



eHealth

eRIC

6.11 Upgrade Mandatory Features



What is Changing?

- eRIC application upgrade from version 6.4 to 6.11
- Upon launch will be 'Like for Like' in appearance and functionality
- Some new features specific to 6.11 will be included as part of the upgrade
- Downtime required with a scheduled date/time of **Tuesday 24th November 1200-1600**



Benefits

- Aligns with an updated MetaVision application
- Version aligns with other sites globally so any application issues identified and resolved can be considered for the NSW Health eRIC application
- New features included upon launch (Outlined in this presentation)
- Allows for ongoing enhancements applicable and feasible with 6.11 version



New Features upon Upgrade

- New allergies icon
- Improved icons alongside medication name
- Order window mandatory fields highlighted
- Duration of therapy shown for orders
- Continuous order enhancement
- Display brand name in all product based medication orders
- Dose status updated
- Undo validate (**undo last dose action**)
- Quick filter option for order timeline view
- **Reactivate discontinued or past orders**
- Parameter normal values log
- Parameter normal values reset



Allergies icon

- When an allergy or drug reaction is documented, an allergy icon will appear next to existing or new orders if applicable
- The allergy icon  will be present where orders and doses are displayed such as:
 - Creating an order or validating an order windows
 - Dose and Task List
 - Prescribe tab view
 - Medication Plan tab view
 - Titrate Medication tab view
- Note:
 - The allergy icon will not be present in Tooltips
 - !!!!! Will also remain as an allergy alert





Allergies icon

Create Order For: Change Plan, MR number 1234007

Orderable [CIAP](#)
!!!! Benzylpenicillin

Dose Form: Injection Route: IV Body Site: Select Body Site

Specify "Infuse Over" at Validation

Medication/Product	Quantity/Volume
!!!! Benzylpenicillin	g

Validate dose for Change Plan, MR number 1234007

Order Details [Current Dose](#)

Orderable [CIAP](#)
!!!! Benzylpenicillin

Dose Form: Injection Route: IV Body Site: Select Body Site

Specify "Infuse Over"

Medication/Product
!!!! Benzylpenicillin

Dose & Task List (Change Plan) Filter: Status: Pending, Immediate, Late; Selected medication groups; Start: From the first dose, End: ;

Validate Mark Not Administered Cancel Action Modify View Properties Co-Sign For Preparations

