Nurse Care Plan
User Manual

Version 5.0

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Contents

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 "Nurse Care Plan", described in this document.

1. Introduction

The Nurse Care Plan module (NCP from now on) is a tool that supports the clinical staff in scheduling and documenting different care activities.
Examples are:

- Actions required due to changes in patient conditions (problems arising);
- Nurse assessments documentation;
- Etc...

Different kinds of activities and tasks can be configured, according to the healthcare structure's requirements. Care plans related to patient profiles can be pre-defined during configuration and selected at patient admission.

The activities are grouped according to the problem they address. The problems are grouped according to the functional area they refer. The module contents are therefore organized in hierarchical form, with functional areas on top, then problems, then activities.

1.1. Launching Nurse Care Plan

To launch Nurse Care Plan:

- Click the  icon on the lateral bar.

A screen is displayed, showing the data of the patient currently selected. Nurse Care Plan requires patient selection. If no patient is currently selected, an empty screen is displayed, reminding that "This module requires a patient". See section 1.2.

1.2. Patient selection

To select a patient,

- Click the **Patient** button indicated in Fig 1 **A**.

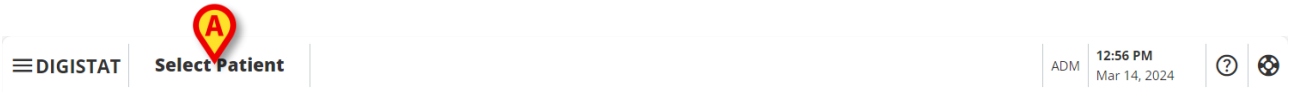

Fig 1

The Digistat Patient Explorer Web module opens. See the Digistat Patient Explorer Web user manual (*USR ENG Patient Explorer Web*) for instructions on patient management functionalities.

Other modules can be configured for the patient selection in place of Patient Explorer Web, depending on the choices of the healthcare organisation. If this is the case, see the specific documentation for instructions.

When a patient is selected the module displays the data of the selected patient.

1.3. Nurse Care Plan structure

The NCP module is structured in three parts, each one providing specific tools:

- "Active plan" (described in section 3) – lists the activities to be executed according to the plan and allows to document them.
- "Plan Management" (described in section 2) – allows to create and manage the nurse care plan.
- "Anomalies" (described in section 4) – lists the actions that were not performed when due, or that were performed differently.

The screen selected by default when launching the module is the "Active Plan" (Fig 2), that, being the environment on which the activities are documented daily, is the main "workplace" for the end user.

To select another screen and display the corresponding functionalities:

➢ Click one of the tabs indicated in Fig 2 **A**.

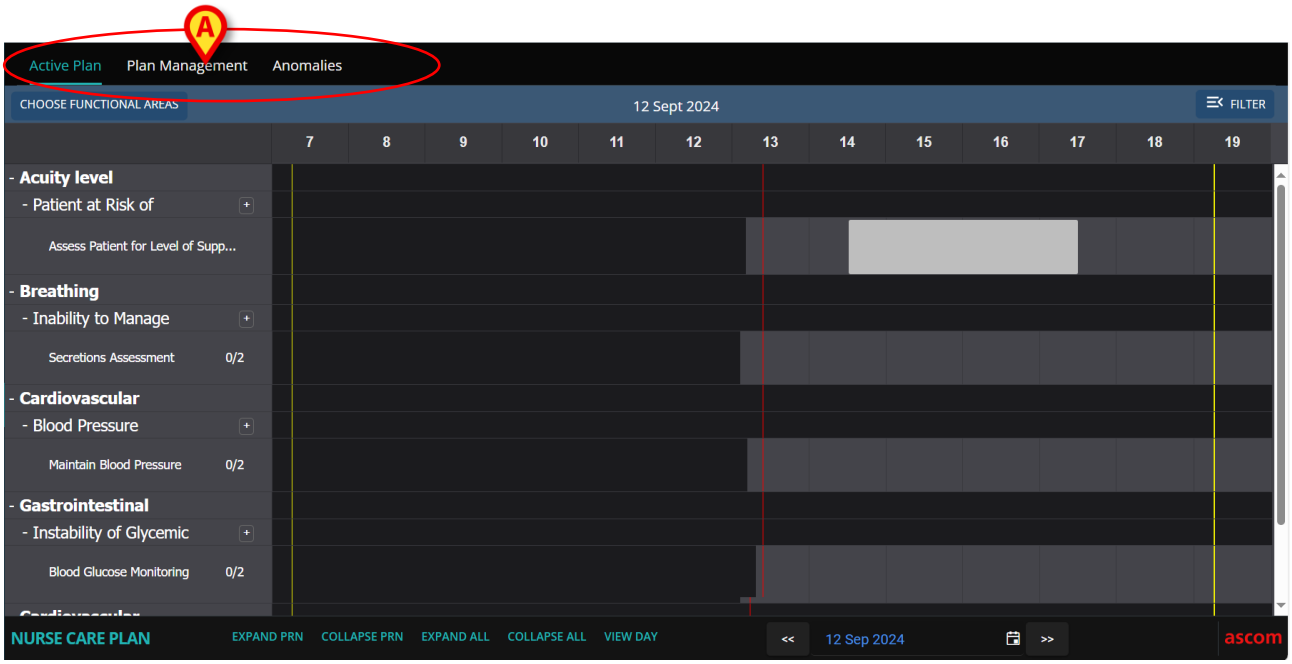

Fig 2

*An additional section can be configured on top of the screen to convey textual information. In Fig 3 **A**, for example, this section is configured to indicate the healthcare structure to which the logged user is registered and their roles.*

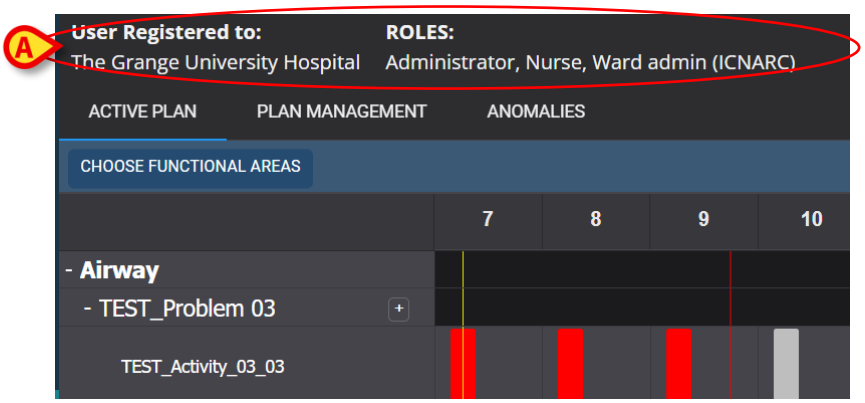

Fig 3

2. Plan Management

For a better understanding of the logical workflows, the “Plan Management” screen is described first. This screen lists the problems and activities already existing for the selected patient. The activities, displayed in a table, are grouped according to the module hierarchical structure (Functional areas → Problems → Activities). In Fig 4, for example, one problem and two activities are present (Fig 4 **A**).

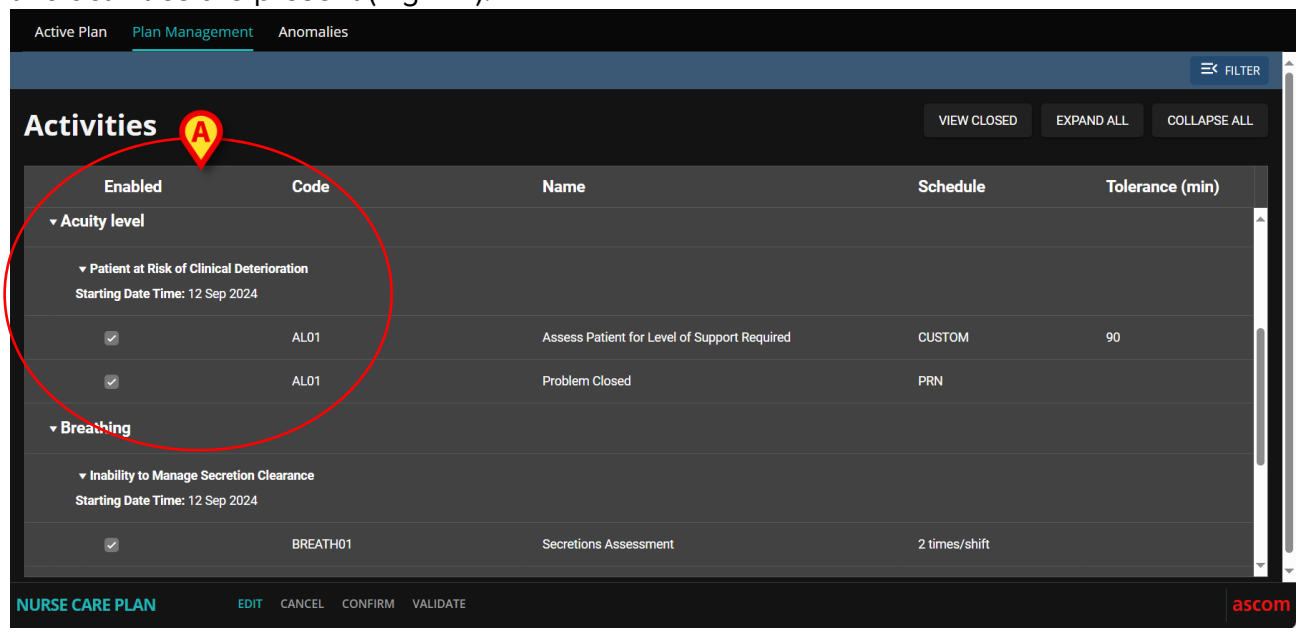

Fig 4

In Fig 4 **A**, for example, the functional area is “Acuity Level”, the problem is “Patient at risk of clinical deterioration” and the possible activities for this problem are a) “Assess patient for level of support required” or b) "Close the problem” if the problematic condition disappears.

In the table, for every activity, the following information is provided (Fig 5 **A**):

- Enabled checkbox (see Fig 31 for the explanation).

- Activity code – univocal hospital code for that specific procedure.
- Activity name – the name, understandable in current language, of the action to be performed.
- Schedule – when and/or how many times the action must be performed.
- Tolerance (if relevant) – possible tolerance period for executing the activity in time if an exact time is scheduled for the execution.

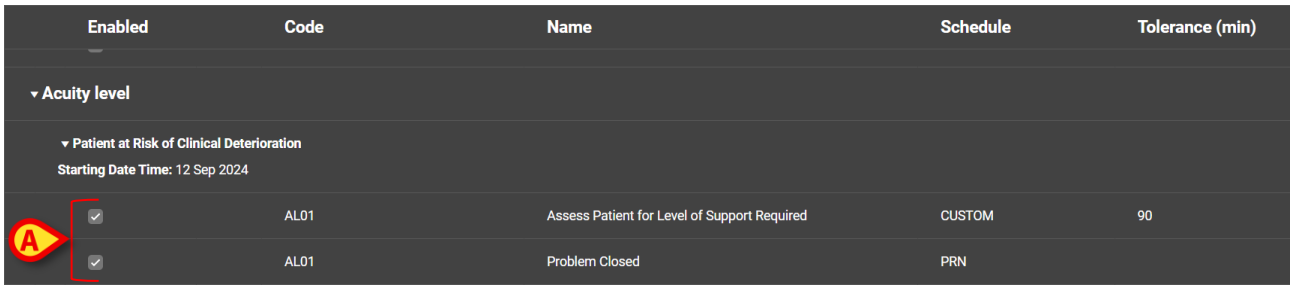

Fig 5

The activities listed on the "Plan Management" screen are displayed, in a different, actionable form, on the "Active Plan" screen (described in section 3). See, for example, Fig 6, showing the "Active Plan" representation of the activities listed in the "Plan Management" shown in Fig 4.

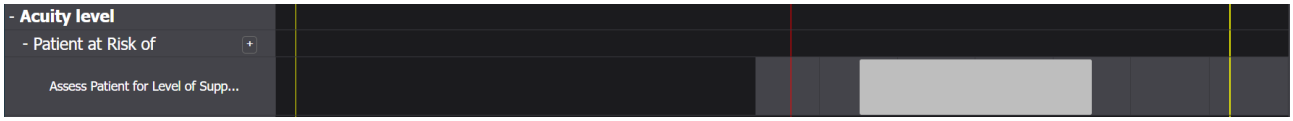

Fig 6

2.1. Adding a problem

It is possible, on the "Plan Management" screen, to add problems. Each problem carries a set of preconfigured activities. To add a problem and the related activities to the "Active Plan":

➢ Click the PLAN MANAGEMENT tab (Fig 7 **A**).

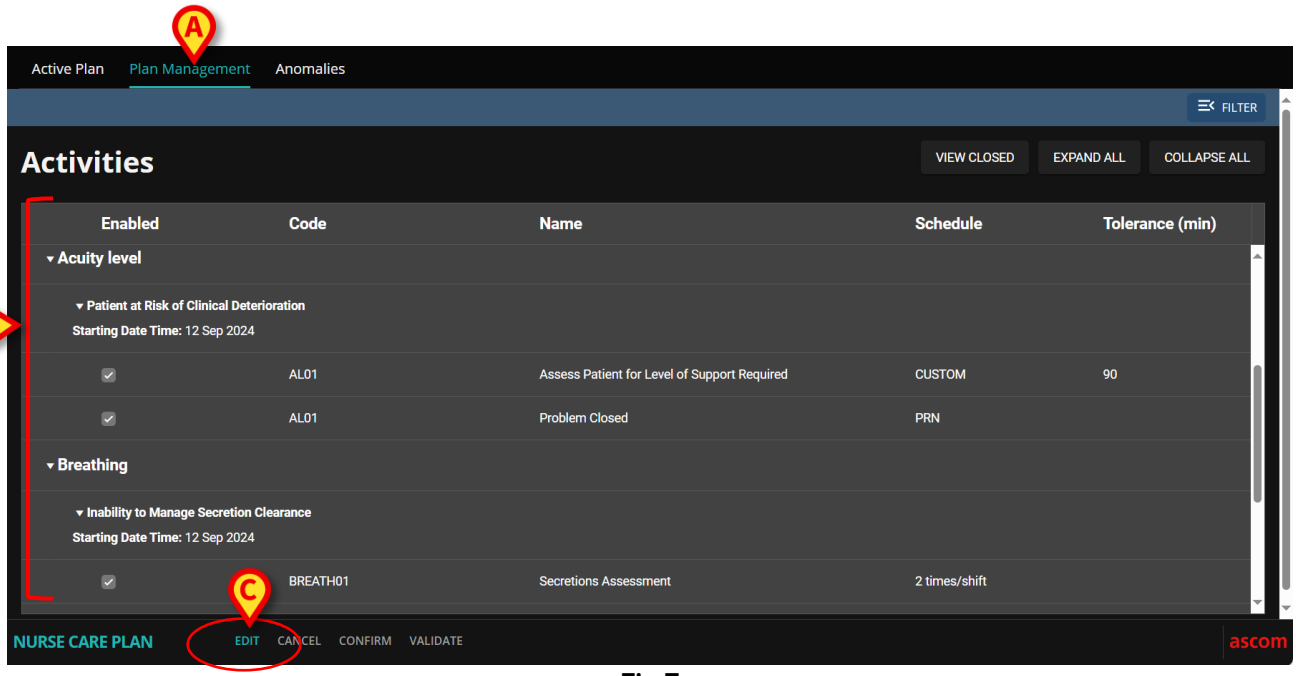

Fig 7

The “Plan Management” screen is displayed (Fig 7). The already present activities are listed on the page (Fig 7 **B**).

- Click the **Edit** button (Fig 7 **C**).

The screen changes in the following way (Fig 8).

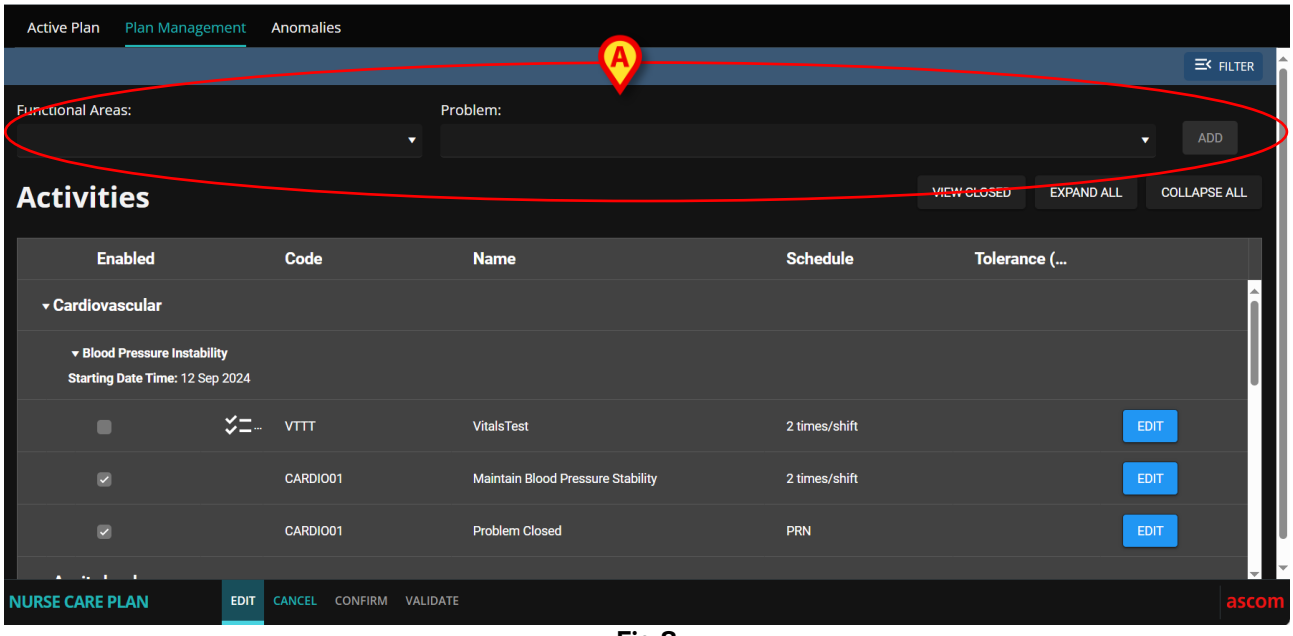

Fig 8

- Select a functional area and a problem in the available fields (Fig 8 **A**, Fig 9).

The selection of a functional area filters the problems that are available for selection in the “Problem” field. Only those belonging to the selected functional area (and that were not already selected) are displayed.

Fig 9

In Fig 9 the problem “Dysrhythmia” in the “Cardiovascular” functional area is selected.

- Click **Add** Fig 9 **A**.

The activities list changes in the following way (Fig 10):

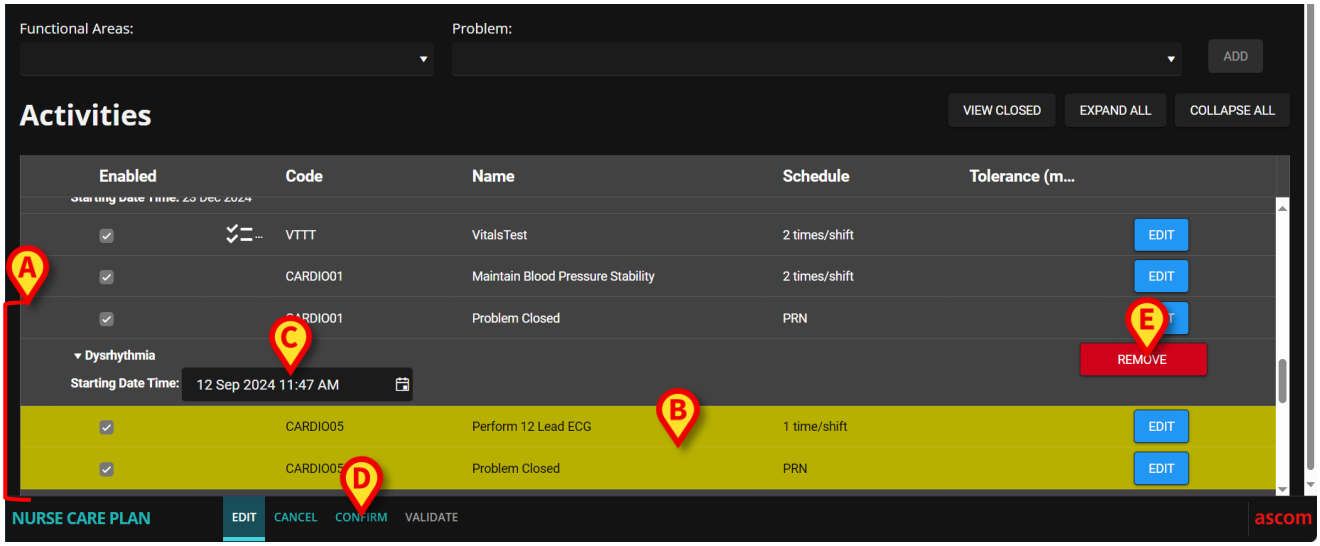

Fig 10

The new problem is added to the list (Fig 10 **A**). The corresponding activities are displayed in yellow, meaning that they are not confirmed yet (Fig 10 **B**).

