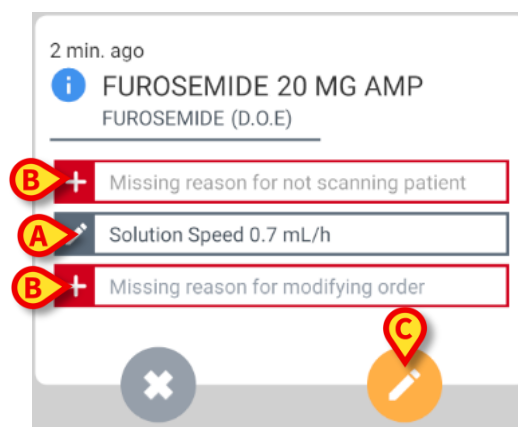The new value is displayed in the administration window (Fig 39 **A**).

Fig 39

> Fill the required fields (Fig 39 **B**).

> Tap the **Write** icon (Fig 39 **C**).

The administration, still in progress (cyan), is updated to the new values.

8.4 Conditional administration procedure

A conditional order is an order that must be administered only if certain conditions occur.
For example: "administer if temperature is above 39°". Therefore, conditional orders do not have a scheduled time. Conditional orders are pink in the BCMA app. The condition is indicated in the tile (see Fig 40).

To administer a conditional order:
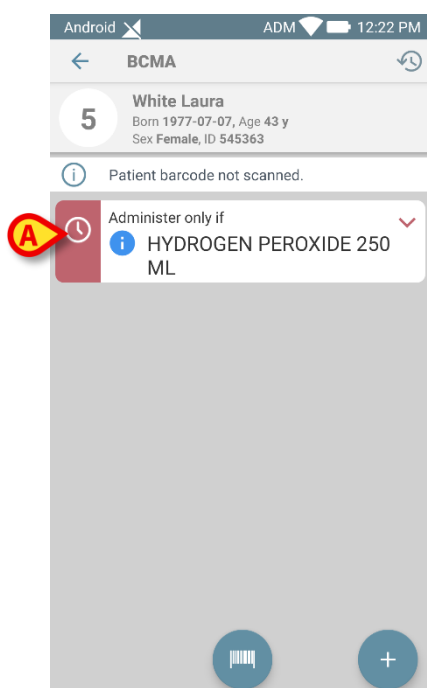
➤ Access the "Patient orders list "screen (Fig 40).

Fig 40

➤ Administer using the procedure related to the specific treatment type (the possible procedures are described in section 8).

If the treatment is defined as "repeatable" at prescription time (on the Digistat® Therapy Prescription desktop module), then the conditional order is still displayed for possible future administrations.

If not, the conditional order is removed from the orders list.

8.5 Administration of a "Late" order

A "Late" order is an order that should have been administered before, according to the administration schedule. The color of the tile is red (Fig 41). To administer a late order:
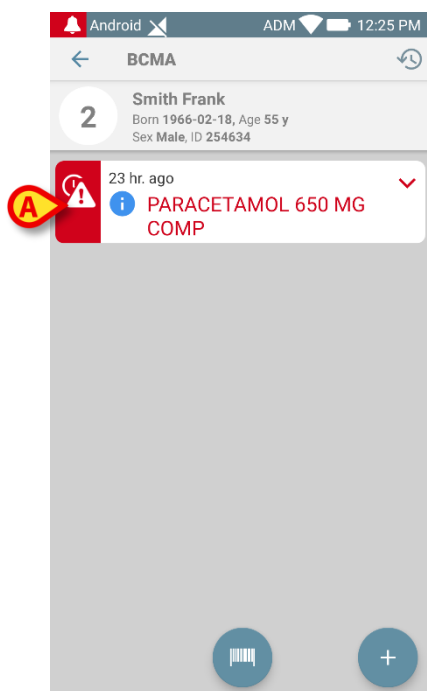
> ➢ Access the "Patient orders list" (Fig 41).

Fig 41

> ➢ Administer using the procedure related to the specific treatment type (see sections 8).

On the administration window it is required to specify a reason for administering the treatment late.