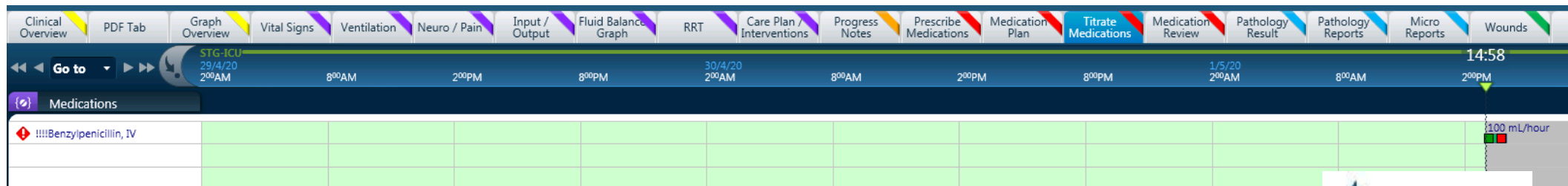
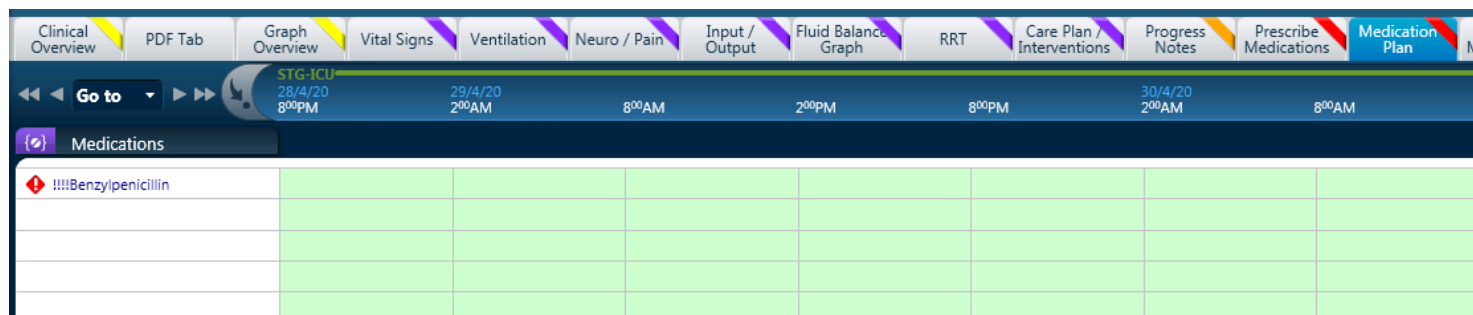
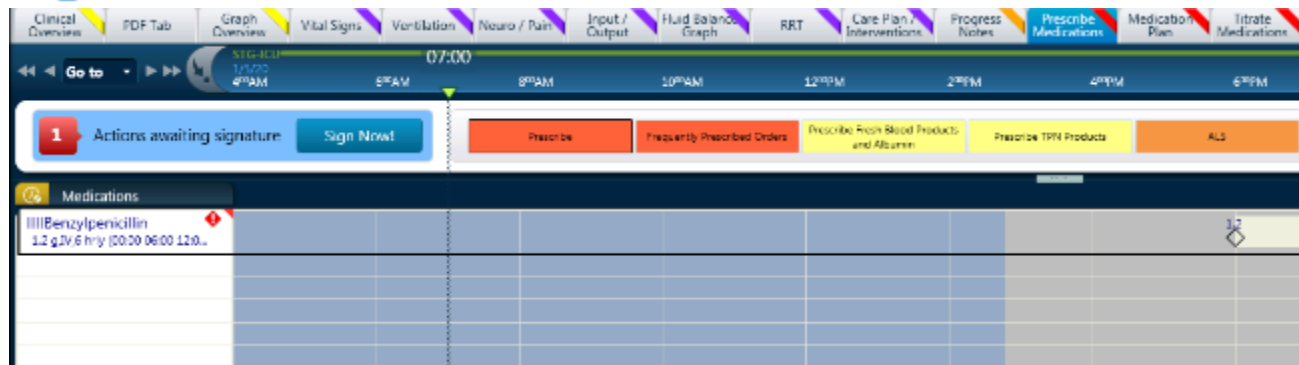
From: 01/05/2020 6:00 PM To: 02/05/2020 2:53 PM

Drag a column header here to group by that column

	Orderable	Start Time	Quantity/Volume	Route	Frequency	Dose Rate	Dose Status	Order Comment
☐	!!!! Benzylpenicillin	01/05/2020 06:00 PM	1.2 g	IV	6 hrly (00:00 06:00...)		Pending	
☐	!!!! Benzylpenicillin	02/05/2020 12:00 AM	1.2 g	IV	6 hrly (00:00 06:00...)		Pending	
☐	!!!! Benzylpenicillin	02/05/2020 06:00 AM	1.2 g	IV	6 hrly (00:00 06:00...)		Pending	
☐	!!!! Benzylpenicillin	02/05/2020 12:00 PM	1.2 g	IV	6 hrly (00:00 06:00...)		Pending	



Allergies icon



Improved icons alongside medication name

- Allow display of icons next to medication names
- Maximum 2 simultaneously displayed against an order
- “More icons” displayed to represent additional icons apply to an order when more than two icons are part of the order

Critical Information Icons	Important Information Icons	Informational Information Icons
 Allergy	 Disallow Substitution	 Fixed Dose Combination
		 Home Medication

More Icons:

Critical Information
Important Information
Informational





Improved icons alongside medication name

- Allergies will always be first if applicable
- Colour of the 'More icons' changes based on the types of icons in the expanded window

The screenshot shows a 'Medications' list with the following items:

- !!!!Coumadin (Warfarin) TBD mg,PO,4:00 PM,Tablet
- !!!!Oxycodone 10mg Nal... 10 mg/5 mg,PO,BD (08:00 2...)
- Heparin 25,000 Unit(s),IV,Continuous,Inj...
- Ondansetron 8 mg,PO,every 8 hour,Tablet

An expanded window for the Oxycodone medication shows three icons: a red warning icon (Potential allergy or intolerance to this order), a blue home icon (Home medication), and a blue fixed dose combination icon (Fixed dose combination).

The screenshot shows a 'Medications' list with the following items:

- !!!!Coumadin (Warfarin) TBD mg,PO,4:00 PM,Tablet
- !!!!Ordine (Morphine) 5 mg,PO,every 6 hour,Oral ...
- !!!!Oxycodone 10mg Nal... 10 mg/5 mg,PO,BD (08:00 2...)
- Heparin 25,000 Unit(s),IV,Continuous,Inj...

An expanded window for the Oxycodone medication shows three icons: a red warning icon (Potential allergy or intolerance to this order), a blue disallow substitution icon (Disallow substitution), and a blue home icon (Home medication).



Clinical Overview

PDF Tab

Graph Overview

Vital Signs

Ventilation

Neuro / Pain

Input / Output

Fluid Balance Graph

RRT

RRT MOCK

Care Plan / Interventions

Progress Notes

Prescribe Medications

Order Profile View

Medication List

0 Actions awaiting signature

Sign Now!

Prescribe

Prescribe Fresh Blood Products and Albumin

Prescribe TPN Products

Medication List

Weights and Dimensions

CIAP

Time shortcuts

Current day

From: ... 02/11/2020 12:00 AM

To: ... 02/11/2020 11:59 PM

Status	Orderable Name	Orderable Qu...	Route	Schedule/Frequency	Additives/Diluent Details	Orderable Do...	Comments
Active	!!!!Coumadin (Warfarin)	TBD mg	PO	4:00 PM			
Active	!!!!Ordine (Morphine)	5 mg	PO	every 6 hour			
Active	!!!!Oxycodone 10mg Naloxone 5mg	10 mg/5 mg	PO	BD (08:00 20:00)			

Dose & Task List (new new) Filter: Status: Pending, Immediate; Selected medication groups; Start: From the

Validate
 Mark Not Administered
 Cancel Action
 Modify
 View
 Mark Prepared
 Properties
 Co-Sign For Preparations

From: ... 26/08/2020 8:00 AM To: ... 03/11/2020 3:49 PM

Drag a column header here to group by that column

	Orderable	Start Time ▲	Quantity/Volume
☐	Ondansetron	02/11/2020 04:00 PM	8 mg
☐	!!!! Coumadin (Warfarin)	02/11/2020 04:00 PM	TBD
☐	!!!! Ordine (Morphine)	02/11/2020 04:00 PM	5 mg
☐	!!!! Oxycodone 10mg Naloxone 5mg	02/11/2020 08:00 PM	10 mg/5 mg
☐	!!!! Ordine (Morphine)	02/11/2020 10:00 PM	5 mg
☐	Ondansetron	03/11/2020 12:00 AM	8 mg
☐	!!!! Ordine (Morphine)	03/11/2020 04:00 AM	5 mg
☐	Ondansetron	03/11/2020 08:00 AM	8 mg
☐	!!!! Oxycodone 10mg Naloxone 5mg	03/11/2020 08:00 AM	10 mg/5 mg
☐	!!!! Ordine (Morphine)	03/11/2020 10:00 AM	5 mg



Mandatory fields highlighted within the order entry window

- Any mandatory fields within a new order plan/dose will be highlighted (Bold and dashed colour frame around the mandatory field)
- Highlighted fields will appear dependent upon the type of order/dose being created or administered

Create Order For new new MR number new

Chosen Medication: Intravenous (Intravenous) **PRN** 2000 Indication: Max dose per 24 hr.

