SELF-GUIDED PRACTICE WORKBOOK

CST TransformationalLearning

CURRICULUM TRACK:

PROVIDER: CRITICAL CARE

Last update: January 25, 2018

CLINICAL + SYSTEMS TRANSFORMATION
Our path to smarter, seamless care

TRANSFORMATIONAL LEARNING

SELF-GUIDED PRACTICE WORKBOOK

Duration	**4 hours**
Before getting started	■ Sign the attendance roster (this will ensure you get paid to attend the session). ■ Put your cell phones on silent mode.
Session Expectations	■ This is a self-paced learning session. ■ A 15 min break time will be provided. You can take this break at any time during the session. ■ The workbook provides a compilation of different scenarios that are applicable to your work setting. ■ Work through different learning activities at your own pace
Key Learning Review	■ At the end of the session, you will be required to complete a Key Learning Review ■ This will involve completion of some specific activities that you have had an opportunity to practice through the scenarios. ■ You and your instructor will discuss the Review ■ You will sign the Review and hand it to the instructor

TABLE OF CONTENTS

Learning Domain

You will be using the learning domain to complete activities in this workbook. The learning domain has been designed to match the actual Clinical Information System (CIS) as close as possible.

Please note:

- Scenarios and their activities demonstrate the CIS functionality not the actual workflow
- An attempt has been made to ensure scenarios are as clinically accurate as possible
- Some clinical scenario details have been simplified for training purposes
- Some screenshots may not be identical to what is seen on your screen and should be used for reference purposes only
- Follow steps to be able to complete all activities
- I If you have trouble following the steps, immediately raise your hand for assistance to use classroom time efficiently
- Ask for assistance whenever needed

PATIENT SCENARIO 1 - Admitting a Patient

Learning Objectives

At the end of this scenario, you will be able to:

- Access a patient's chart and review patient care information
- Place and manage admission orders
- Review and manage medications on admission
- Complete patient's admission and document patient care

SCENARIO

As the provider covering the Critical Care Unit, you receive a phone call from a provider on the Medicine Unit. A 47 year old male patient who initially presented to the ED with fever, shortness of breath, and a productive cough was admitted to the Medicine Unit for a course of antibiotics for presumed pneumonia. While on the Medicine Unit, the patient fell and now needs to be admitted to the Intensive Care Unit (ICU) for further evaluation due to decreased level of consciousness and need for airway protection.

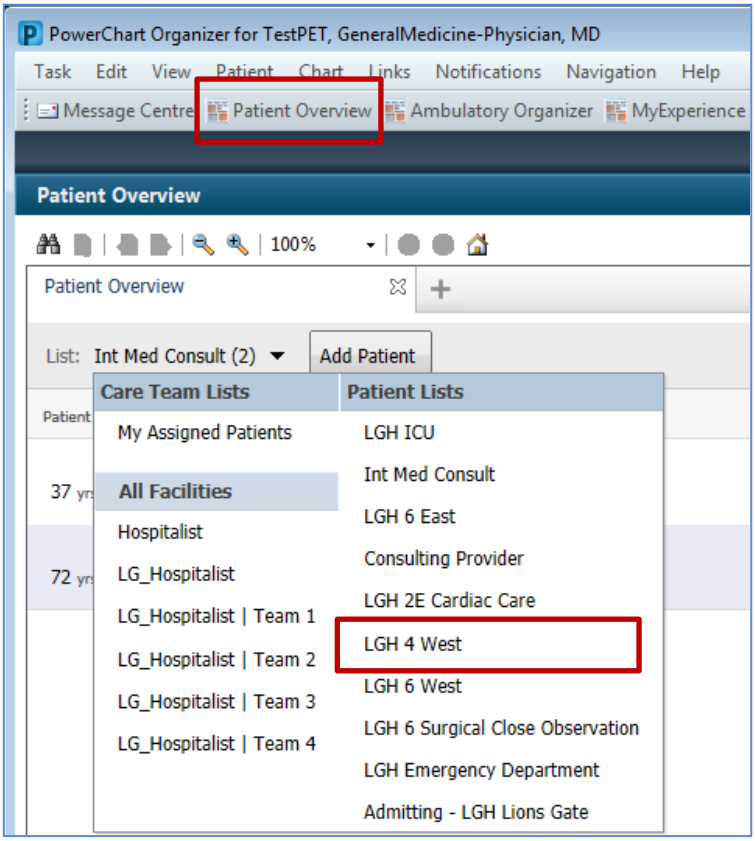
You will complete the following 5 activities:

- Access and review the patient chart
- Review home medications and complete admission medication reconciliation
- Place orders through PowerPlans (order sets) for patient admission
- Update problems and diagnoses and document your assessment findings
- Complete and sign an admission note

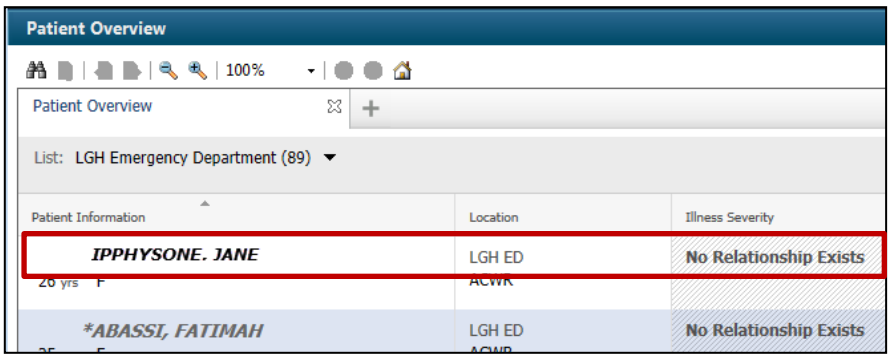
Activity 1.0 – Setting the Stage before You Start

Your received a consult request from the Medicine provider and want to open and review the patient's chart.

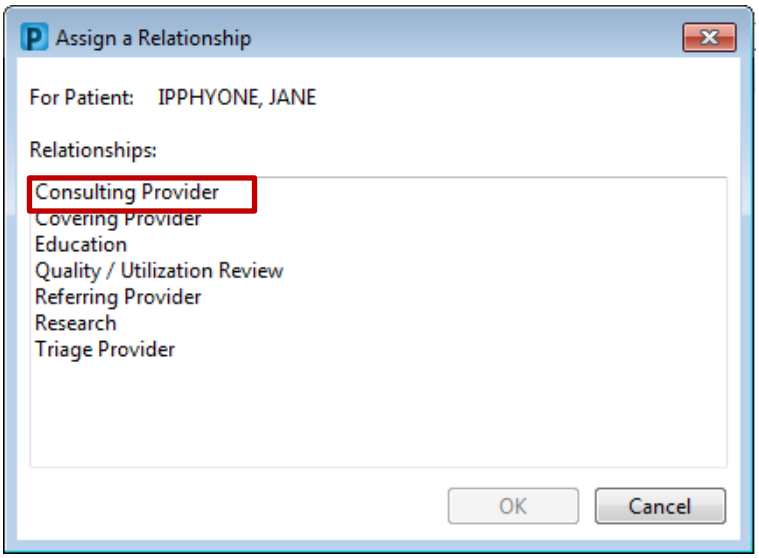
The recommended way to do this is to use an existing **Medicine Unit** patient list from **Patient Overview** window. Below, you see the example how this might look in real life.



The list helps to locate the patient. If you have never accessed this patient's chart, the patient is marked by **No Relationship Exists.** Clicking patient's name will open the chart.



If there is no relationship, a prompt **Assign a Relationship** will display. As a consulting provider, you would select **Consulting Provider**.



You will be learning more about Patient Overview and patient lists later and will have the opportunity to walk through the steps of accessing the patient's.

Review key steps to admitting patients first.

After reviewing the patient chart and assessing the patient, you can decide whether to admit them.

If you do not admit them, you will create a consult note and close the chart. If you admit them, the first step you need to take is to place the **Admit to Inpatient** order.

It is important that the Admit to Inpatient Order is placed before any other orders. Pharmacy dispensing may be delayed if this order is not placed first. Also, placing this order allows the following important steps to happen automatically:

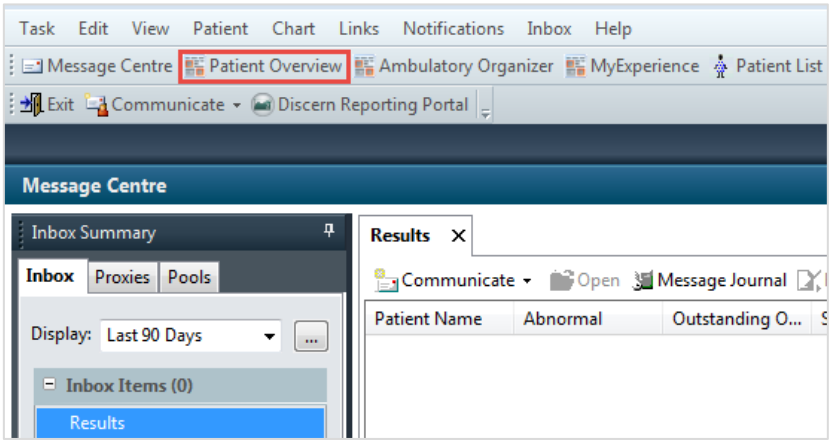
- The status of the patient becomes inpatient and the **clock starts for the admission**
- There is a notification to Access Services to **locate a bed for the patient**
- If the patient was from ED, the encounter type changes from Emergency to **Inpatient**
- Admission **tasks are sent to the inpatient nurse** assigned to this patient

ACTIVITY 1.1- Access and Navigate the Patient Chart

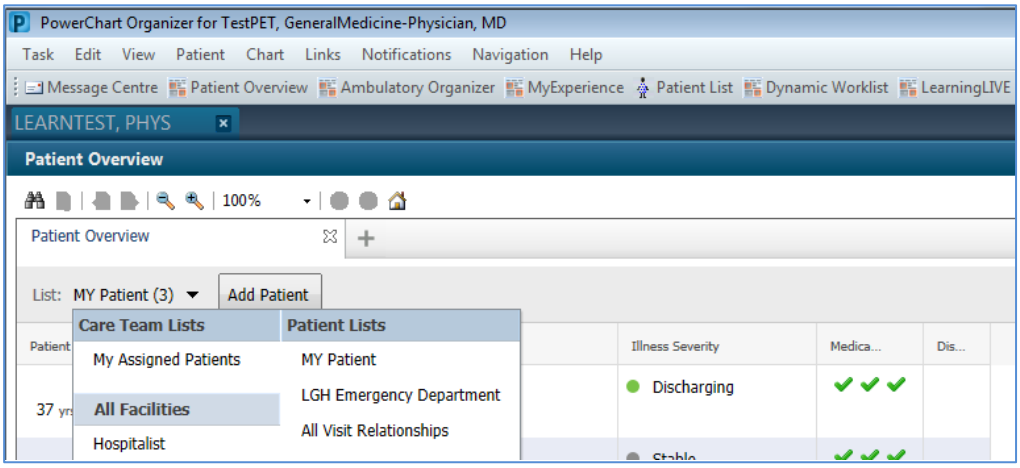
The Clinical Information System (CIS) allows for immediate access to the patient chart. Let's go ahead and access the patient's chart.

1 Ensure you are logged into PowerChart using provided username and password. Your landing page will be the Message Center.

2 To access and review the patient chart click **Patient Overview**

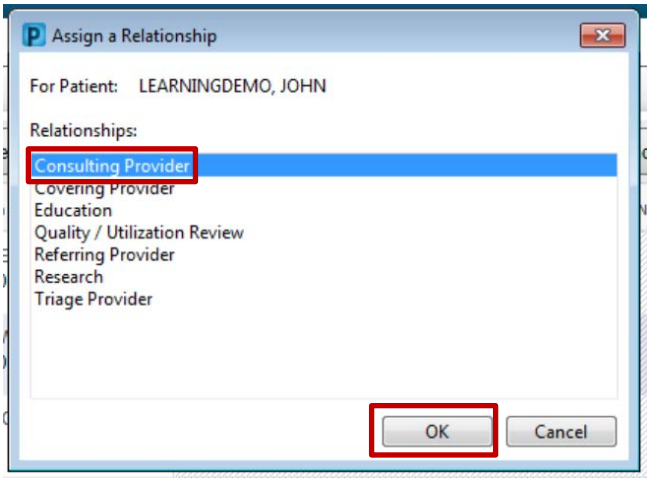


3 Select the **My Assigned Patients** list which groups together all patients for whom you are the attending provider.

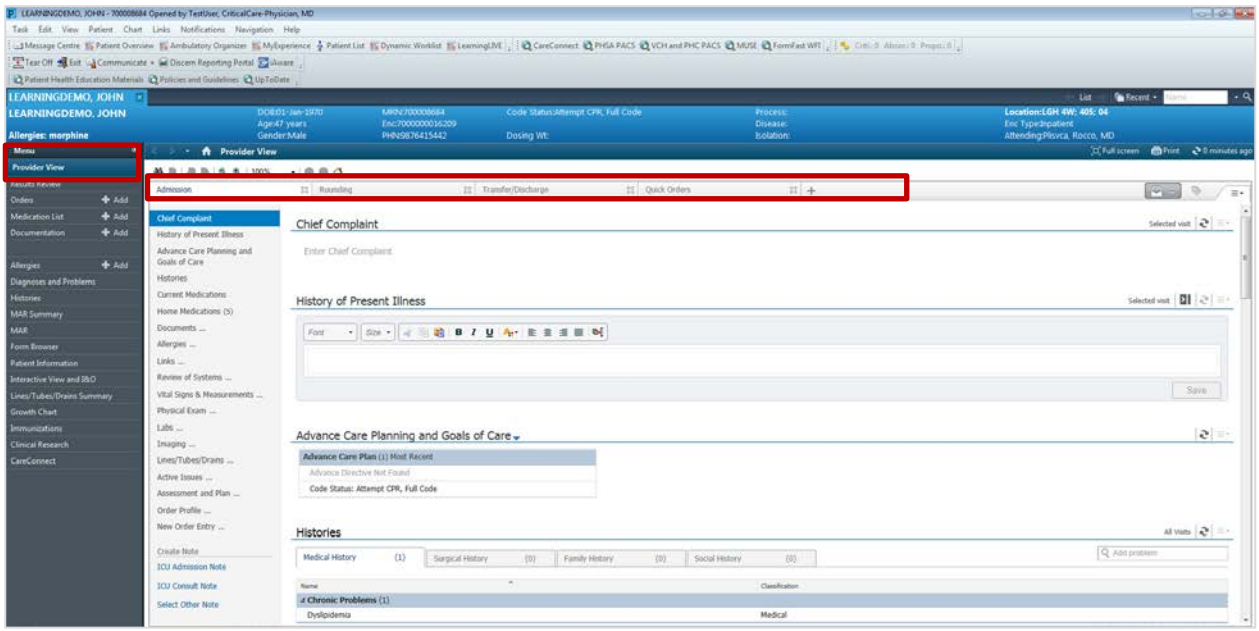


Note: There are other ways of accessing a patient's chart that can be learned from other resources.

4 You are prompted to **Assign a Relationship** to the patient. Select **Consulting Provider** then click **OK.**



5 The patient's chart opens to the **Provider View** which is your current default screen when accessing a patient's chart. It is organized into several tabs. Each tab is designed to support a specific workflow. Click each tab to review what is contained in each view.

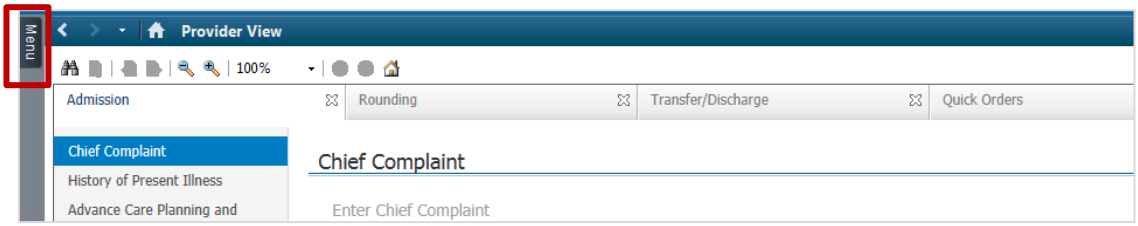


6 The Banner Bar located at the top of the screen displays demographic data, alerts, information about patient's location, and current encounter information.

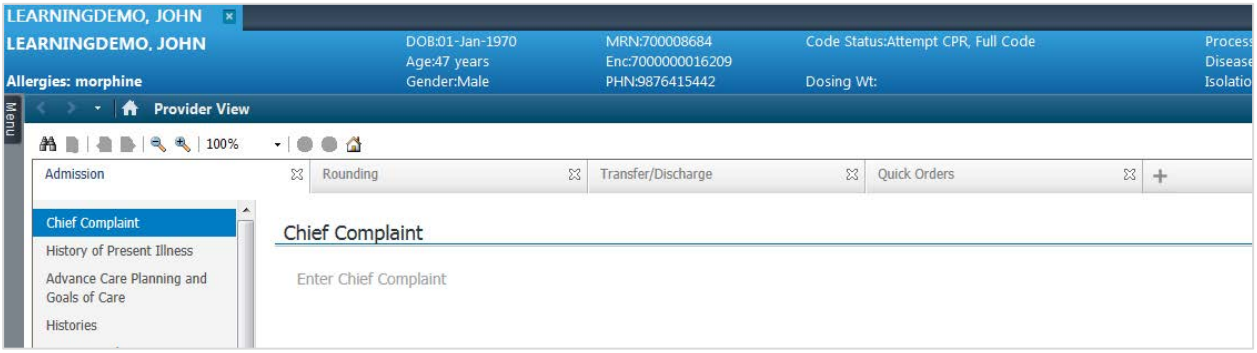
Click the **refresh** icon to ensure that your display is up-to-date. A timer shows how long ago the information on your screen was last updated. **Refresh** frequently.

7 For increase viewing, click on the **Auto hide** icon to the right of the **Menu** view.

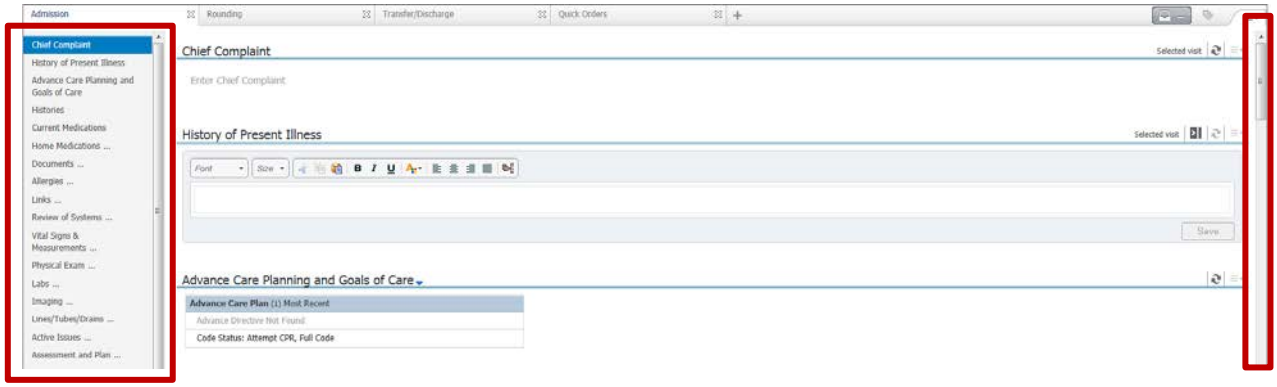
Note: The table of contents Menu will be in hide view throughout this workbook. By clicking on the Menu button, the table of contents will re-appear again. This can be discussed further during your personalization sessions.



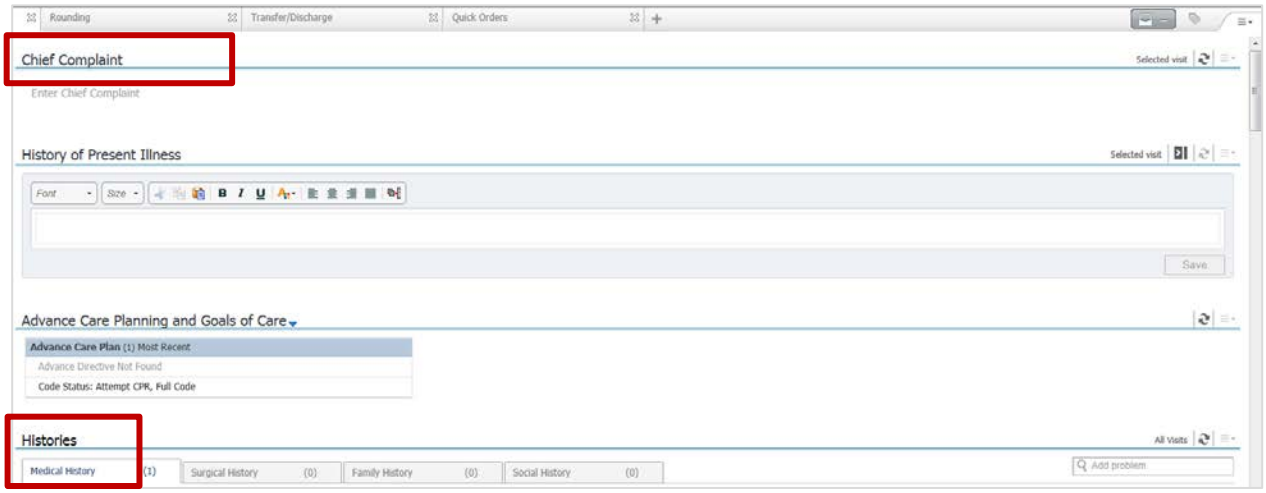
8 Now, let's open the **Admission** tab.



9 On the left side of the screen there is a list of components representing workflow steps specific for your specialty. Click the component or use the scroll bar to display the content of the patient's chart.



10 Each component has a heading. Place the cursor over the heading. This icon means it is a link. Click this heading to open a comprehensive window with more options.