The current day/time is selected by default as the starting date/time of the problem (Fig 10 **C**). It can be edited. To edit the date/time, either type the new value in the field or click the icon to select the value on a selection tool. The date/time can be set in the past (in case the user is documenting something that occurred significantly before it was possible to use NCP) or in the future (in case it is necessary to prepare the plan in advance). The selectable time limits are within the existing plan, i.e.: the plan creation time is the limit in the past and the plan validity duration is the limit in the future.

The plan validity duration is set by the PlanDuration System Option. Refer to the system administrators or see the document DSO ENG System Options for more information.

The **Remove** button (Fig 10 **E**) allows to remove the specific problem, and only that one. If editing a plan and inserting multiple problems within the same procedure, this button makes it possible to remove single problems without canceling the whole procedure. The button, for example, is present alongside each single problem when selecting a standard plan (see section 2.2). After plan confirmation (see below), the **Remove** button is not available anymore.

Some of the features of the activities can be edited. See section 2.3 for the activity editing procedures.

- Click **Confirm** to confirm the changes made (Fig 10 **D**).

The screen changes in the following way (Fig 11):

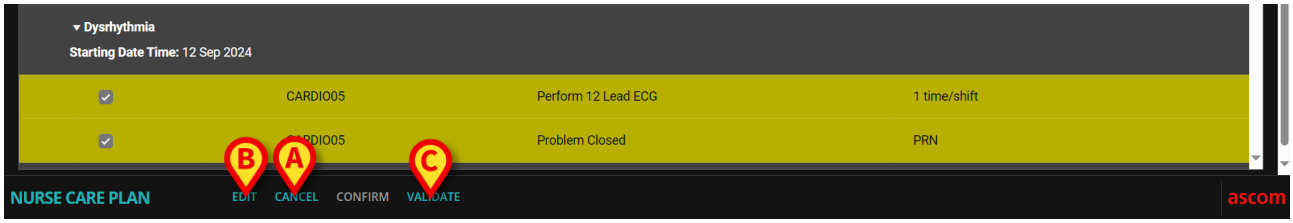

Fig 11

The changes are this way saved but they are not applied to the Active Plan until the new plan is validated. At this stage it is still possible to discard the changes made (**Cancel** button - Fig 11 **A**) or perform additional changes before validation (**Edit** button again - Fig 11 **B**).

To validate the plan:

- Click **Validate** (Fig 11 **C**).

The validation may require some time. A pop-up window is displayed while the validation is in progress.

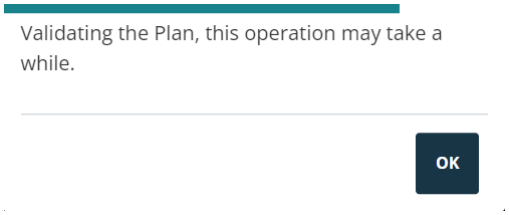

Fig 12

The new problem and the related activities are this way added to the "Active Plan" (Fig 13).

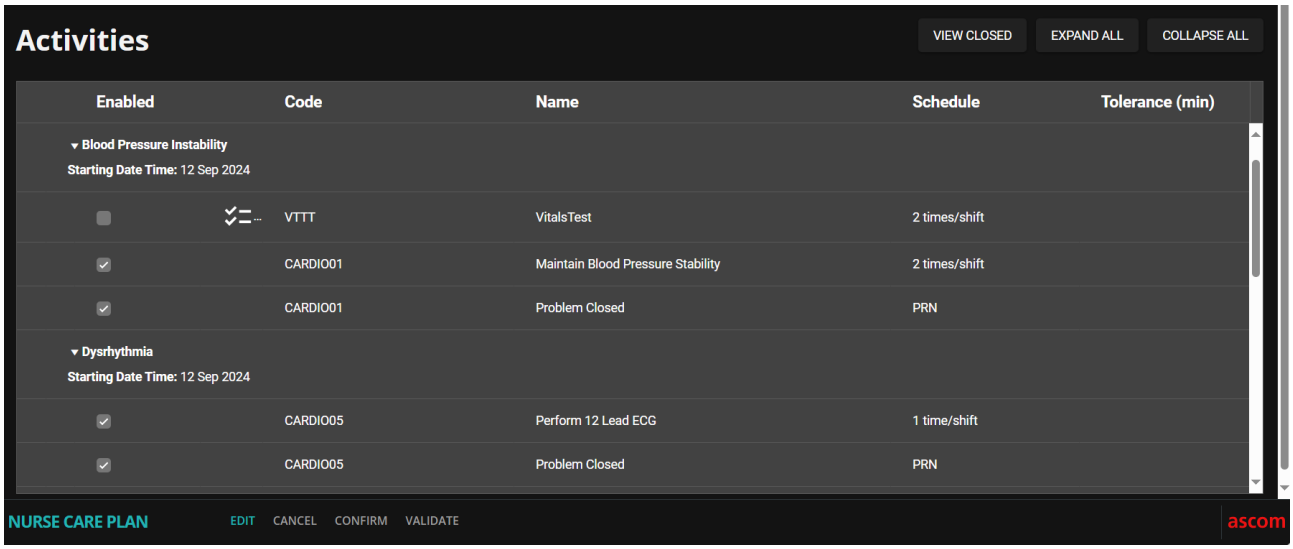

Fig 13

In the example shown in Fig 13 there are two problems (Blood pressure instability and Dysrhythmia) both belonging to the same functional area (Cardiovascular) and each one requiring two possible actions.
A problem belonging to a different functional area would be displayed according to the module hierarchic logic (see Fig 14 – the “Patient at risk of clinical deterioration” problem was added, belonging to the “Acuity level” functional area).

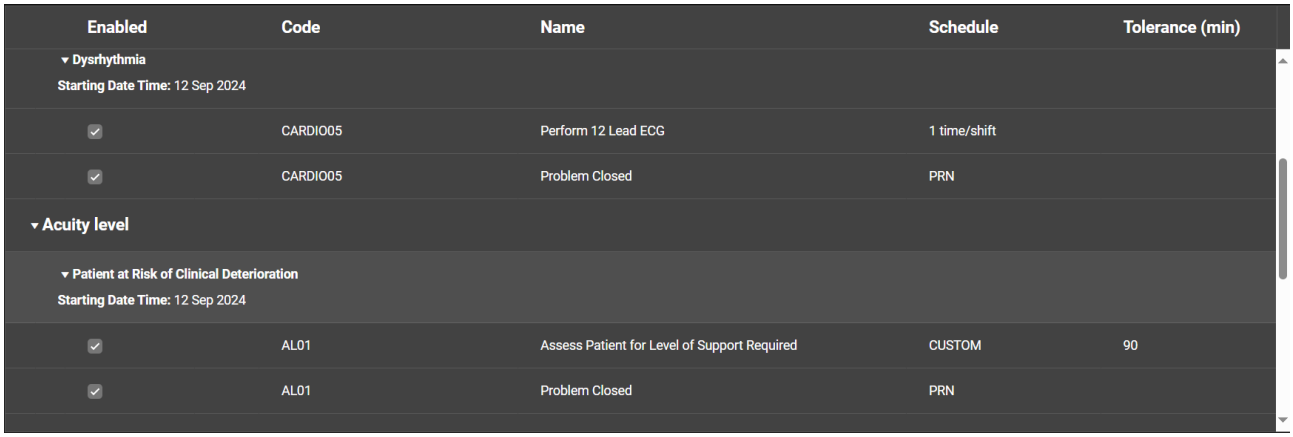

Fig 14

The validated plan is displayed on the “Active Plan” in a different form (Fig 15).

Fig 15

2.2. Standard plans selection

For a new patient, for which no activity is yet specified, it is possible to select a standard plan, i.e. a set of pre-configured problems/activities that correspond to the patient’s clinical profile. See for example Fig 16, where no activity was selected.

A selected standard plan can be edited at selection time (as described in paragraph 2.3). Additional problems/activities can be specified later (paragraph 2.1).

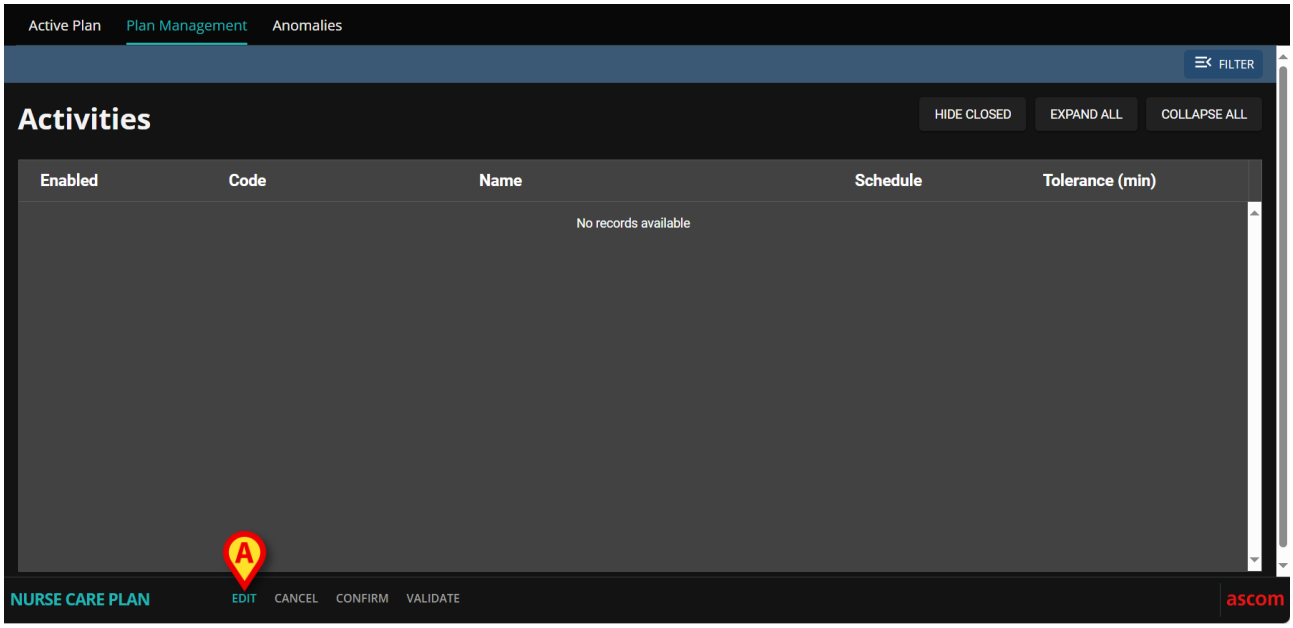

Fig 16

To select a standard plan:

- Click the **Edit** button on the command bar (Fig 16 **A**).

If no activity is present on the patient's plan, the screen changes in the following way (Fig 17).

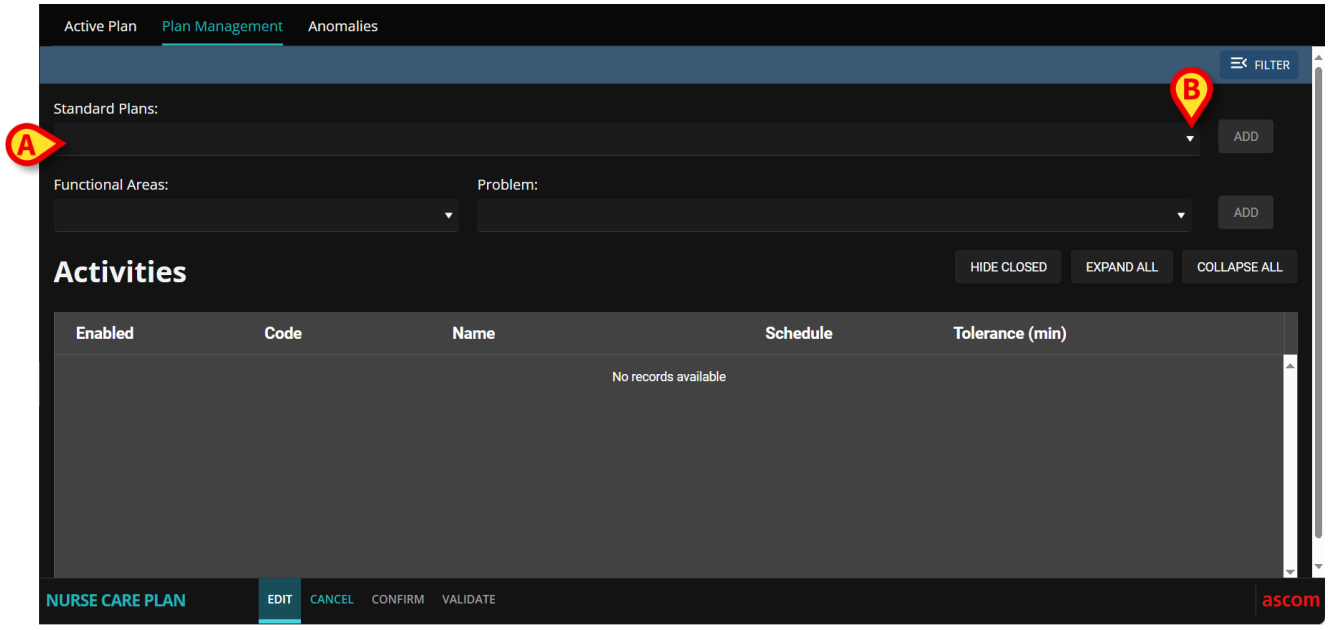

Fig 17

The "Standard Plans" field is available (Fig 17 **A**).

- Click the ▼ button on the right (Fig 17 **B**) to display the available options in a drop-down menu (Fig 18).

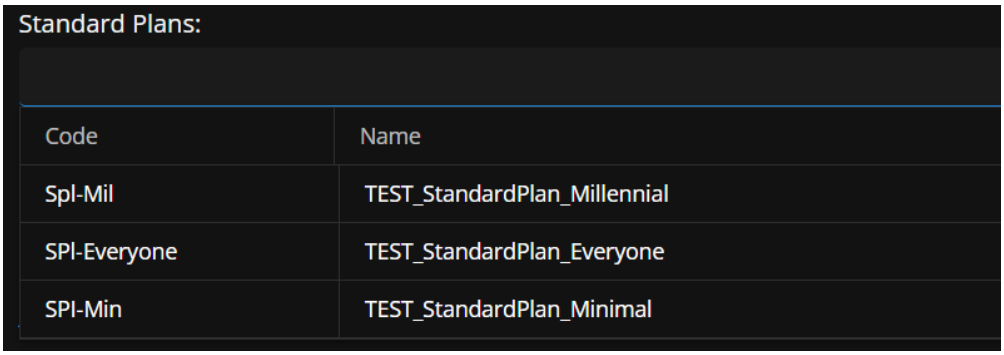

Fig 18

The standard plans are defined during configuration and can be linked to features of the patient's clinical profile (i.e. Age, Sex, Pathology etc.). For a specific patient, only the appropriate possible plans are available on NCP.

- Click the required option.

The selected option is displayed in the field (Fig 19).

Fig 19

- Click the **Add** button (Fig 19 **A**).

A confirmation window is displayed (Fig 20). The default starting day/time is here the current day/time. It is possible to set a different starting day/time for the plan. Click the icon (Fig 20 **A**) to do so, if required. A calendar tool will open for day/time selection.

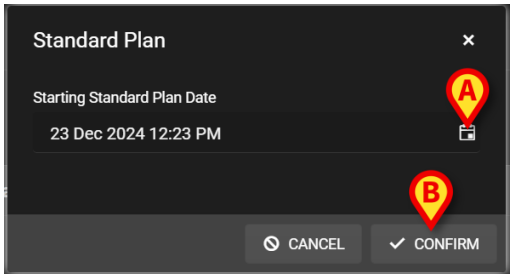

Fig 20

After day/time selection,

- Click **Confirm** to confirm the plan.

The problems and activities belonging to the plan will be displayed (Fig 21).

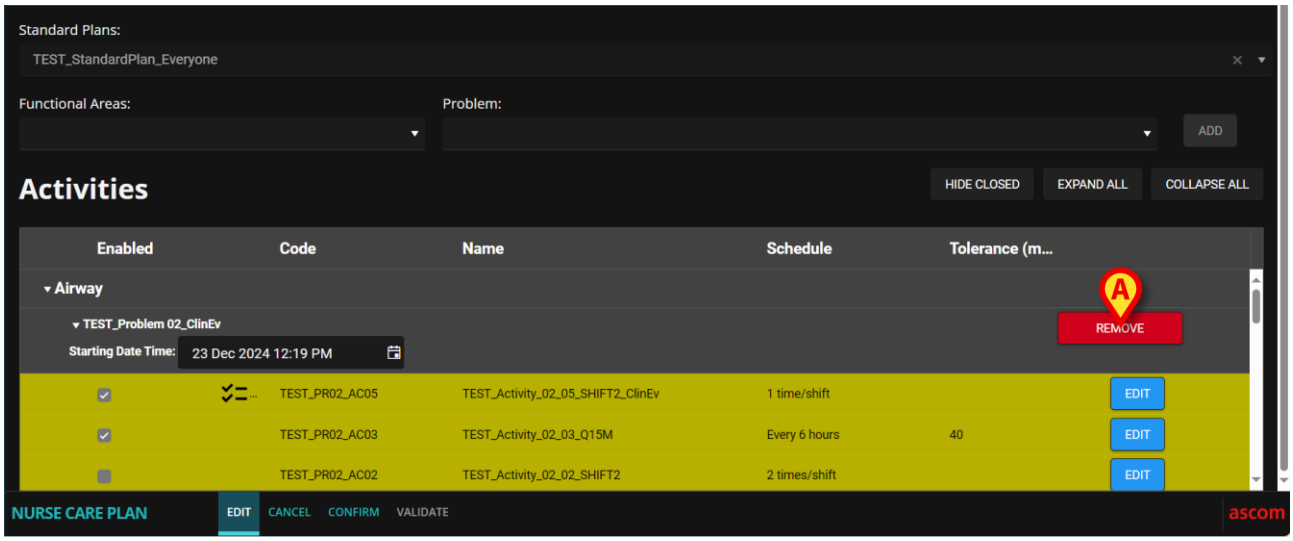

Fig 21

- Edit the activities if required, as explained in section 2.3.

After editing is completed, confirm and validate the plan as described in section 2.1.

*If necessary, you can use the **Remove** button placed alongside each problem (Fig 21 **A**) to remove the single specific problem.*

2.2.1. Adding a problem/activity – concise procedure

This paragraph summarizes the “Add problem/activity” procedure.

To add a problem with its related activities to the plan:

1) Access the “Plan management” screen (Fig 7).
2) Click the **Edit** button (Fig 7 **C**).
3) Select a functional area and a problem, or search and select the problem directly (Fig 8 **A**, Fig 9).
4) Click **Add** (Fig 9 **A**).
5) Set the required day/time, if different from “now” (Fig 10 **C**).
6) Click **Confirm** to confirm the changes (Fig 10 **D**).
7) Click **Validate** (Fig 11 **C**).

2.3. Editing an activity

To edit an existing activity

- Access the “Plan management” screen (Fig 22).
- Click the **Edit** button (Fig 22 **A**).

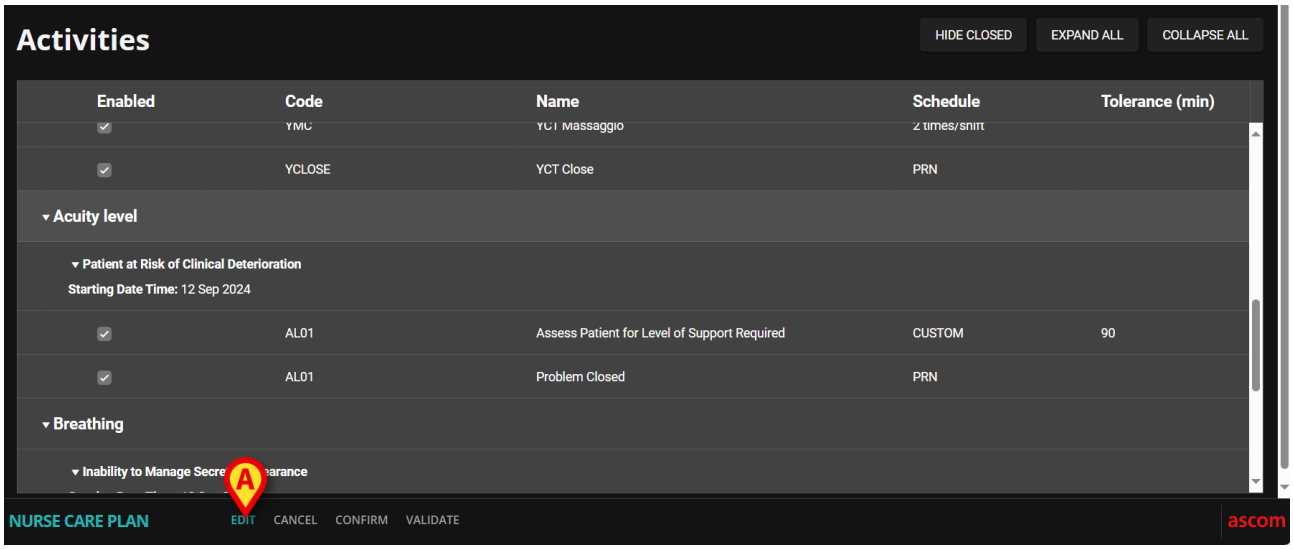

Fig 22

The screen changes in the following way (Fig 23).