Dose Form: Injection Route: IV Body Site: Select Body Site Patient Mode: None Frequency: Continuous

Medication/Dose Table:

Medication/Dose	Quantity/Volume	Concentration	Daily Dose
Intravenous (Intravenous)	5 mg	500 mg / mL	mg/day
Glucose 50%	100 mL		mL/day

Dose Rate: Rate: Total volume: 100 mL

Start: Time: End: No Time Limit: Titrate to a SAP of:

Order weight: Drug Calculation Wt: No Free Text Medication Name:

Buttons: Order Log Save & Create New Save & Close Cancel





Order entry daily dosage

- Changing the quantity/volume field to another related unit of measure will also update the daily dosage field to reflect the change e.g. mg to g
- Quantity/volume amount also needs to be updated if required

Orderable CIAP
Vancomycin

Dose Form: Infusion. Route: PR Body Site: Select Body Site

PRN PRN indication Max. dose per 24 hr.

Pattern Mode: None Frequency: BD (08:00 20:00)

No Infused Over Additives Diluent

Medication/Product	Quantity/Volume	Concentration	Daily Dosage
Vancomycin	500 mg	--	10 mg/kg/day (1,000 mg/day)

No Infused Over Additives Diluent

Medication/Product	Quantity/Volume	Concentration	Daily Dosage
Vancomycin	1 g	--	0.02 g/kg/day (2 g/day)



Duration of therapy

- Duration of therapy shown on order entry window for orders that have an end date/time

Create Order For: RFN LN, MR number 3333333

Orderable: Benzylpenicillin CIAP

Dose Form: Injection Route: IV Body Site: Select Body Site

PRN PRN indication Max. dose per 24 hr.

Pattern Mode: None Frequency: 6 hrly (00:00 06:00 12:00 18:00)

Specify "Infuse Over" at Validation Additives Diluent

Medication/Product	Quantity/Volume	Concentration	Daily Dosage
Benzylpenicillin	1.2 g	--	0.08 g/kg/day (4.8 g/day)

Start: Next Scheduled Dose

End: Last dose of the day on 05/08/2020 6:00 PM (~7d/6h)

Dosing weight: Actual Weight 60 kg As of 3/04/2020 3:16 PM

Free Text Medication Name:

Order Log Save & Create New Save & Close Cancel



Continuous order

- Upon validating subsequent doses for continuous orders that don't specify a rate a message alert will display asking if the user would like to continue with the current rate and dose rate (Orders with **Rate Titration** or **Set Quantity or Volume Only**)
- Any Bolus rates entered that ended the last dose are excluded (Will display previous rate prior to bolus)

Create Order For: RFN LN, MR number 333333

Additional Information Allergies/ADR

Orderable: Noradrenaline (Norepinephrine) CIAP

Dose Form: Injection Route: IV Body Site: Select Body Site

Pattern Mode: None Frequency: Continuous

Max. dose per 24 hr.

Set Quantity Or Volume Only

Medication/Product	Quantity/Volume	Concentration	Daily Dosage
Noradrenaline (Norepinephrine)	6 mg	0.06 mg / mL	
Diluent: Glucose 5%	100 mL	--	

Dose Rate: Rate: Total volume: 100 mL

Start: Now End: No Time Limit

Dosing weight: Actual Weight 60 kg As of 3/04/2020 3:16 PM

Free Text Medication Name:

Order Log Save & Create New Save & Close Cancel

Validate dose for RFN LN, MR number 333333

Order Details Previous Prepared/Validated Dose Current Dose

Additional Information Pharmacy Review Notes Allergies/ADR

Orderable: Noradrenaline (Norepinephrine) CIAP

Dose Form: Injection Route: IV Body Site: Select Body Site

Administration time: 07/08/2020 6:49 AM

Write dose comment

Set Dose and Rate

Medication/Product	Product Amount	Quantity/Volume	Concentration
Noradrenaline (Norepinephrine)	6 mg	100 mL	0.06 mg / mL
Diluent: Glucose 5%	--	--	--

Copy products Additives Diluent

Infuse over

Co-sign for administration

Co-sign user: Password:

Dose Log Val. and Close Cancel

MetaVision

The previous dose ended with a rate of 5 mL/hour and a dose of 0.0833 microg/Kg/minute. Would you like to continue with the same rate and dose?

Yes No Cancel



Dose status

- Ability to view multiple dose statuses and times from the right click options when there are multiple doses shown in the same cell (e.g. 12 or 24 hour view)

The screenshot displays the 'Medications' section of the eRIC interface. A list of medications is shown on the left, including Noradrenaline (Norepinephrine), Paracetamol, Vancomycin, Ondansetron, PO, and Benzylpenicillin, IV. The Paracetamol row is highlighted in red. A right-click context menu is open over the Paracetamol row, showing options: General, 1 g (Pending) 6:00 PM, 1 g (Late) 12:00 PM, Validate, Modify, Withhold Dose, View Dose, Mark Prepared, Mark Prepared and Validate, Dose Log, View Order, and Order Log. The '1 g (Pending) 6:00 PM' and '1 g (Late) 12:00 PM' options are highlighted in green. Below the context menu, two panels show 'Order Details' and 'Dose Details' for the selected dose.

Order Details
Frequency: QID (06:00 12:00 18:00 22:00) Start: 06/08/2020 06:00 AM Stop: No time limit

Dose Details
Paracetamol Tablet 1 g
PO Administration time: 06/08/2020 06:00 PM
Dose Status: Pending
Preparation Status: Not Prepared

Order Details
Frequency: QID (06:00 12:00 18:00 22:00) Start: 06/08/2020 06:00 AM Stop: No time limit

Dose Details
Paracetamol Tablet 1 g
PO Administration time: 06/08/2020 12:00 PM
Dose Status: Late
Preparation Status: Not Prepared



Undo validate

- Ability to undo the validated dose
- **Replaces Mark as Error** (The workflow of prescribing a once only dose no longer required if the dose is intended to be given unless a continuous infusion is prescribed)
- Dose remains available allowing the user to perform another action (sign or administer later, withhold or mark not administered)

The screenshot shows the 'Medications' section of the eRIC interface. A table lists medications under three categories: 'Meds-Other Medication' (Paracetamol, PO), 'Meds-Inotropes & Vasopressors' (Noradrenaline, 5 mL/hour), and 'Meds-Antimicrobial' (Benzylpenicillin, IV). A context menu is open for 'Paracetamol 1 g', showing options: 'Undo Validate' (highlighted with a red box), 'Revise', 'View Dose', 'View Section', 'Dose Log', 'Co-sign For Administration', 'View Order', and 'Order Log'. A modal window titled 'Action on Paracetamol 1 g' is also open, showing a 'Reason for undo validate' dropdown set to 'None' and a 'Comments' text area.

The screenshot shows the 'Reason for undo validate' dropdown menu. The options are: 'None' (selected), 'None', 'Dose validated but not administered to the patient', 'Marked as validated in error', 'Incorrect bolus/rate change (clears current infusion)', and 'Other - please specify reason in comments field'. The 'OK' and 'Cancel' buttons are at the bottom right.