> ➢ Tap the required field.
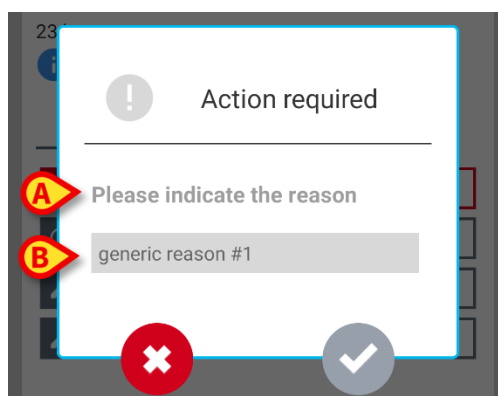
The following window is displayed (Fig 42).

Fig 42

> ➢ Type the reason in the field indicated in Fig 42 **A**.

If configured, a drop-down menu containing a list of pre-defined reasons can be available for quick selection (Fig 42 **B**).

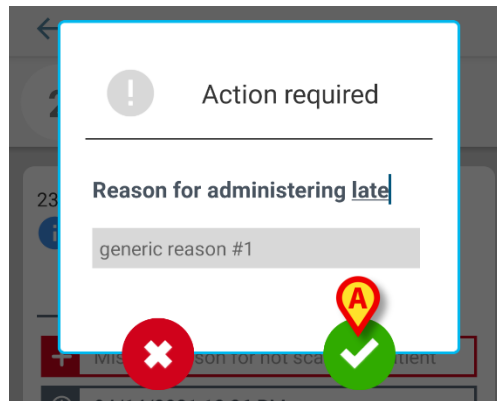After specification, the **Check** icon activates.

Fig 43

> ➢ Tap the **Check** icon (Fig 43 **A**).

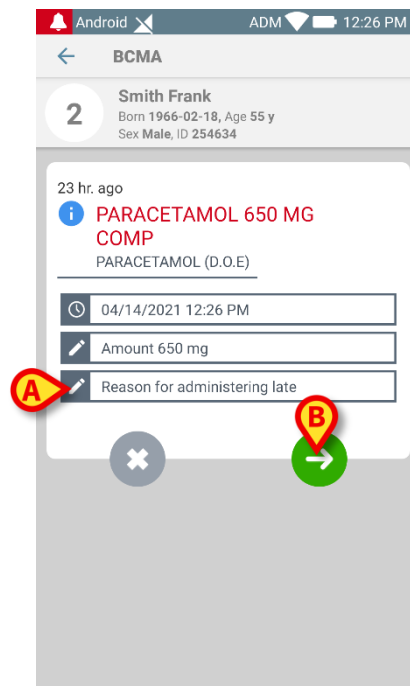The reason is displayed in the administration window (Fig 44 **A**).

Fig 44

> ➢ Tap the **Administer** icon (Fig 44 **B**).

The orders list is displayed again, updated after the administration (Fig 23).

8.6 Administration before the scheduled time

A treatment can be administered before the scheduled time. The reason for anticipating the administration must be specified at administration time. The color of the tile is grey (Fig 45). To administer a future order:
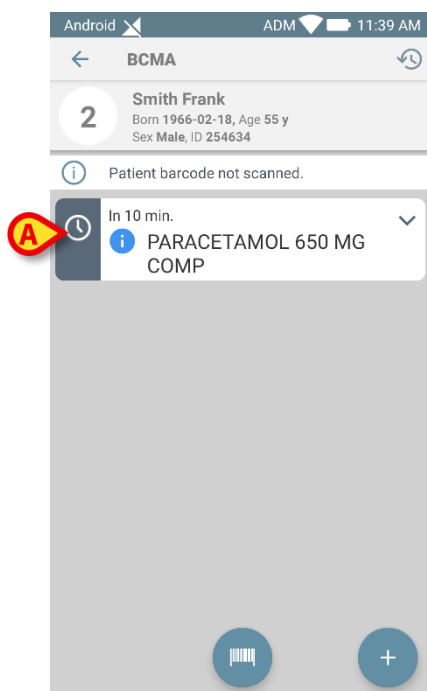
➢ Access the "Patient orders list" (Fig 45).

Fig 45

➢ Administer using the procedure related to the specific treatment type (see section 8).

On the administration window it is required to specify a reason for anticipating the treatment administration.

➢ Tap the required field.