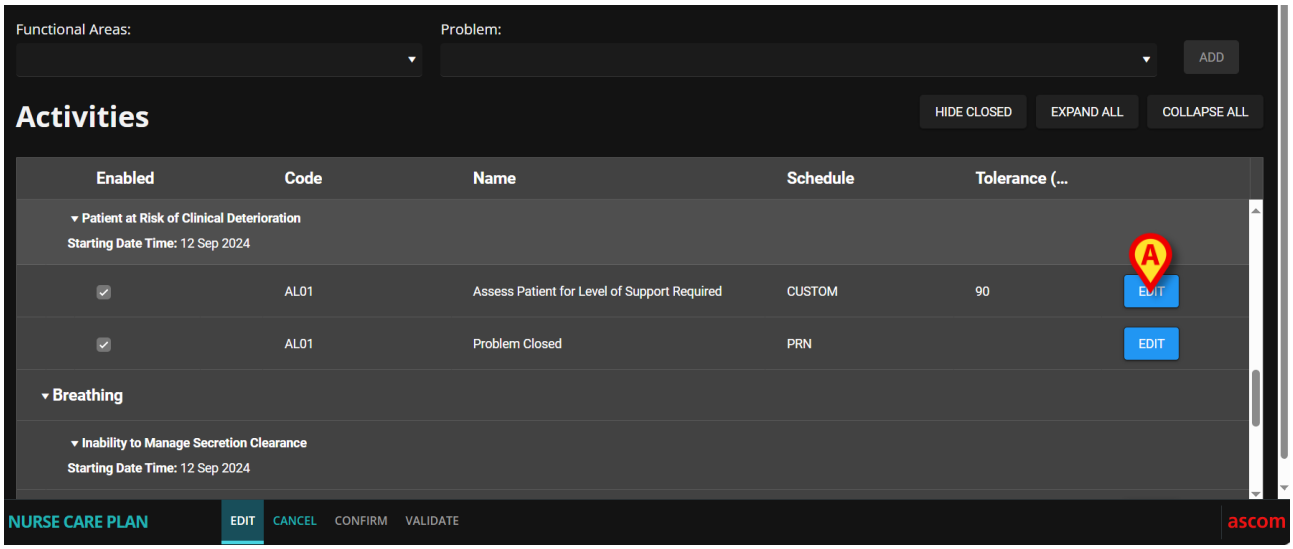

Fig 23

An **Edit** button is displayed on the right of each activity (Fig 23 **A**).

- Click the **Edit** button corresponding to the activity that must be edited.

An “Edit activity” window opens, detailing the activity’s features (Fig 24). See paragraph 2.3.1 for the description of the “Edit Activity” window and the editing procedures.

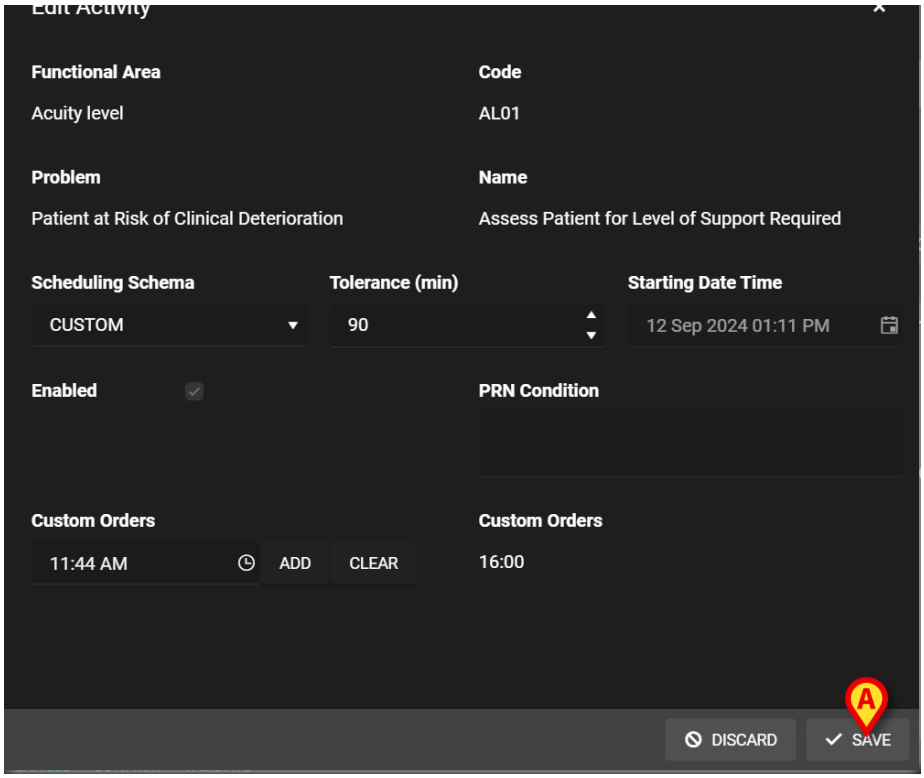

Fig 24

After editing the activity:

- Click the **Save** button (Fig 24 **A**).

On the Plan Management screen, the edited activity is highlighted (Fig 25 **A**). The **Confirm** button is available on the command bar (Fig 25 **B**).

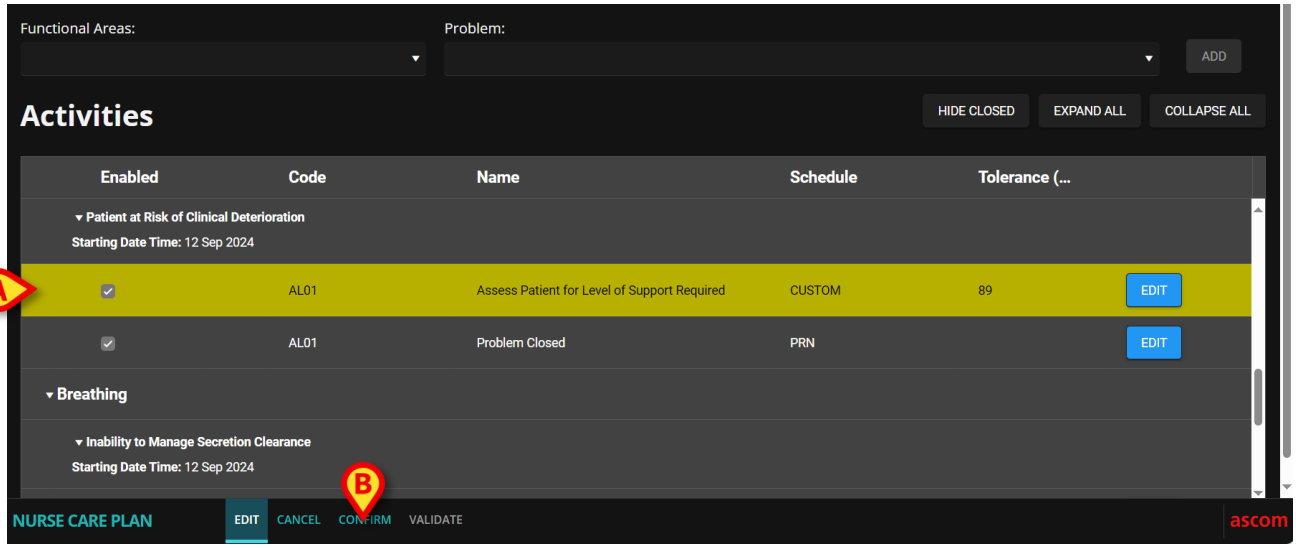

Fig 25

It is now possible to either edit another activity or confirm and validate as described in paragraph 2.1.

2.3.1. “Edit Activity” window description

The “Edit Activity” window allows to define the features of a selected activity. The editable features depend on the activity type, that is defined during configuration.

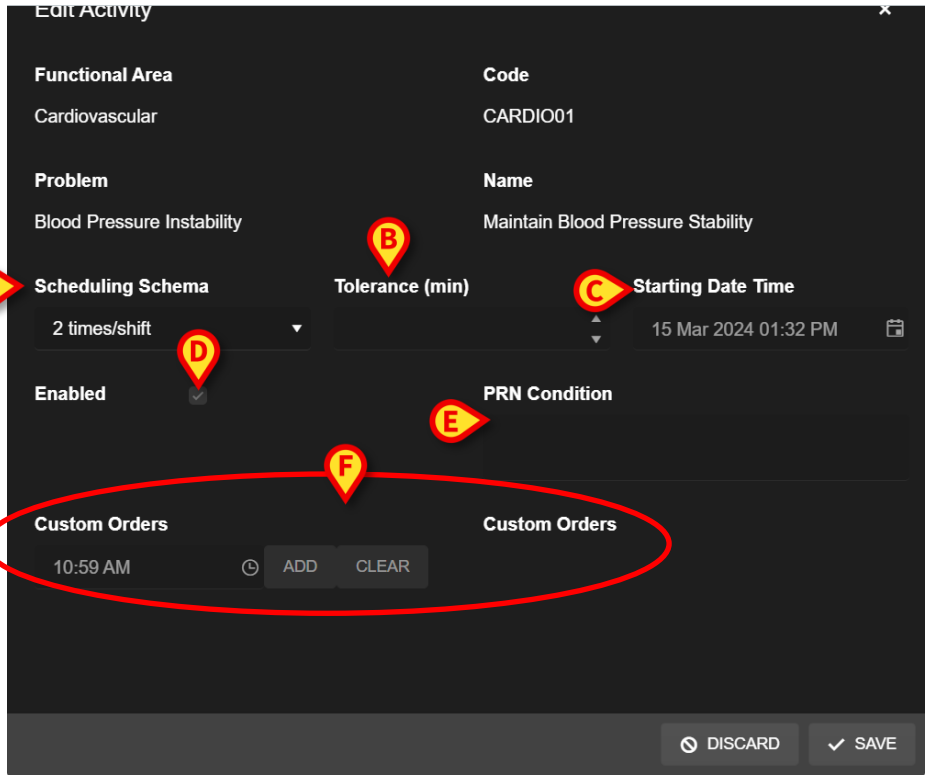

Fig 26

The “Edit Activity” window contains the following information:

- Functional Area (read only)
- Activity Code (read only)
- Addressed problem (read only)
- Activity name (read only)
- Scheduling schema (Fig 26 **A**)

The scheduling schema defines when and/or how many times an activity must be performed. The kind of schema changes according to the activity type. To edit the scheduling schema:

➢ Click the arrow indicated in Fig 27 **A**. A drop-down menu opens.

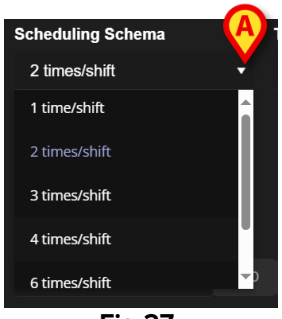

Fig 27

➢ Select on the menu the required option.

In Fig 27 the activity is configured to be performed a certain number of times (at least) per shift. The chosen option indicates the minimum number of times the activity must be performed during a single shift to be considered as correctly executed. I.e. it is possible (and it is correct) to perform the action more than stated in the schema.

Another kind of schema indicates the frequency of the activity (Fig 28 **A**).

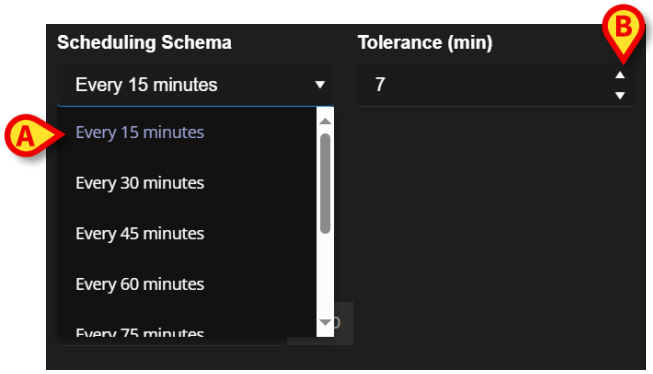

Fig 28

In this case the choices on the drop-down menu indicate the interval between two occurrences of the same activity (for example: every 60 minutes). The frequency specification enables the "Tolerance" field (Fig 28 **B**).

Refer to paragraphs 3.5.1 and 3.5.2 to see how these types of activity are managed on the "Active Plan" screen.

- Tolerance (Fig 26 **B**)

Tolerance specification is relevant only in case of activities scheduled for a specific time, be it an activity characterized by a determined frequency (i.e.: "every N minutes") or a custom activity to be performed at specific times (i.e.: "at *hh:mm* and at *hh:mm*").
The tolerance indicates the time span before and after the scheduled time within which the action is still considered as "in time".

To edit the tolerance, use the up and down arrows indicated in Fig 28 **B**. One click corresponds to one minute more (up arrow) or less (down arrow).

- Starting date/time (Fig 26 **C**)

The starting date/time field allows to specify when the activity starts. The starting date/time can be from the present moment to the next future.

To edit the starting date/time

➢ Click the calendar icon placed alongside the field (Fig 29 **A**). A calendar window opens.

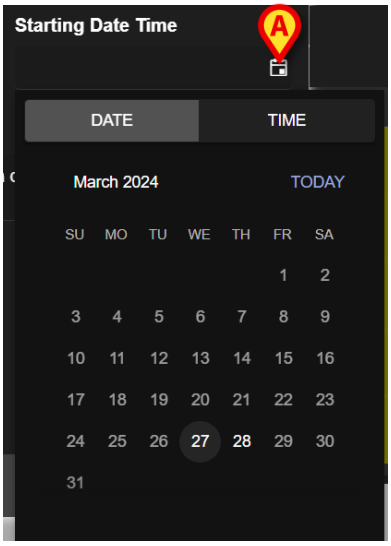

Fig 29

The selectable days are highlighted. In Fig 29 only the 27th and 28th are selectable (being the 27th the present day). After the day is selected, the window automatically shifts to time selection (Fig 30).

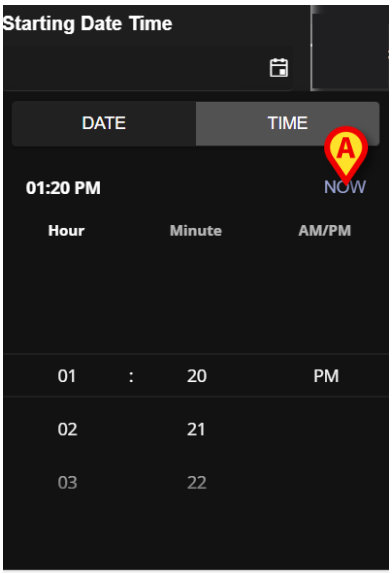

Fig 30

The first selectable time can be before the current time to allow users to document an activity performed before they could use NCP. Only the selectable time limits are enabled on the window.

The lower time limit is the problem start day/time; the upper time limit is the plan validity time in the future.

The **Now** button (Fig 30 **A**) sets the current time as starting time.

The selected date/time is then displayed in the date/time field. The activity will be actionable on the Active Plan starting from the date/time specified here.

The starting date/time is only editable before the validation of the activity. After validation it is not editable anymore.

- Enabled checkbox (Fig 26 **D**)

The “Enabled” checkbox allows to disable/enable some of the activities that are related to a problem. After a problem is selected, a certain number of activities are added to the nurse care plan. Under specific clinical conitions, some of them can be considered unnecessary. These can be disabled when entering the problem for the first time. Disabled actions, still displayed on the Plan Management screen, can be enabled later. Enabled actions cannot be disabled once validated.
As default, activities are enabled or disabled according to the configuration of the specific problem or standard plan. Only the enabled activities, after confirmation and validation, will be displayed on the “Active Plan” screen.

To enable/disable an activity:

➢ Click the “Enabled” checkbox to check/uncheck it

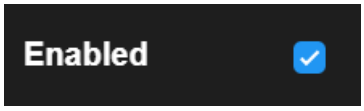

Fig 31

- PRN Condition (Fig 26 **E**)

The PRN Condition field is only relevant if the activity is configured as PRN (“Pro Re Nata”), meaning that the activity is required only at the occurrence of specific conditions. PRN activities cannot be scheduled in advance and, on the “Active Plan” screen, are managed differently from the scheduled ones – see paragraph 3.5.4). For PRN activities, the PRN indication is displayed in the “Scheduling schema” field (Fig 26 **A**).
The PRN Condition field is a free text field in which the conditions under which the activity must be performed are described (Fig 32).

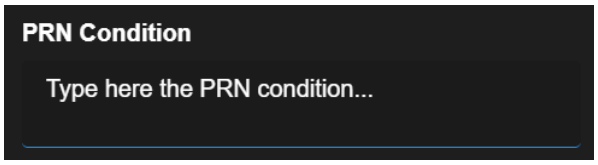

Fig 32

- Custom orders (Fig 26 **F**)

The custom orders specification is only enabled if the activity is configured as “Custom”, meaning that the number of occurrences required and their scheduled time is explicitly indicated when editing the activity (for example: “this activity must be performed twice, at 5:00 PM and at 10:00 AM”). If this is the case, the CUSTOM indication is displayed in the “Scheduling schema” field (Fig 26 **A**).

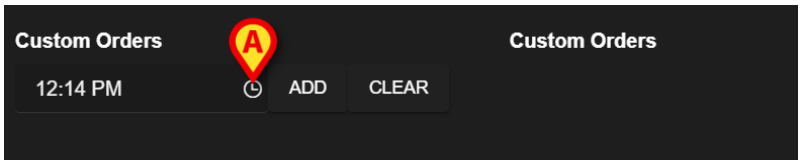

Fig 33

To specify the custom orders:

- Click the clock icon (Fig 33 **A**). A time selector opens (Fig 34).

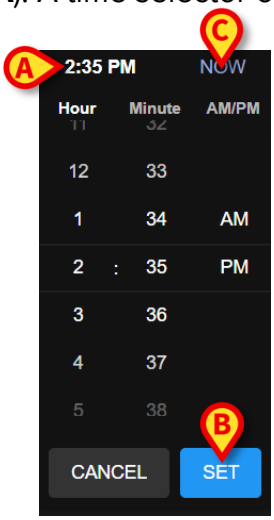

Fig 34

The current time is selected by default (Fig 34 **A**).

- Select the hour/minute (AM or PM).

A time range of 24 hours in the future is available for selection. If necessary, use the **Now** button (Fig 34 **C**) to set the current time again. After the required time is selected:

- Click the **Set** button (Fig 34 **B**).

The selected time is displayed in the “Custom Orders” field (Fig 35 **A**).

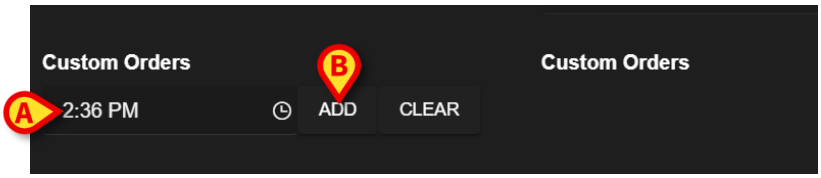

Fig 35

- Click the **Add** button (Fig 35 **B**).

The order is this way added to the “custom orders” list (Fig 36 **A**). The action is automatically scheduled at the same time every new day.

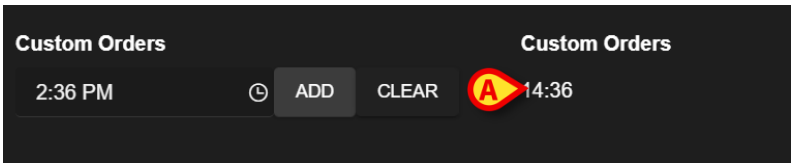

Fig 36

To schedule additional custom orders, repeat the same procedure. All the scheduled activities are listed together. See for example Fig 37 **A**.

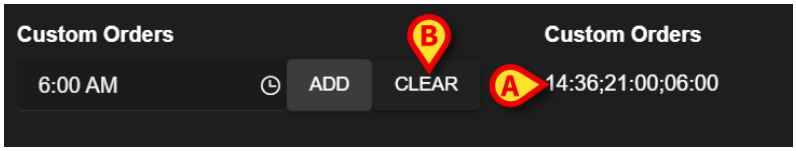

Fig 37

To empty the custom orders list:

- Click the **Clear** button (Fig 37 **B**).

After clicking the **Clear** button, all the scheduled custom orders disappear.

For custom orders, the tolerance specification field (Fig 26 **B**) is enabled; the starting date/time field (Fig 26 **C**) is disabled.

See paragraph 3.5.3 to see how custom orders are managed on the “Active Plan” screen.

2.4. Display options

Some display options are available on the “Plan Management” screen. They are activated by the buttons indicated in Fig 38 **A**.