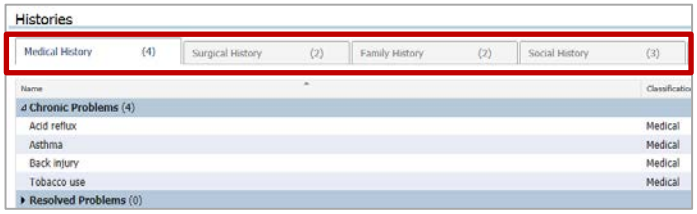
Key Learning Points

- When admitting a patient it is critical to place the **Admit to Inpatient** order prior to entering additional orders
- Use the **Patient Overview** and specific patient lists to access patient charts
- Review **Banner Bar** information to ensure you have selected the right patient and the right encounter
- Remember to **refresh** your screen frequently to view the most up-to-date information
- The **Provider View** provides access to various workflow tabs

ACTIVITY 1.2- Review Histories

Your patient's family member told you about the patient's hip replacement surgery that was done last year. In this activity, you will add this information to the patient's history.

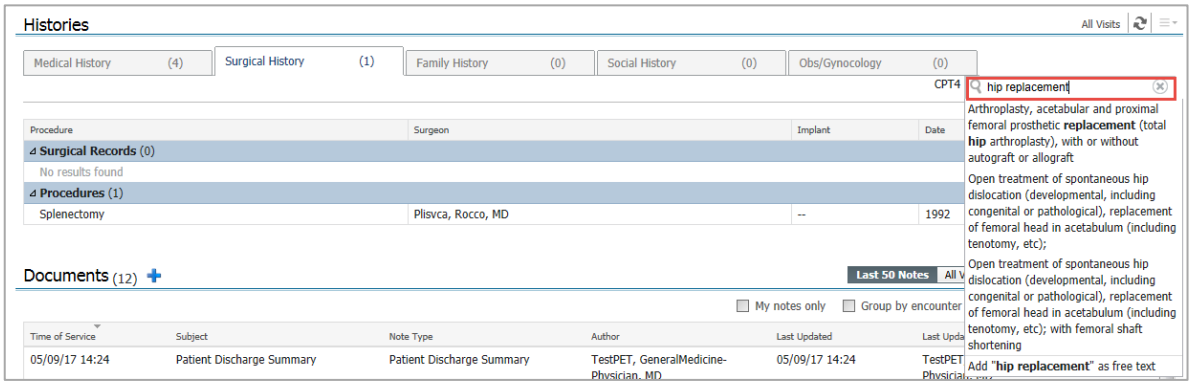
1 Click **Histories** component to display Medical History, Surgical History, Family History, and Social History. Ensure you are in the **Admission** tab.



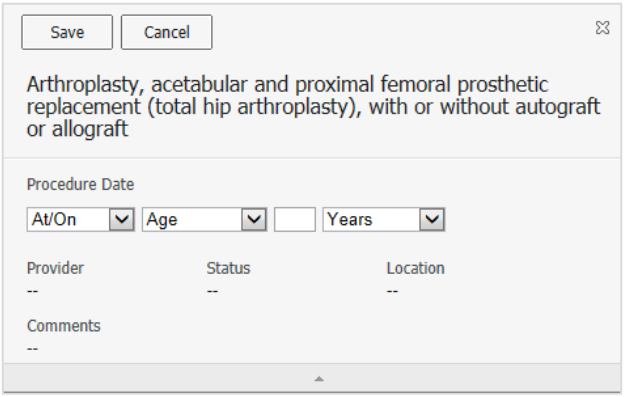
Note: There is a separate tab for each history type. The number in brackets indicates how many entries are in each tab.

2 Select **Surgical History** to add a new entry

3 Click into the **Search** box and type *hip replacement.* A list of options will appear. Select an appropriate option.



4 Enter procedure date information of *Age 47* years and click **Save.**



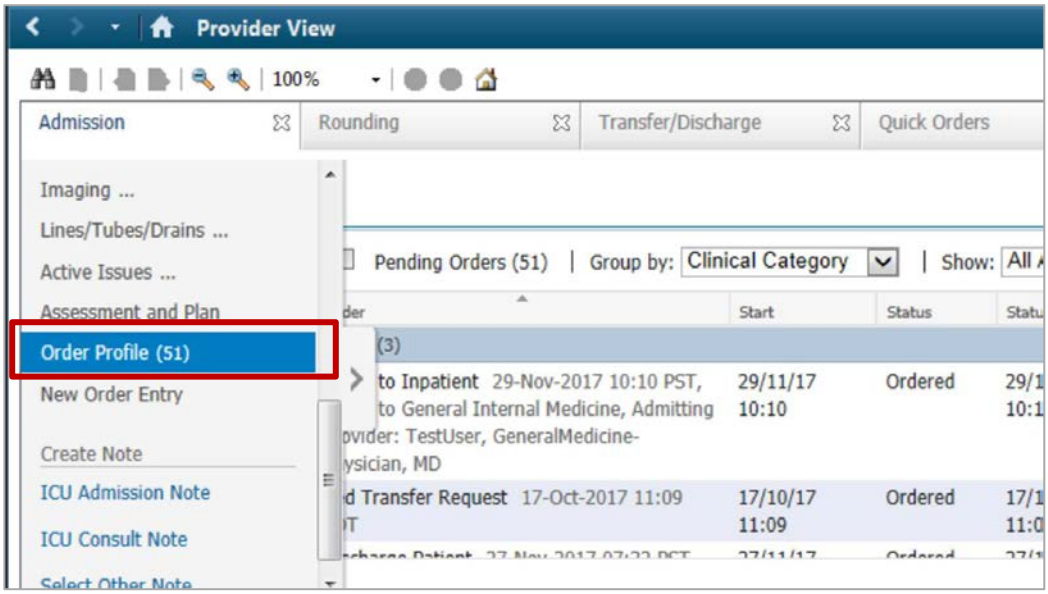
Note: To add **Family or Social History**, click on the *Histories* heading in order to add information. For additional information regarding patient history documentation, refer to the reference guide.

Key Learning Points

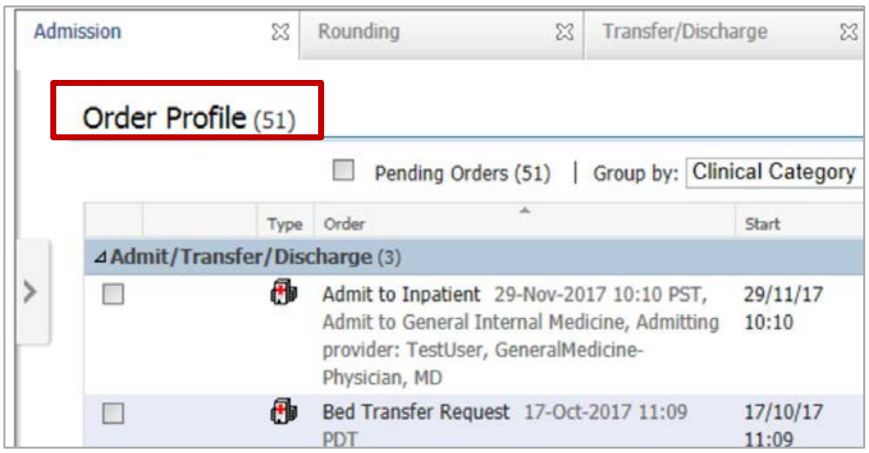
- Histories information including surgical procedures can be added when taking a patient's history

ACTIVITY 1.3- Discontinue Existing Orders and Powerplans Through Order Profile

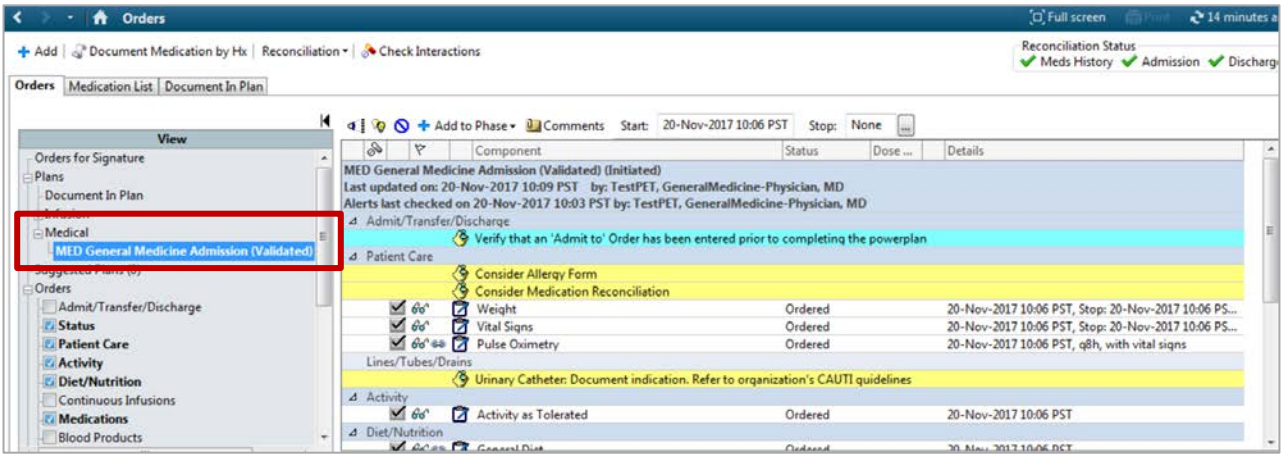
1 While you are in the Admission tab, locate the **Order Profile** component.



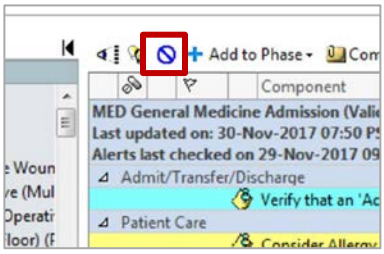
2 Select the **Order Profile** link



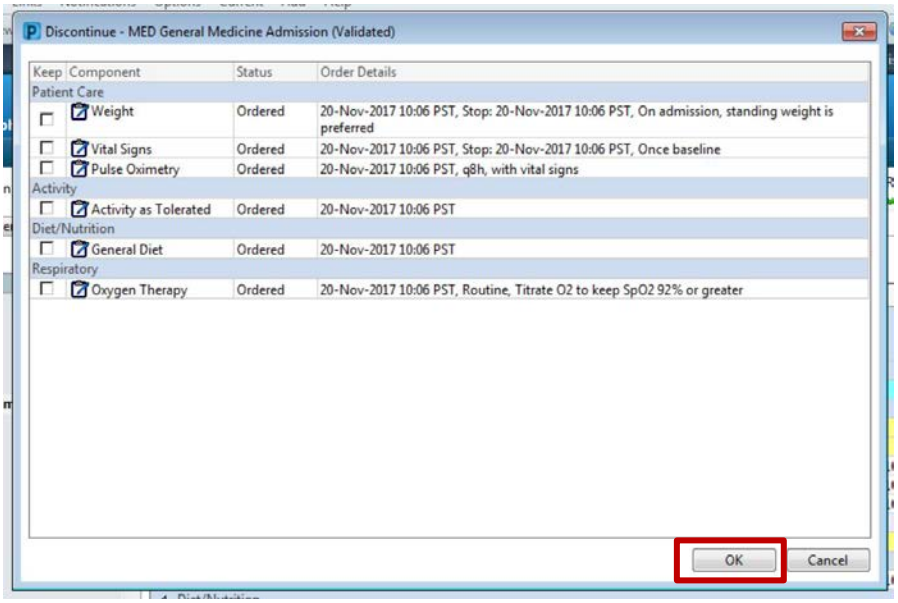
3 Locate and click on the **General Medicine Admission PowerPlan** in the **View** navigator



4 Click the **Discontinue** icon

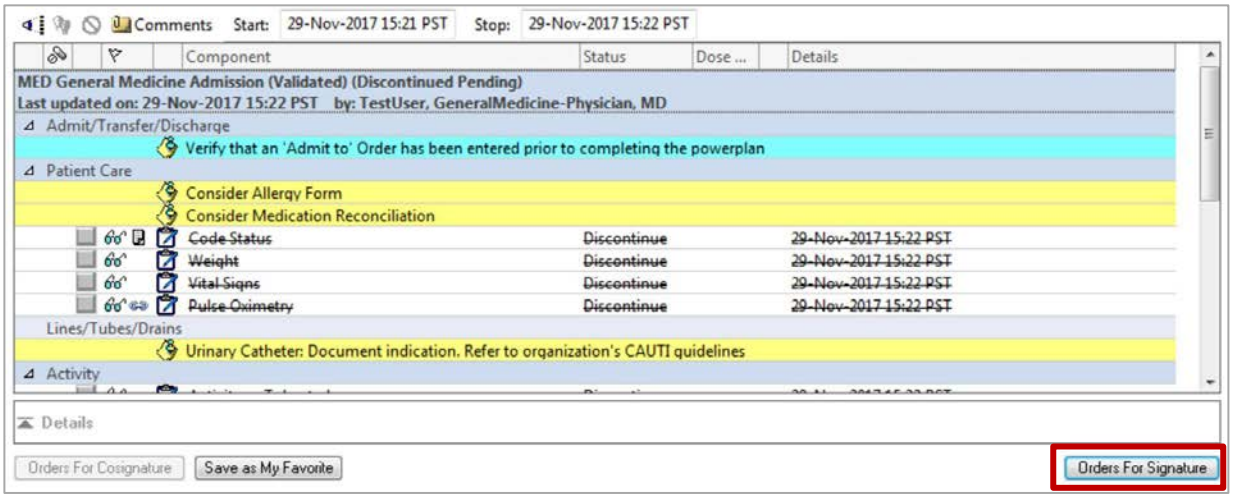


5 The discontinued dialog box is displayed. Click **OK** to discontinue all active orders in the PowerPlan

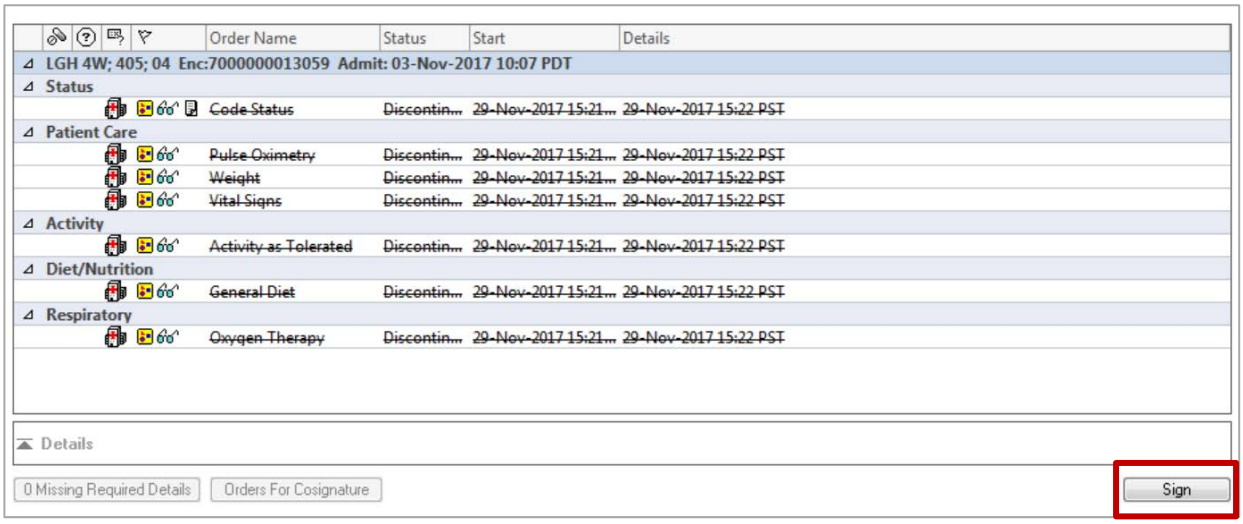


Note: Here, you have the option to keep an order(s) by checking on the box next to the order.

6 Select **Orders for Signature**



7 Select **Sign**



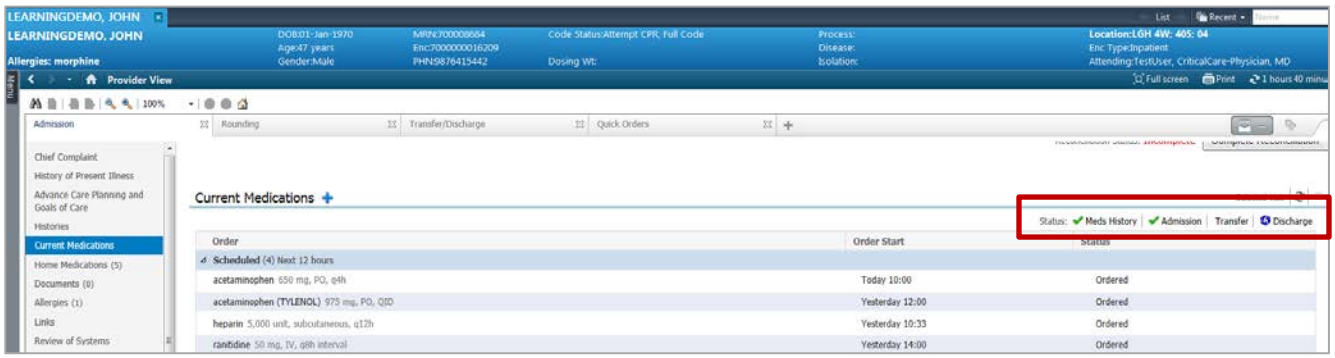
ACTIVITY 1.4 a- Review Patient's Best Possible Medication History and Complete Medication Reconciliation

Note that your patient's best possible medication history (BPMH) was already completed on admission to the Medicine Unit. If your patient was coming directly from the ED, a pharmacy technician will have already documented the patient's home medications. You will have the opportunity to complete a BPMH on a direct admission to ICU later on in this activity. To continue, your patient's spouse informs you that your patient takes Lisinopril 5mg PO daily which was missed during the original BPMH. You will now update the information.

As part of receiving the patient, you review his BPMH and complete his transfer medication reconciliation.

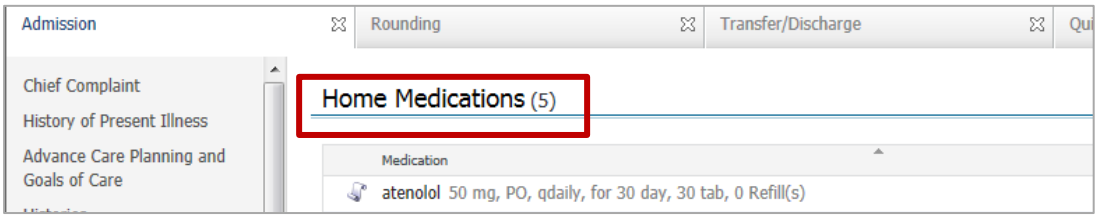
Within your workflow tabs, there are a few tools to help with this:

- **Home Medications** – this component lists home medications documented for this visit and carried over from previous encounters
- **Current Medications** – this component lists medications administered during the current encounter
- **Medication Reconciliation Tool** – for admission, transfer, and discharge allows you to manage all home and ordered hospital medications through one convenient screen.

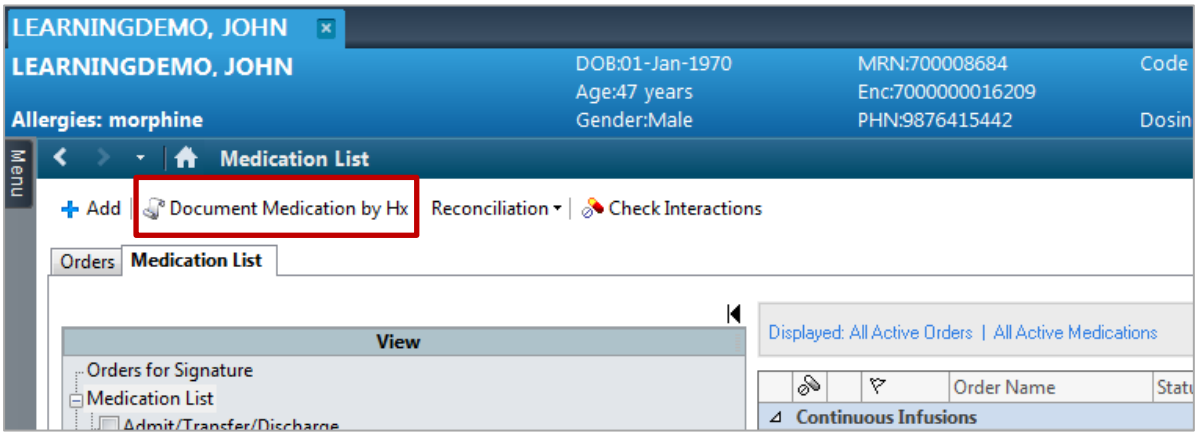


1 Select the **Home Medications** component from the list to view what has been documented.

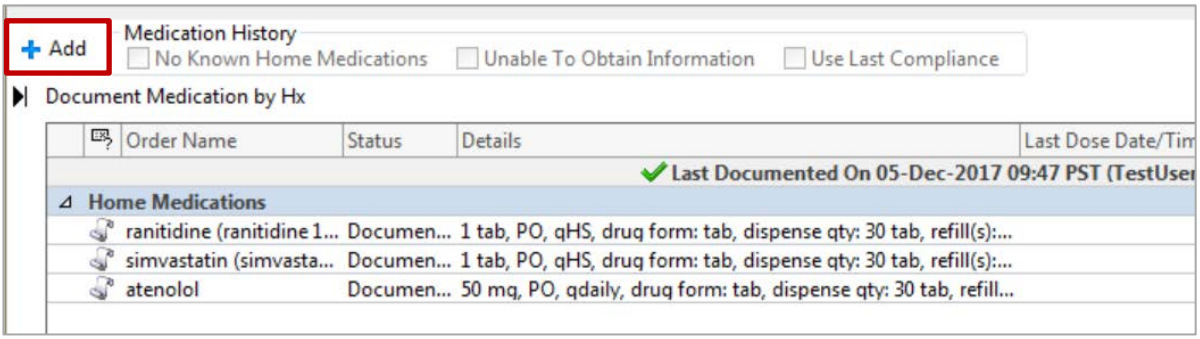
2 Click the **Home Medications** heading.