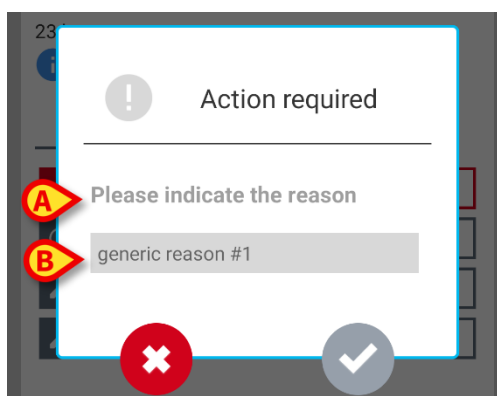The following window is displayed (Fig 46).

Fig 46

➢ Type the reason in the field indicated in Fig 46 **A**.

If configured, a drop-down menu containing a list of pre-defined reasons can be available for quick selection (Fig 46 **B**).

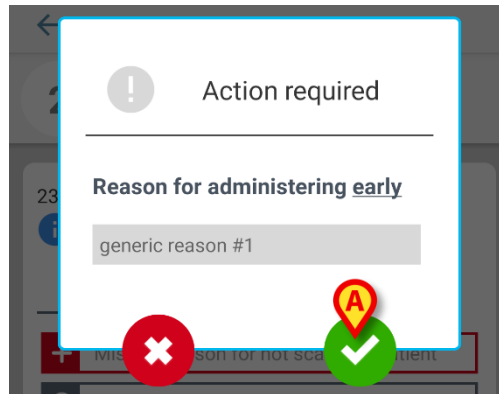After specification, the **Check** icon activates (Fig 47).

Fig 47

> ➢ Tap the **Check** icon (Fig 47 **A**).

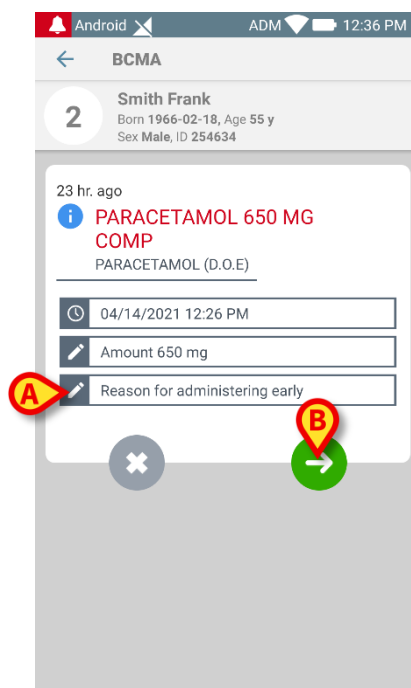The reason is displayed in the administration window (Fig 48 **A**).

Fig 48

> ➢ Tap the **Administer** icon (Fig 48 **B**).

The list of pending orders for the patient is displayed again, updated after the administration (Fig 45).

8.7 Witnessed administration

Some critical treatments, defined during configuration, require a witnessed administration. That means that, at administration time, a second user, different from the logged one, must insert username and password to "witness" the administration of the critical treatment.

To do that:

➢ Access the "Patient orders list" (Fig 41).

The order requiring a witnessed administration is characterized by the "eye" icon indicated in Fig 49 **A**.
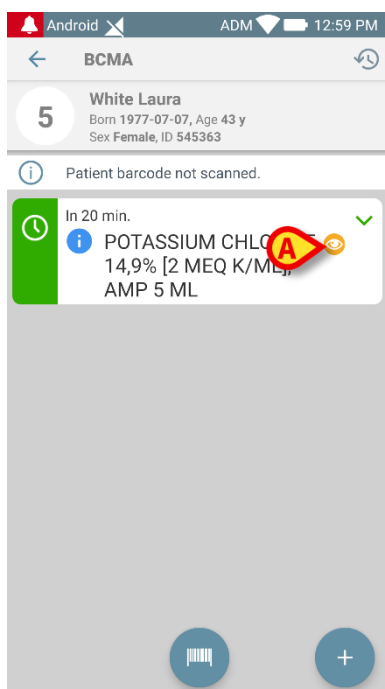

Fig 49

➢ Select the relevant order, either manually or by barcode scan.