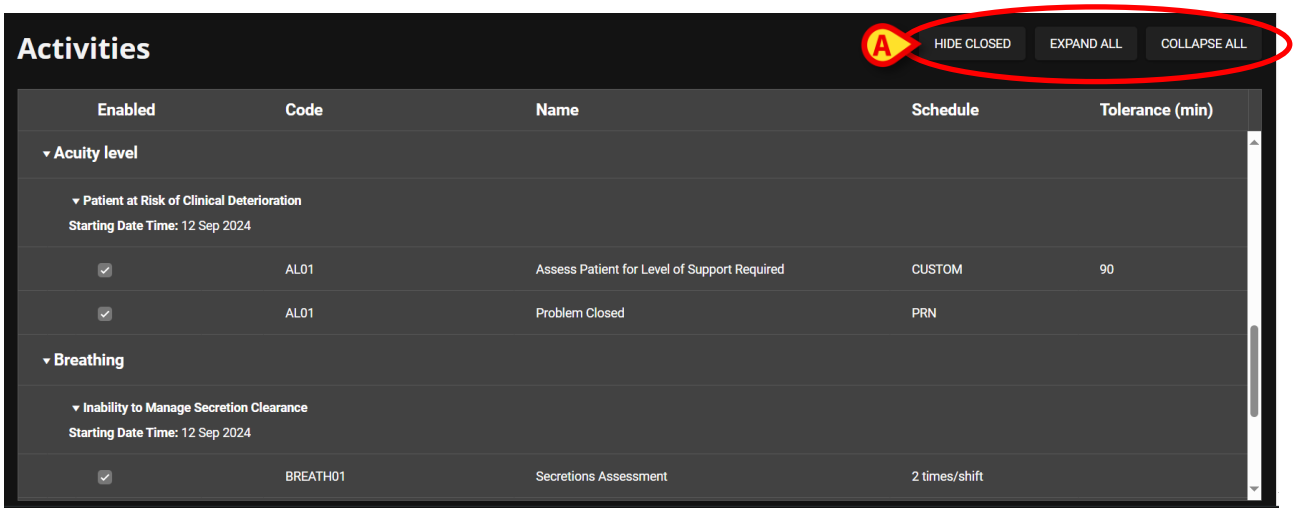

Fig 38

The default display mode, when the “Plan Management” screen is selected, shows all the activities as expanded and hides the closed activities.

2.4.1. Expand/Collapse activities

The clinical areas and the problems can be collapsed and expanded one by one by clicking the small arrow on the left of the clinical area/problem's name (Fig 39 **A**).

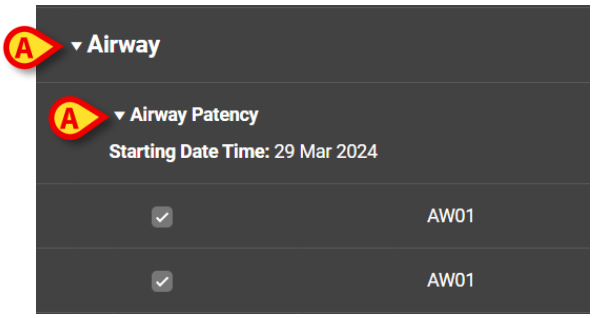

Fig 39

To collapse all the clinical areas/problems at once and display only the list of clinical areas, as in Fig 40:

- Click the **Collapse All** button (Fig 40 **A**).

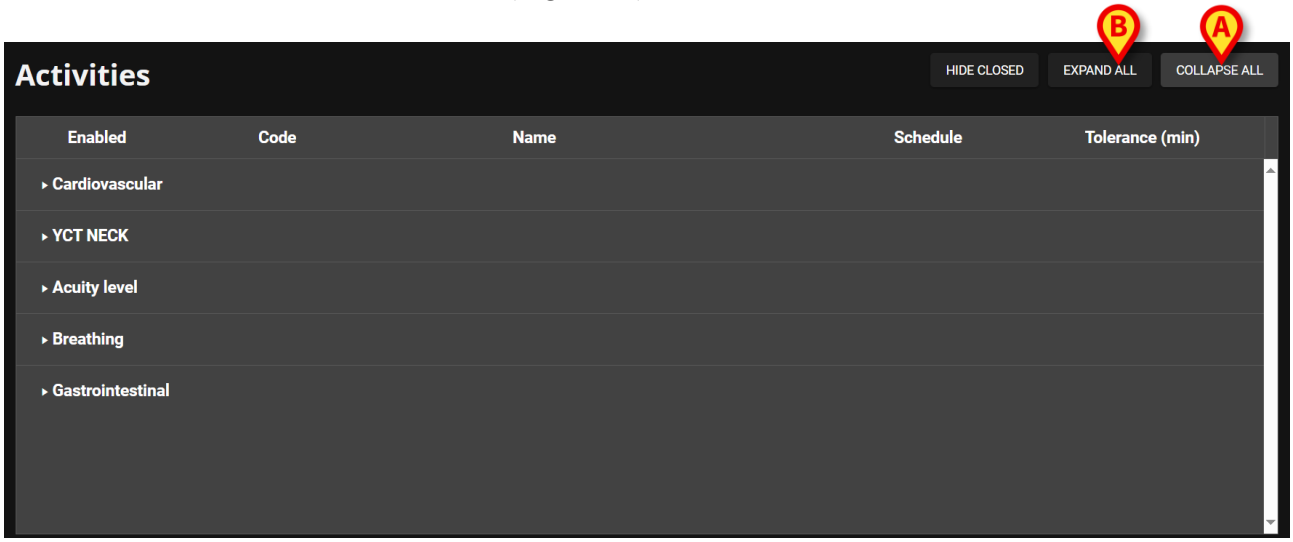

Fig 40

The single clinical areas can then be expanded one by one. To expand them all at once:

- Click the **Expand All** button (Fig 40 **B**).

2.4.2. View/Hide closed activities

- Click the **View Closed** button to display the closed activities.

The closed activities are highlighted green (Fig 41 **A**).

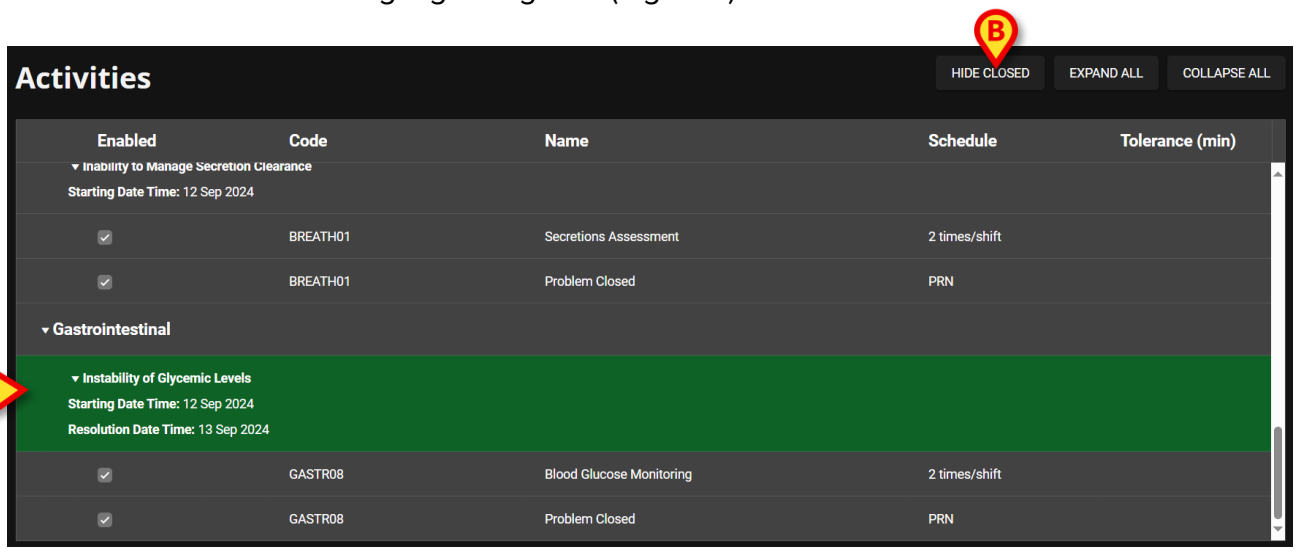

Fig 41

The **View Closed** button becomes **Hide Closed** (Fig 41 **B**).

- Click the **Hide Closed** button to hide the closed activities again.

The View/Hide closed button is present if the "ClosedProblemButtonFilterEnabled" system option is set to TRUE. Refer to the system administrators or see the document DSO ENG System Option for more information.

2.5. Filters

The Filter button (Fig 42 **A**) allows to display a chosen sub-set of activities.

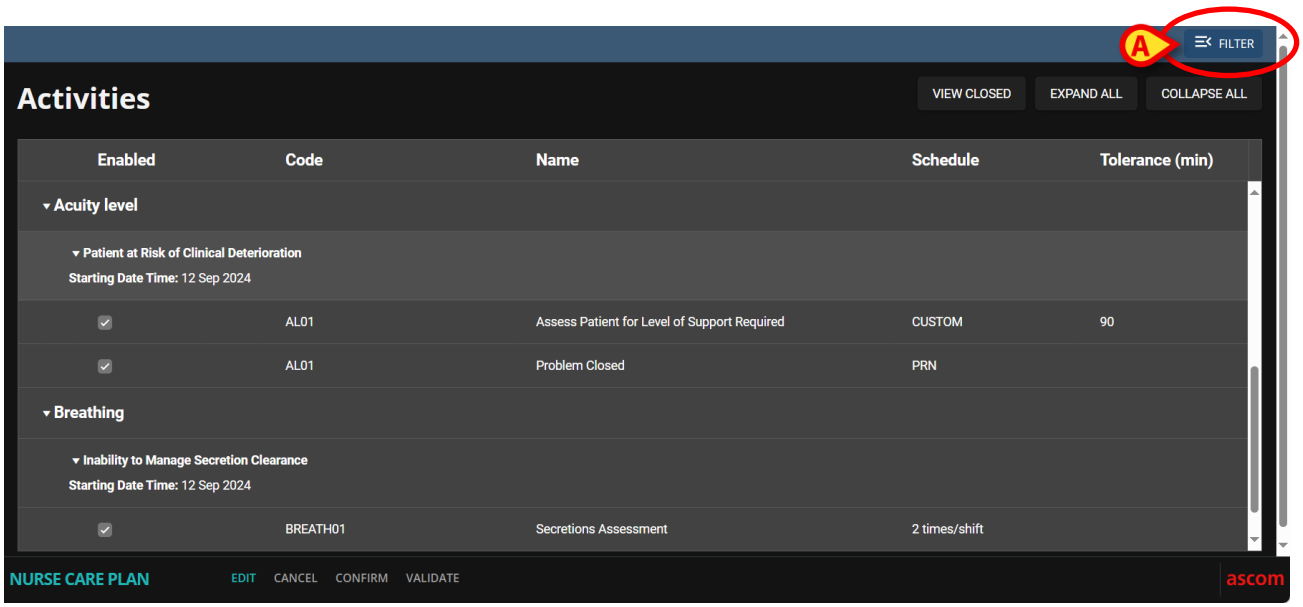

Fig 42

To do that:

- Click the **Filter** button (Fig 42 **A**).

The following window opens (Fig 43).

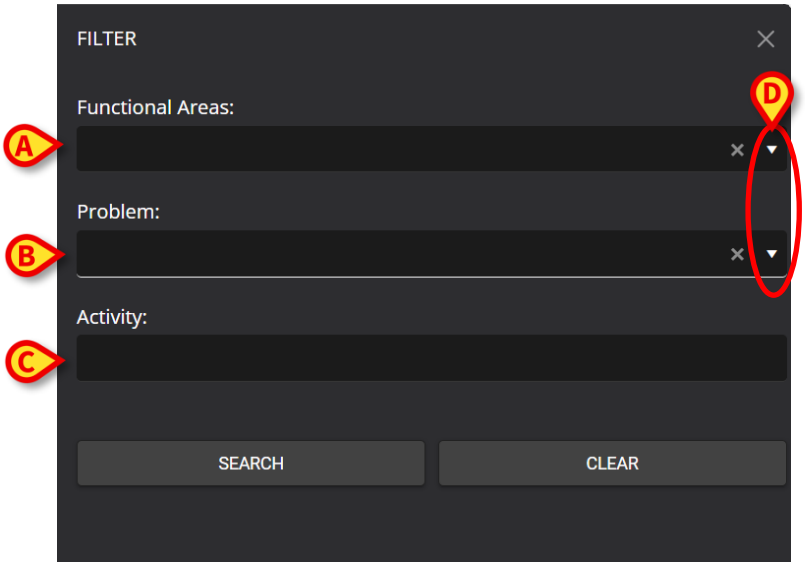

Fig 43

It is possible to filter by Functional Area (Fig 43 **A**), Problem (Fig 43 **B**) or Activity (Fig 43 **C**). All case insensitive.

To filter, either insert a text string in a field or select an item in the available drop-down menus. Click the ▼ icon on the right of the field to display the corresponding drop-down menu (Fig 43 **D**).

The functional areas available for selection are the ones already present in the Plan (i.e.: if, for the patient, only problems relating to the “Cardiovascular” and “Acuity Level” areas are specified, then the “Functional areas” drop-down menu only displays the “Cardiovascular” and “Acuity Level” items).
The selection of a functional area reduces the selectable problems to those belonging to the selected functional area (i.e. if “Cardiovascular” is selected, then only the problems related to the “Cardiovascular” area are available in the “Problem” drop-down menu).
After the filters are defined (in Fig 44 **A**, for example, the “Cardiovascular” functional area is selected as filter):

- Click the **Search** button (Fig 44 **B**).

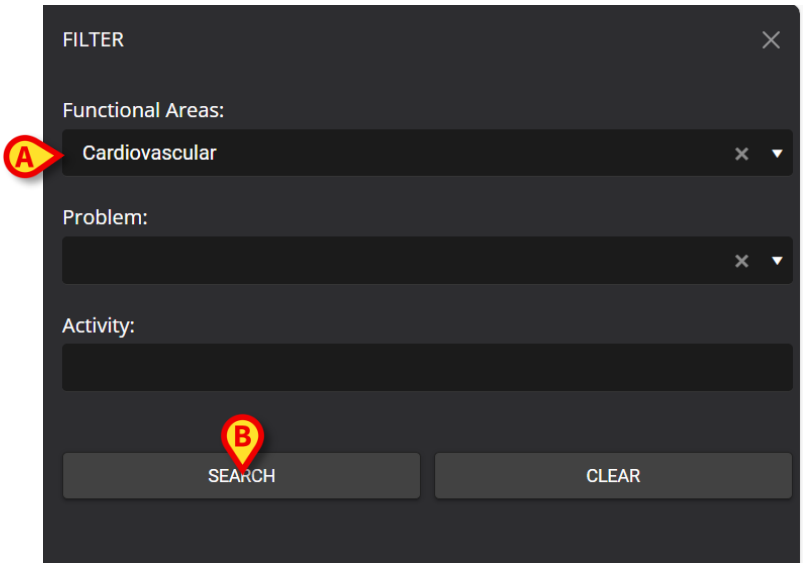

Fig 44

Only the functional areas/problems/activities matching those specified will be displayed (Fig 45).

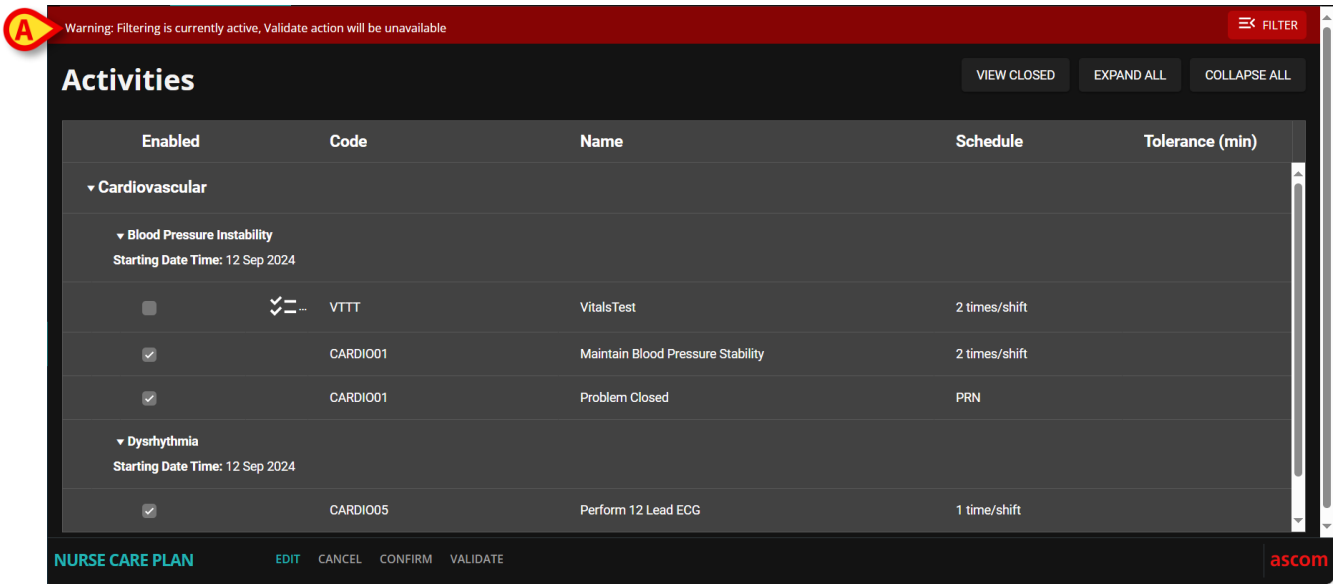

Fig 45

When the page contents are filtered, a warning is displayed on top (Fig 45 **A**), informing that there are active filters, and that plan validation is not available. Also, when the contents are filtered, no activities can be added to the plan.

2.6. Command bar

Four buttons are present on the command bar (Fig 46).

Fig 46

Edit (Fig 46 **A**) – allowing to make changes to the plan.
Cancel (Fig 46 **B**) – allowing to discard any changes made and go back to the state preceding the activation of the edit mode.
Confirm (Fig 46 **C**) – allowing to confirm the changes made.
Validate (Fig 46 **D**) – allowing to validate the plan after confirmation.

For a description of the related procedures see paragraphs 2.1, 2.2, 2.3.

3. Active Plan

The “Active Plan” screen shows, in a graphic actionable form, the activities that must be executed for a selected patient. The “Active Plan” is the tool that allows to document the activities of the nurse care plan.

To access the “Active Plan” screen

- Click the ACTIVE PLAN tab on the tab selector (Fig 47 **A**).

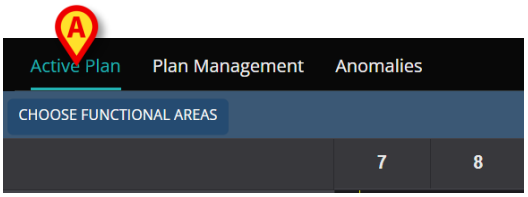

Fig 47

The “Active plan” screen is then displayed (Fig 48).

3.1. Screen structure

The Active Plan screen (Fig 48) is composed of the following areas:

1) the list of activities (Fig 48 **A** – described in section 3.2);
2) the activity schedule grid (Fig 48 **B** – described in section 3.3);
3) the command bar (Fig 48 **C** – described in section 3.4).

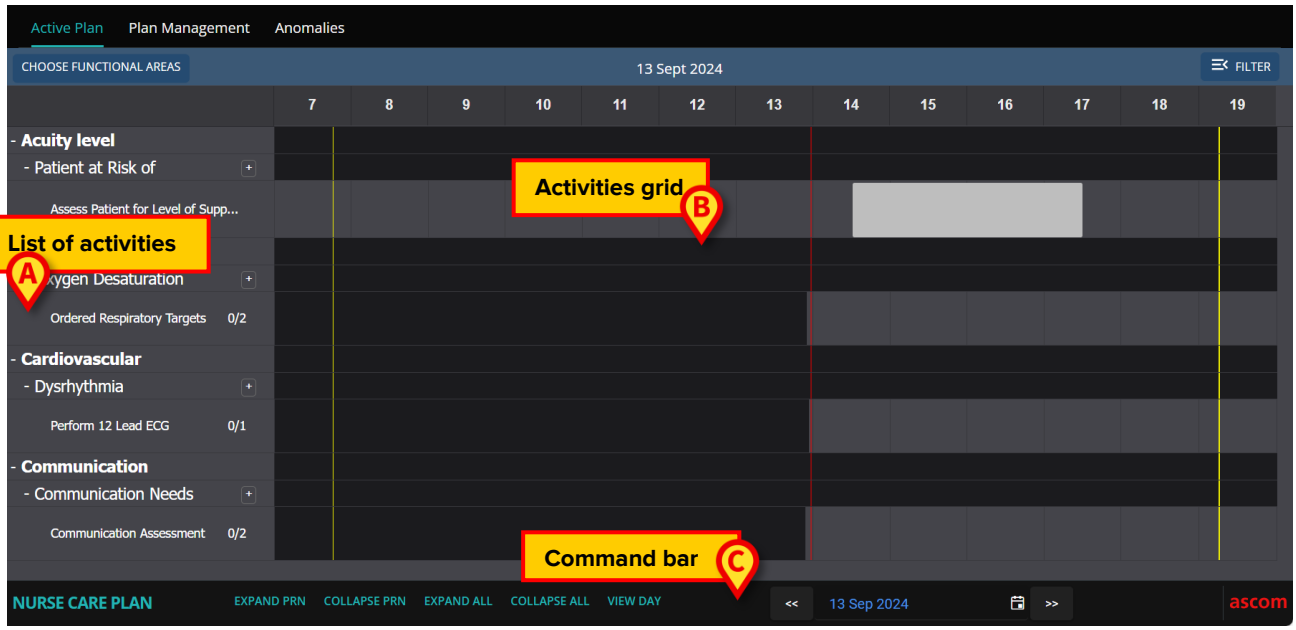

Fig 48

3.2. The activities list

The area on the left lists the activities on the nurse care plan. The activities are listed according to the hierarchical structure characterizing the NCP module, described in section 1 (Functional areas → Problems → Activities).