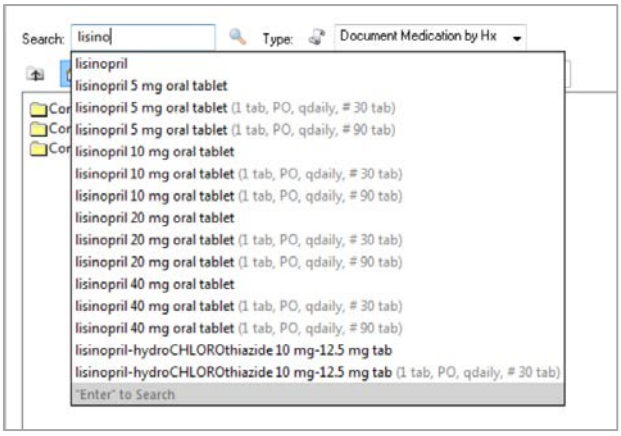
3 In the Medication List window, click **Document Medication by Hx**.

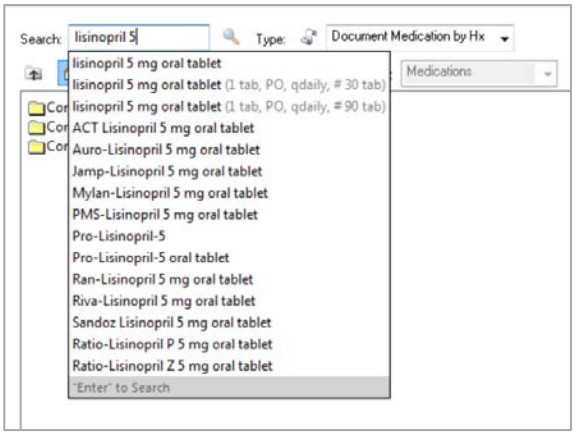


4 Click the **+ Add** button on the Medication History toolbar.



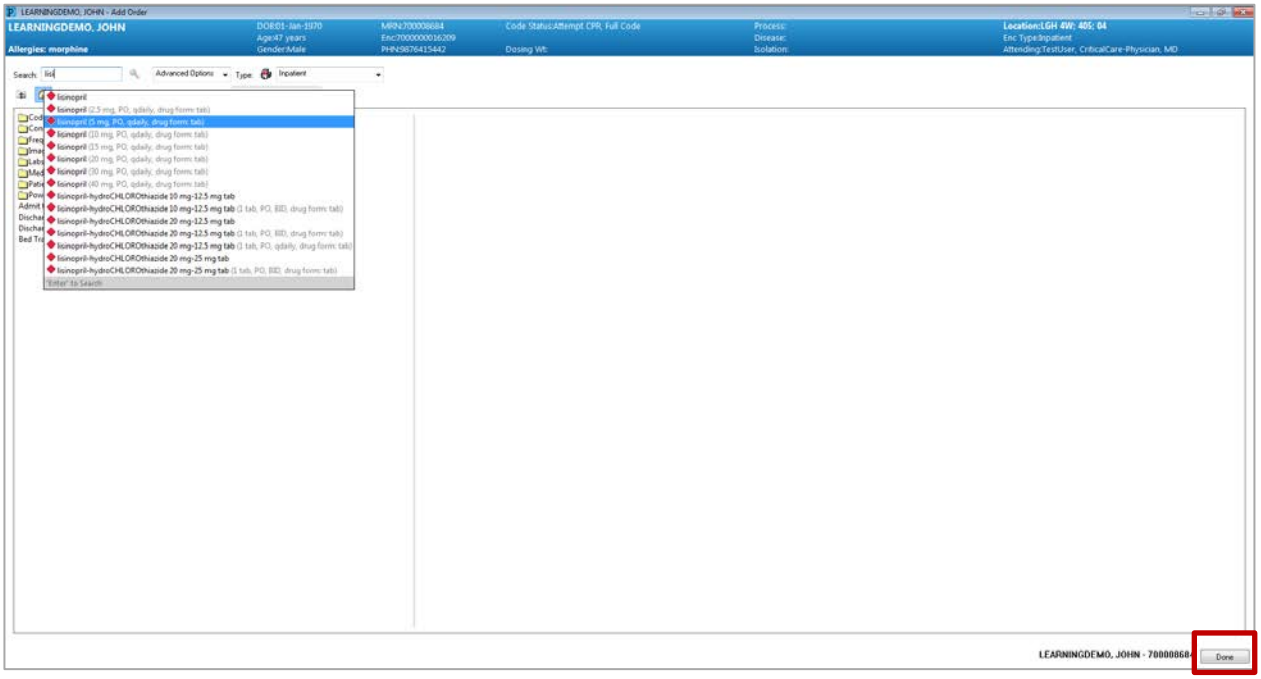
5 Type ***lisino*** and pause. A list of frequently used lisinopril order sentences displays. To truncate the list further, add more details. For this example, type ***Lisinopril 5***



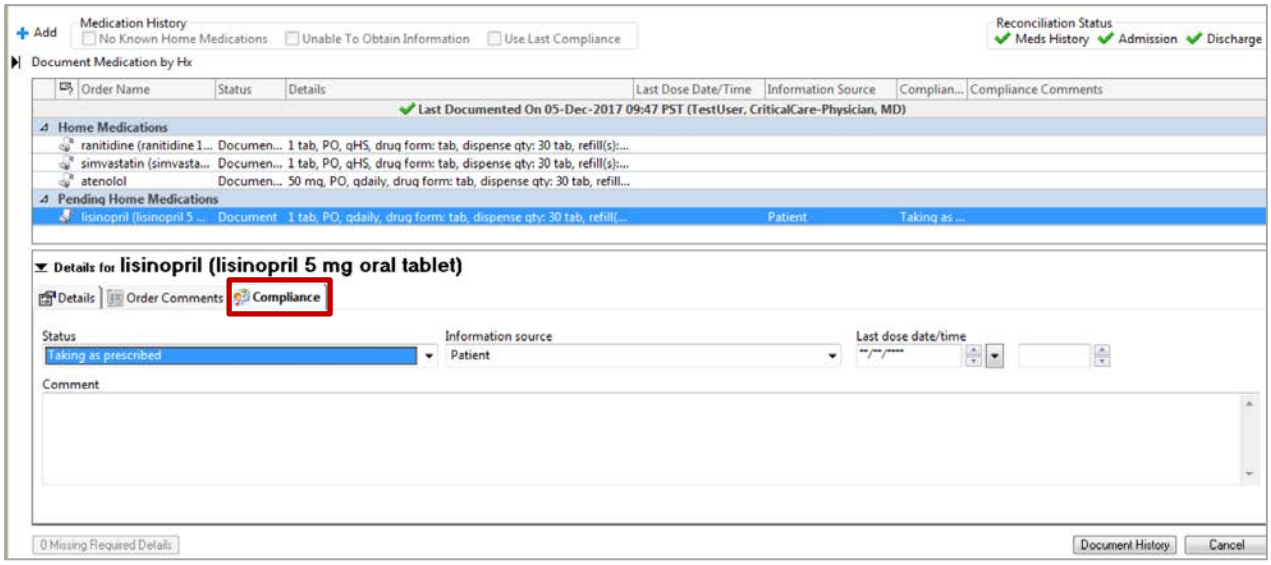


6 Select the appropriate medication and associated details. Your selection has been placed.

7 You can continue searching and adding more medications if needed. In our example, you add just one. Click **Done**.



8 Details for the lisinopril display for your review. It is very important to know if the patient is compliant with their home medications. To add this information, click on the **Compliance** tab.



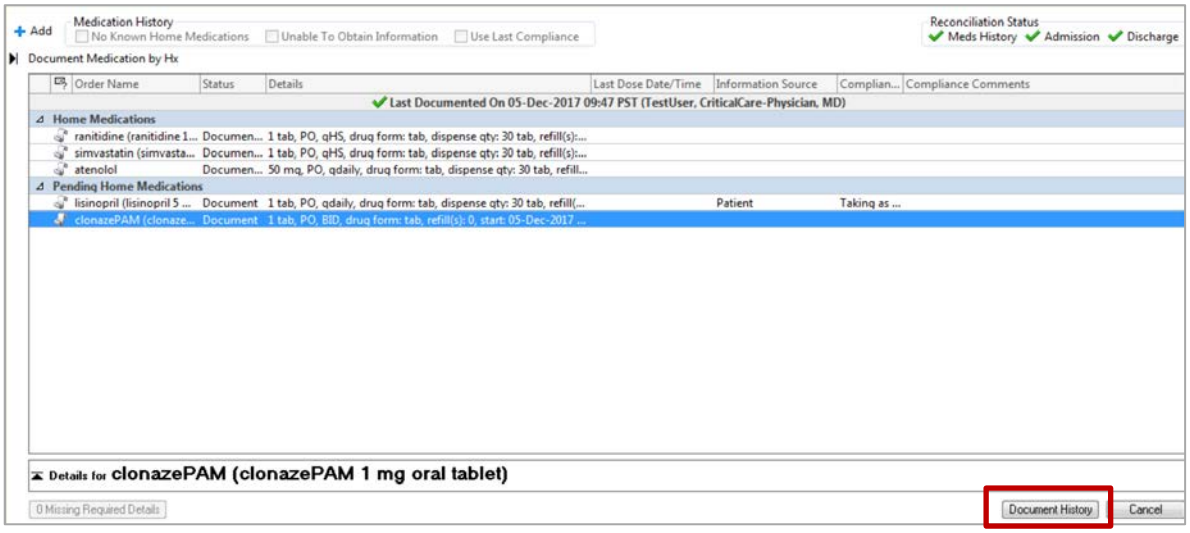
9 Document the following compliance information:

- **Status** = *Taking as prescribed*
- **Information source** = *Patient,*
- **Last dose date/time**= *Yesterday at 0900*

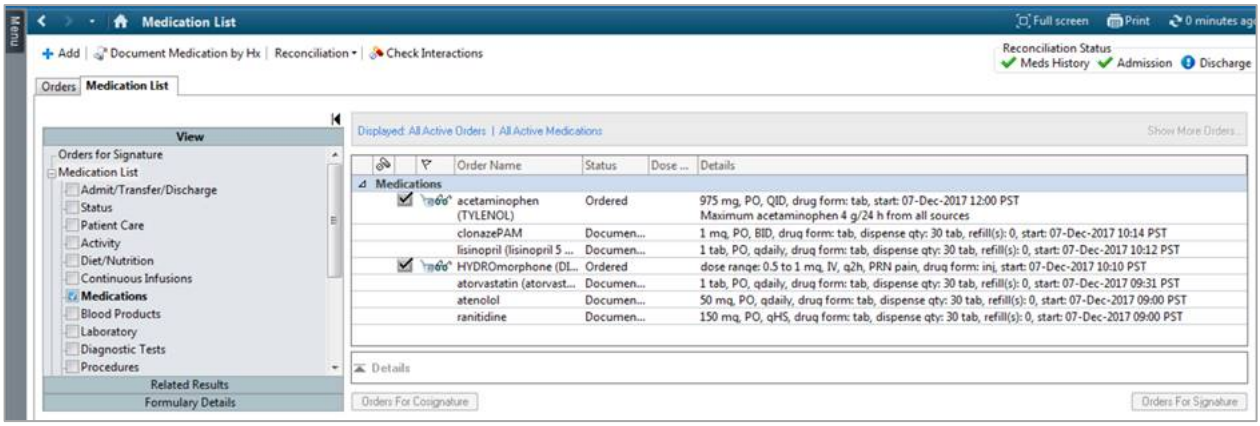
Note: Click Details to collapse or expand details for any order.

To practice, repeat steps to add **Clonazepam 1mg PO BID**.

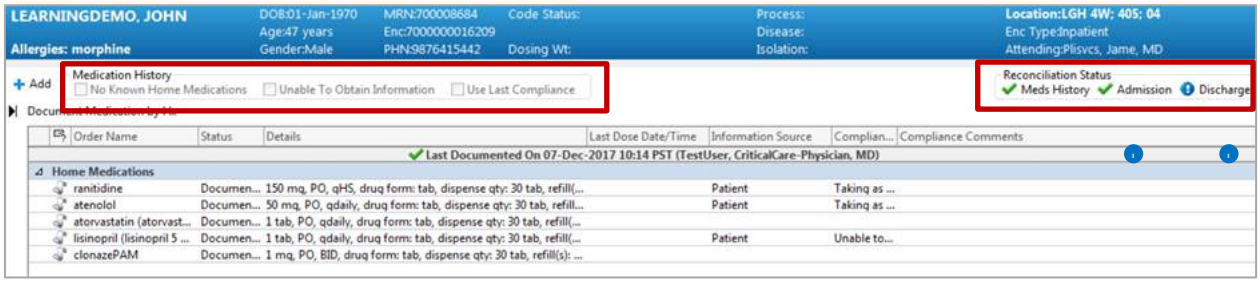
10 Click **Document History** to complete the process.



11 The updated list of current home medications for your patient is displayed. You will notice under **Status** column that the medications listed are now "Documented".



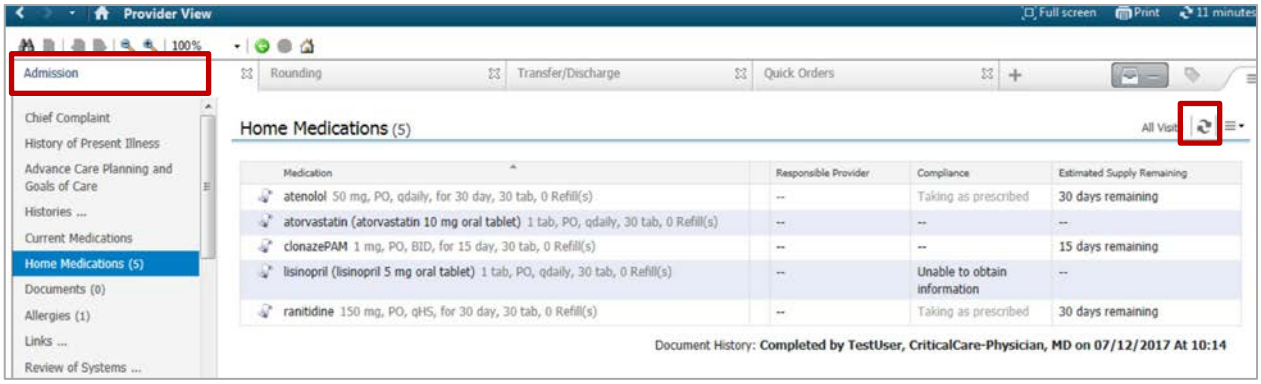
Note: Home medications can be updated at any time, even if the Meds History status states **complete.** In some cases, you may document that the patient has no home medications or you are unable to obtain information. Click the Home Medications heading and select **No Known Home Medications** or **Unable to Obtain Information** respectively.



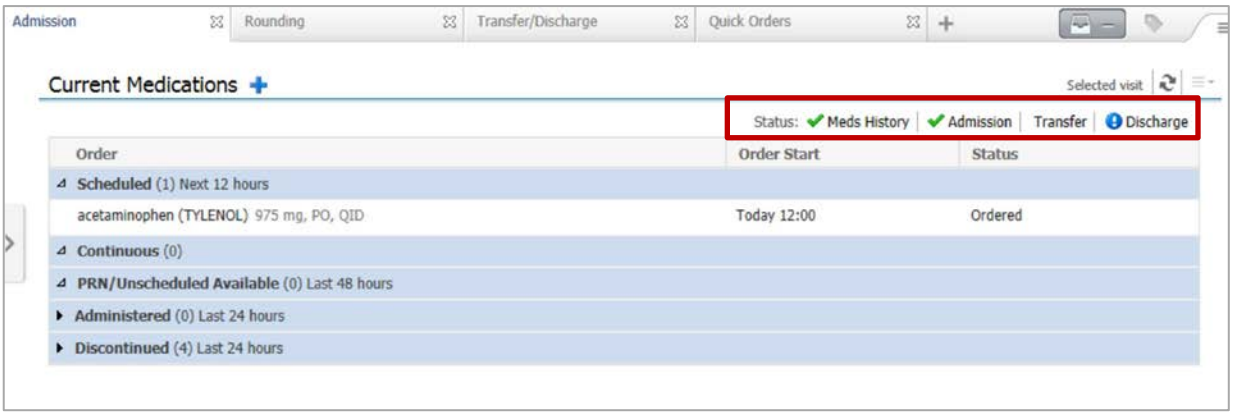
12 Use navigation buttons to return to the previous view :

- takes you back one screen
- takes you to your default view – the **Provider View**
- displays a list of recently visited screens for an easy jump back

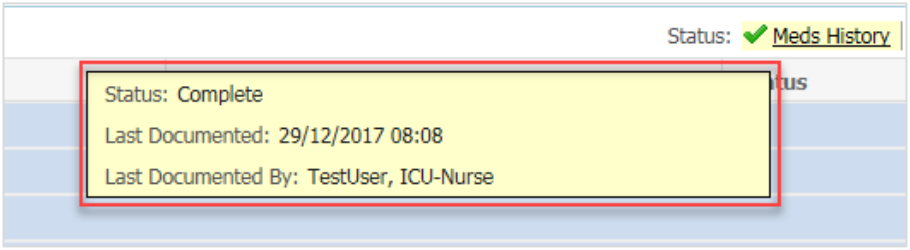
13 Back in the **Admission** tab, check your new entries. Click the **Refresh** icon to display the most recent information for this component.



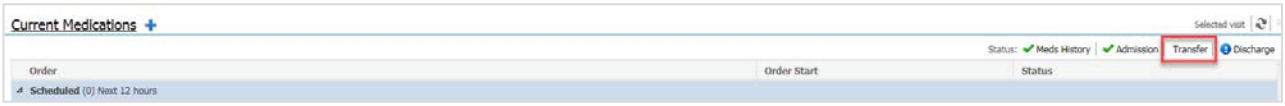
14 With the BPMH completed, move to the next component – **Current Medications** – indicating the status of medication management in patient's chart.



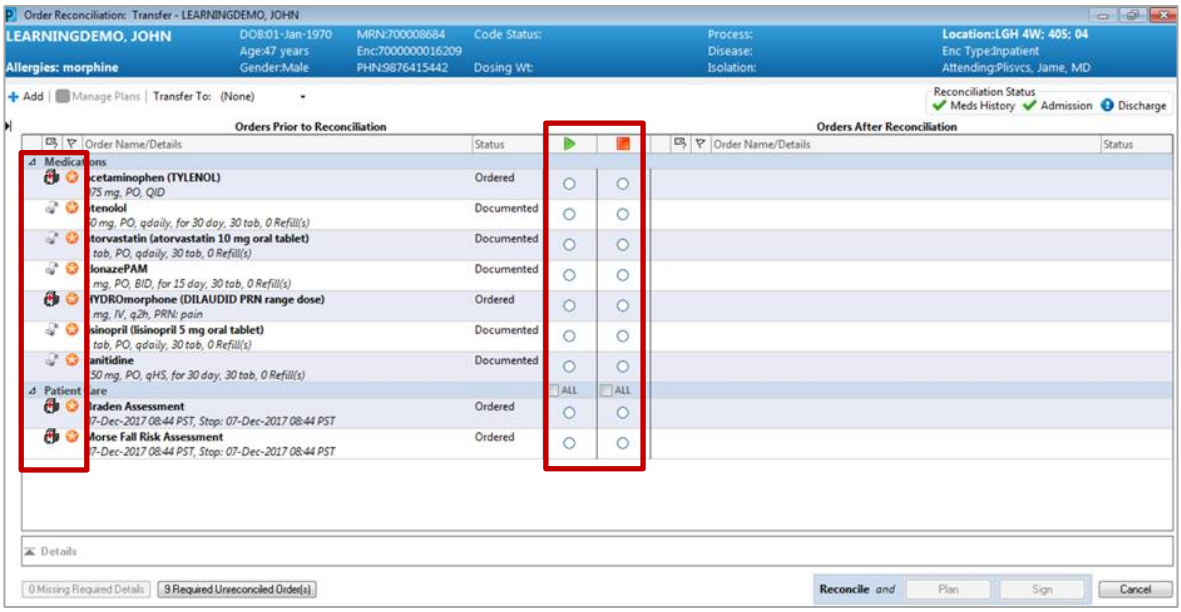
Note: Hover over the Meds History Status line to display who and when has reconciled this record. Hover to discover is a standard technique used across the CIS displaying additional details.



15 To complete transfer medication reconciliation, click the **Transfer** button under the **Current Medications** component.



16 Transfer reconciliation screen displays documented home medications and medications ordered for your patient.

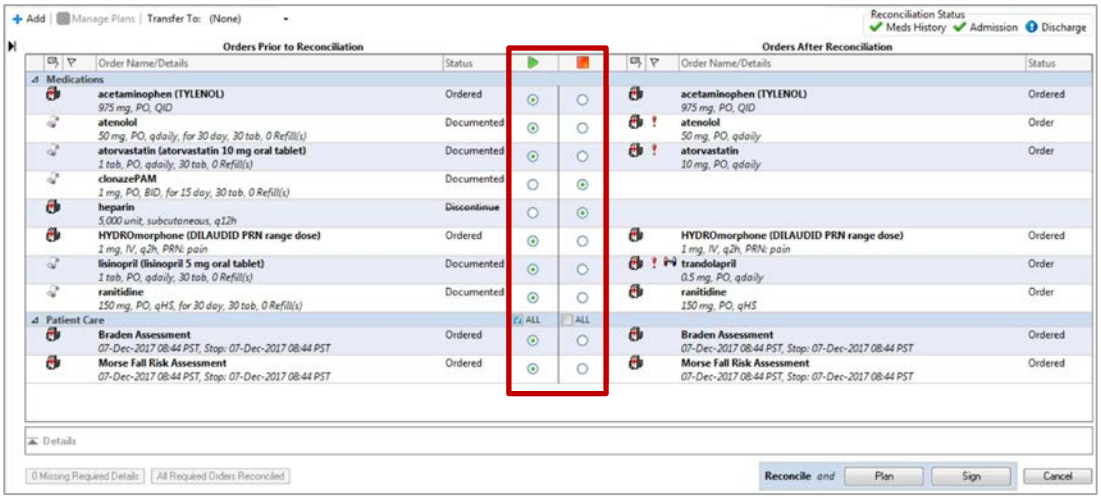


17 In the Transfer Reconciliation, continue the following medications:

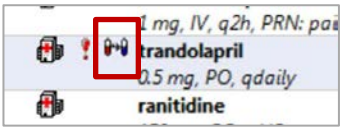
- lisinopril 5 mg PO daily

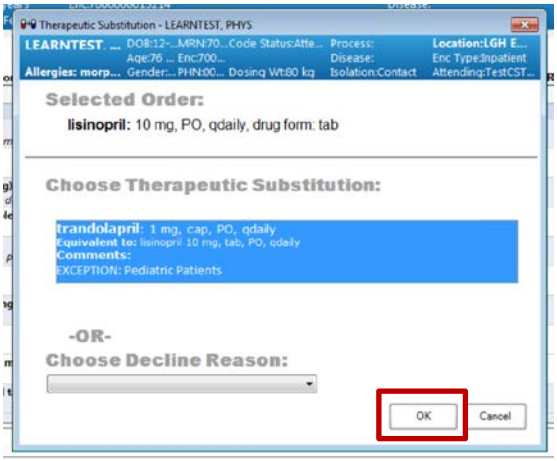
Note: You will be notified that lisinopril will be substituted with trandolapril. Accept the suggested replacement or choose a reason to decline it and this will be communicated to the pharmacy.