Undo validate

- Undo actions are available in right-click menus, in the same views that the actions Validate and mark not administered are available
- In all cases, the user is prompted to enter the reason for performing the Undo action
- The same permission settings used for dose actions are used for the Undo action, so that a user permitted to perform the Validate action is also permitted to undo the Validate action
- If actions were performed on the dose after the Validate action (e.g. change of quantity, or filling out an attached form), they too are rolled back
- Doses return to their condition prior to validation based upon the order at the time. Any actions to an order after the dose had been validated (rescheduled or modified) may not apply
- The full actions workflow, including the Undo action, can be seen in the Dose Log
- **Note: Undo validate a continuous infusion will clear all actions on that dose including bolus and rate changes e.g. removes whole infusion, unable to clear bolus/rate change only**



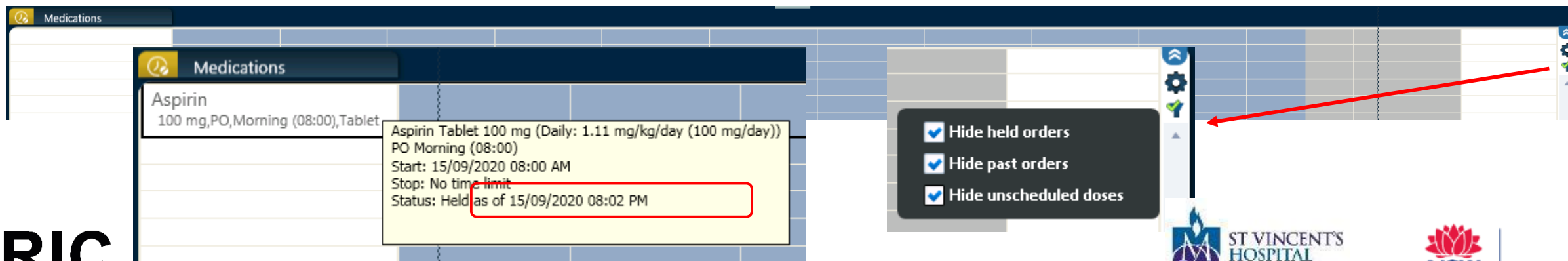
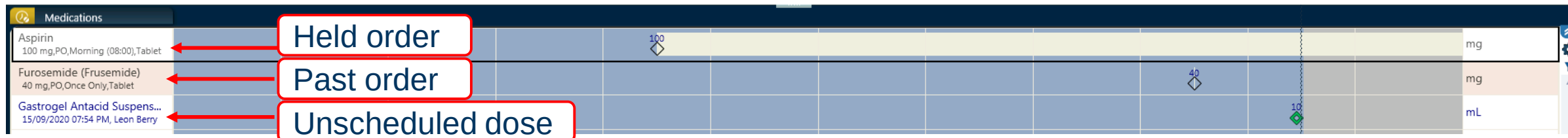
Order eligibility time

- Orders will remain active until after the last scheduled dose is complete
- The duration of the last dose is not added if that dose is skipped, not administered or marked as an error
- If a dose is moved so that it will complete after the order's scheduled end time, then the order will remain active until that dose is complete. An order whose final dose does not have a final disposition, such as when it is immediate or late, will remain active until it does



Order timeline view filter option

- Ability to hide past orders, held orders and unscheduled doses on the Order Timeline View
- Default is to show all these orders and doses
- Order timeline will display past orders with a distinct colour and held orders in grey font so they are easily distinguished from active orders
- Tooltip for held orders will include the date/time the order was held





Reactivate past or discontinued orders

- **Note: using this feature is not recommended as it might duplicate the order**
- Ability to reactivate single orders that are in past status or discontinued
- Accessed by right clicking on the order and selecting reactivate
- Order template window populated with original order details

The screenshot shows the 'Medications' section of the eRIC interface. It displays a table with columns for medication name, dose, frequency, and status. Two rows are visible: 'Amiodarone 100 mg, PO, BD (08:00 20:00), Tablet' and 'Prednisolone 10 mg, PO, Night (18:00), Tablet'. The 'Prednisolone' row is highlighted in orange, indicating it is a discontinued or past order. A right-click context menu is open over this row, showing options: 'Mark as error', 'Log', 'View', and 'Reactivate'. The 'Reactivate' option is highlighted with a red border. The table also shows a timeline of orders with diamond icons indicating specific times.