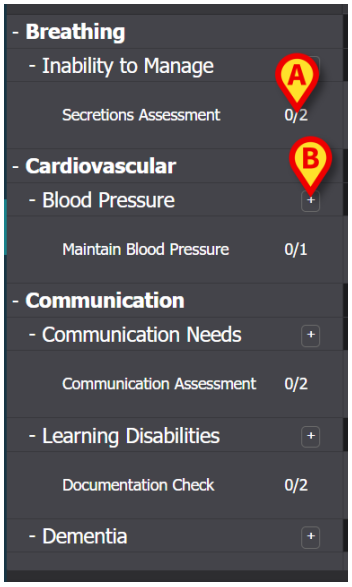

Fig 49

See, for example, Fig 49, where Breathing, Cardiovascular and Communication are the functional areas. The Communication functional area (for example) has three Problems (Communication needs, Learning disabilities and Dementia) and each problem is managed with one or more scheduled activities.

Different types of activity are characterized by specific features, described in paragraph 3.5.

The items in the list can be collapsed and expanded using the – and + button placed on the left of the item (Fig 50 **A** - **B**).

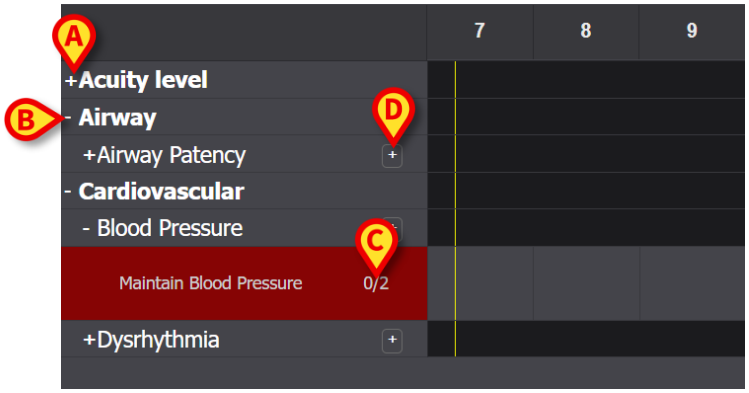

Fig 50

The numbers indicated in Fig 50 **C**, having the form N/N, indicate the number of times the activity has already been performed (left) and the minimum number of mandatory

occurrences of the activity (right); this is relevant for the activities characterized by the scheduling schema “N times per shift”.

The + icon placed on the right of a problem (Fig 50 **D**) displays the PRN activities related to that problem, that are hidden by default (see paragraph 3.5.4 for a description of PRN activities).

If an activity is not performed when scheduled, the corresponding rectangle on the list is highlighted (Fig 51 **A**).

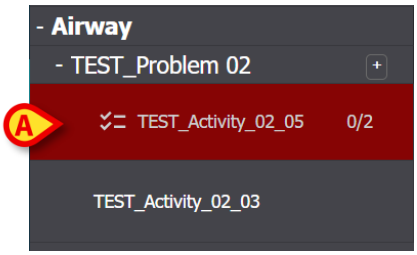

Fig 51

3.3. Activities schedule grid

The central area of the screen is a grid (Fig 52 **A**).

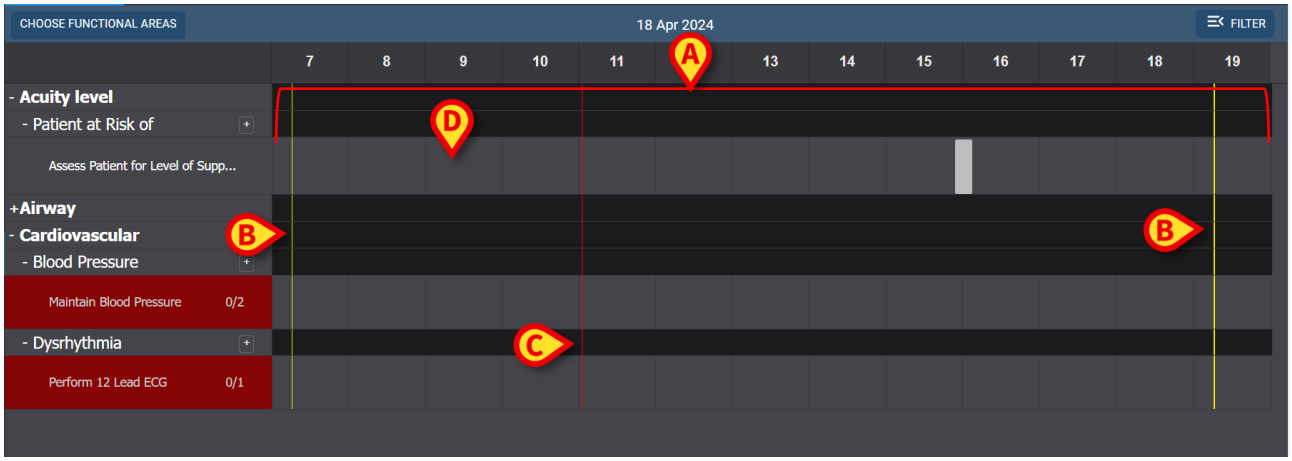

Fig 52

The columns correspond to the hours of the day, indicated on top. In Fig 52 a time span of twelve hours is displayed, going from 7:00 to 19:00. The current shift is displayed by default when the “Active Plan” screen is selected. The yellow vertical bars (Fig 52 **B**) indicate the beginning (the left one) and the end (the right one) of the shift. The shift shown in Fig 52 starts at 7:15 and ends at 19:15. The present moment is indicated by the red “now” bar (Fig 52 **C**). The “now” bar moves left to right as time goes by, always indicating the present moment. When the shift ends, the screen contents scroll to the left to display the successive shift.

The grey rows (as, for instance, the one indicated in Fig 52 **D**) correspond to activities and are clickable. Black areas are not clickable. The specific actions are displayed differently on the grid, depending on their type, and managed differently. See section 3.5 for the list of possible types of action and their display mode and management.

3.4. The command bar

The command bar contains buttons allowing to operate on the screen contents.

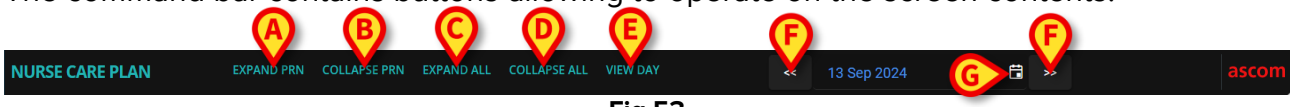

Fig 53

The availability of some of the buttons on the command bar is defined by System Options. Refer to the system administrators or see the document DSO ENG System Option for more information.

The **Expand PRN** button (Fig 53 **A**) shows all the PRN ("Pro Re Nata") activities (described in section 3.5.4, hidden by default).

The **Collaps PRN** button (Fig 53 **B**) hides all the PRN activities.

The **Collapse All** button (Fig 53 **D**) hides all the activities (or all the activities and the problems, depending on configuration). Only the functional areas are listed on the activities list, as in Fig 54 (or the functional areas and the problems, depending on configuration).

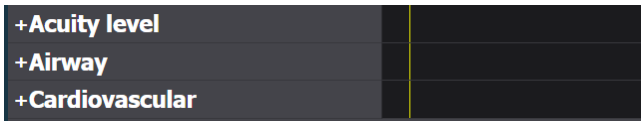

Fig 54

The single areas can then be expanded one by one.

The **Expand All** button (Fig 53 **C**) shows all the hidden items (either activities or activities and problems, depending on configuration).

*The presence/absence and behaviour of the **Collapse All** and **Expand All** buttons depend on the configuration of the system option NCPExpandAllEnabled. There are three options: 1) the buttons are not enabled; 2) the **Collapse All** button hides all the activities and the problems (i.e. only the functional areas are displayed); 3) the **Collapse All** button hides only the activities (i.e. the functional areas and the problems are displayed).*

The **Day/Shift switch** (Fig 53 **E**) allows to change the time range displayed on a single screen. If the "Shift" display mode is selected, meaning that a single shift is displayed, a **View Day** button allows to switch to "Day" mode, where the 24 hours of the selected day are displayed on a single screen. Vice versa, if the "Day" display mode is selected, a **View Shift** button allows to switch to "Shift" mode.

The **left and right arrows** (Fig 53 **F**) display the previous (left) and following (right) day or shift, depending on the current display mode.

Calendar selection button. The button indicated in Fig 53 **G** shows the date currently displayed. It is possible to select a different date. To do that:

- Click the calendar button.

A calendar window is displayed (Fig 55).

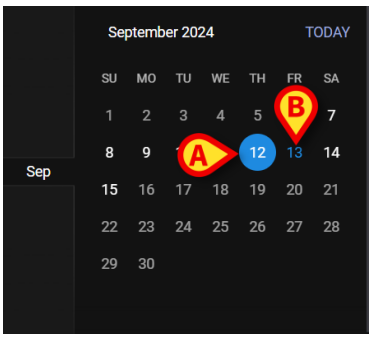

Fig 55

The day currently displayed is circled (Fig 55 **A**), the current date (today) is blue (Fig 55 **B**).

- Click the month/day to be displayed.

The screen contents will change accordingly. The scheduled activities of the selected day will be displayed; The selected date is shown on the Calendar button.

A **View More** button is present on the command bar, allowing to display all the existing activities, if the module is configured to display only a specified maximum number of rows when the Active Plan screen is loaded.

3.5. Types of activity

NCP manages four types of activity, that have specific features and specific recording modes.

Times per shift – The activity must be performed a certain number of times per shift at least. What time is not relevant.
Interval – The activity must be performed at regular intervals (For example: every 60 minutes).
Custom – The activity must be performed a specified number of times, at a specified time.
PRN (Pro Re Nata) – The activity must be performed only if certain conditions occur.

3.5.1. “Times per shift” activity

This type of activity must be performed a certain number of times per shift at least. See, for example, the “Airway Patency assessment” activity, belonging to the “Airway” functional area. When editing it on the “Plan management” screen, the following window is displayed (Fig 56).

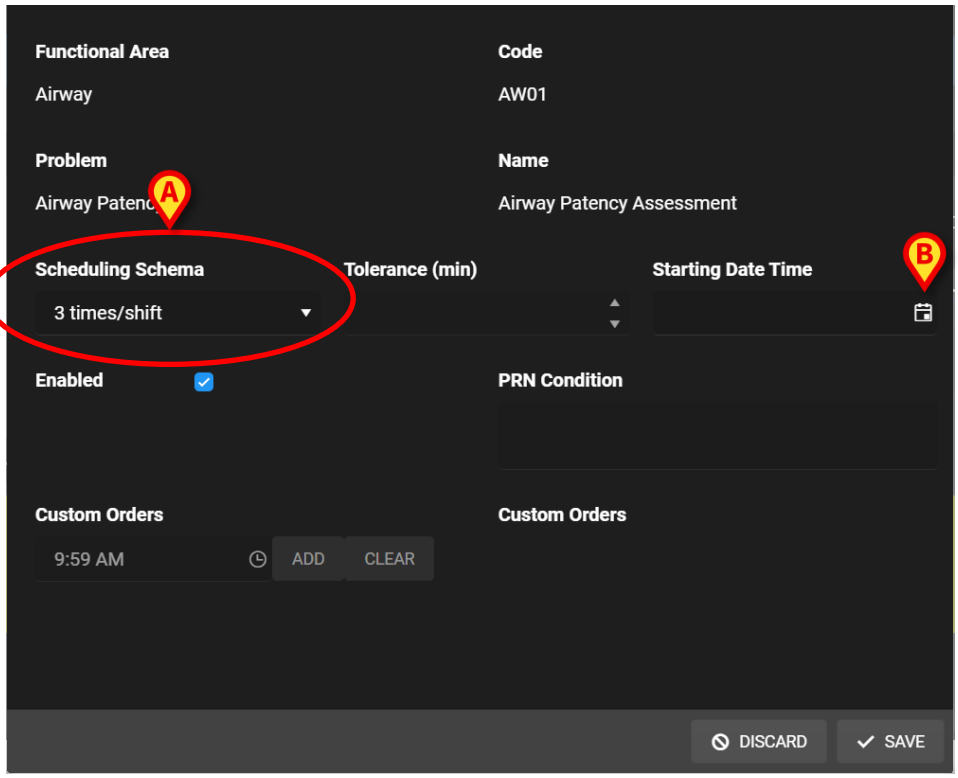

Fig 56

The scheduling schema can be selected editing the field indicated in Fig 56 **A**. The activity is already configured to be a "Times per shift" type; the selection relates to the number of times per shift. The only other editable field is the "Starting Date/Time" (Fig 56 **B**), allowing to set a future starting time.

After Saving, Confirming and Validating (see paragraph 2.1), the activity is displayed on the "Active Plan" (Fig 57 **A**).

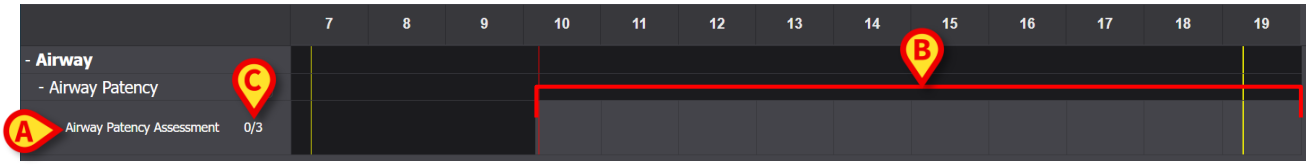

Fig 57

The activity started at 10:10. The grey area is the active area (clickable - Fig 57 **B**). The black areas are not active.
The numbers indicated in Fig 57 **C** indicate the number of times the activity was already executed. The required minimum number of times is three.
To document that the activity was executed:

- Click the grey area in the position corresponding to the time the activity was executed.

A future time cannot be selected, therefore the clickable area is the one on the left of the red "now" bar (Fig 58 **A**).

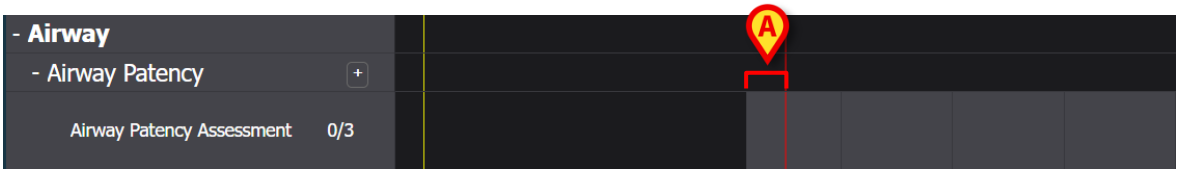

Fig 58

*When moving the mouse pointer on the chart, a tooltip indicating the corresponding time is displayed (Fig 59 **A**).*

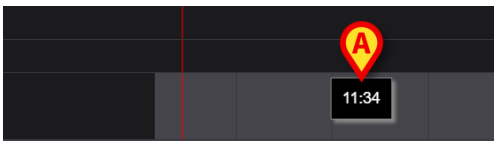

Fig 59

After clicking, the window shown in Fig 60 is displayed, allowing to specify the details of the execution. The window contents are specific to each execution and configured to record the information that is relevant for the current activity. The main features of the window are described in paragraph 3.6.

An activity can be correctly documented as "Not Performed", if intentionally not performed for a specific reason (to be specified on the window). This case does not generate a "late" flag on NCP (i.e.: no row is highlighted as in Fig 62), but the "Not Performed" activity is displayed on the Anomalies page (see paragraph 4).

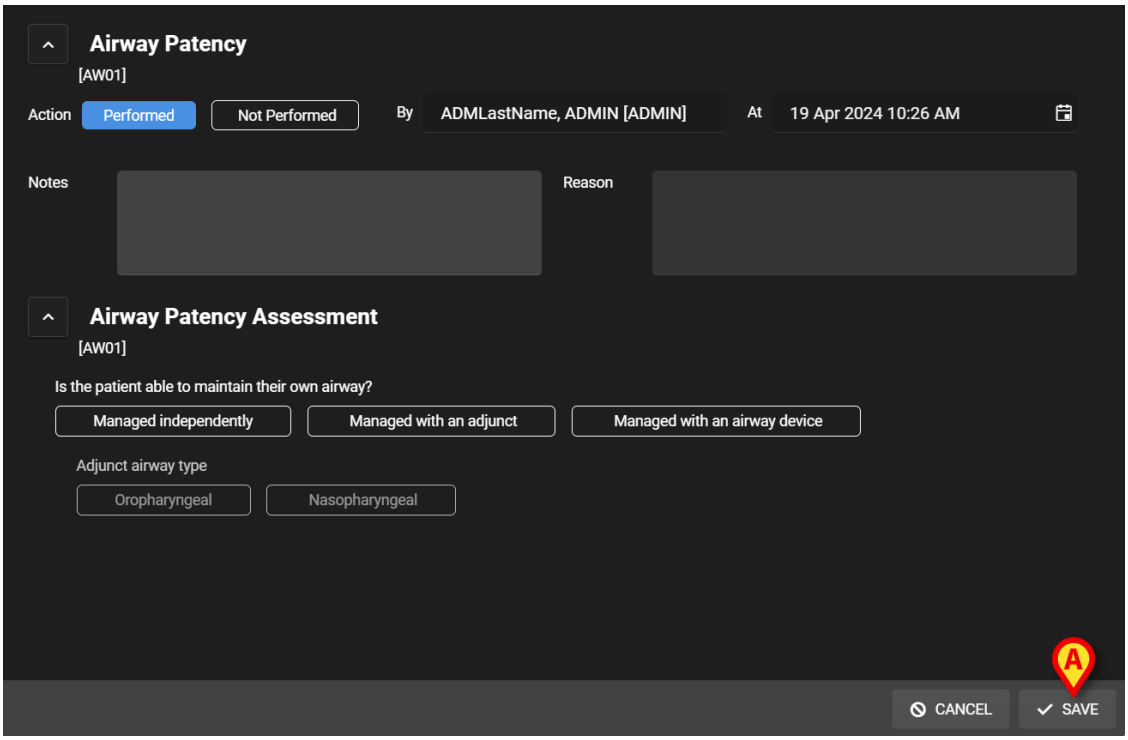

Fig 60

After specifying all the relevant information,

- Click **Save** (Fig 60 **A**).

A mark is drawn on the chart, in the position corresponding to the execution time (Fig 61 **A**).

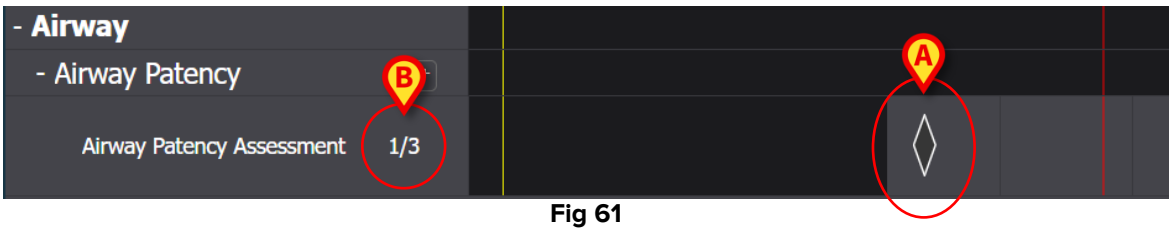

Fig 61

Some features of the mark can be configured to convey specific information on the action. For example, the colors can change under certain conditions.

The counter on the left changes to indicate the number of times the activity was executed (Fig 61 **B**).
Being a "times per shift" type of activity, if the shift ends and the activity is not executed at least N times, the corresponding row turns red, meaning that there was something due that was not performed. See Fig 62 for an instance.

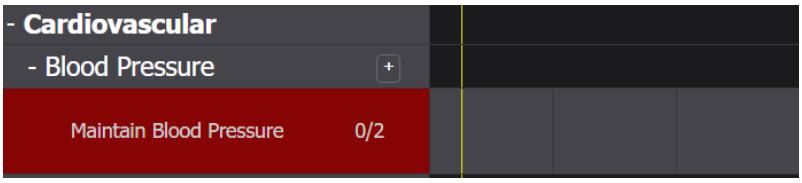

Fig 62

3.5.2. "Interval" specification

Some activities are configured to be executed at regular intervals. For these activities the frequency is specified. For example: "Deliver every 30 minutes". See, for example, the "Test Activity" chosen for the following example. When editing it on the "Plan management" screen, the following window is displayed (Fig 63).

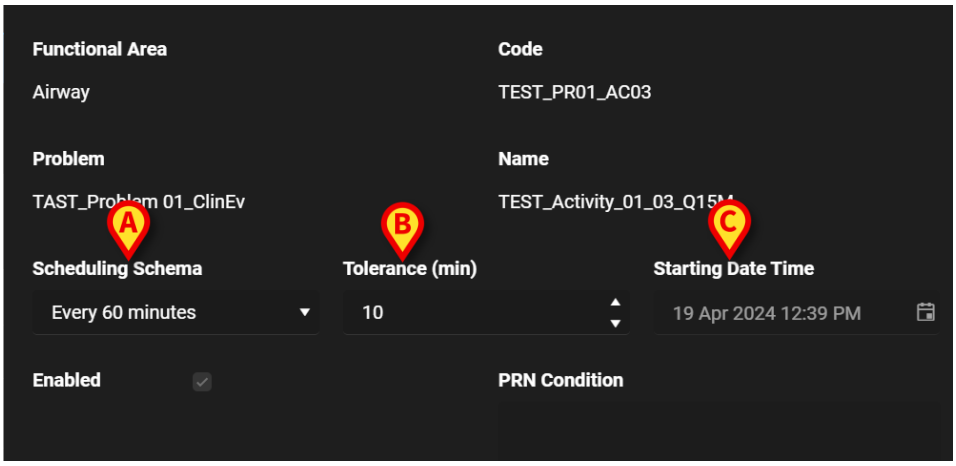

Fig 63

The scheduling schema can be selected, as indicated in Fig 63 **A**. The activity is already configured to be an "Interval" type; the selection relates to the interval length. The tolerance

field is enabled, allowing to select how long, before and after the scheduled time, the execution is still considered to be in time (Fig 63 **B**). The only other editable field is the "Starting Date/Time" (Fig 63 **C**), allowing to set a future starting time.