- atenolol 50 mg PO daily
- ranitidine 150mg PO qHS
- atorvastatin 10mg daily
- hydromorphone 0.5-1 mg IV Q2H PRN
- acetaminophen 975mg PO q6h



18 If a home medication is not available, a therapeutic substitution dialog box will appear. Select the therapeutic substitution and click **OK.**



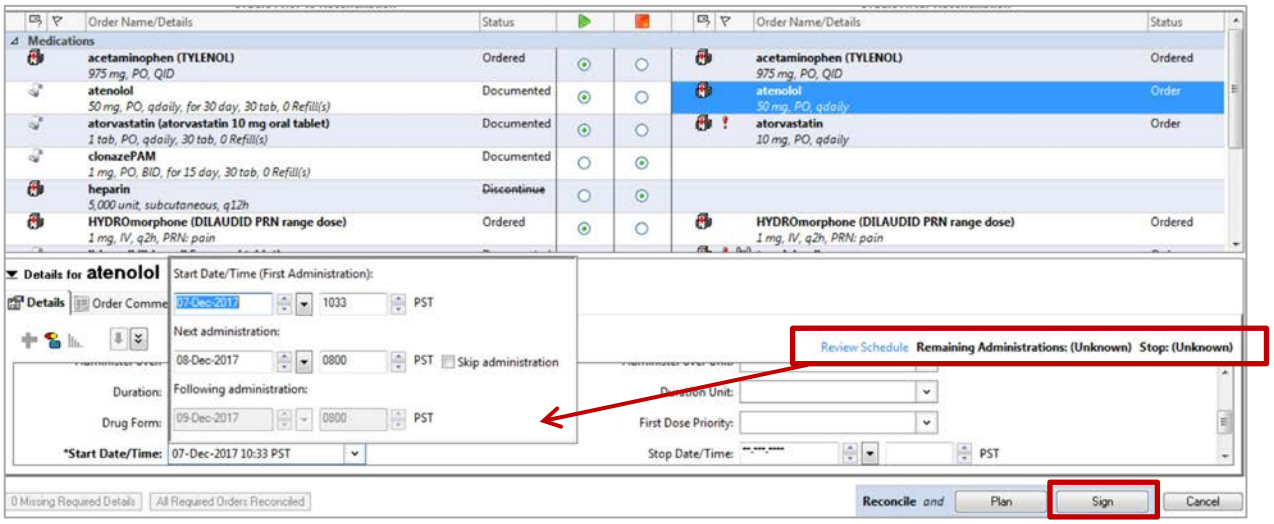


19 Discontinue the following medications:

- Clonazepam 1mg PO
- Heparin 5000 units Subcutaneous BID

Review the list of **Orders After Reconciliation** on the right side of this window.

Note: Some medications might be marked by . Click the line to display the **Details** window, and then click **Review Schedule** to check if details are correct for drug administration. You will be able to adjust the first dose time if appropriate.



20 Click **Sign** to complete the process. You cannot sign off until you address all medications listed. The unreconciled orders button in the bottom left corner provides a count of any medications that still require reconciliation.

Note: It is recommended to complete admission medication reconciliation before placing any new orders. This way you are only reconciling the patient's documented home meds and recently ordered meds.

Key Learning Points

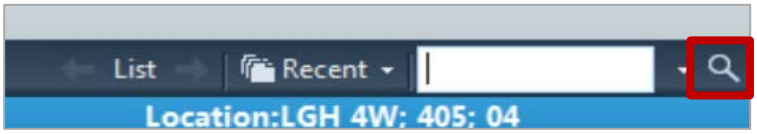
- When searching for any order, type the first few characters of the term to bring up list of possible entries
- BPMH must be completed before admission medication reconciliation can occur
- Home medications once documented can be updated at any time
- The Admission Medication Reconciliation screen displays both home and hospital medications. You can choose to continue or discontinue any listed medications
- It is recommended to complete admission medication reconciliation prior to entering additional admission orders

ACTIVITY 1.4 b- Medication Reconciliation for Direct ICU admission

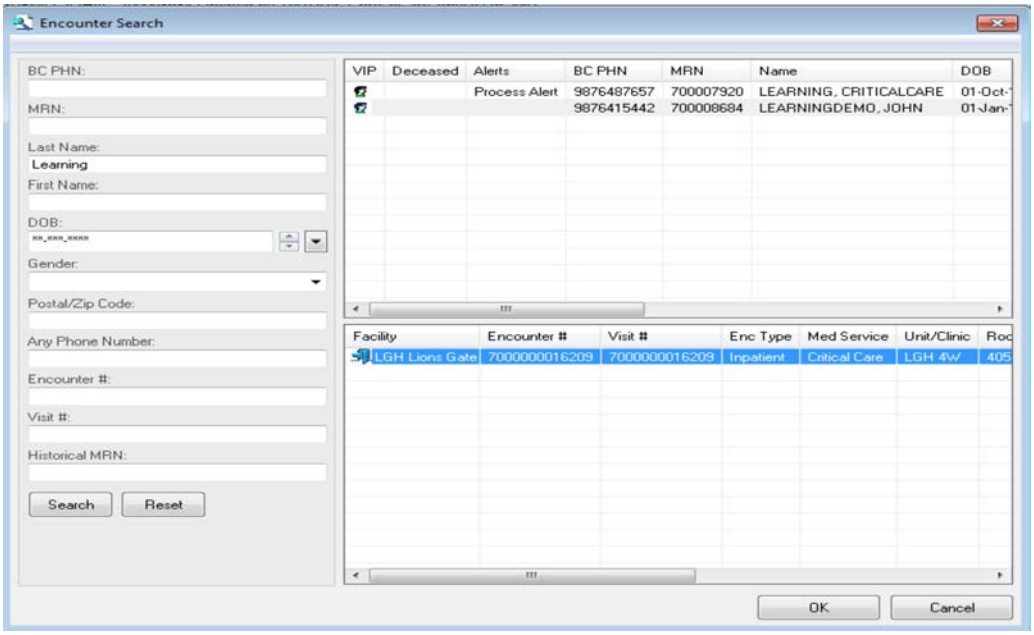
The BPMH must be completed before proceeding with the admission medication reconciliation. The best possible medication history is generally documented by a pharmacy technician. When a pharmacy technician is not available, it can be completed by a nurse, medical student, resident, or by you as the patient's most responsible physician.

In this activity, you will need to search and open a new patient chart. You can leave the newly transferred patient's chart open so you can resume once this activity is completed.

1 Click on the **Search** icon to look-up your new patient



2 Type in the name of your new patient in the **Encounter Search** name field.

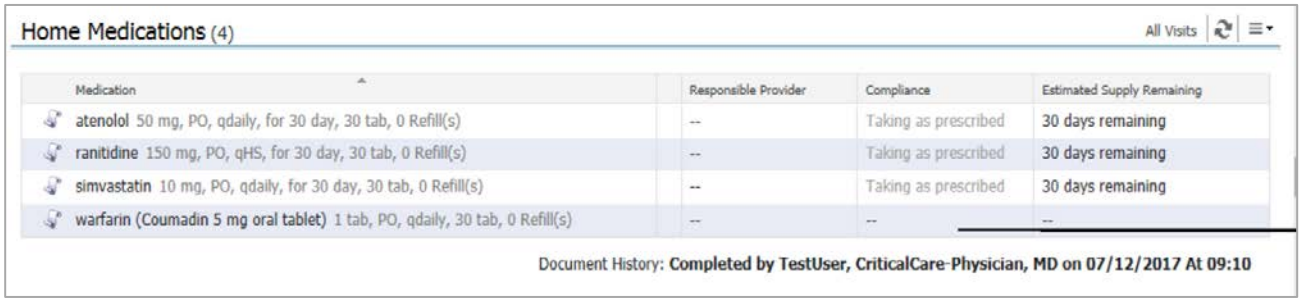


Note: The above screenshot may not be the same as your current screen.

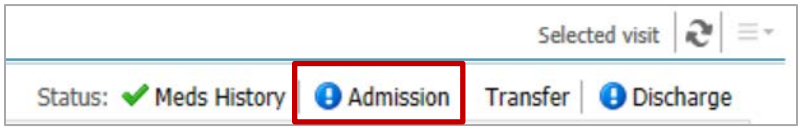
3 Locate the appropriate patient and the encounter number

4 Select **OK**

5 From the **Admission** tab, navigate to the **Home Medications** component to view the patient's home medications.

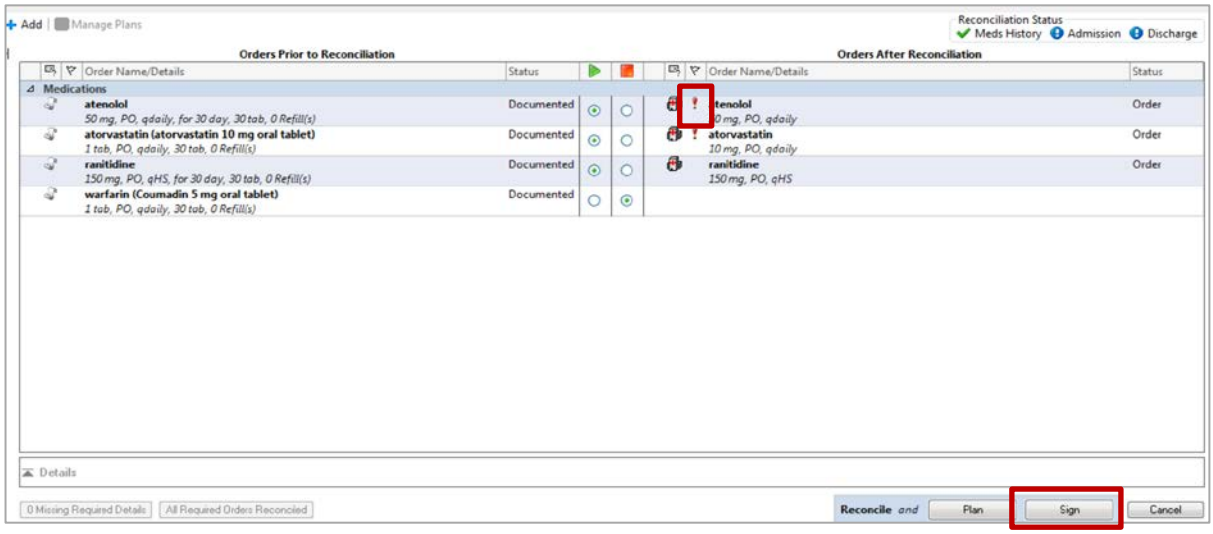


6 Navigate to the **Current Medications** component. Note that the **Meds History** status is complete.



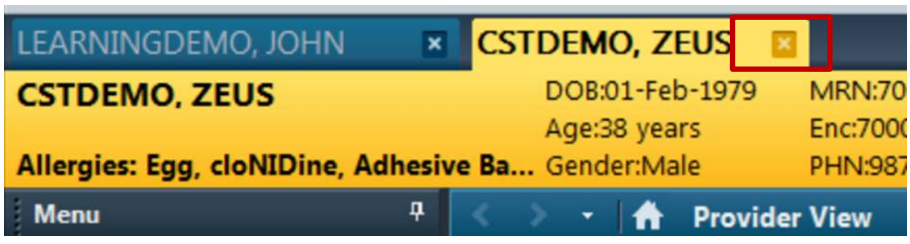
7 Select the **Admission** link. Notice that there are 4 unreconciled orders

8 Discontinue the medication: *Coumadin* and continue the following medications: *Atenolol, atorvastatin and ranitidine.*



- The review message icon may appear under **Orders After Reconciliation**. If it's present, expand the order details. You will select the **Review Schedule.**
- The review schedule details will allow you to modify start date/time and administration schedule.
- The therapeutic substitution dialog box may appear – select the therapeutic substitution if applicable.
- Complete this for any orders with the icon.
- Click **Sign**
- Click **Refresh** icon
- Now, the Status shows **Admission** is complete.

9 Now you can close this patient's chart by clicking the close icon



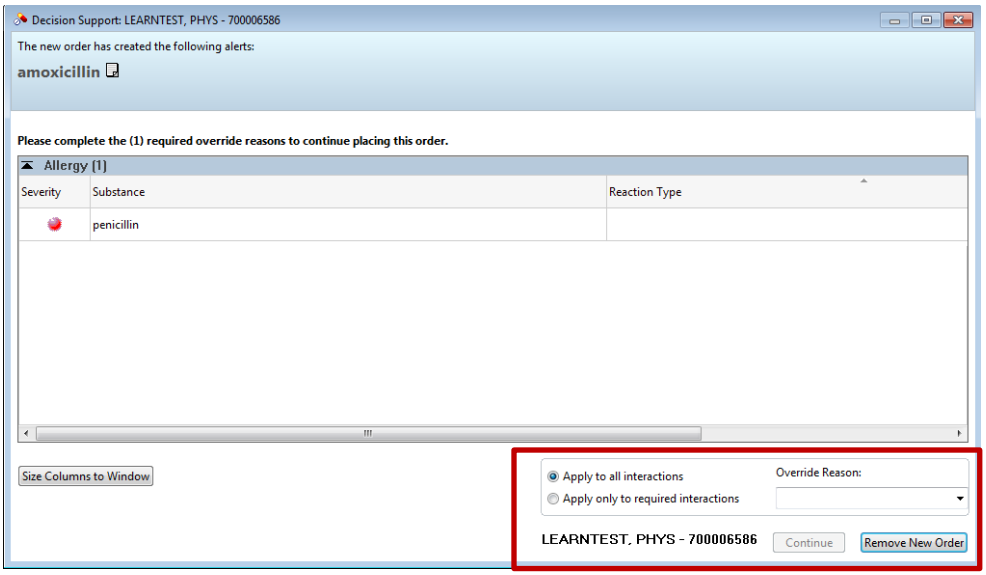
Note: The current patient chart that is open has the yellow banner.

ACTIVITY 1.5- Review Allergies

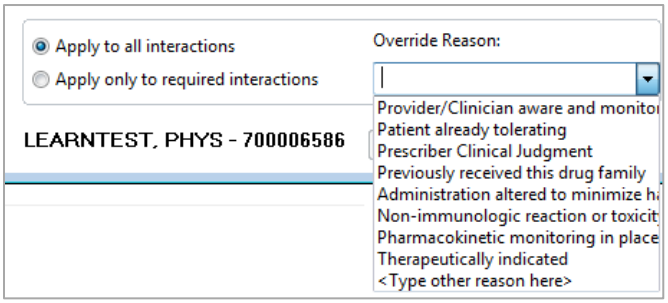
Now you review your first patient's allergies and add an allergy to morphine. This information was provided by the patient's daughter after admission.

In the CIS, patient allergies can be added and updated by the providers and clinicians. In the inpatient setting, a patient's allergies are to be reviewed by a provider on admission, at every transition of care, or annually. Allergy information is carried forward from one patient visit to the next.

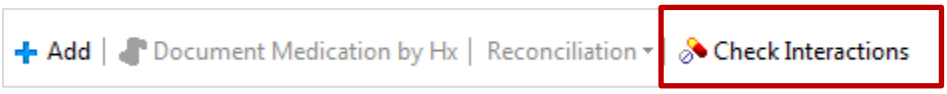
The CIS keeps track of the allergy status and will automatically prompt you when the information is not up-to-date. It will also track allergy-to-drug interactions. When placing an order with allergy contradictions, an alert will display:



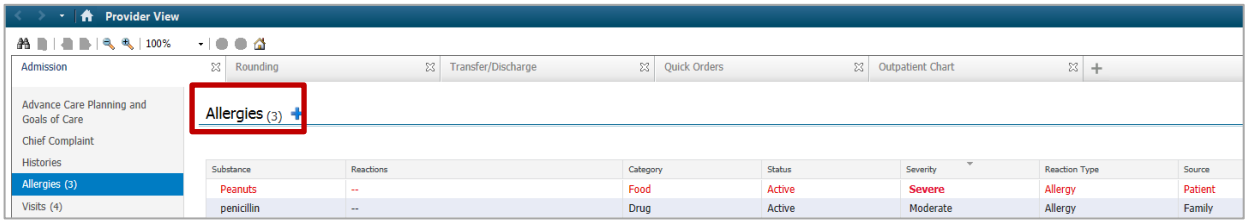
You can either remove the order and select another medication, or continue with the order by overriding the alert and documenting the reason:



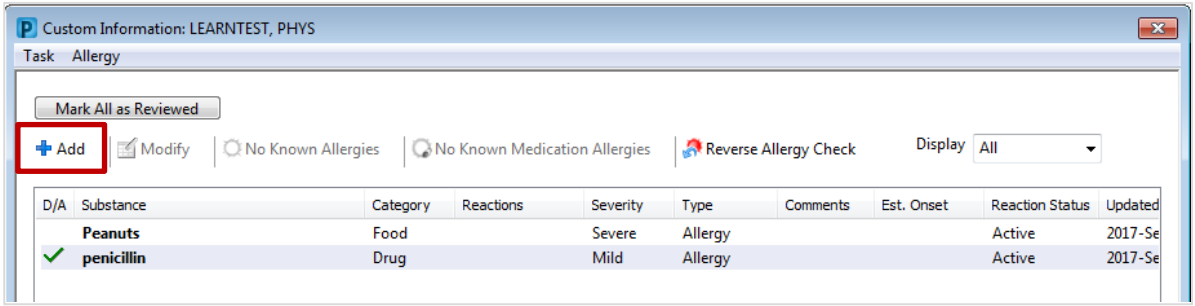
The CIS allows you to check drug-to-drug interactions when ordering medications by clicking the **Check Interactions** button.



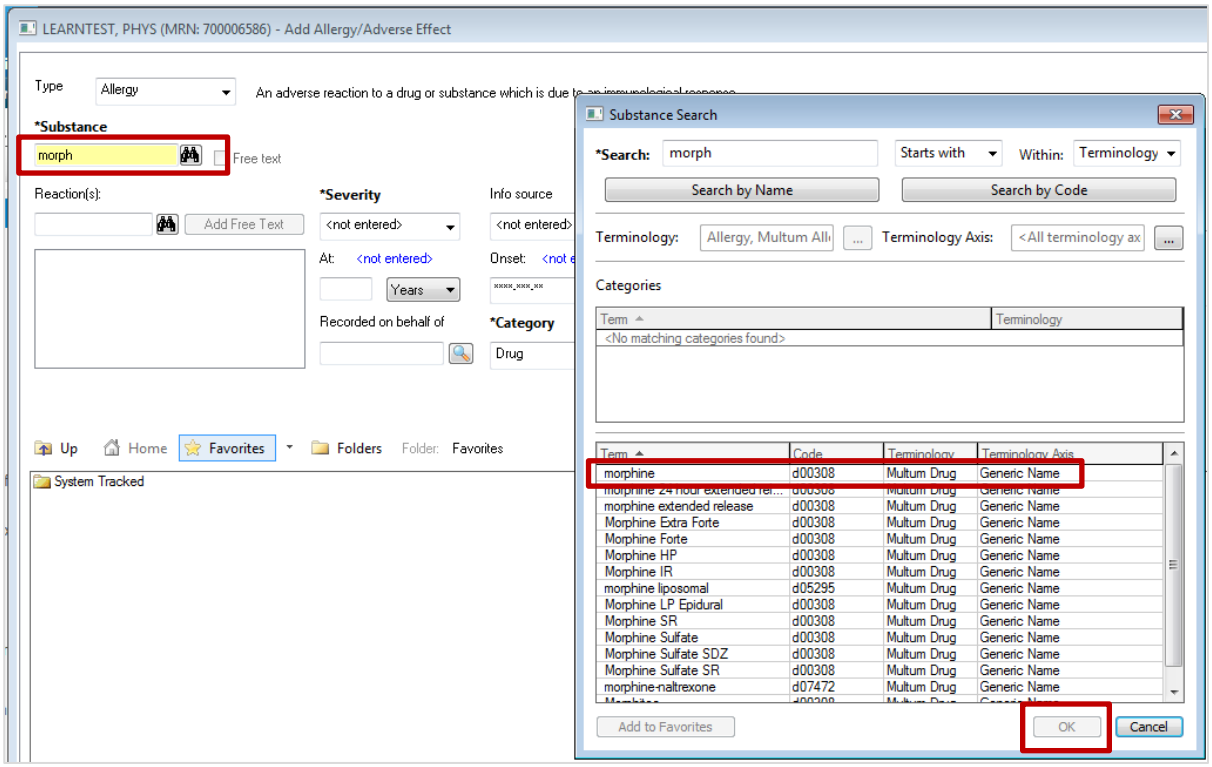
1 Click the **Allergy** link to open the window where you will enter or update allergy information.