Medication	Dose	Frequency	Status
Amiodarone	100 mg	PO, BD (08:00 20:00)	Tablet
Prednisolone	10 mg	PO, Night (18:00)	Tablet



Parameter normal values log

- Ability to open a log of the normal values for a parameter to view all the changes that have been made
- Change units field to normal values on right hand side of tabular view to see any applicable values
- Log accessed by right clicking on the parameter in the tabular view and selecting 'Show normal values log'

The screenshot shows the eRIC interface with a tabular view of parameters. A context menu is open over the 'Urine Output' parameter, with the option 'Show normal value log' highlighted. The 'Normal value log Urine Output' window is displayed, showing a table of updates.

Update Time	Changed By	Low	High	Action
07/08/2020 12:14:52 PM	Doctor_01 Test	0	1600	New
07/08/2020 12:15:14 PM	Doctor_01 Test	0	2000	Update
07/08/2020 12:15:24 PM	Doctor_01 Test	0	1000	Update
07/08/2020 12:15:32 PM	Doctor_01 Test	0	1200	Update

The 'Normal values' dropdown menu on the right side of the interface is also highlighted with a red box, showing the current value of 1200.



Parameter normal values reset

- Ability to revert normal values, if changed, for a parameter to their default values (If any normal values are pre set within eRIC)
- Accessed by right clicking on the parameter in the tabular view and selecting 'Reset normal value'
- Note: Changing the normal values will remain on the patient file, even when changing users, unless they are reset

The screenshot displays a table of medical parameters. The first row, 'Urine Output', has a value of 500 and a normal range of 1,500. A red box highlights the 'Reset normal value' option in the context menu that appears when right-clicking on the 'Urine Output' parameter. Another red box highlights the 'Normal values' dropdown menu, which shows a current value of 0 and a normal range of 1000. A red arrow points from the 'Reset normal value' option to the 'Normal values' dropdown.

Parameter	Value	Normal Range
Urine Output	500	1,500
Urine O	0	0
Stool O	0	0
Gastric	0	0
Gastric	0	0
Vomit	0	0
Colost	0	0
Ileost	0	0
Jejun	0	0
Mucou	0	0
Stool	0	0
Stool	0	0



Other Changes - Notifications Centre

- Slight change in appearance to the 'Actions for Validation' icon
- Opens dose and task list

The screenshot displays the eRIC (electronic Record for Intensive Care) interface. At the top, there's a navigation bar with various icons. Below it, a patient's data is shown, including vital signs and lab results. A notification center is overlaid on the right side, featuring a green checkmark icon labeled "Actions for validation". A black box on the right indicates "Active user: Doctor". A red arrow points to the bottom status bar, which shows the active user and other system information.



Other Changes - Dosing Weight

- Dosing weight in the order template window includes 'Drug Calculation Wt.'

Create Order For: Testing Patient, MR number wdfa

Orderable: Heparin CIAP

Dose Form: Injection Route: IV Body Site: Select Body Site

PRN: PRN indication Max. PRN dose per 24 hr.

Pattern Mode: None Frequency: Continuous

Set Dose and Rate

Medication/Product	Quantity/Volume	Concentration	Daily Dosage
Heparin	25,000 Unit(s)	100 Unit(s) / mL	Unit(s)/kg/day (0 Unit(s)/day)
Diluent Sodium chloride 0.9%	250 mL	--	mL/kg/day (0 mL/day)

Dosing weight: Drug Calculation Wt. 80 kg

Rate: Total volume: 250 mL Infuse over:

Start: Now End: No Time Limit Target APTT range:

Dosing weight: Drug Calculation Wt. 80 kg As of 30/09/2020 8:31 AM

Free Text Medication Name:

Order Log Save & Create New Save & Close Cancel

Dosing weight:

Drug Calculation Wt.

80 kg