After Saving, Confirming and Validating (see paragraph 2.1), the activity is displayed on the "Active Plan" (Fig 64 **A**).

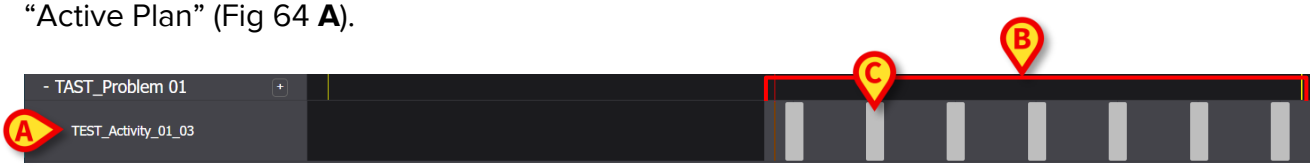

Fig 64

The grey area is the active area (clickable - Fig 64 **B**). The black areas are not active. The activity was scheduled to be performed "Every 60 minutes" with a tolerance of 10 minutes. The smaller grey rectangles indicated in Fig 64 **C** indicate when the activity must be performed. The length of each rectangle corresponds to 10 minutes. When it's time to execute the activity (i.e. the red "now" bar intersects one of the "execute" rectangles, the rectangle turns green, indicating that we are within the tolerance time to correctly execute the activity (Fig 65).

Fig 65

If the activity is not executedwithin the tolerance time, the corresponding rectangle turns red (Fig 66).

Fig 66

To record that the activity was executed:

- Click the rectangle corresponding to the time of execution.

A future time cannot be selected, therefore the clickable area is the one on the left of the red "now" bar. The following window is displayed, allowing to specify the details of the execution (Fig 60). The window contents are specific to each execution and configured to record the information that is relevant for the current activity. The main features of the window are described in paragraph 3.6.

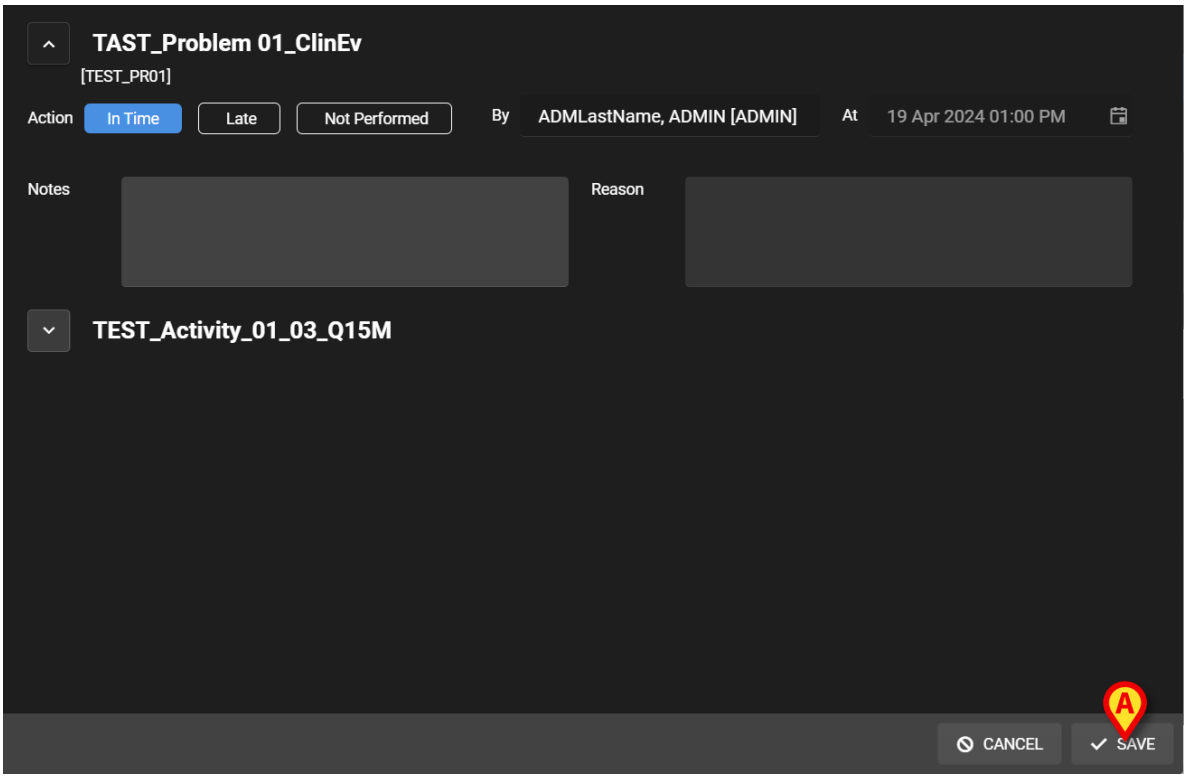

Fig 67

➢ Click **Save** (Fig 67 **A**).

A mark is drawn on the chart, in the place where the activity-rectangle was (Fig 68 **A**).

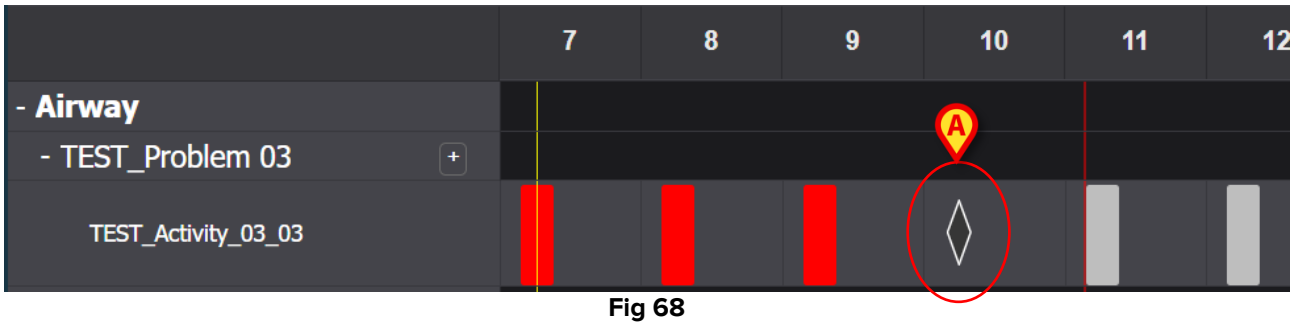

Fig 68

Some features of the mark can be configured to convey specific information on the action. For example, the colors can change under certain conditions.

3.5.3. Custom Activities

Custom activities are those that are scheduled to be executed a specified number of times at specific times. The number of required executions and their scheduled times are explicitly indicated when editing the action (for instance: the activity must be performed twice, at 5:00 PM and at 10:00 AM every day). See, for example, the “Assess Patient for level of support required” activity (Fig 69). When editing it on the “Plan management” screen, the window shown in Fig 69 is displayed. The CUSTOM indication is selected in the “Scheduling schema” field (Fig 69 **A**). The single orders are indicated in Fig 69 **B**. See section 2.3.1 for the description of this window.

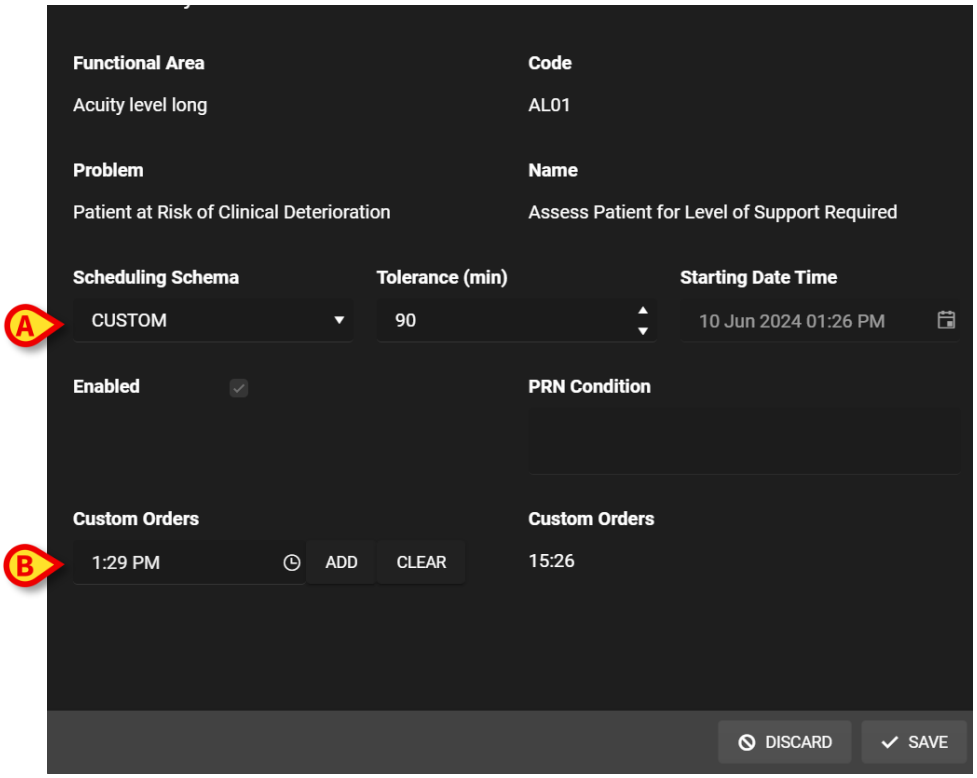

Fig 69

On the "Active Plan", each specific order is displayed as indicated in Fig 70 **A**, as a single rectangle placed in the position corresponding to the scheduled time, having a length indicating the specified tolerance time (10 minutes in the figure).

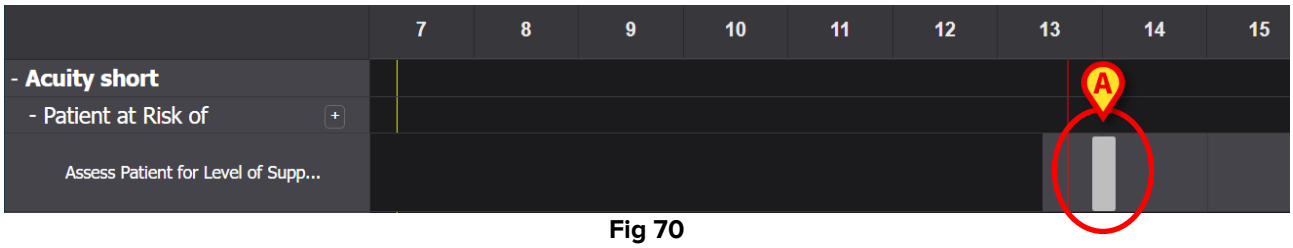

Fig 70

It is not possible to execute a future action. When the red "now" bar intersects the rectangle, the rectangle turns green. If the activity is not executed within the tolerance time, the corresponding rectangle turns red, meaning that the action is late.

To document the execution of the activity:

- Click the rectangle.

The execution window opens (Fig 71).

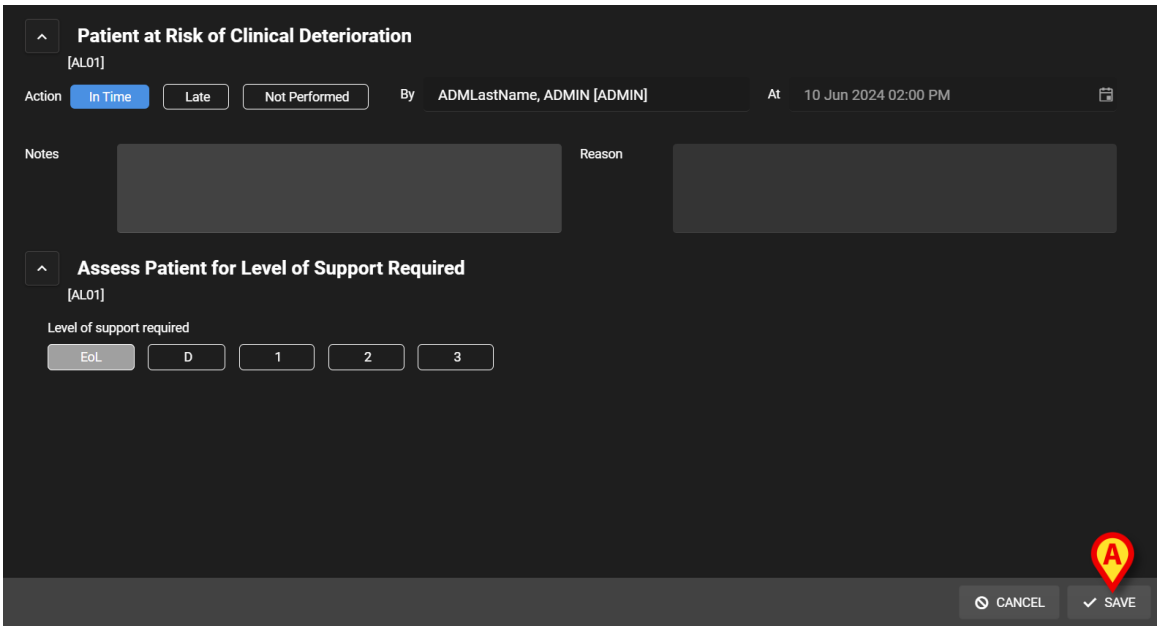

Fig 71

The window contents are specific to each execution and configured to record the information that is relevant for the current activity. The main features of the window are described in paragraph 3.6.

- Fill the required fields
- Click **Save** (Fig 71 **A**).

A mark is drawn on the chart, in the place where the action-rectangle was (Fig 72 **A**).

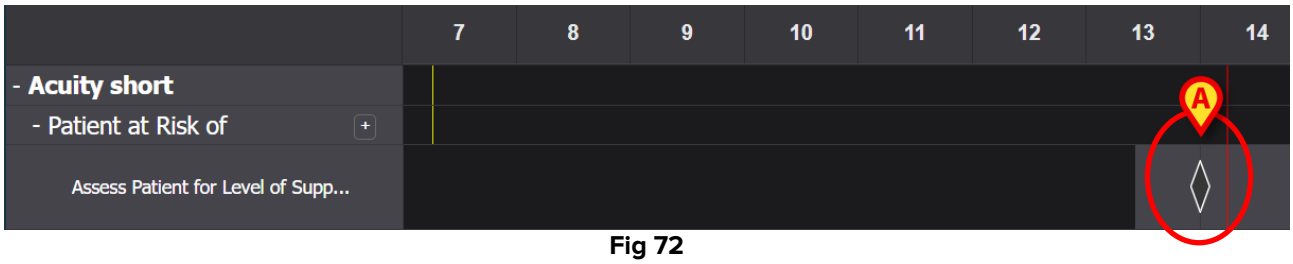

Fig 72

3.5.4. PRN (Pro Re Nata) activities

These are activities that must be executed only if certain conditions occur. It could be, for example, a clinical evaluation that must be performed only if the patient's state changes to a specific condition. Therefore, PRN actions do not have a scheduled time or pre-determined number of deliveries. See, for instance, the "TEST Activity" indicated in Fig 73 **A**.

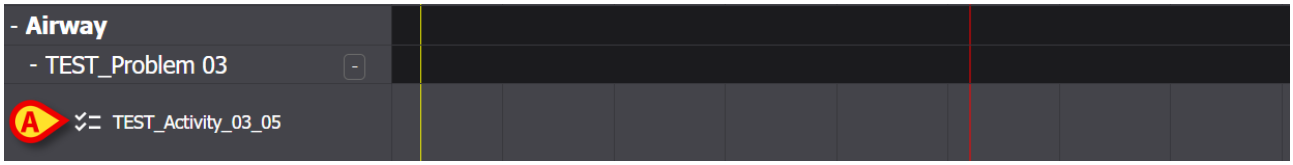

Fig 73

The grey area on the left of the red “now” bar is clickable. To document a PRN activity:

- Click the grey area in the position corresponding to the execution time.

The execution window opens (Fig 74).

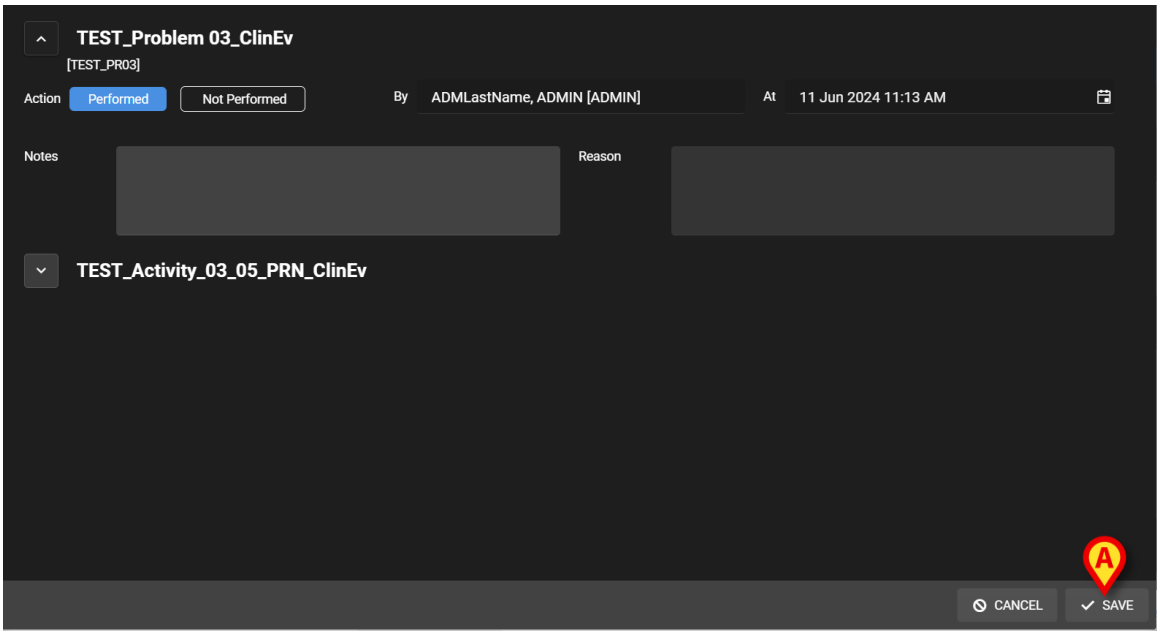

Fig 74

The window contents are specific to each execution and configured to record the information that is relevant for the current activity. The main features of the window are described in paragraph 3.6.

- Fill the required fields
- Click **Save** (Fig 74 **A**).

A mark is drawn on the chart, in the place corresponding to the time of execution (Fig 75 **A**).

Fig 75

By default, PRN activities are hidden on the Active Plan screen. There are two ways to display them.

1) Click the  icon placed alongside a problem on the activities list to display the PRN activities for that specific problem (Fig 76 **A**).

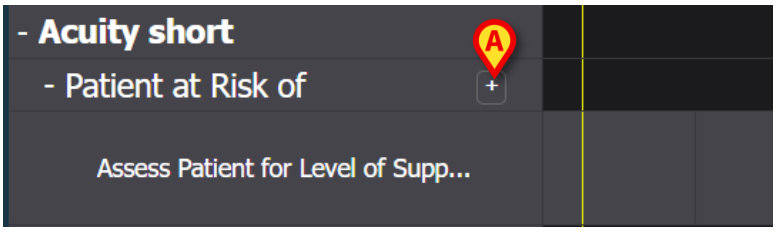

Fig 76

2) Click the **Expand PRN**/**Collapse PRN** buttons on the command bar to Expand/Collapse all the PRN activities at once (Fig 77 **A**).

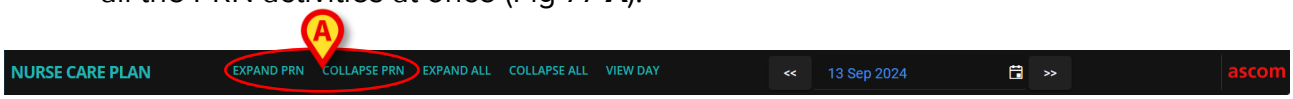

Fig 77

3.5.5. Problem closed

A problem can be closed if the conditions that generated it do not exist anymore. For this purpose, a specific “Problem closed” activity is associated to every problem on the “Active Plan” screen (Fig 78 **A**).