2 To add the morphine allergy to your first patient's record, click the Add icon on the toolbar.



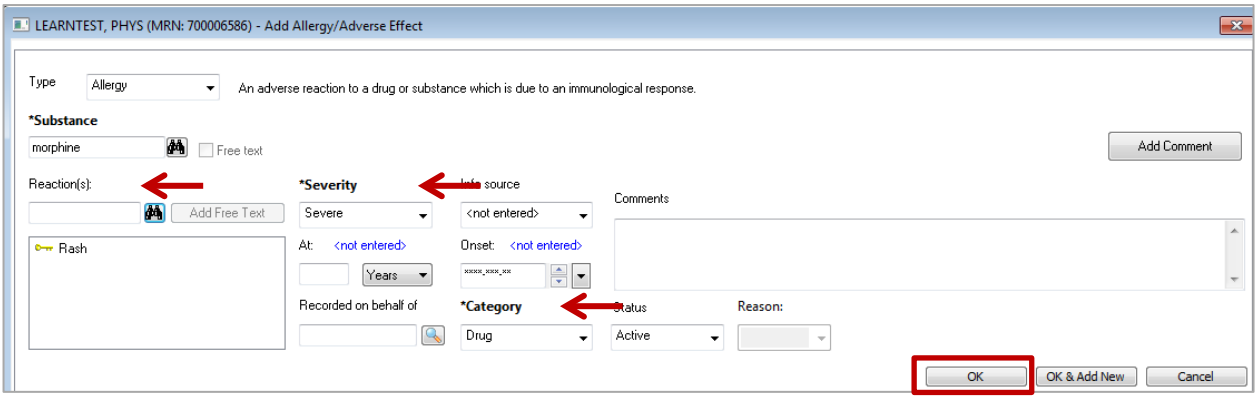
3 Search for morphine in the **Substance** box. Remember to use to execute the search, and then select one of the options from the list. Click **OK** to return to the Add Allergy/Adverse Effect window.



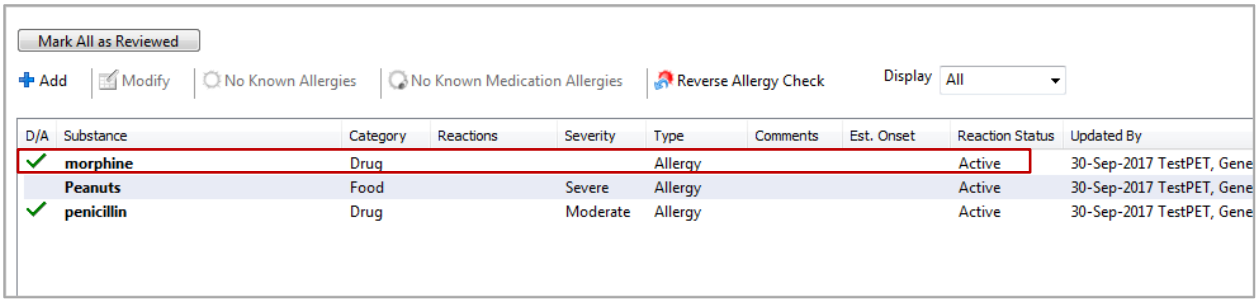
4 Add appropriate options in the other two mandatory fields:

- Select *Severe* for the **Severity**
- Select *Drug* for the **Category**
- Search for *Rash* in the **Reaction**(s) box (recommended)

5 Click **OK** to save the information.

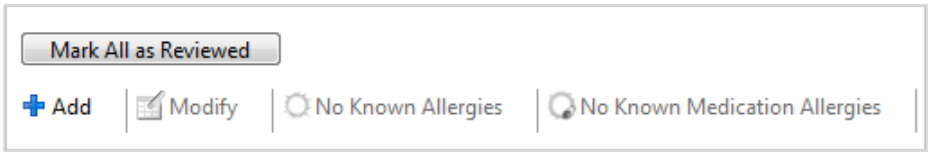


6 Patient's allergy record is updated. The green checkmark next to morphine indicates drug allergies. Click **Mark All as Reviewed** to complete the review.

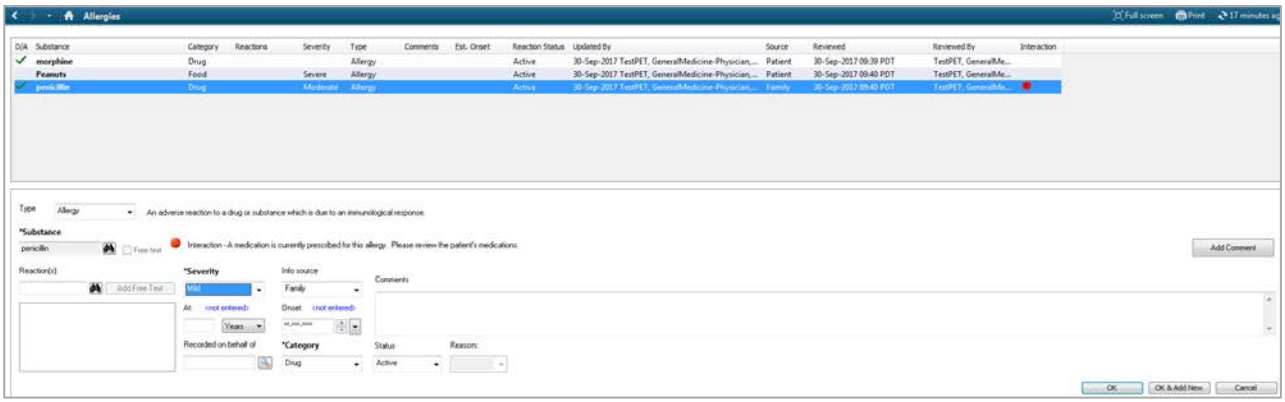


Note: In order for the pharmacy to dispense, they must see that the allergy record has been reviewed by a provider. When there is no information available, you can use other the toolbar options:

- **No Known Allergies**
- **No Known Medication Allergies**



7 To modify the existing allergy, select the appropriate line and click **Modify**. For our example, change the severity level for penicillin from moderate to mild.



Key Learning Points

- Patient allergies and interactions are monitored by the CIS
- Allergy record needs to be reviewed for each encounter on admission, at discharge, or with a change in level of care
- Review of allergies is complete when *Mark All as Reviewed* is selected

ACTIVITY 1.6- Place a PowerPlan (Order Set) for Patient Admission

Now you are ready to place orders for your patient. You will use a PowerPlan that is specifically designed for admitting patients to the Intensive Care Unit.

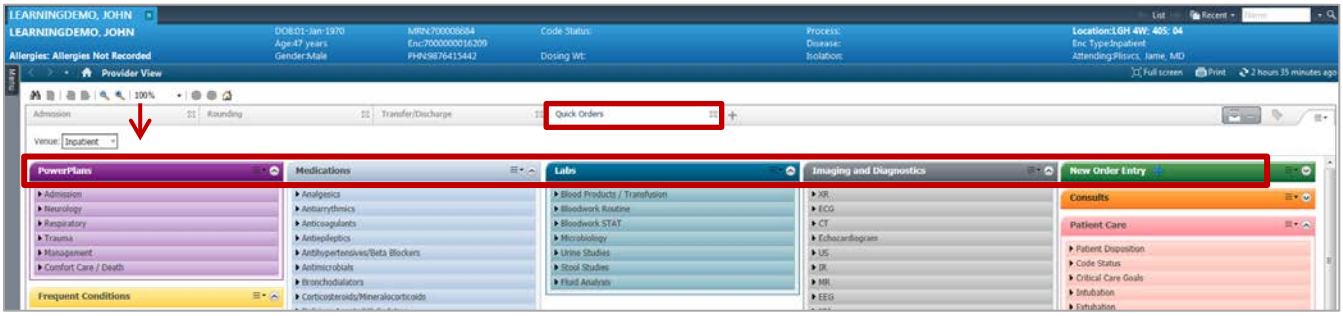
PowerPlans are similar to pre-printed orders (PPOs), allowing you to plan and coordinate care in the acute care environment by defining sets of orders that are often used together. You can adapt PowerPlans to fit your needs:

- You can select and deselect individual orders from the PowerPlan list
- You can add orders that are not listed in the PowerPlan
- You can add other modules (orders sets) that are a listed in a PowerPlan

Initiated PowerPlan becomes active immediately and its orders create respective tasks and actions for other care team members.

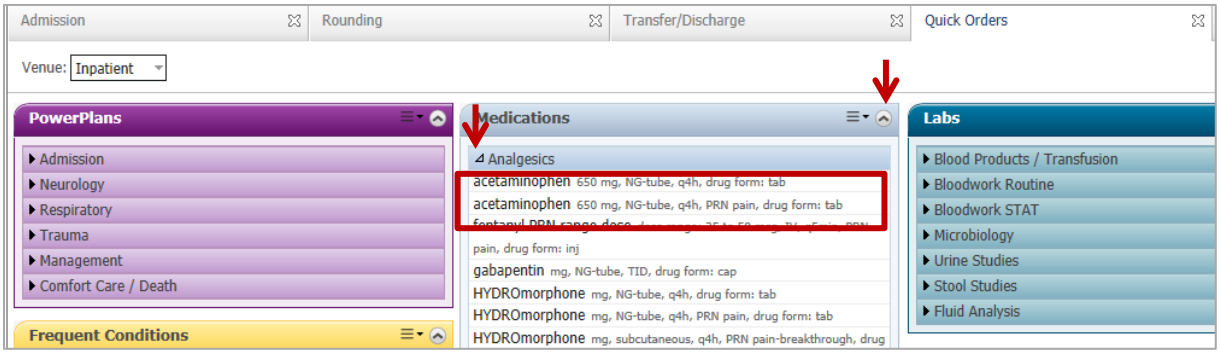
A PowerPlan that is **not** initiated remains in a planned stage allowing to prepare orders for a future activation as needed.

The best option for placing PowerPlans and orders is via the Quick Orders tab. This view is a one-stop shop for common orders and PowerPlans organized in separate categories.



Under each category, there are folders. For example, under the medication category is the analgesics folder which contains individual orders for analgesic medications such as acetaminophen. Orders may allow you to add additional details regarding dose, frequency, route, etc., or may have these details pre-determined for ease of

ordering as an order sentence. Categories and folders can be collapsed or expanded by clicking the expansion arrows and

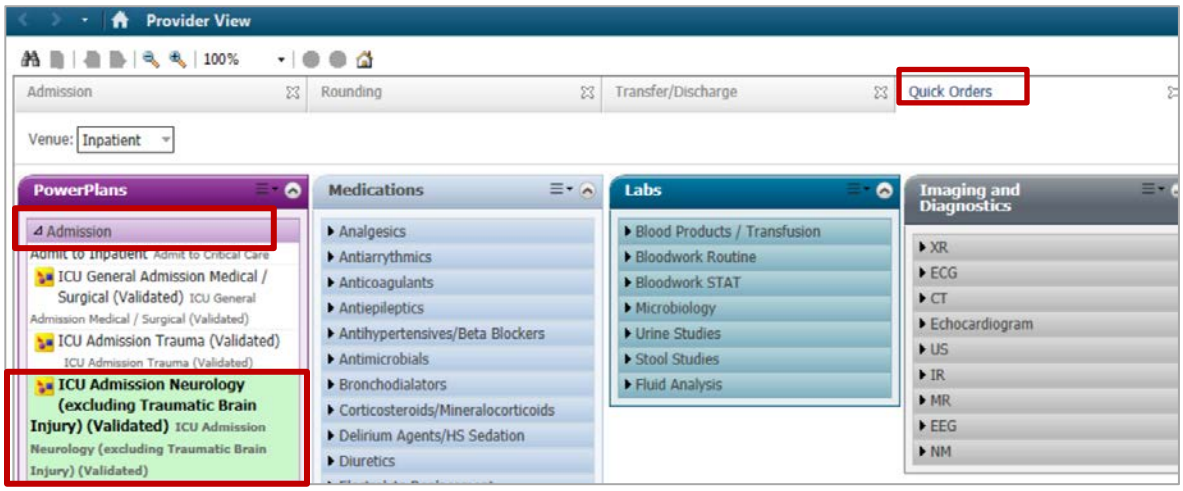


Order availability and organization may differ depending on your specialty.

Placing the PowerPlan:

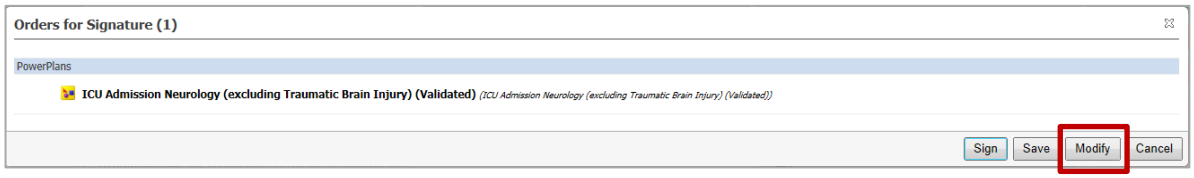
1 In the **Quick Orders** tab, expand the **Admission** folder

2 Select **ICU Admission Neurology**. PowerPlans are marked by the icon.

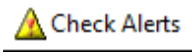


3 Click the **Orders for Signature** icon. 1

4 Click **Modify**.

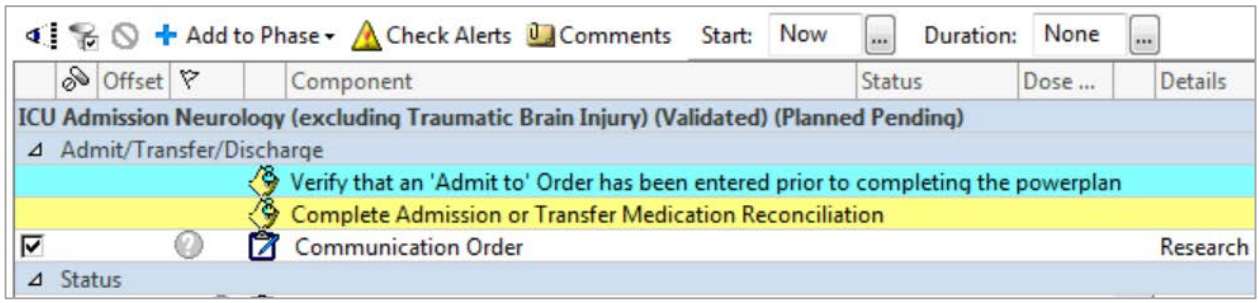


5 The PowerPlan window displays. Hover over the icons along the top toolbar:

	**Merge View –** Displays the plan components with those already ordered for the patient and active on the patient profile.
	**Initiate Plan or Phase –** Initiates the selected plan or phase. Orders do not become active or route to ancillary departments until you initiate.
	**View Excluded –** Displays components of the predefined plan that were not included in the initiated plan.
	**Discontinue –** Opens the Discontinue dialog box so that you can discontinue the plan or phase (individual components can be kept).
	**Plan Comment –** Adds a note to a PowerPlan phase. Plan comments allow you to communicate decisions made regarding the phase to other clinicians who can view or take action on the phase. You can add a comment to a phase in any status.
	**Check Alerts –** Allows you to check for Quality Measure Alerts.

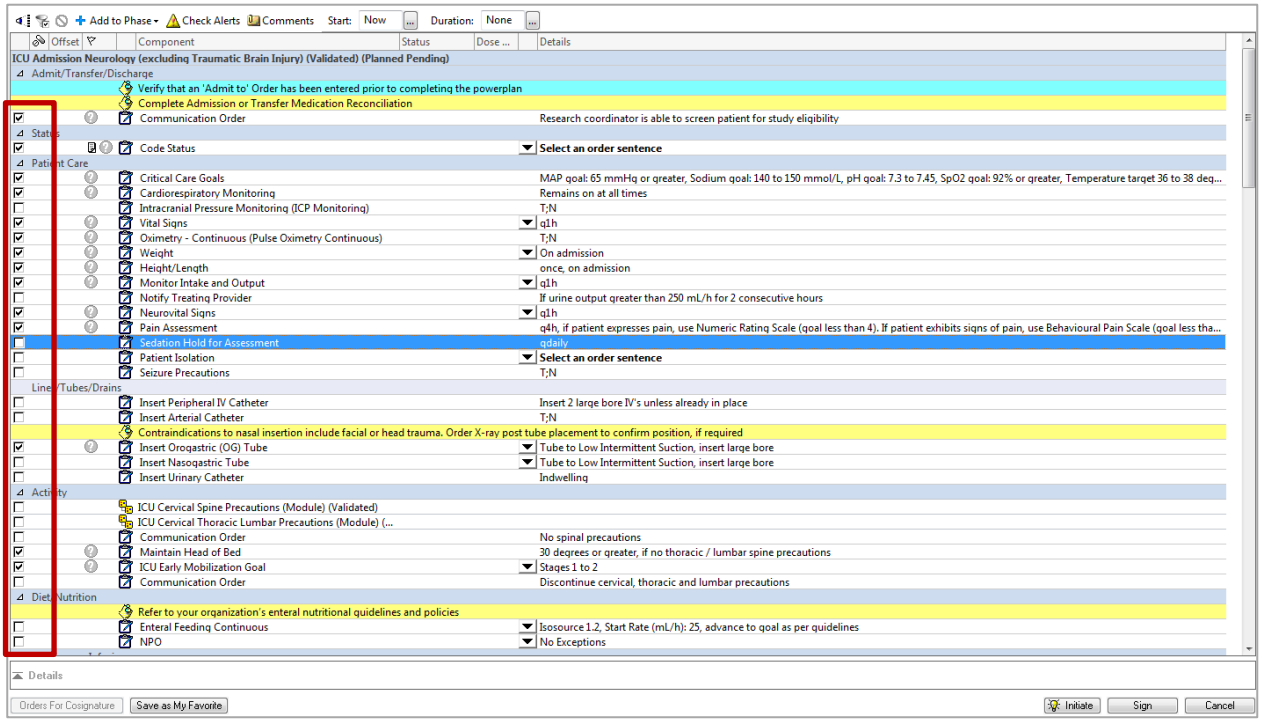
6 PowerPlans open in the Plan Navigator. Scroll through to locate visual cues organizing orders:

- Bright blue highlighted text for critical reminders
- Bright yellow highlights for clinical decision support information
- Light blue highlights that separate categories of orders



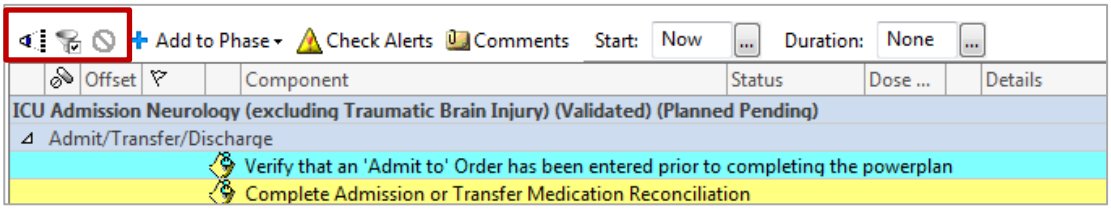
Modifying the PowerPlan:

1 Click the corresponding box to select or deselect individual orders from the PowerPlan. Some orders are already pre-selected for efficiency but you can click the box to deselect, if necessary.



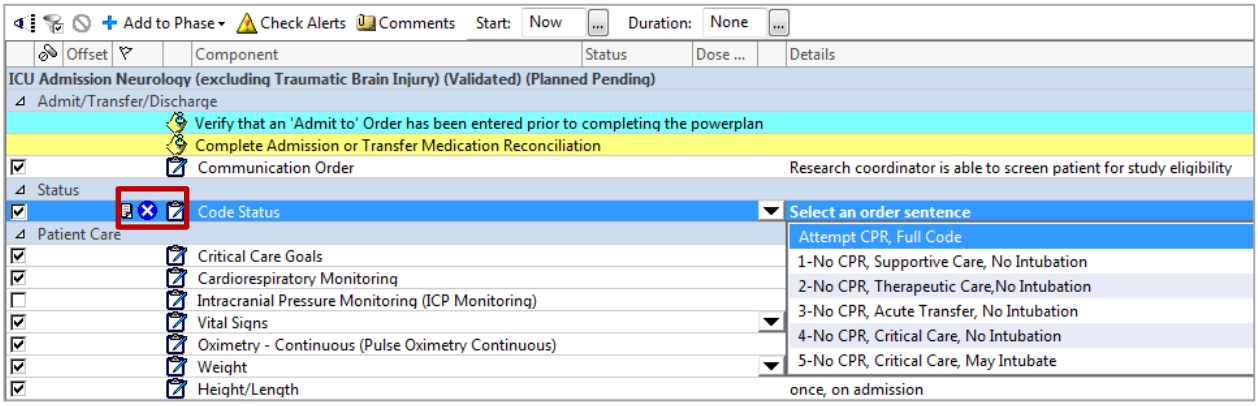
2 Click toolbar icons to flex the display of the PowerPlan to facilitate easier review. For example:

- Collapses or expands the list of order categories on the left side of the screen. Collapsing the list creates more room for the PowerPlan Navigator
- Displays pre-selected defaulted orders only
- Merges your planned orders with existing orders to avoid duplicating an order. However, the CIS will warn about an attempted duplicate.



3 **Code Status** order is pre-selected but the order sentence for the appropriate option needs to be chosen. Click to select one of the options.

Note: The icon next to the order indicates missing details. This is a standard icon across the entire CIS.



4 Continue adding the following orders to the PowerPlan:

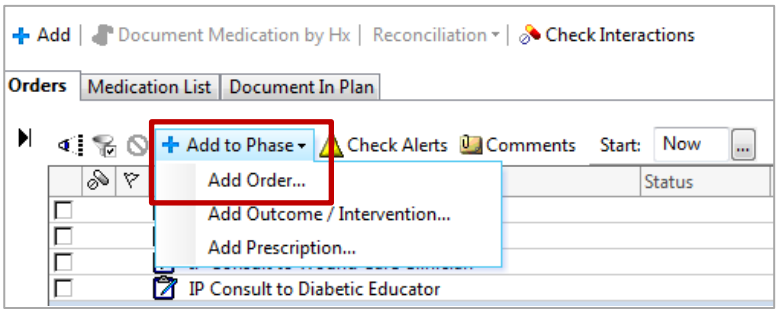
Remember to click the Details button to expand or collapse the order details view.

- *Insert Peripheral IV Catheter*
- *Insert Arterial Catheter*
- *Insert Nasogastric Tube*
- *Insert Urinary Catheter*
- *Acetaminophen 650 mg NG Q4H*
- *Hydromorphone 0.1- 0.5 mg IV q5min PRN*
- *Chemistry: Magnesium, phosphate, calcium ionized, troponin, lactate and CK levels*
- *Blood culture x2*
- *Urinalysis Microscopic*
- *Electrocardiogram 12 Lead*
- *XR Chest*

Note: You can select details provided by the order sentence or change details manually in the Details view.