The order changes in the following way (Fig 50 - for barcode procedure, Fig 51 is directly displayed)
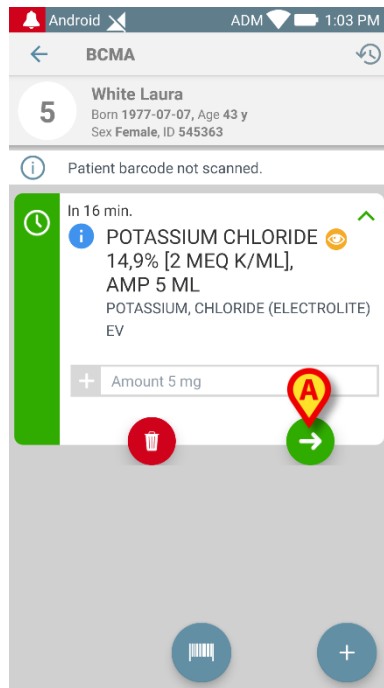
Fig 50

➢ Tap the **Administer** icon (Fig 50 **A**).

The following window is displayed, requesting username and password of a "witness", i.e. a user that is different from the one currently logged (Fig 51).
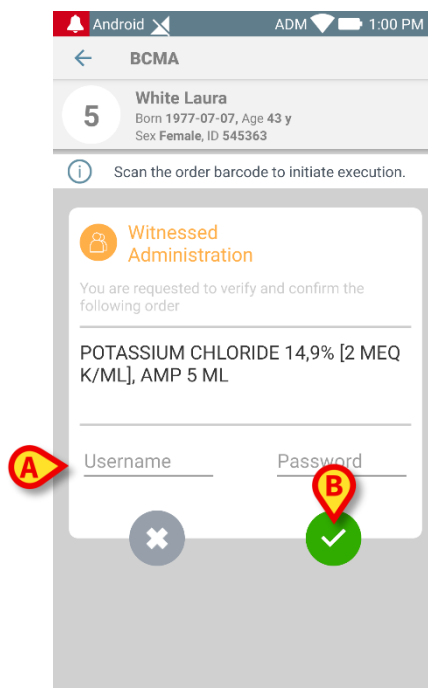

Fig 51

➢ Insert username and password of the "witness" user (Fig 51 **A**).

➢ Tap the check icon (Fig 51 **B**).

➢ Proceed with the administration as specified in sections 8, depending on the administration type.

When changing the administration values of a witnessed administration, the credentials of the "witness" user must be entered again.

8.8 Changing the administration values

To change the values of an administration before administering it:
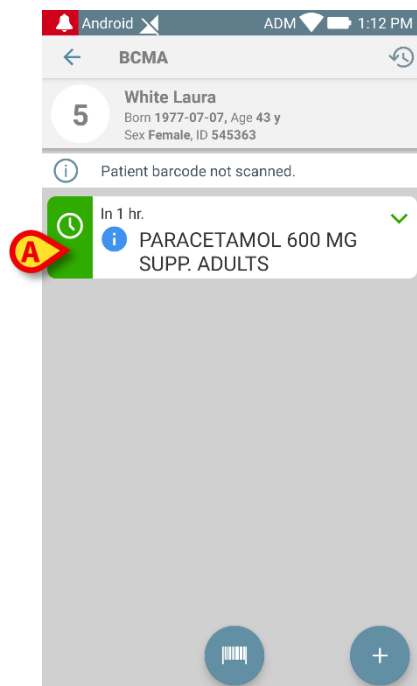
➢ Access the "Patient orders list" (Fig 52).

Fig 52

➢ Select the relevant order, either manually or by barcode scan.

The order changes in the following way (Fig 53 - for barcode procedure, Fig 54 is directly displayed).
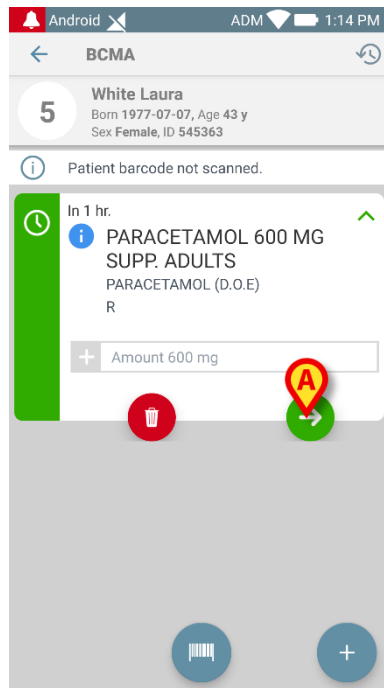
Fig 53

➢ Tap the **Administer** icon (Fig 53 **A**).