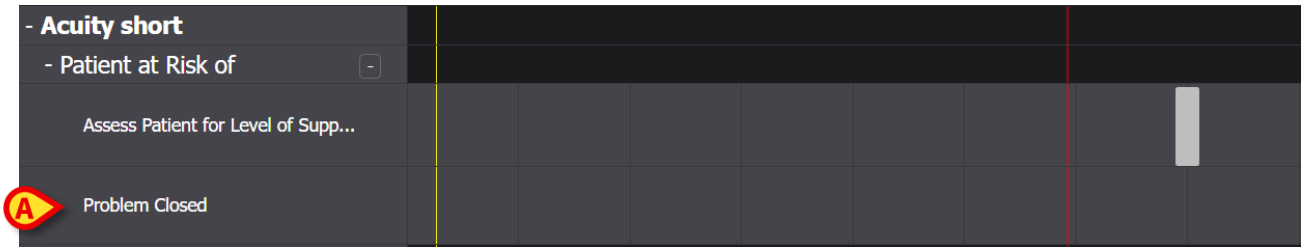

Fig 78

The “Problem closed” is configured as a PRN activity (see previous paragraph). The grey area on the left of the red “now” bar is clickable. To document that a problem is closed:

- Click the “Problem Closed” row related to the problem to be closed.

The execution window opens (Fig 79).

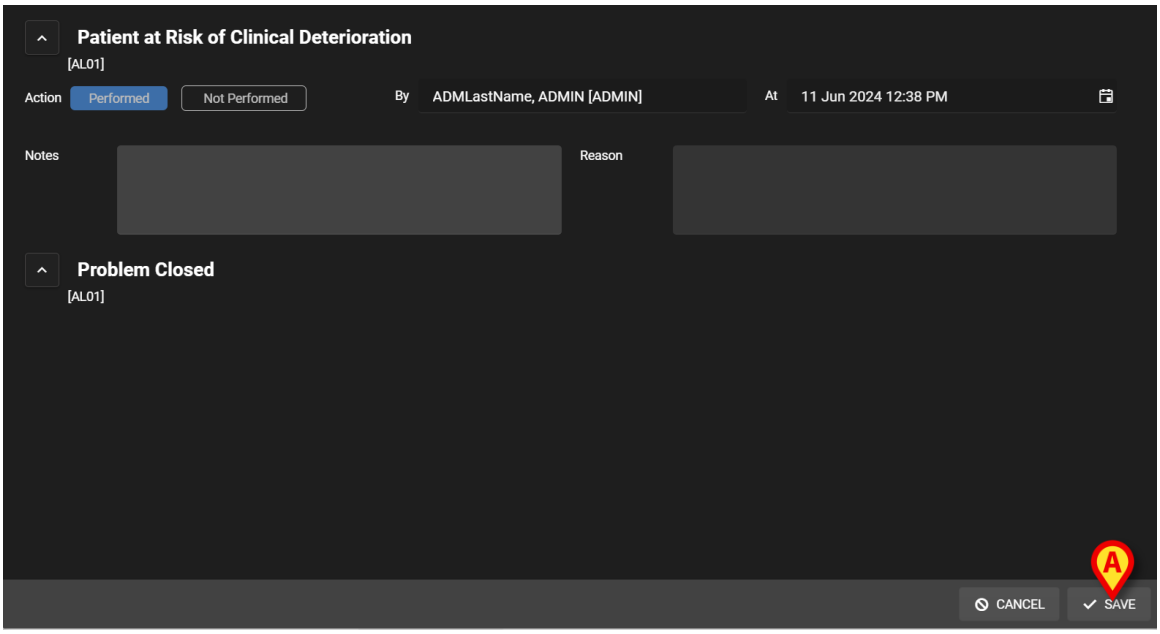

Fig 79

- Click **Save** (Fig 79 **A**).

The screen changes in following way (Fig 80).

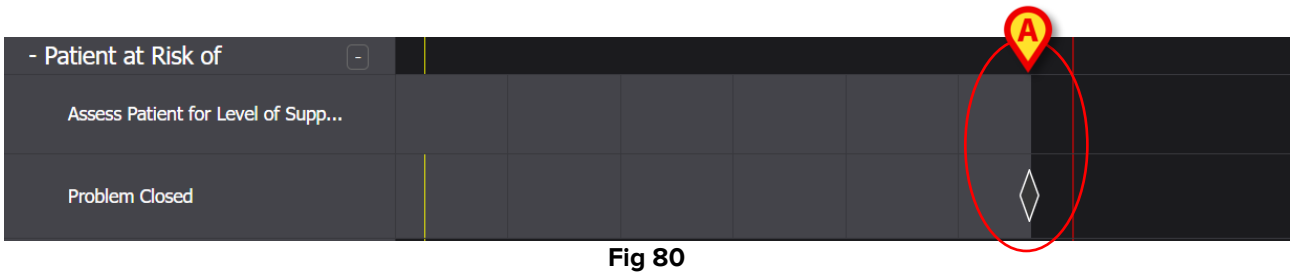

Fig 80

A mark is drawn on the chart, in the place corresponding to the closing time. All the activities related to that problem are interrupted (they disappear from the active plan - Fig 80 **A**).

3.6. Execution window

Each execution window is configured to document a specific activity, therefore its contents and data entry modes change according to the type of documented activity. This paragraph describes the features that are common to all windows and the possible data entry modes.

The overall structure is the same for all activities. The upper part of the window contains:

- the problem addressed by the activity (Fig 81 **A**).
- the indication of whether the action was performed or not (Fig 81 **B**). In case of activities scheduled at an exact time, this multiple choice includes the “In Time” and “Late” options (see Fig 67 for an instance). If an activity is documented as “Not Performed” or “Late”, the “Reason” field is enabled (Fig 81 **C**), requiring to indicate the reason why the activity was executed late or not executed. The “Not Performed” and “Late” activities are indicated as “Anomalies” in the dedicated window (paragraph 4).
- The name of the user documenting the activity (Fig 81 **D**).

- The execution date/time (Fig 81 **E**). Click the  icon placed alongside the date/time field to open a calendar tool allowing to change the date/time if the activity is documented at a time that is different from the time of actual execution. Only the allowed time span is enabled for selection on the calendar tool.

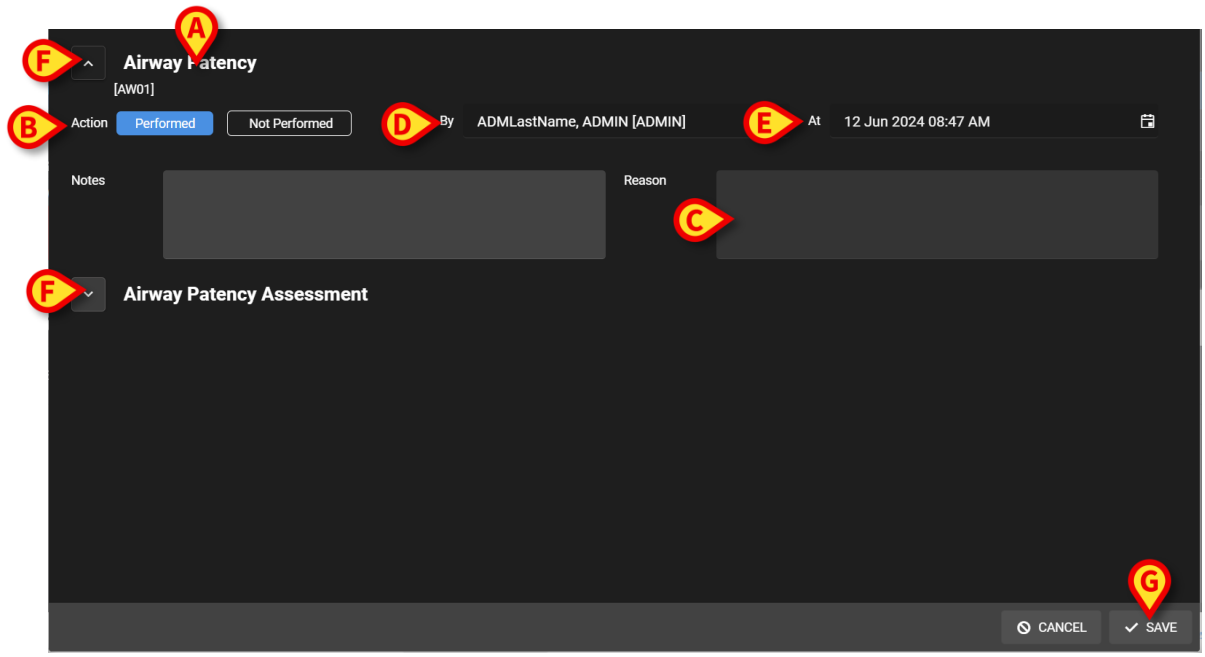

Fig 81

Use the  buttons to expand/collapse each section (Fig 81 **F** - in Fig 82 both sections are collapsed).

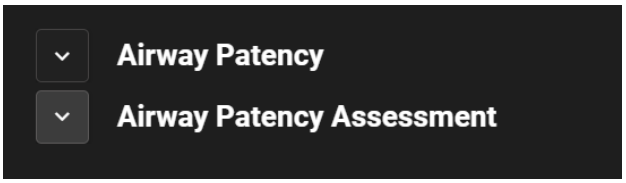

Fig 82

The lower section changes according to the activity to be documented. It can be widely customized to describe a specific activity in detail. The activity is usually described by multiple selection fields, as in Fig 83 **A**.

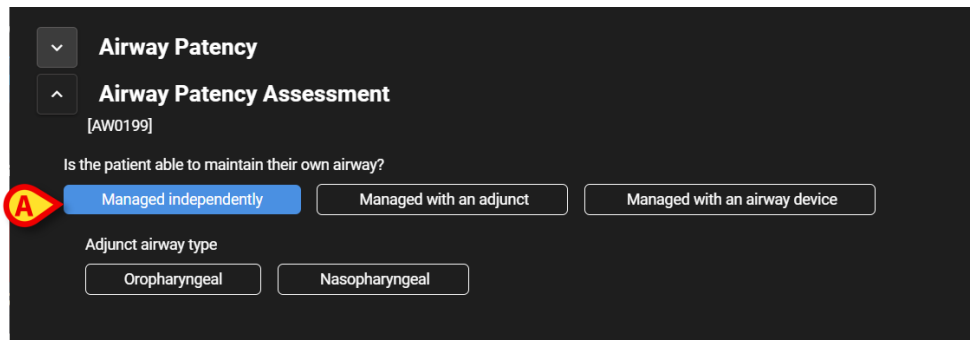

Fig 83

➢ Click a choice to select it.

The selected choice is highlighted. Fields can be co-related. In this case, a specific choice enables or disables other fields. For example, in Fig 83, the “Managed with an airway device” selection enables the possibility to specify the airway adjunct type.

Data entry can also be performed, depending on the context, on drop-down menus and free text fields for notes and textual descriptions.

3.6.1. Nurse assessments documentation

Some activities include (or are) the documentation of nurse assessments (see Fig 84 for an example).

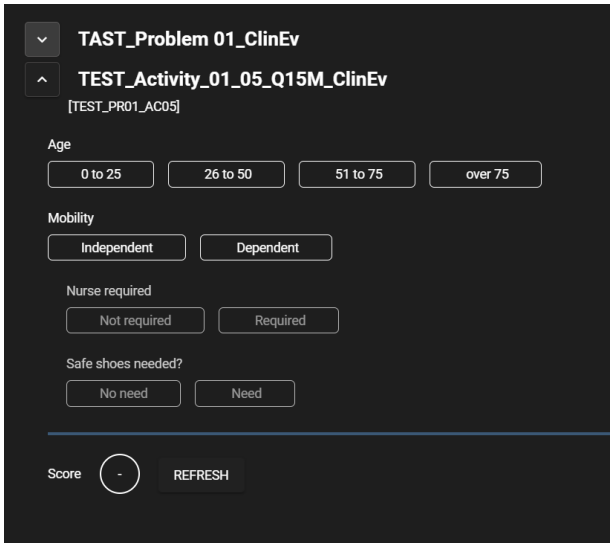

Fig 84

In these cases:

- Specify all the required information (Fig 85 **A**).

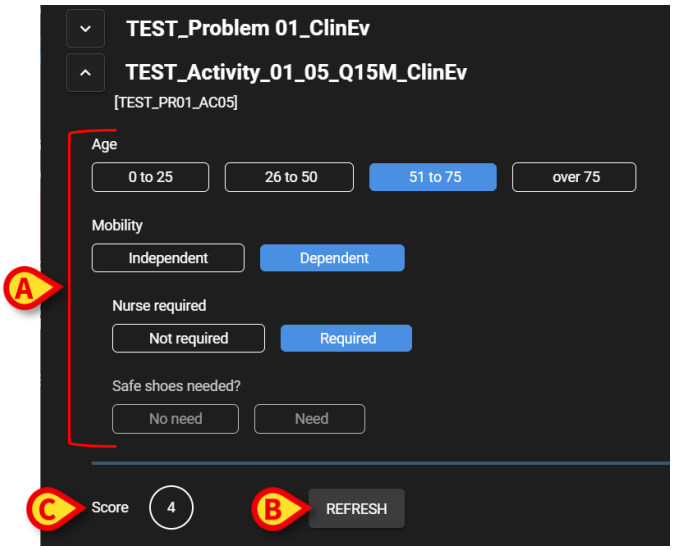

Fig 85

- Click the **Refresh** button (Fig 85 **B**).

The assessment is automatically calculated and displayed in a result field (Fig 85 **C**).

After clicking the **Save** button on the execution window (Fig 81 **G**), the calculation result is displayed on the “Active Plan” screen in the position corresponding to the execution time (Fig 86 **A**).

Fig 86

The assessments indicated on the “Active Plan” can be configured to be highlighted with different colors to convey specific information (for example: red to indicate the presence of critical values).

3.7. Display activity details

To display the details of a documented activity

- Click the corresponding mark on the “Active Plan” (Fig 87 **A**)

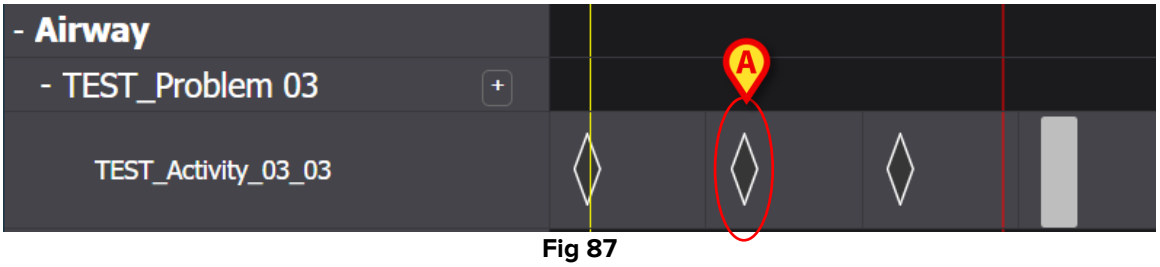

Fig 87

The activity details window opens (Fig 88).

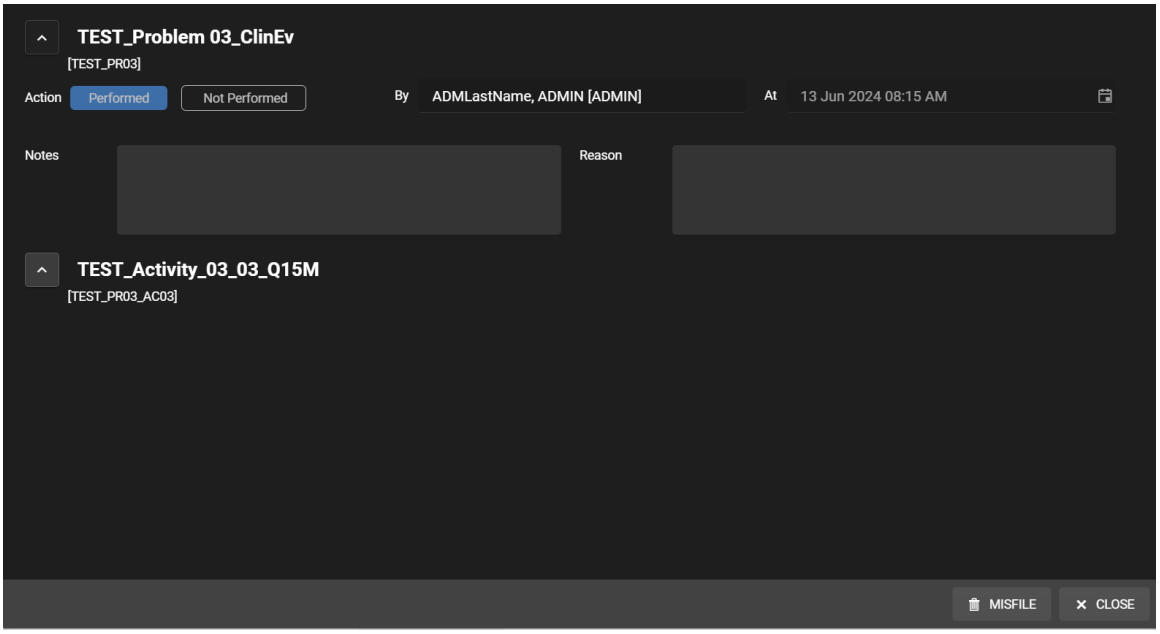

Fig 88

3.7.1. Misfile an activity

To misfile an activity

- Click the mark corresponding to the activity to be misfiled.

The activity details window opens (Fig 89)

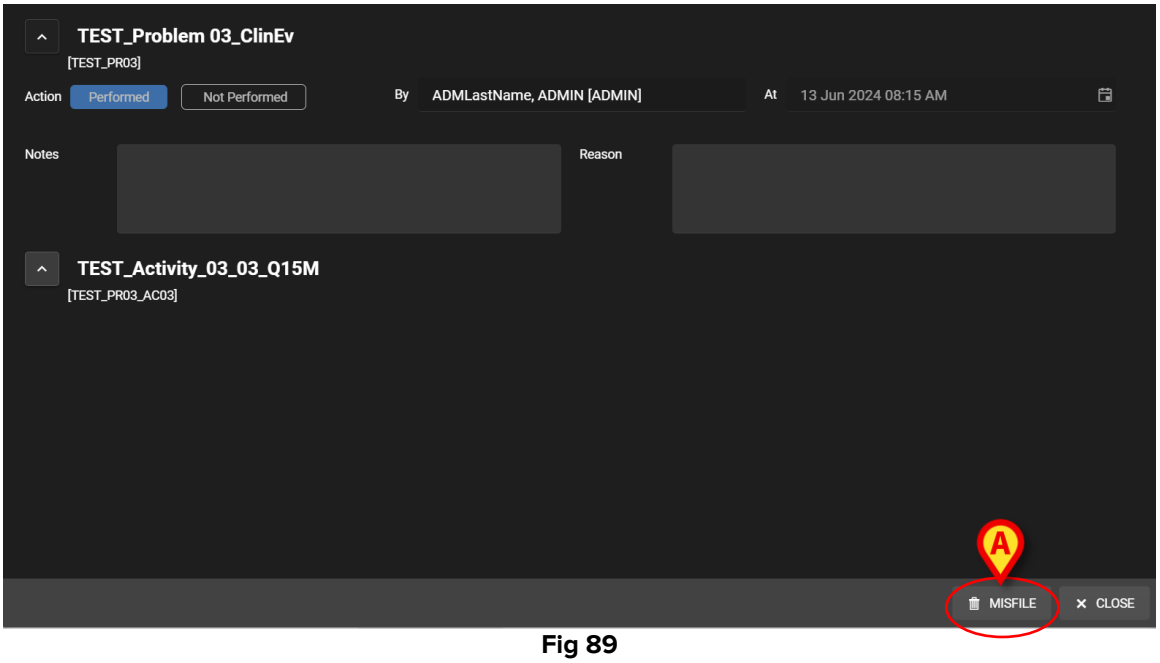

Fig 89

- Click the **Misfile** button (Fig 89 **A**).

A “Misfile” section, including a “Reason” field, is enabled on the window (Fig 90 **A**).

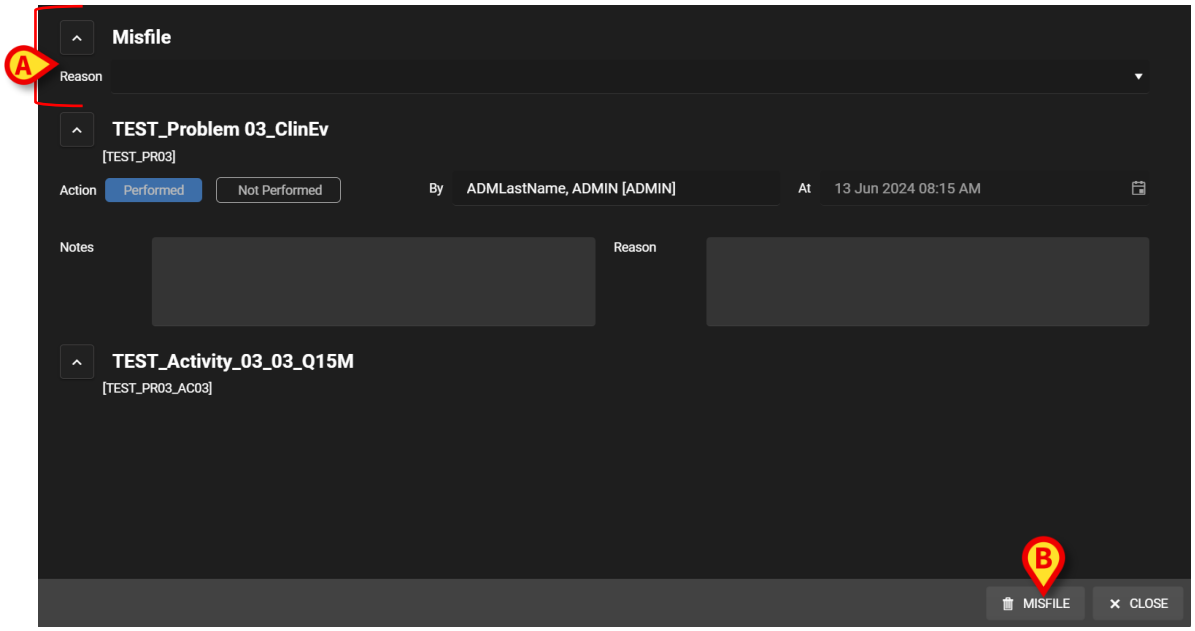

Fig 90

- Either type the reason in the “Reason” field or select it on the available drop-down menu (Fig 91 **A**).