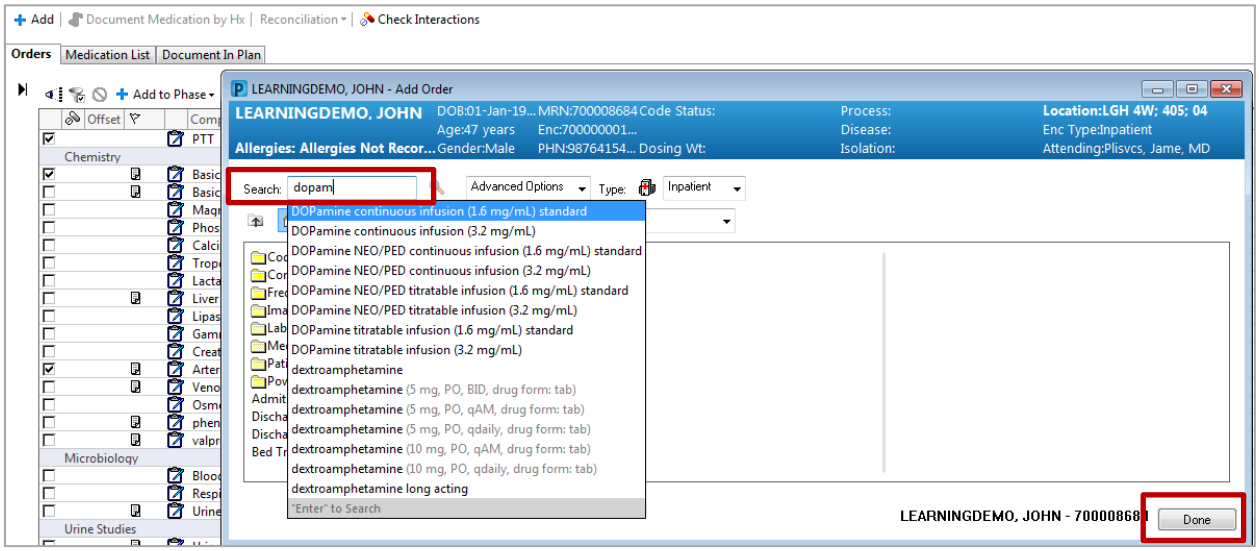
Adding to Phase while in PowerPlan:

1 You want to add some orders that are not part of the PowerPlan. Click + **Add to Phase** button

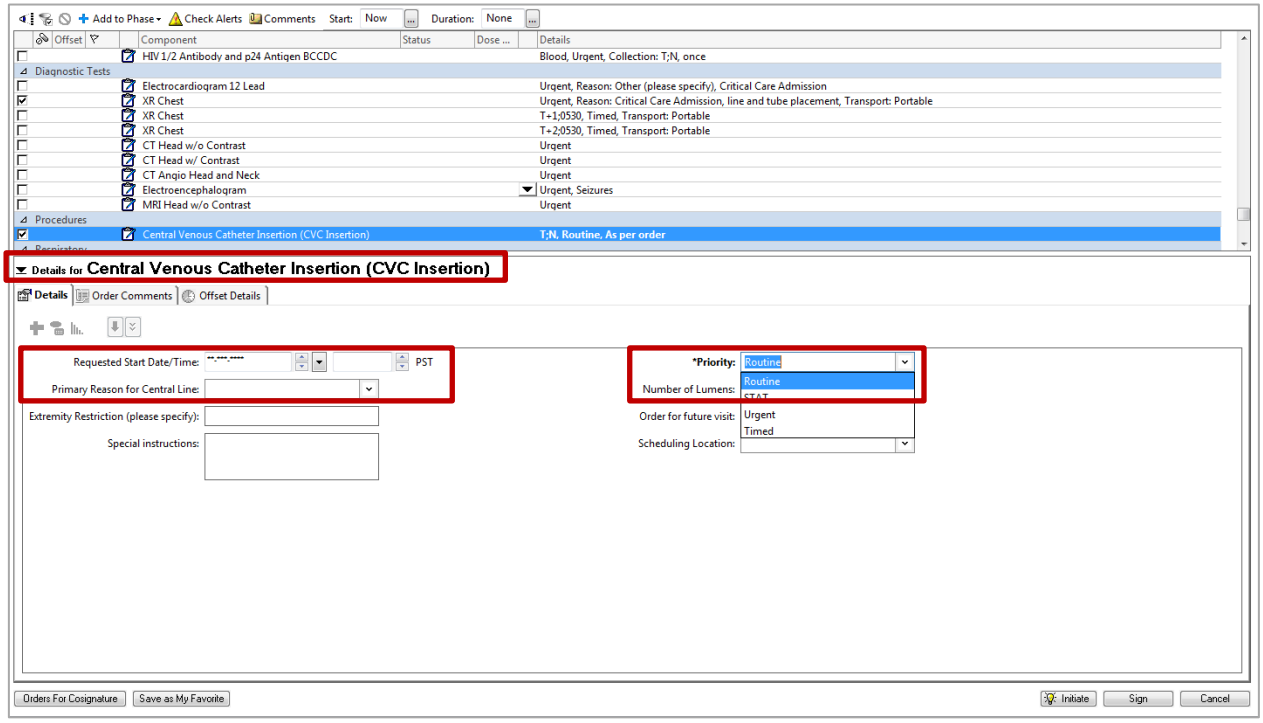


2 Search the order catalogue for:

- *Dopamine titratable infusion (1.6 mg/mL) standard*
- *Ciprofloxacin 400mg IV q12h*
- *CVC insertion*



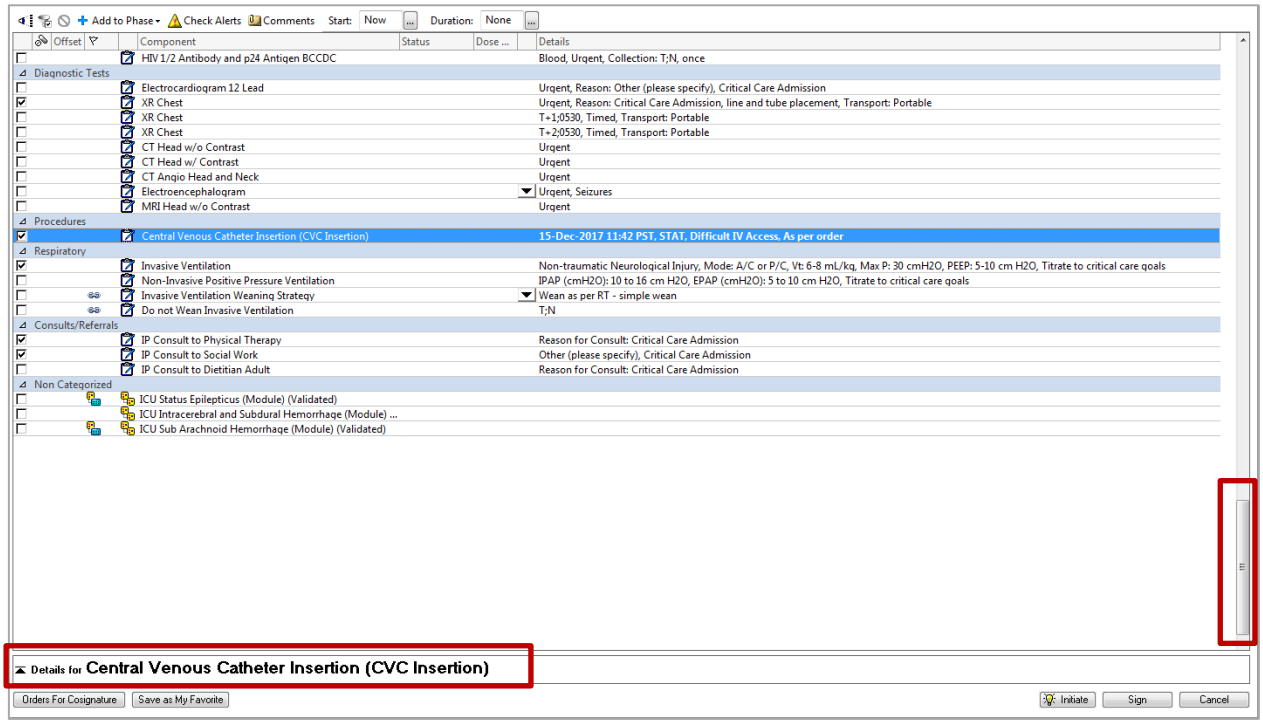
3 Once you have selected the orders above, click **Done** at the lower right corner. Then, the **Details for Central Venous Catheter Insertion (CVC Insertion)** appears, as it is the last order you entered in the catalogue search.



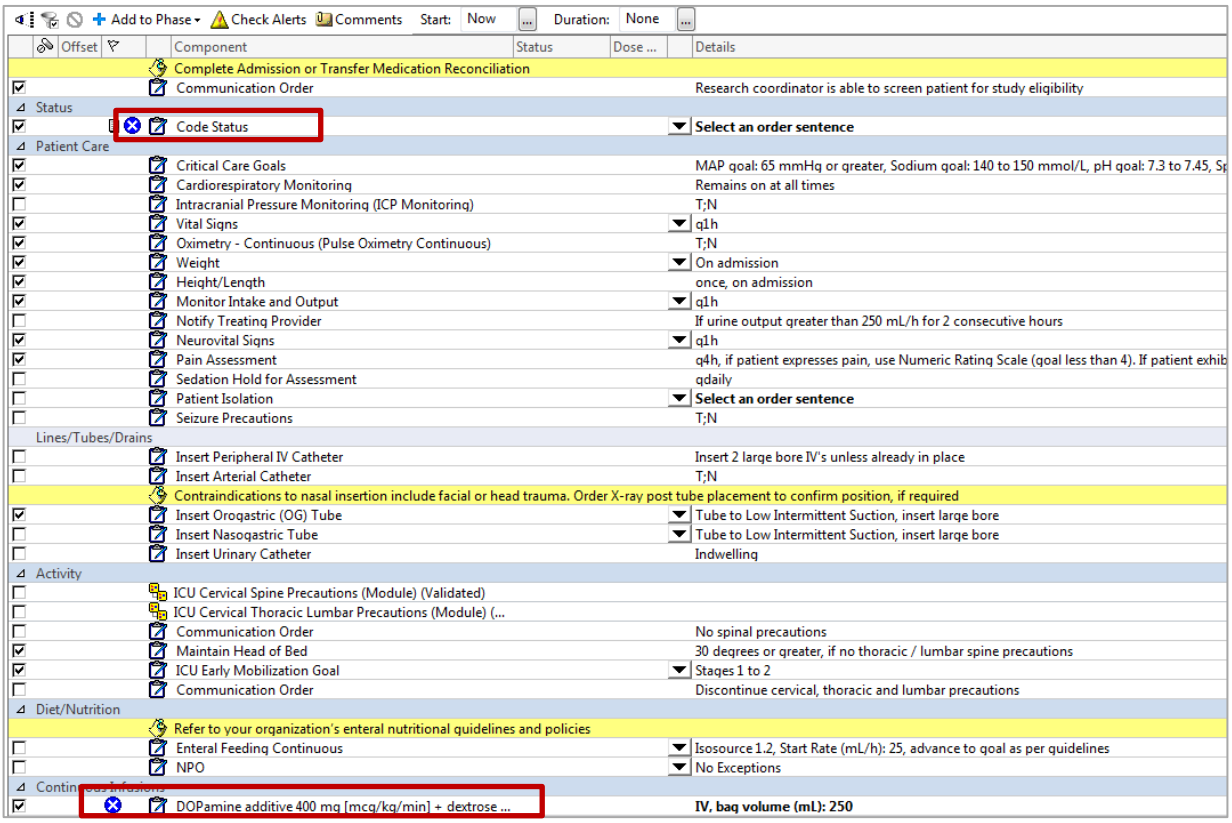
Fill in the following information:

- **Requested Start Date/Time:** type "**t**" for date and type "**n**" for time. (This will automatically enters today's date and current time)
- **Primary Reason for Central Line:** *Difficult IV Access*
- **Priority:** *STAT*

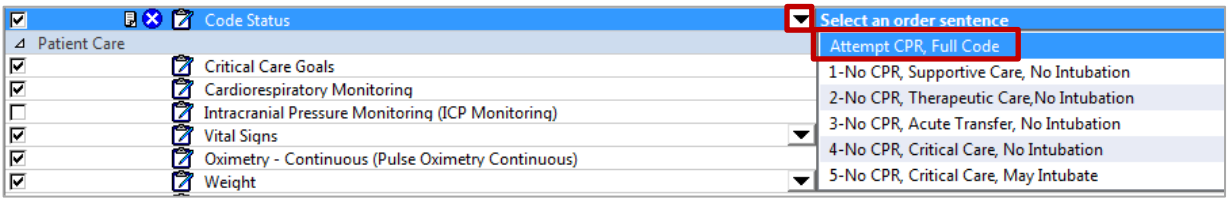
4 Do not Sign here yet. Click the **Details** icon to hide the Details for CVC Insertion. Notice the **Details** is now collapsed at the bottom of your PowerPlan Order Screen.



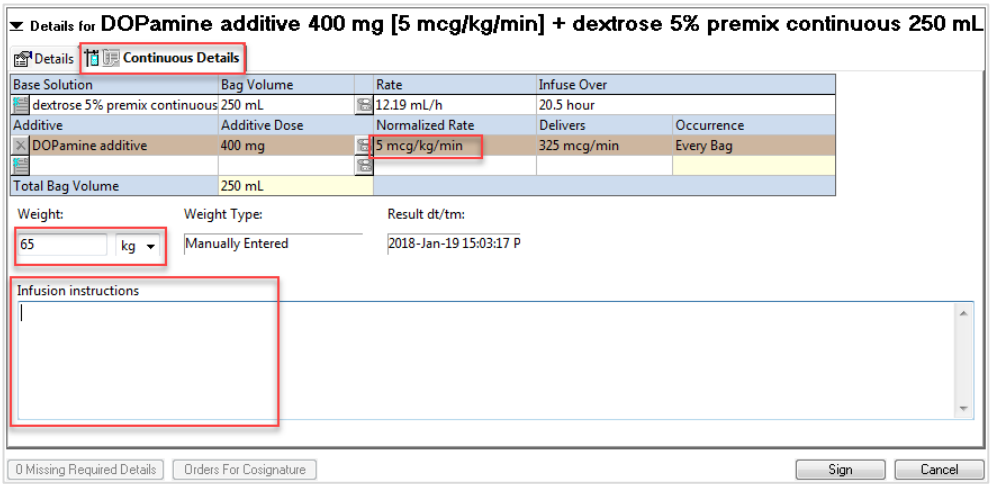
5 Now, scroll up to locate all the orders that have this icon. Notice that you have to complete one for **Code Status** and **Dopamine additive 400 mg (mcg/kg/min).**



6 For practice, let's go ahead and complete the **Code Status** and select **Attempt CPR, Full Code** by clicking on the drop-down icon. This again will take you to the Details for Code Status. Remember not to sign here and simply collapse the **Details** icon.

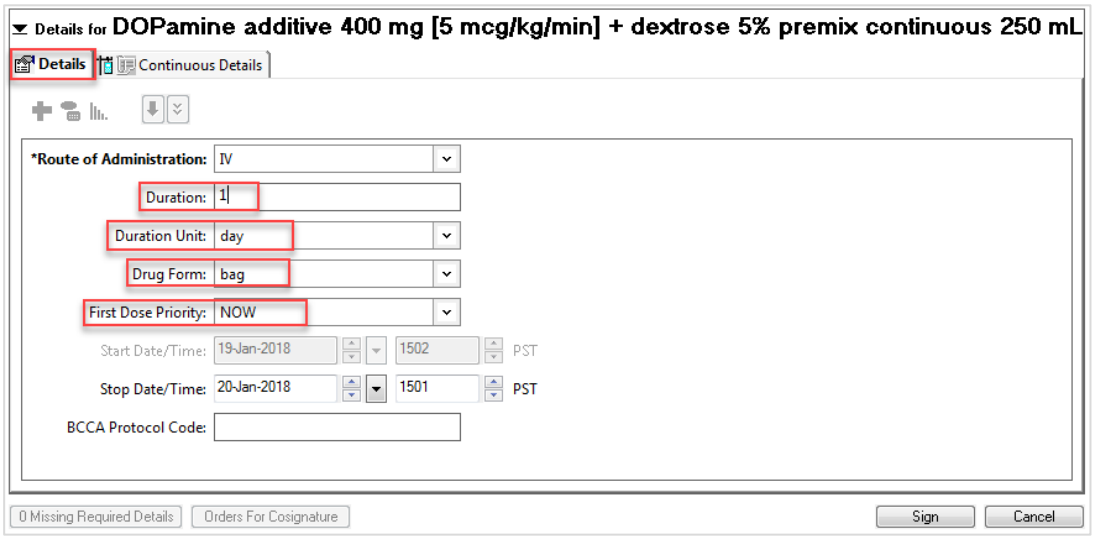


7 Next, locate the **Dopamine** under **Continuous Infusions.** The details default in the **Continuous Details** tab, type **5** in the **Normalized Rate** field. If the patient's weight has not yet been entered in the chart, go ahead and enter **65 kg** in the **Weight** field below the infusion details. You can also type in the **Infusion Instructions** within the free text box.



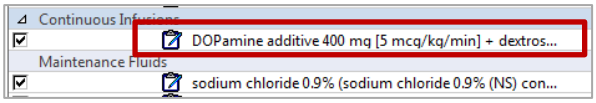
8

1. Now, click the **Details** tab. Fill in the following information:
   - **Duration** = *1*
   - **Duration Unit** = *day*
   - **Drug Form** = *bag*
   - **First Dose Priority** = *Now*

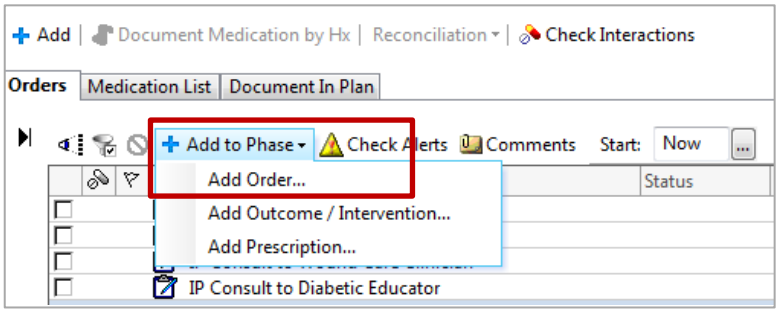


9 Now that you have completed all the required Details, let's minimize the order details using this icon.

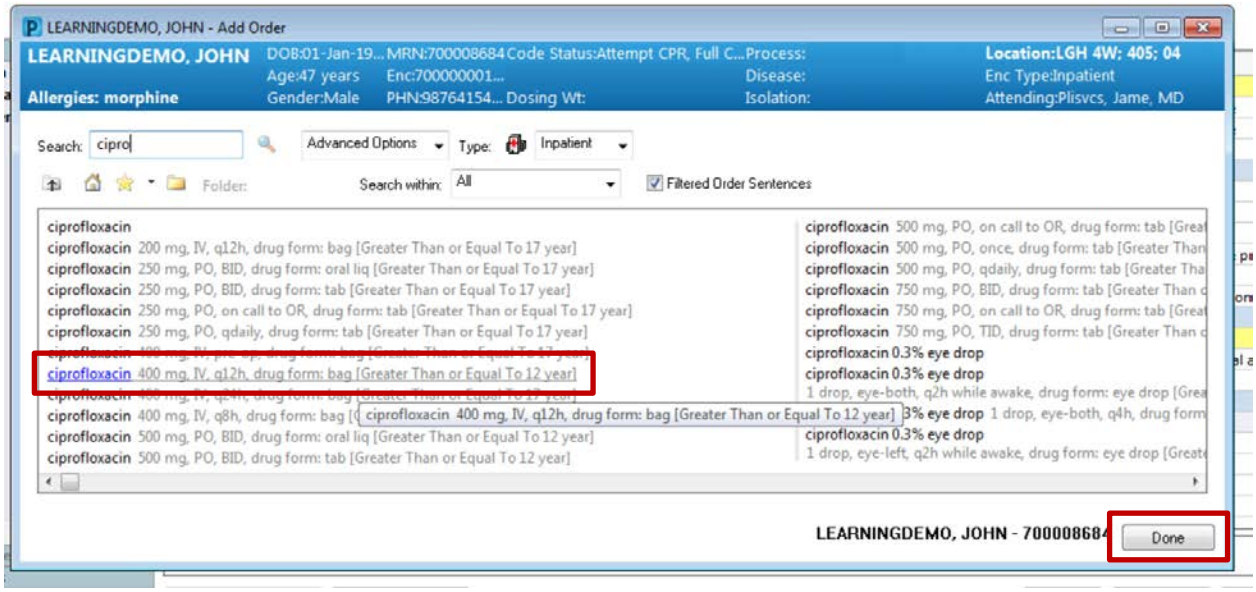
Note: Once all the necessary fields are completed, you will notice that the Details icon next to Dopamine and Code Status disappear.