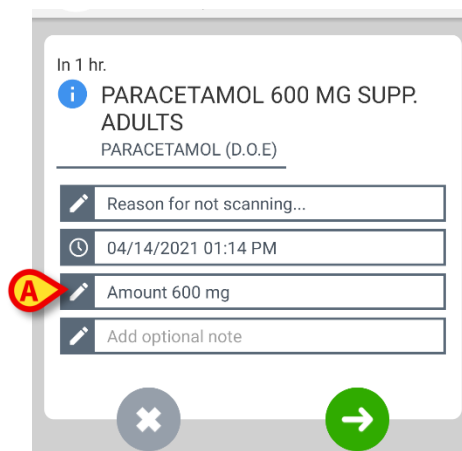The following window is displayed.

Fig 54

➢ Tap the "Write" icon on the left of the "Amount" field (Fig 54 **A**).
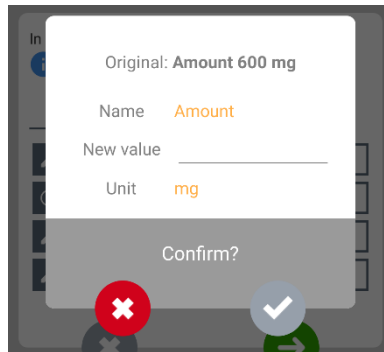
The following window is displayed (Fig 55).

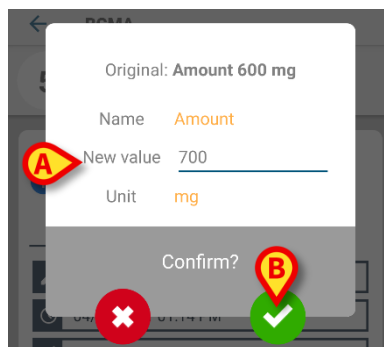**Fig 55**

➤ Type the new amount in the "New value" field (Fig 56 **A**).

Fig 56

➤ Tap the **check** icon (Fig 56 **B**).

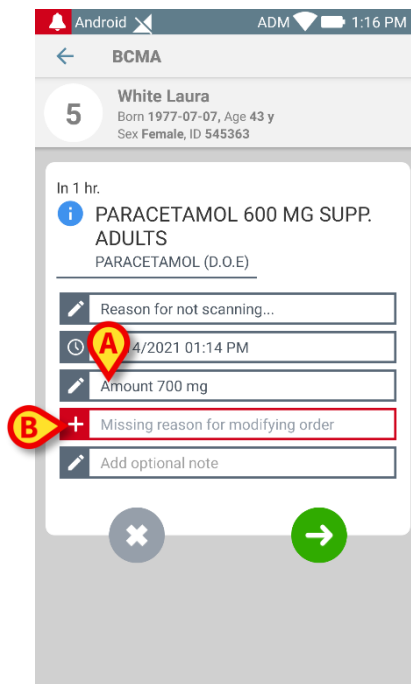The new value is inserted in the administration window (Fig 57 **A**).

Fig 57

The reason for modifying the order must be inserted in the field indicated in Fig 57 **B**. To do that:

➢ Tap the missing reason field (Fig 57 **B**).

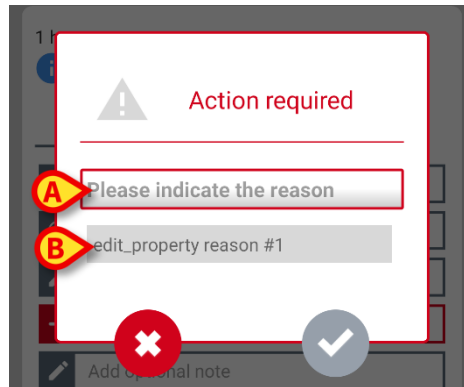The following window is displayed (Fig 58).

Fig 58

➢ Type the reason in the field indicated in Fig 58 **A**.

If configured, a drop-down menu containing a list of pre-defined reasons can be available for quick selection (Fig 58 **B**).