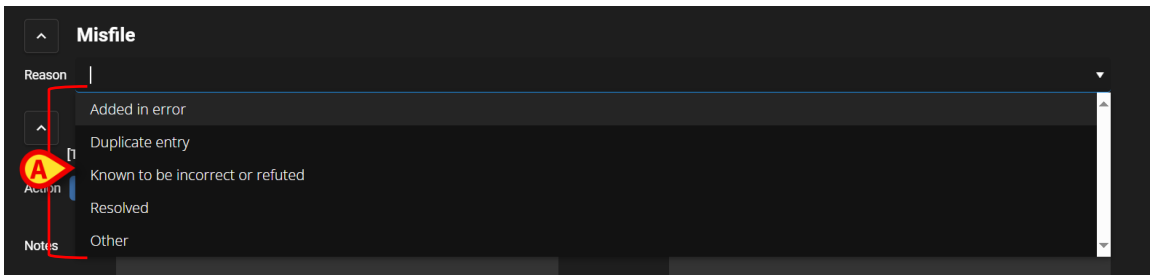

Fig 91

After selecting the reason:

- Click the **Misfile** button again (Fig 90 **B**).

The activity will be misfiled. The misfiled activities are displayed as crossed on the Active Plan (Fig 92 **A**).

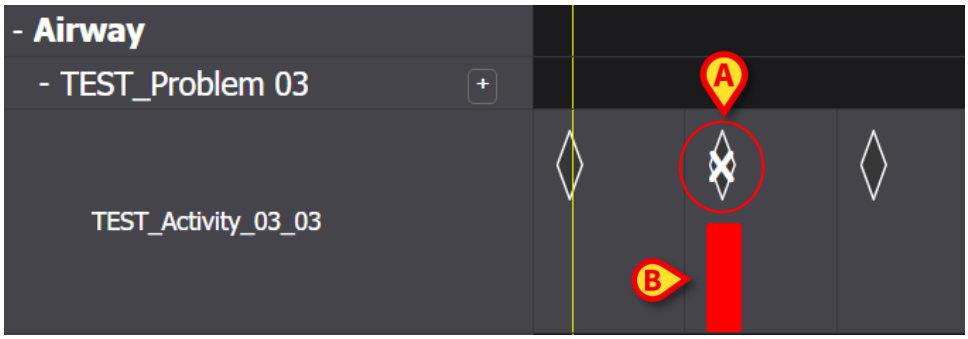

Fig 92

The misfiled activities must be considered as “undone”, therefore, if the activity was scheduled for a certain date/time, it is represented again on the Plan as an activity to be done. See, for example, in Fig 92 **B**, the restored activity (now late) after misfiling.

3.8. Choose functional areas

It is possible to choose which functional areas are displayed on the Active Plan to enhance the plan readability and facilitate the information retrieval.

To do that:

- Click the **Choose Functional Areas** button (Fig 93 **A**).

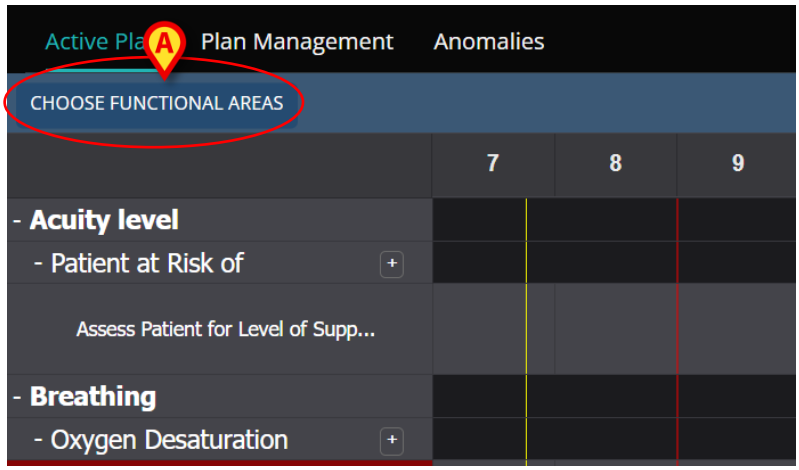

Fig 93

The following window opens (Fig 94). The window lists the functional areas for which at least an activity is present in the "Active Plan" of the selected patient.

Fig 94

- Click an item on the list to select/deselect it (Fig 94 **A**).

Use the **Select All** button to select all the items on the list. Use the **Deselect All** button to deselect all the items on the list (Fig 94 **B**).

- Click **Save** (Fig 94 **C**).

Only the selected functional areas are displayed on the Active Plan. When this type of selection is active a red funnel icon is displayed on the **Choose Functional Areas** button (Fig 95 **A**).

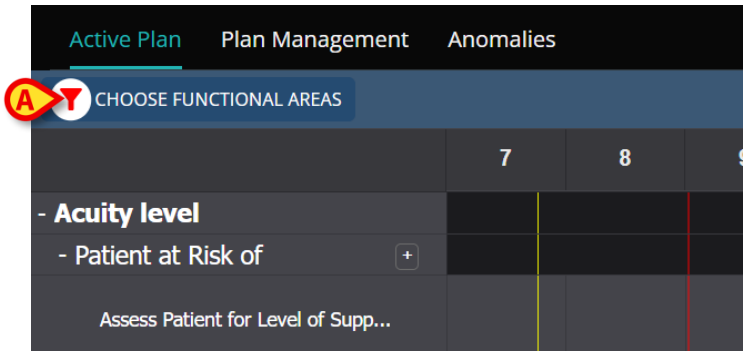

Fig 95

3.9. Filters

It is possible to filter the contents of the Active Plan. To do that:

- Click the Filter button on the top-right corner of the screen (Fig 96 **A**).

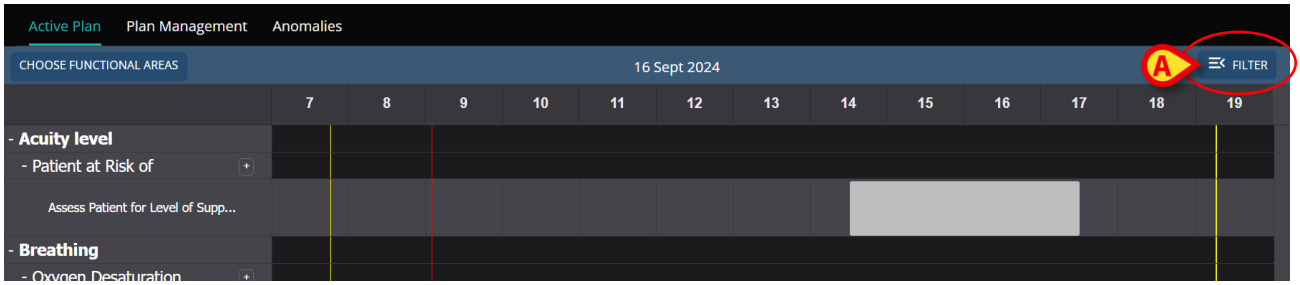

Fig 96

The following window opens (Fig 97).

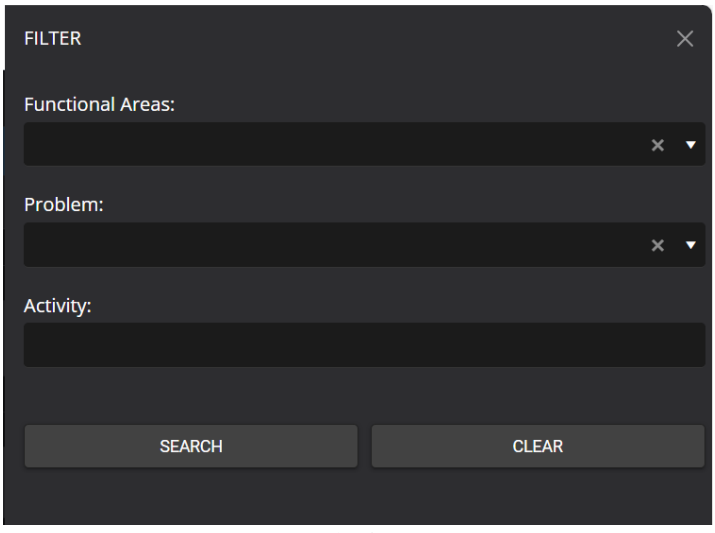

Fig 97

It is possible to filter by Functional Area, Problem or activity. Type the text to be searched in the fields or select the relevant item in the available drop-down lists (Fig 98 **A**).

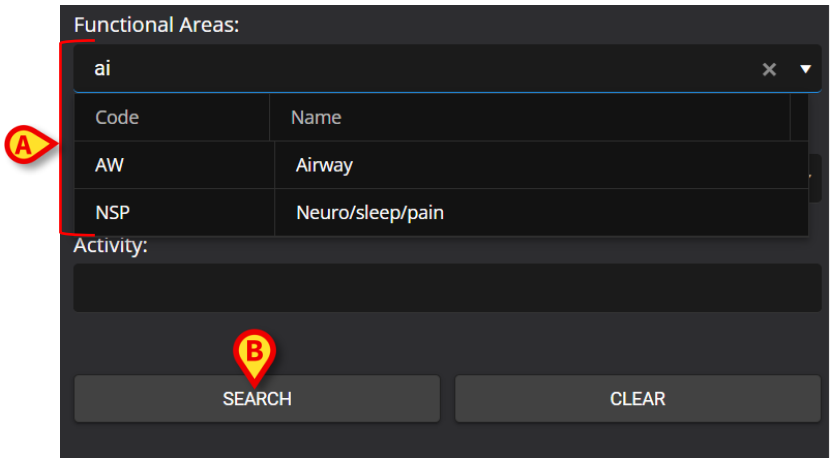

Fig 98

Only the functional areas for which at least an activity is present on the "Active Plan" currently displayed can be selected. The functional areas that were excluded with the procedure described in paragraph 3.8 (Choose Functional Areas) are here also excluded.
If a functional area is selected, the selectable problems are those related to the selected functional area.
The activity field is a free text field (no drop-down menus are here available).

After selection

- Click **Search** (Fig 98 **B**).

The "Active Plan" screen will display only the items matching the search criteria. When the screen contents are filtered, the heading bar is highlighted red (Fig 99 **A** – Filters are Active).

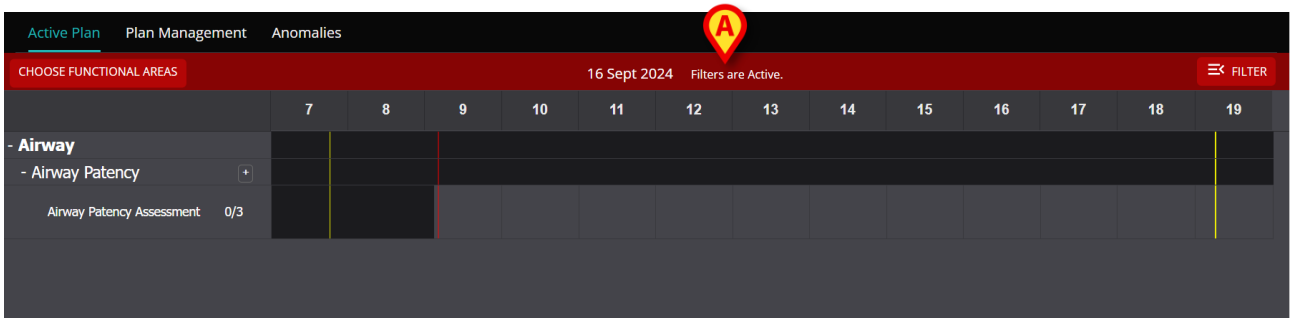

Fig 99

4. Anomalies

The “Anomalies” screen lists all the anomalies of the activity management. An anomaly is a scheduled activity that was not performed or was performed differently from what scheduled. The activities documented as “Late” and “Not performed” are also listed on the “Anomalies” screen.

To access the “Anomalies” screen (Fig 100):

- Click the ANOMALIES tab (Fig 100 **A**).

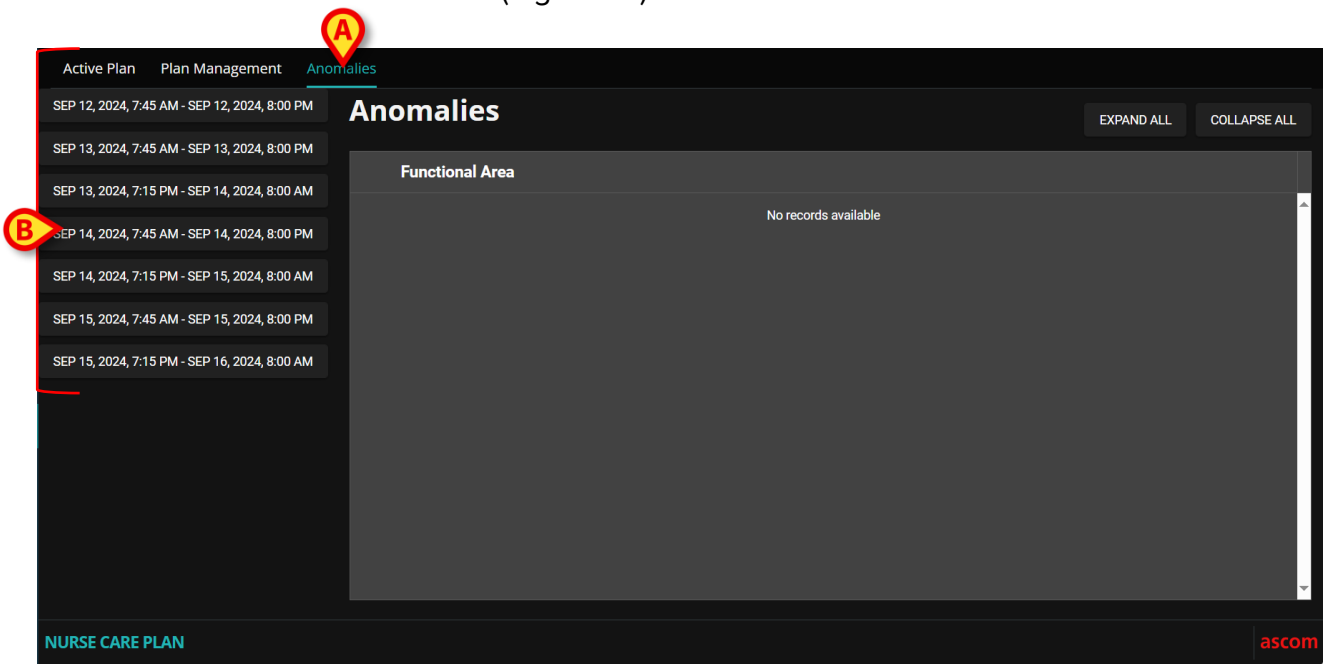

Fig 100

On the left are listed the shifts in which at least an anomaly occurred (Fig 100 **B**).

- Click a shift (Fig 101 **A**) to display the related anomalies on the central area (Fig 101 **B**).

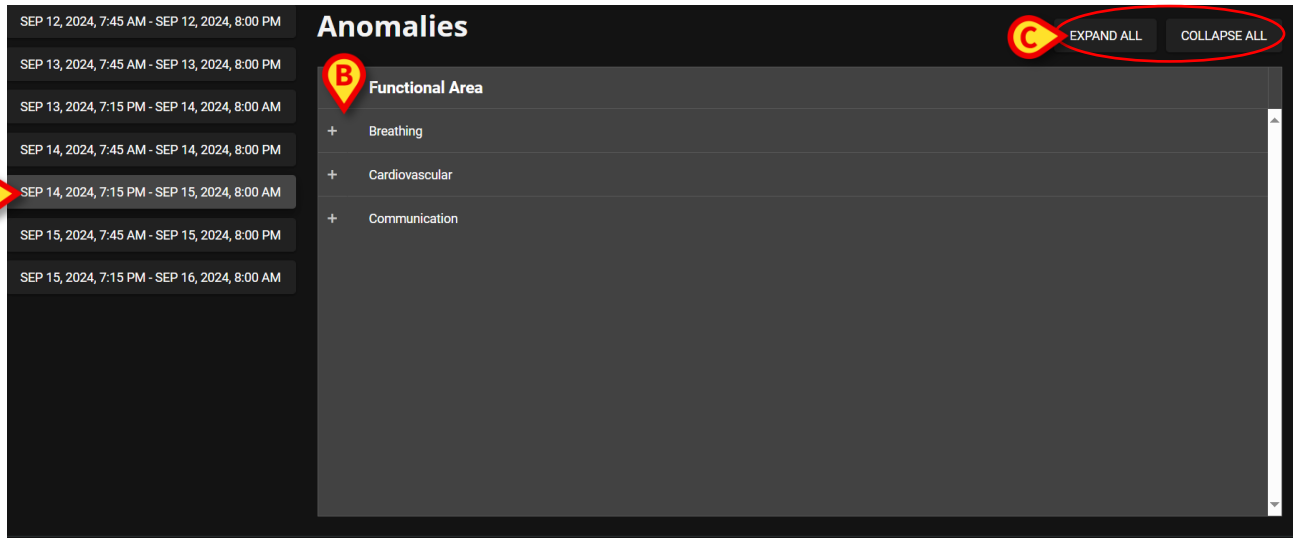

Fig 101

- Click the + icon placed alongside any item to expand it. Click − to collapse it.

The screen contents are organized hierarchically: Functional Areas → Problems → Activities → Anomalies.

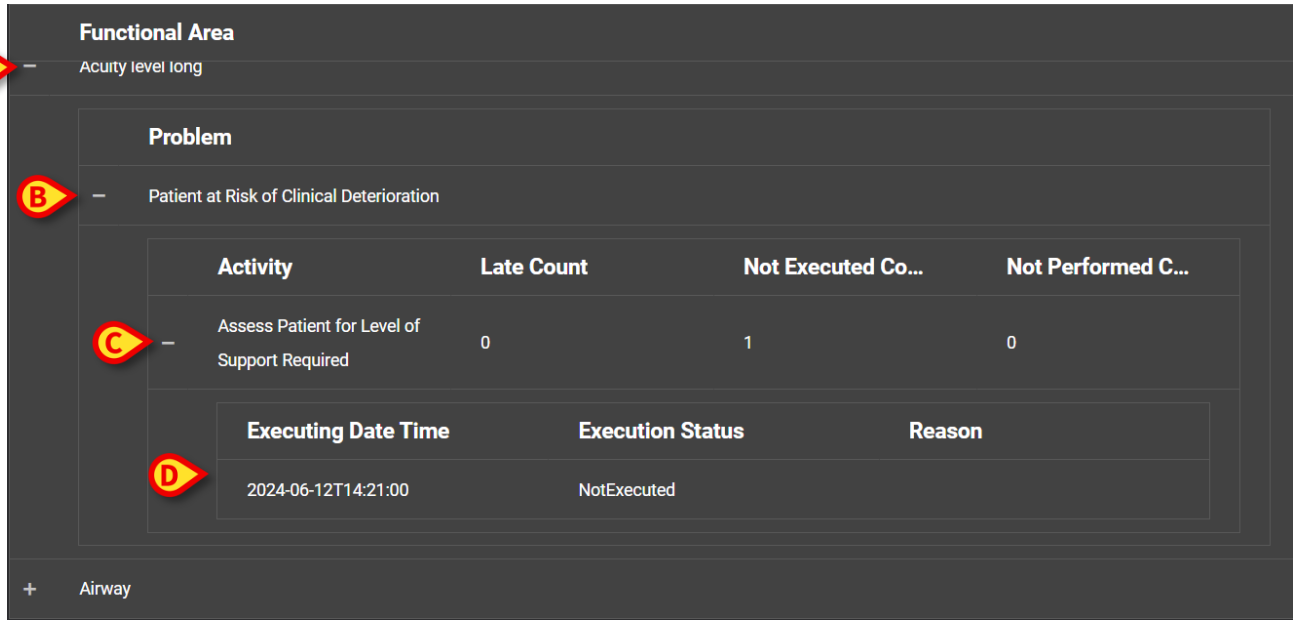

Fig 102

See, for example, in Fig 102:

- Functional Area: Acuity Level Long (Fig 102 **A**).
- Problem: Patient at Risk of Clinical Deterioration (Fig 102 **B**).
- Activity: Assess Patient for Level of Support Required (Fig 102 **C**).
- Anomaly: the anomaly details are here specified (date/time and type - Fig 102 **D**).

- Click the **Expand All** button to expand all the items. Click the **Collapse All** button to collapse all the items (Fig 101 **C**).