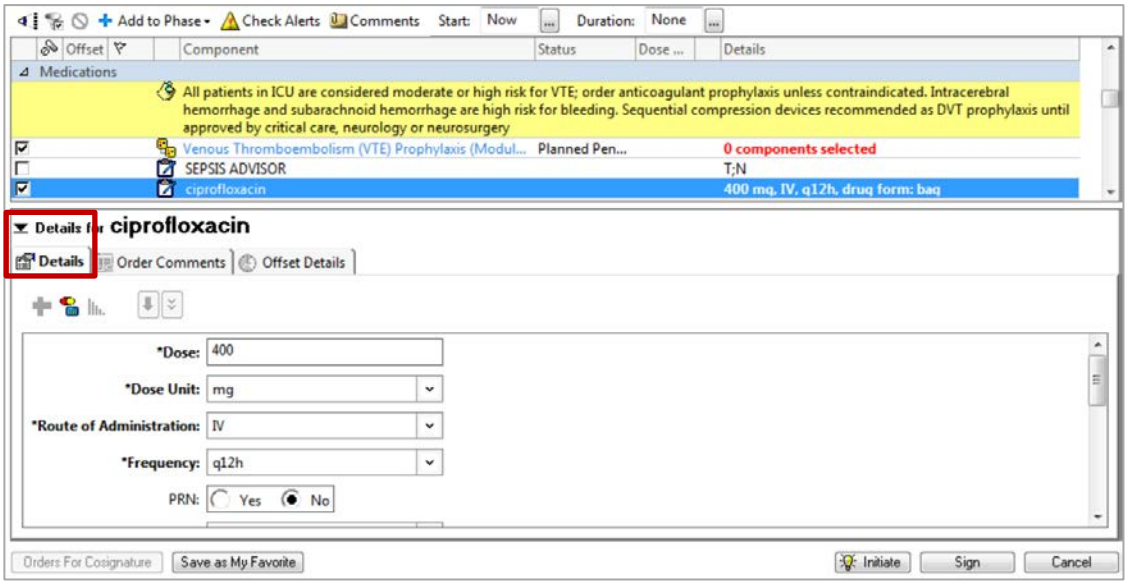
10 Next, add Cipro to the PowerPlan. Select **+ Add to Phase** and choose **Add Order…**



11 Search the order catalogue for Cipro 400mg IV q12hr. Select the appropriate order and click **Done.**

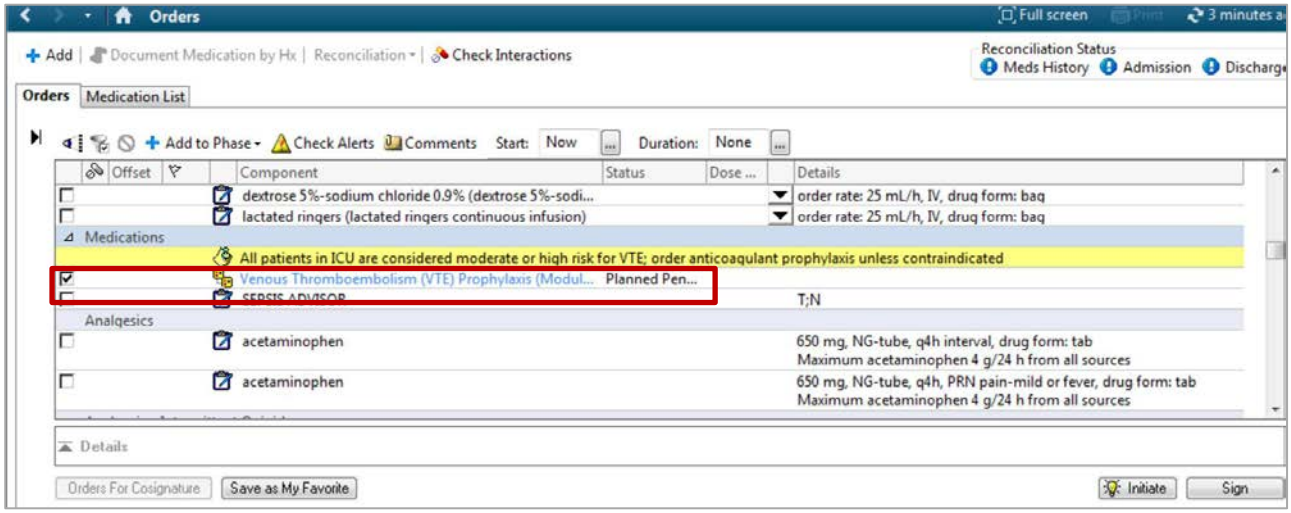


12 View the order details. Minimize the order details once finished.

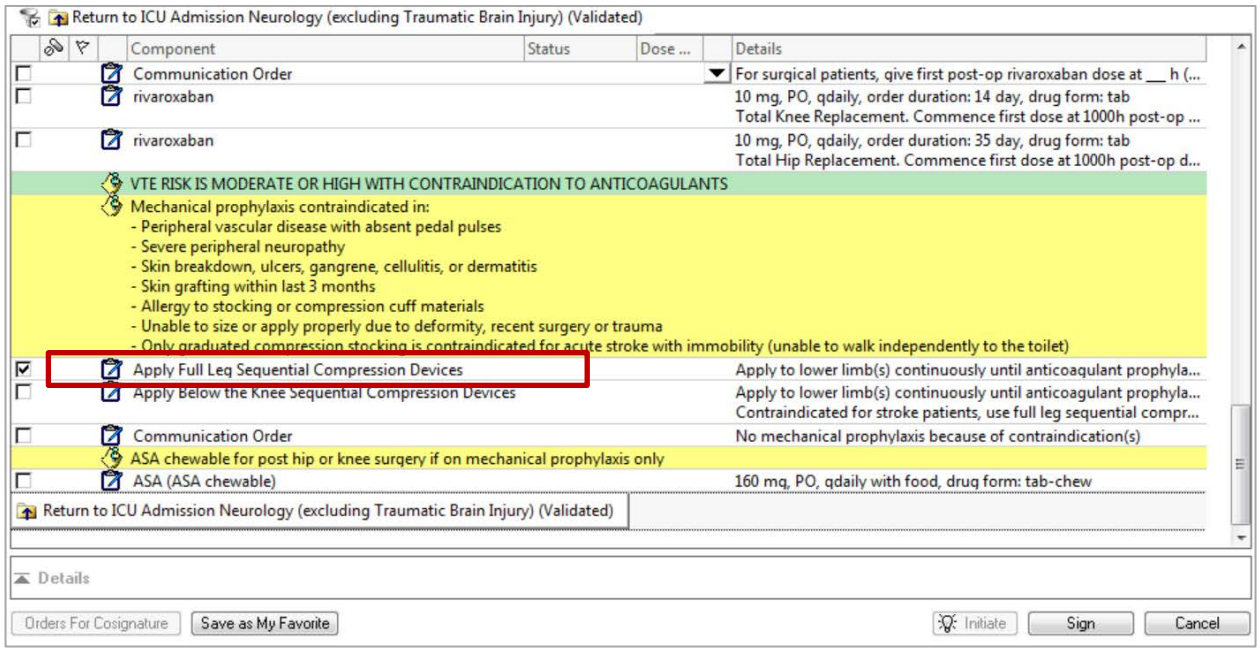


Modifying a Module:

1 Scroll down to locate **Venous Thromboembolism Prophylaxis** Module and modify by clicking the module link



2 Select **Apply Full Leg Sequential Compression Devices**

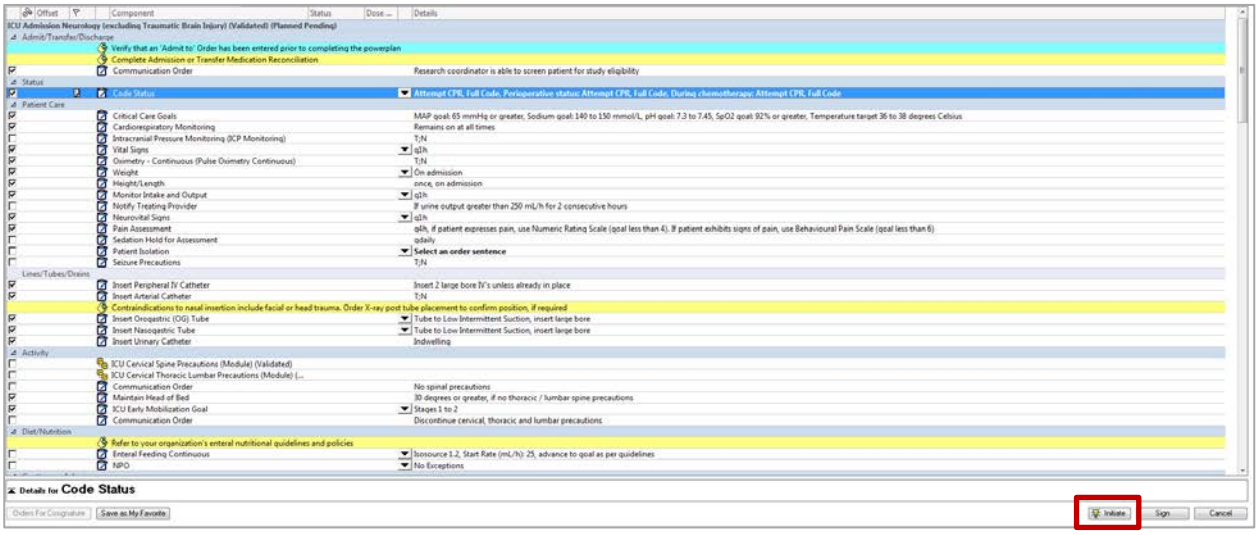


3 Once you have made your selections for this module, **do not** sign yet. You need to return to the main PowerPlan by selecting **Return to ICU General Admission Neurology** to sign off the entire PowerPlan.

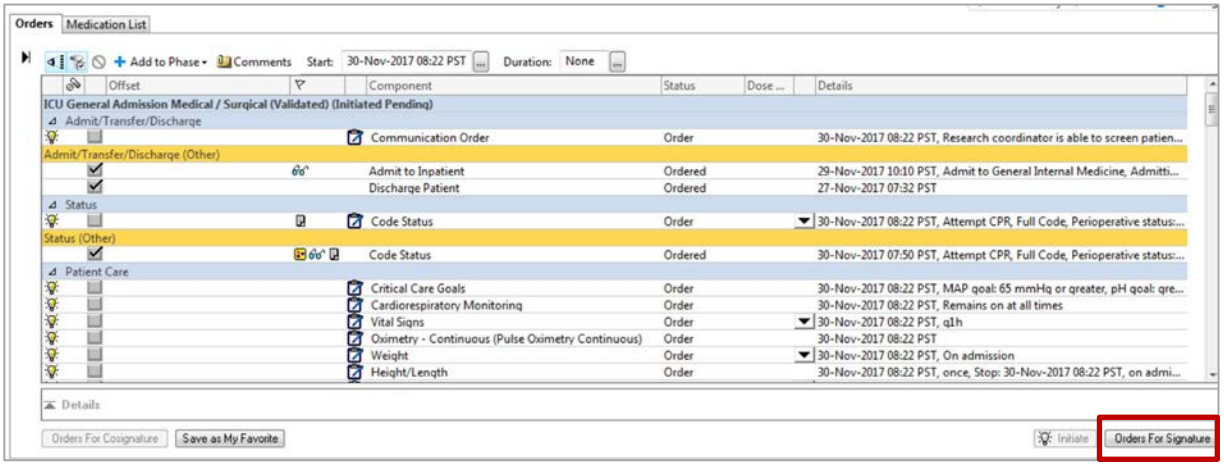
4 Now, all your orders are selected and you are ready to sign off. Remember to use to see what has been selected so far and to merge your plan with other current orders. This will help to identify any duplication.

Note: Click **Initiate** first to ensure that all selected orders are immediately active. If you **do not** Initiate the PowerPlan and click **Sign only**, the orders are **not** active. The PowerPlan remains in a planned state until it is activated later by a provider or a nurse assigned to this patient. For example, the provider created the PowerPlan in a planned state when the patient was still in ED. The receiving nurse will initiate the PowerPlan order upon patient's arrival on the unit, and the orders will then become active.

5 For your first patient, **Initiate** the ICU Admission Neurology PowerPlan.



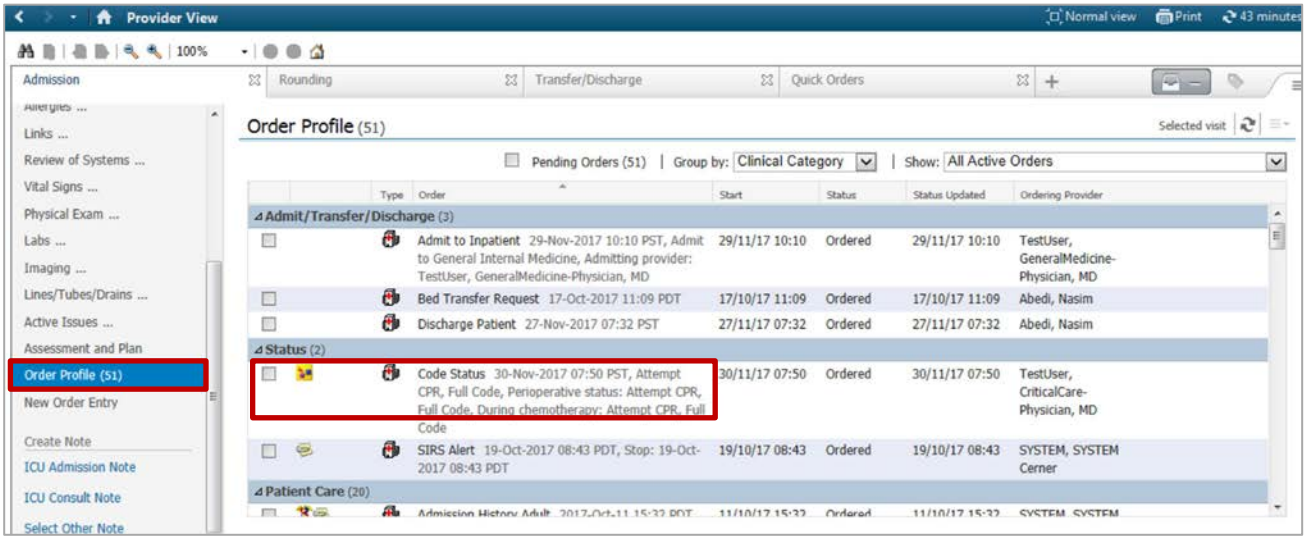
6 Once ***Initiate*** is selected, a lightbulb icon is displayed beside each of the checked orders and allergy checking and drug-drug interaction checking occurs. Click **Orders for Signature.**



7 Click **Sign** to complete the process. Your orders will become active and all related tasks for your first patient's care will be created for the appropriate clinician.

Note: If you click Cancel at this point, no orders will be placed and actioned.

8 Navigate back to the Admission tab and click the **Order Profile** component**.** The order profile allows you to review all currently active orders for your first patient.



Note: This view lists individual orders. The icon indicates that the order is part of the PowerPlan.

9 PowerPlans in a *planned* status (signed but not initiated) are not listed under Orders Profile. Click on the Order Profile heading to review orders including those in a planned state.

Key Learning Points

- PowerPlans are similar to pre-printed orders
- You can select and add new orders not listed in the PowerPlan by using Add to Phase functionality
- You can select from available order details using drop-down lists or modify order sentences manually where needed
- Initiate means that PowerPlan orders are immediately active and as such, can be actioned right away by the appropriate individuals
- To ensure orders within a PowerPlan are immediately active, click *Initiate* first and then *Sign*
- Sign will place orders into a planned state for future activation

ACTIVITY 1.7- Complete an ICU Admission Note

As the last step of admitting your first patient to the Intensive Care Unit, you create the admission note.

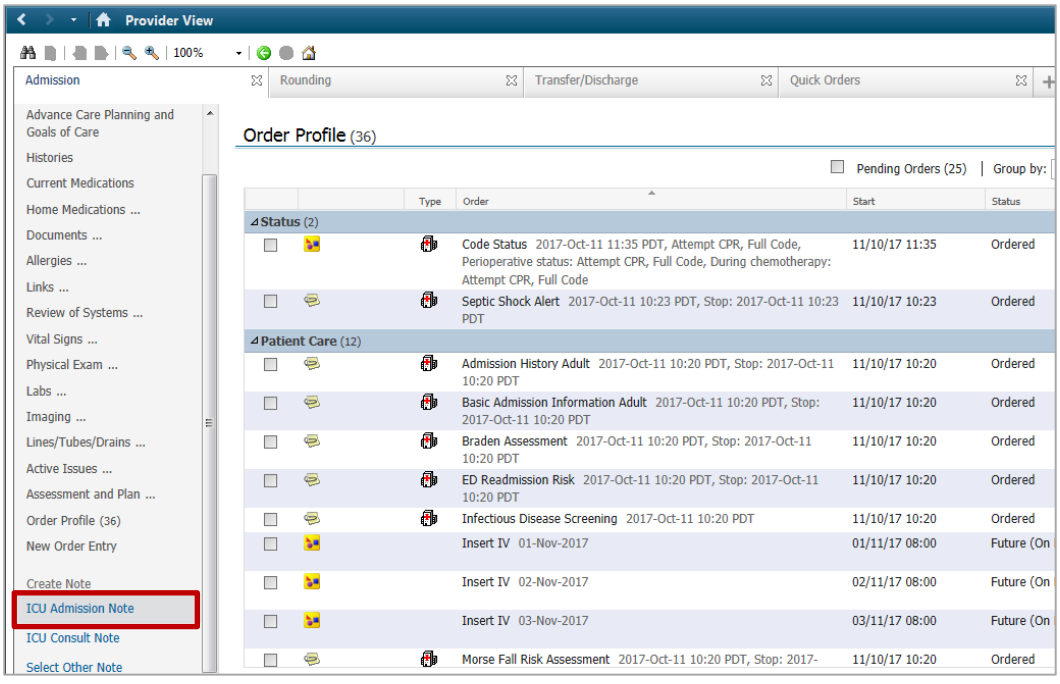
The Clinical Information System (CIS) uses Dynamic Documentation to pull all existing and relevant information into a comprehensive document using a standard template.

Dynamic Documentation can save you time by allowing you to populate your documentation with items you have reviewed and entered in the Admission workflow tab. This is why it is more efficient to create the note as the last step of the admission process. You can also add new information by typing or dictating.

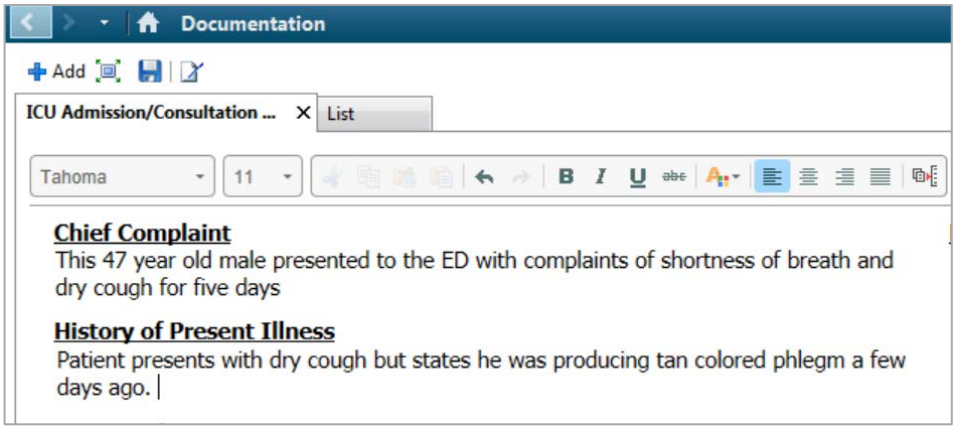
Workflows such as Admission, Rounding, and Transfer/Discharge have the Create Note section displaying relevant note types represented by links. With one click on the desired note type link, the CIS generates a charting note.

1 Navigate to the **Create Note** section

2 To document an admission, click **ICU Admission Note**.

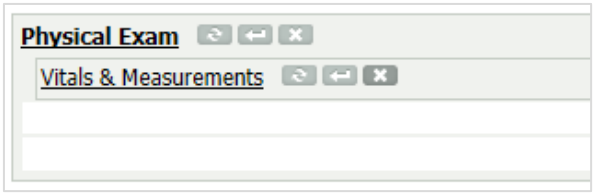


3 The draft note displays in edit mode populated with the information captured by you and other clinicians. Review different sections of this note.

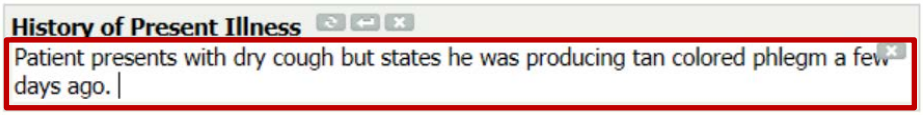


4 Position your cursor over the heading of any section to activate a small toolbar:

- refreshes the dynamic information in the box
- activates the box for edits or new entries
- removes the entire section or content of the box

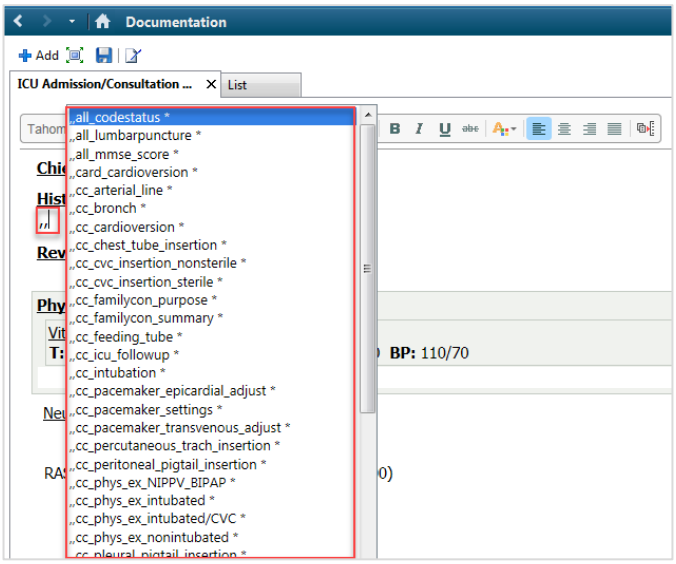


5 For editing the existing text, click into the box, for example **History of Present Illness**. It becomes active and you can select the text to add or delete as needed.

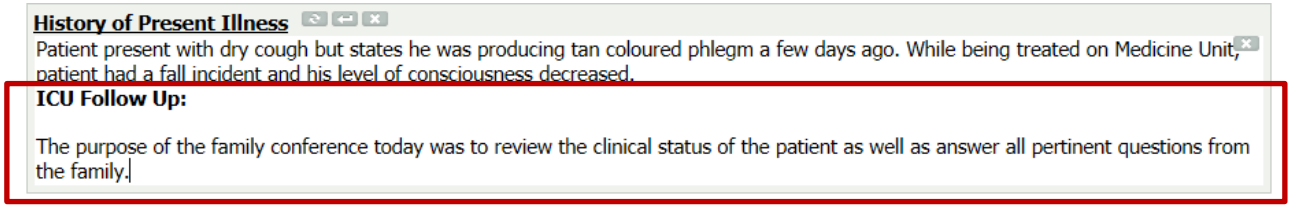


Note: CIS offers **Auto-Text** phrases that can be used within Provider documentation to quickly and easily insert note templates, and pull in patient data with smart templates. Let's go ahead and practice.