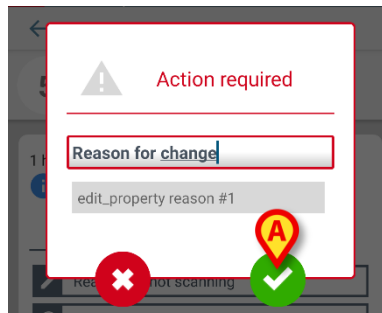After specification, the **Check** icon activates (Fig 59).

Fig 59

➢ Tap the **Check** icon (Fig 59 **A**).

The reason is displayed in the administration window (Fig 60 **A**).

Fig 60

> Tap the **Administer** icon (Fig 60 **B**) to administer the treatment.

8.8.1 Changing the administration time

If documenting an administration on the BCMA application at a time that is different from the actual administration time, it is possible to change the administration time on the BCMA application. For example: If a nurse administers a treatment at 10 but, for any reason, cannot document the administration until 10:30, they can set the actual administration time on the application. To do that, on the administration window:

> Tap the date/time field (Fig 61 **A**).

Fig 61

A date time picker opens.

➢ Set the date/time.

After the new date/time settings are saved it is required to add a note indicating the reason why date/time was changed.

8.9 Creating a new order

Some configured treatments can be ordered directly on the BCMA application, without an existing prescription on the Therapy Prescription desktop module. To create a new order for a treatment:

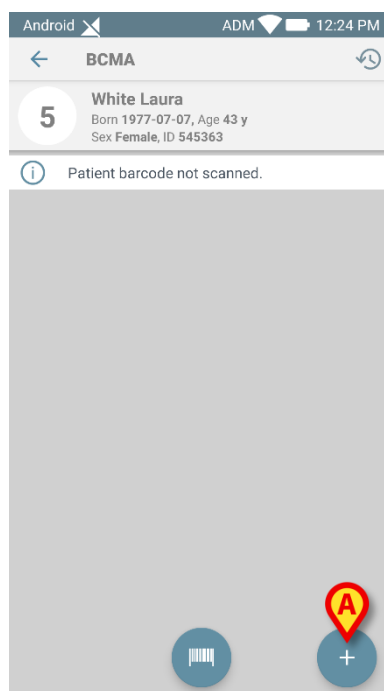➢ Access the "Patient orders list" screen (Fig 62).

Fig 62

➢ Tap the " ＋ " icon (Fig 62 **A**).

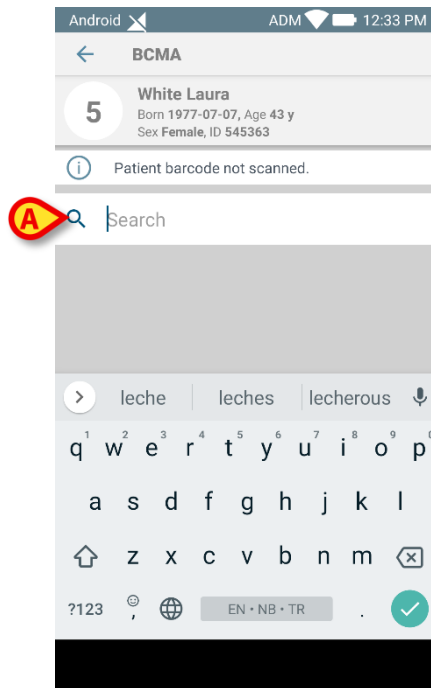A search field is displayed (Fig 63 **A**).

Fig 63

➢ Type a search string in the field (Fig 64 **A**).

The treatments matching the inserted search string are listed on screen (Fig 64 **B**).
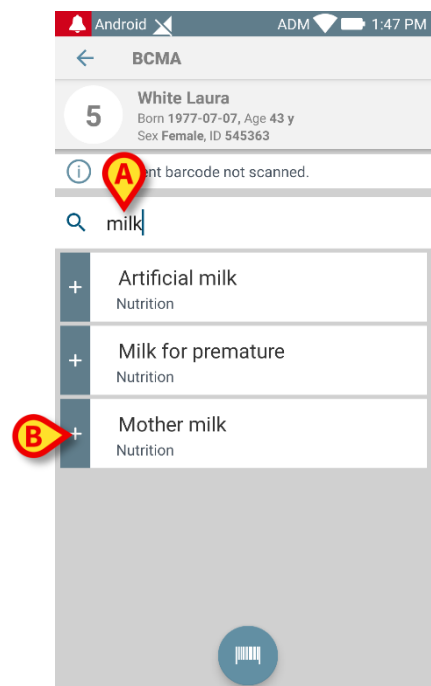

Fig 64

➢ Tap the wanted treatment.

The administration window is displayed. The fields that require to be filled are red (Fig 65 **A**).

Fig 65

> Tap the "Write" icon on the left of the fields to be filled (Fig 65 **A**).

> Insert the required values.

> Tap the **Administer** icon (Fig 65 **B**).

The order is administered according to its configuration and the values specified by the user.

8.10 Deleting an order

To delete an existing order:
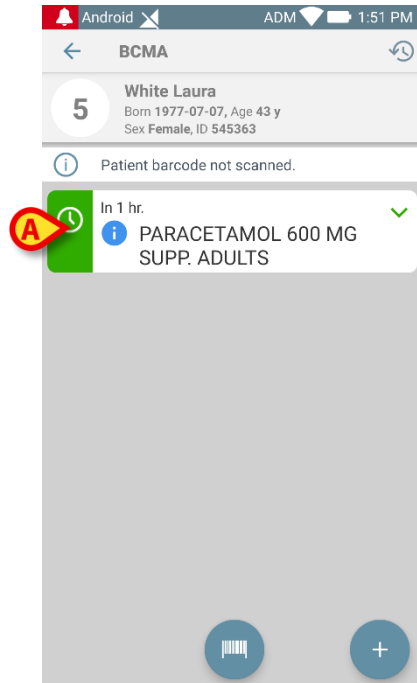
➢ Access the "Patient orders list "screen (Fig 66).

Fig 66

➢ Select the relevant order, either manually or by barcode scan.

The order changes in the following way (Fig 67 - for barcode procedure, Fig 68 is directly displayed).
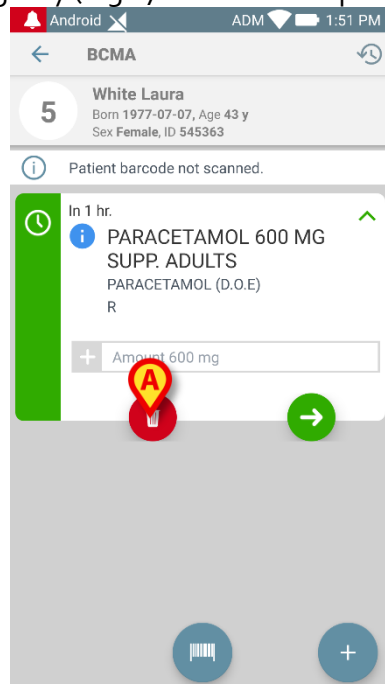

Fig 67

➢ Tap the **Delete** icon (Fig 67 **A**).

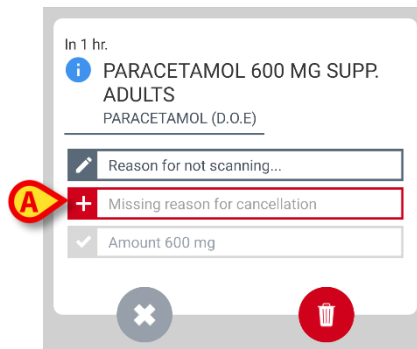The following window is displayed. A reason for cancelation is required (Fig 68 **A**).

Fig 68

> Insert the reason for cancellation (Fig 69 **A**).
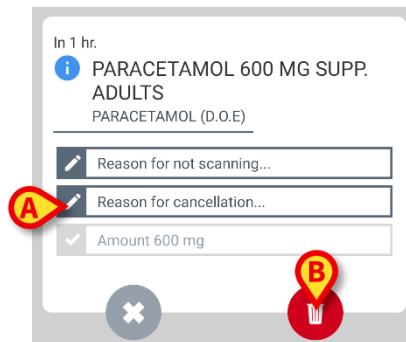> Tap the **Delete** icon (Fig 69 **B**).

Fig 69

The order is deleted. The orders list is displayed again, updated after cancellation.