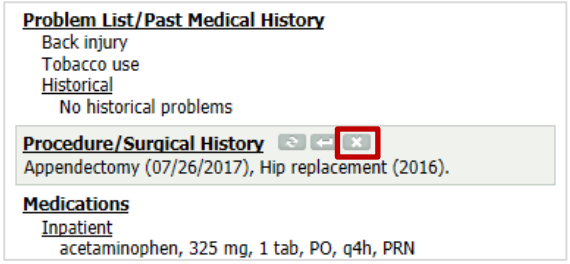
6 While you are in History of Present Illness, type "**,,cc**" ("comma, comma cc") and a list of auto-text phrases related to critical care appears. If you only type in "comma, comma", it will display a list of all available auto-text phrases. Let's go ahead and try it.



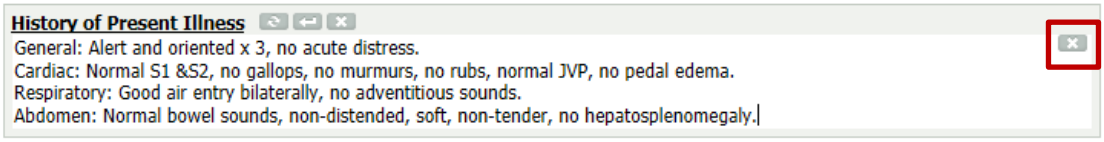
7 Select "**,,cc_familycon_purpose**" and then double-click. Notice that a phrase regarding family meeting is auto-populated into the text box.



8 You can remove section that are not required or are currently blank. For example, place the cursor over the heading and click to remove the entire section.

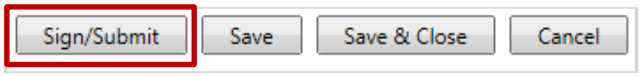


9 Activate the text box and click to remove the entire content of this section. For example, you can remove the content in the History of Present Illness and type a new text.



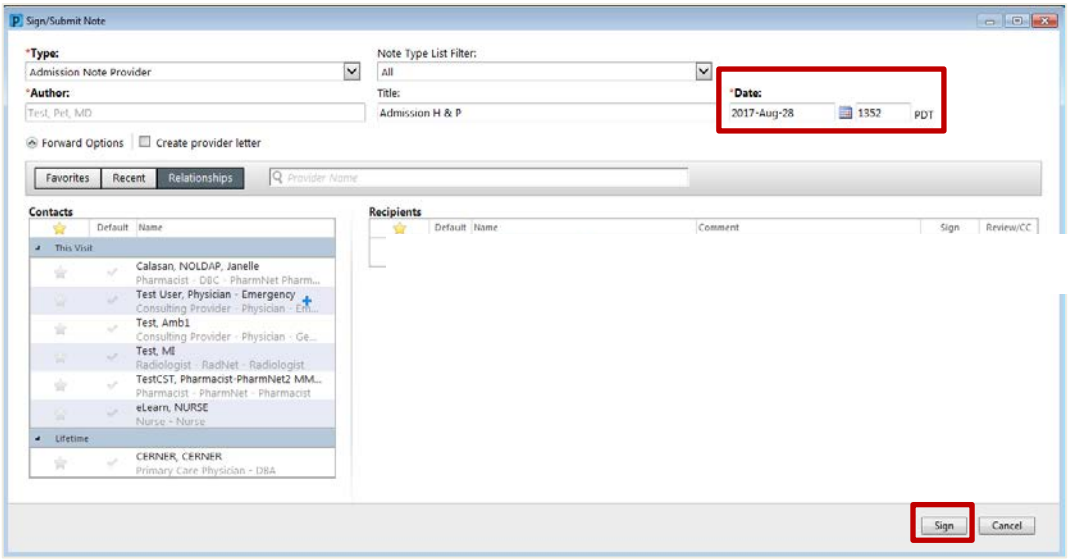
10 Review the **Assessment/Plan** section. It is populated with the diagnosis you have entered. Enter new text to practice.

To complete your note, click **Sign/Submit.**



Note: You have also an option to click Save or Save & Close to continue to work on this document later. Saved document is not visible to other care team members.

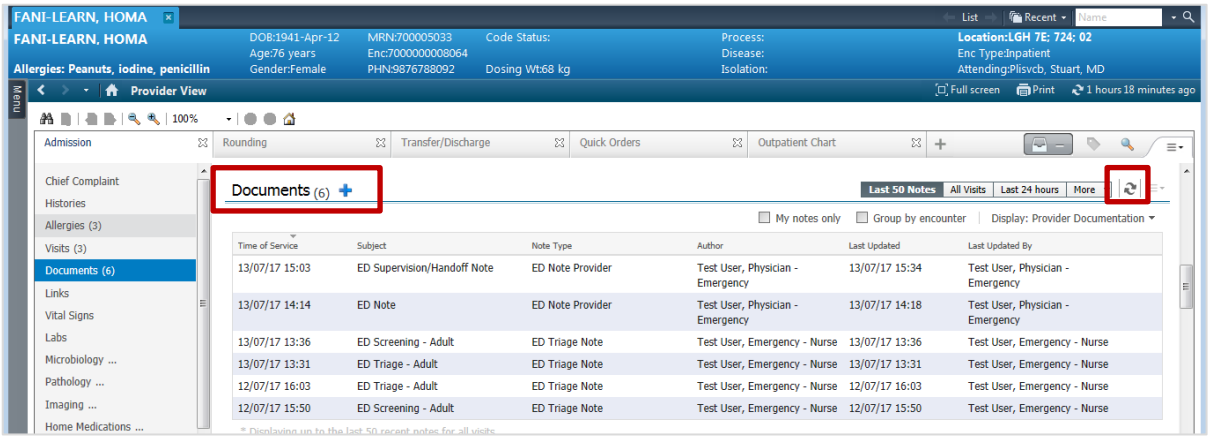
11 In the **Sign/Submit** window, typically no changes are required if you use the link to create your document. Note type and title are already populated if you use a link to create your document but can be altered. You will learn later how to use the **Forward** option to send copies of the admission note to other providers.Click **Sign** to complete the process.



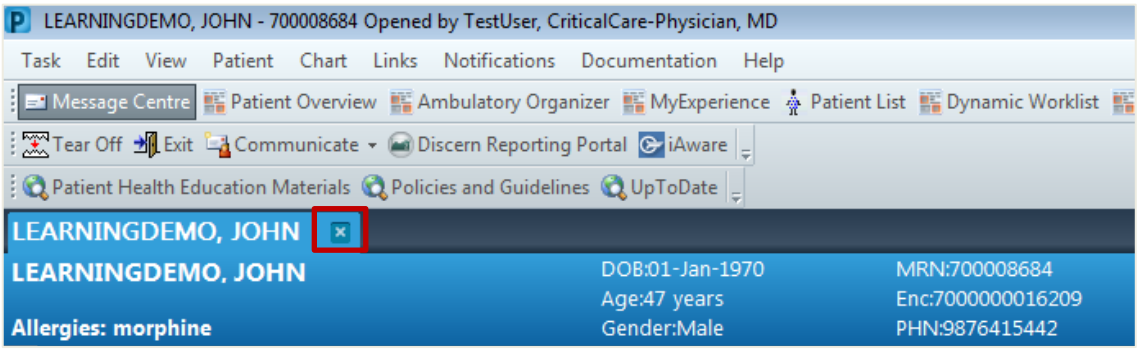
Note: The Date box auto-populates with the current date. Ensure that it indicates the date of the patient's admission, not the date the note is created.

12 Once the note is signed, it cannot be edited. Any changes require creating an addendum. You will practice adding an addendum later.

After signing the note, you are transferred back to the Admission tab. Remember to click the **Refresh** button on documents component.The admission note is now listed under Documents and is visible to the entire care team.



13 To close this patient chart, click the x icon on the Banner Bar.



Key Learning Points

- Use Dynamic Documentation to prepare notes standardizes documentation practices.
- Use note links listed under the Create Note sections to produce documents efficiently.
- Only when a note is signed will it be visible to the care team.
- Saved notes remain in a draft format and are visible only to you.
- Once you sign and submit a note, further edits can be added but will appear as an addendum.

SCENARIO 2- Managing Your Patient During Rounding

Learning Objectives

At the end of this scenario, you will be able to:

- Update patient information.
- Modify current orders.
- Review documents and create a progress note.

SCENARIO

Your first patient was admitted yesterday to the Intensive Care Unit. His level of consciousness is unchanged since admission to the ICU. The Chest X-ray confirmed aspiration pneumonia and mild cardiogenic edema.

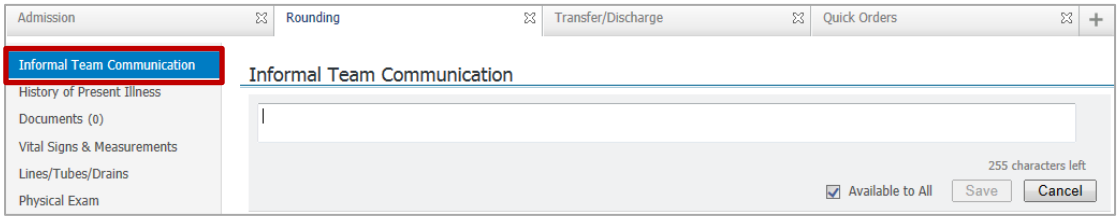
You round on your patients and examine your patient. You want to replace the IV ciprofloxacin with IV piperacillin-tazobactam and place electrolyte panel and CT head orders to re-evaluate your patient post fall. You also learn that your patient had a hip replacement last year and that he had an allergic reaction to morphine. As a heavy smoker, he has suffered from gradually worsening shortness of breath, and cough since last winter.

You will complete the following 7 activities:

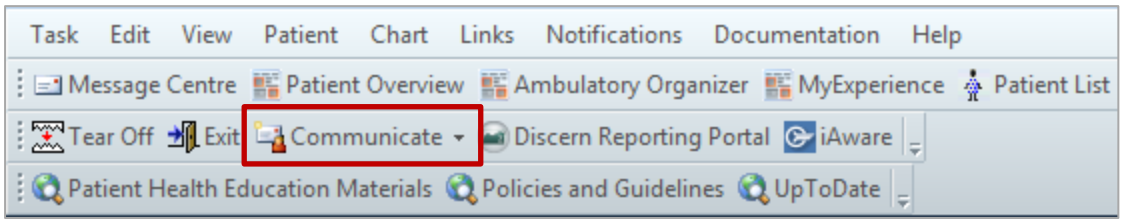
- Review informal team communication
- Review documents, labs and imaging
- Review CareAware Critical Care (iAware)
- Add an individual order and modify the existing order
- Update Active Issues
- Create a progress and use an auto-text entry
- Create a procedure note

ACTIVITY 2.1- Review Informal Team Communication

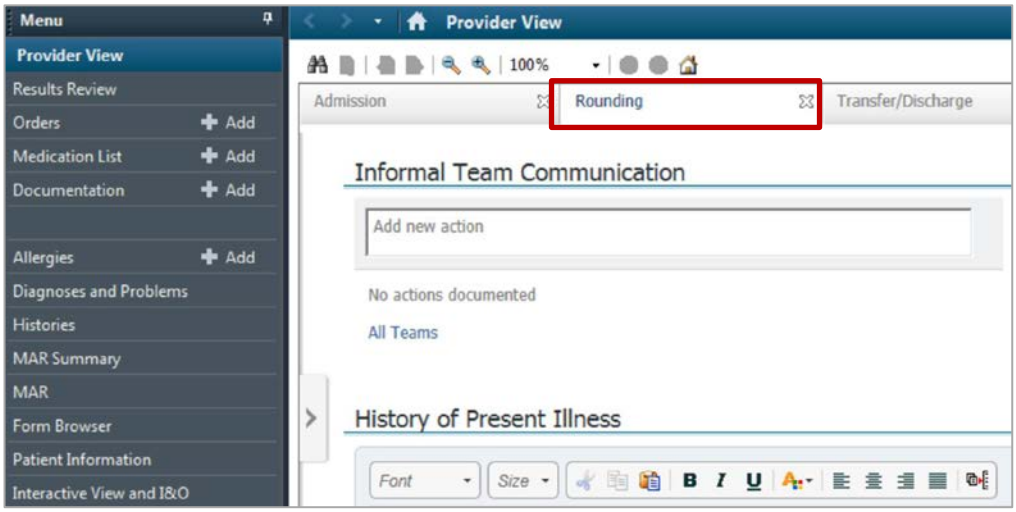
The **Informal Team Communication** is a tool that allows providers to communicate information to other clinicians. It is considered an informal communication tool as it will not be saved into the patient's chart. It is found in the Rounding tab as the very first component option. For example, you can add "Page Dr. X when patient's family arrives."



Note: *Communicate* icon found in your toolbar does not have similar functionality as the Informal Team Communication. This Communicate toolbar will be discussed further at a later point in this workbook along with the Message Centre.



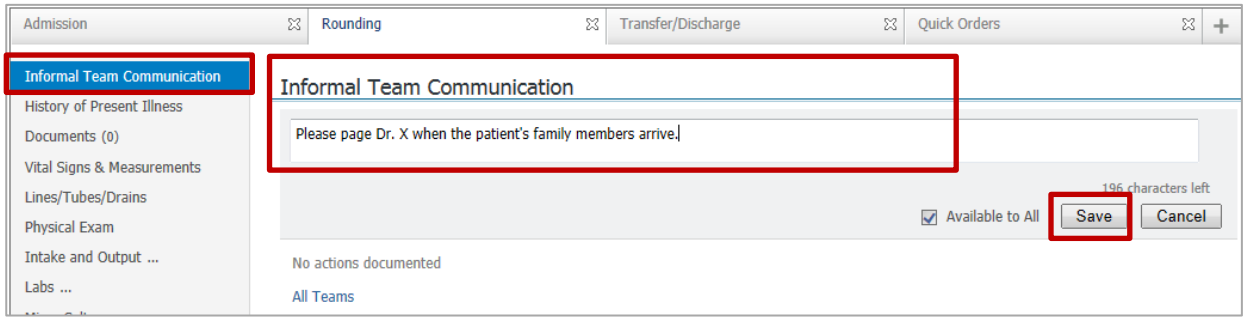
1 Select the **Rounding** tab within the Provider view.



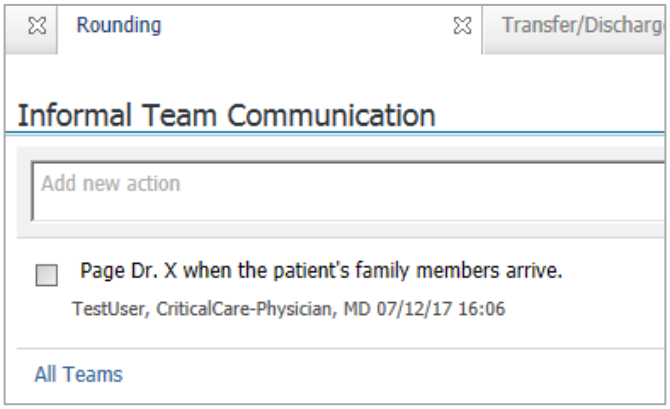
2 Locate the **Informal Team Communication** component

3 Begin typing in the text box and write:

- *Page Dr. X when the patient's family members arrive.*



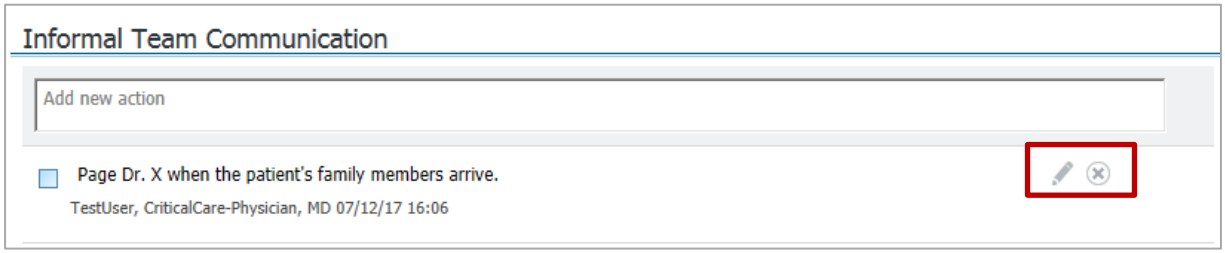
4 Click **Save** button. Then, the communication details will appear below.



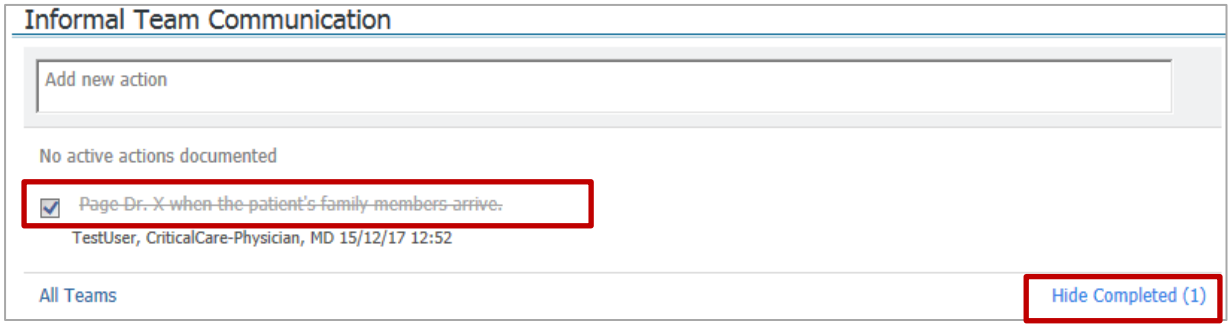
5 Hover over the message you just saved and you will notice these icons:

= means to edit the message

= means to delete the message



6 By clicking on the tick box next to the message, this indicates that you have completed it. Notice your message has been crossed out.

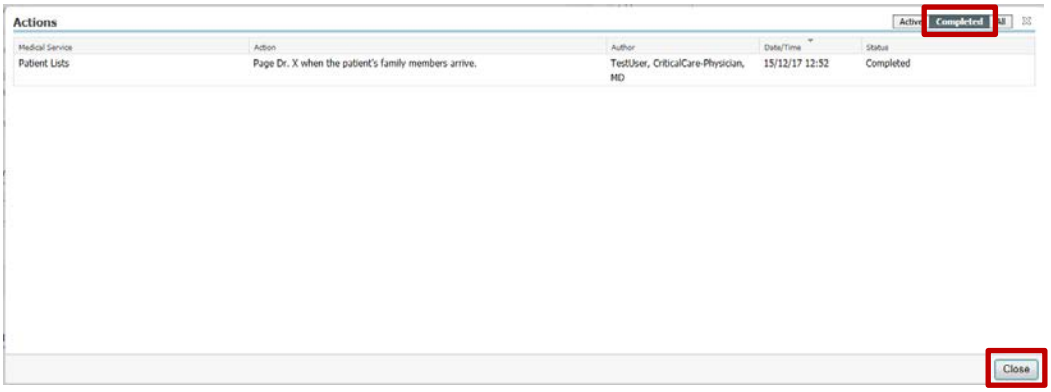


7 You can hide the completed message by clicking on the **Hide Completed (1)** link shown above. To view the completed link, simply click on the **Show Completed (1)** link.

Note: The number next to the Hide or Show Completed link indicates how many messages are present.

8 Now, click on the **All Teams** link below the message area. The **Actions** pop-up screen appears and shows you the default **Active** tab with No results found.

9 Within the same screen, select the **Completed** tab and it will show you the previous message.



10 Once done, click the **Close** button.

Key Learning Points

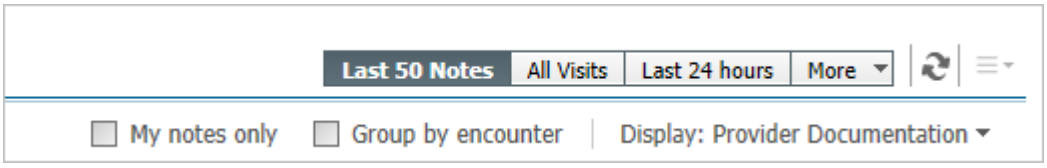
- Informal Team Communication allows providers to communicate information to other clinicians.
- It is an informal communication tool as actions or comments documented will not be saved into the patient's chart
- Completed actions should be checked off and comments addressed should be deleted

ACTIVITY 2.2- Review Documents

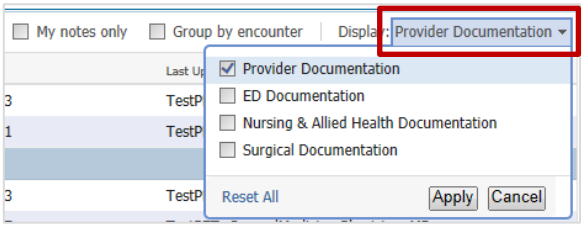
Continue reviewing the patient's chart by following the Rounding tab list of components. When using the Clinical Information System (CIS), you might be faced with a large amount of information.

For many components, you can filter in many ways. For example, in the Documents component you can:

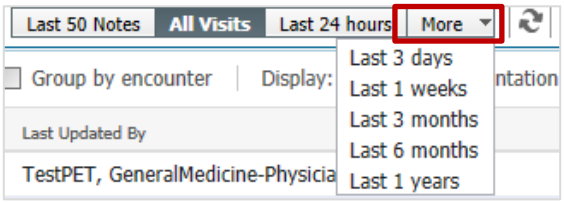
- Display notes from the **Last 24 hours** or **My notes only**
- Use **Group by encounter** to see notes for the current encounter only
- Limit documents to **Last 50 notes**
- Access notes for **All Visits**



You can also change the displayed note types by selecting **Provider Documentation**.

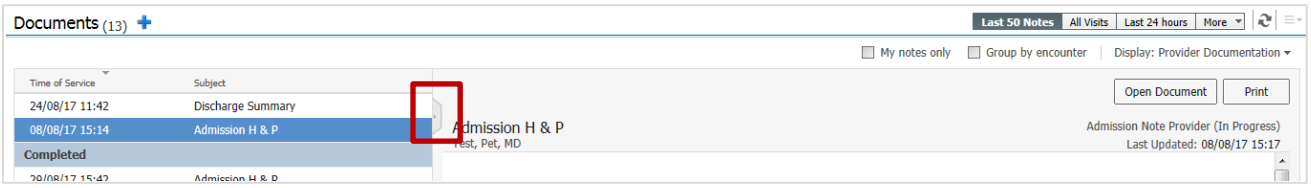


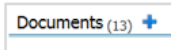
The display time range can be changed by expanding options under **More**

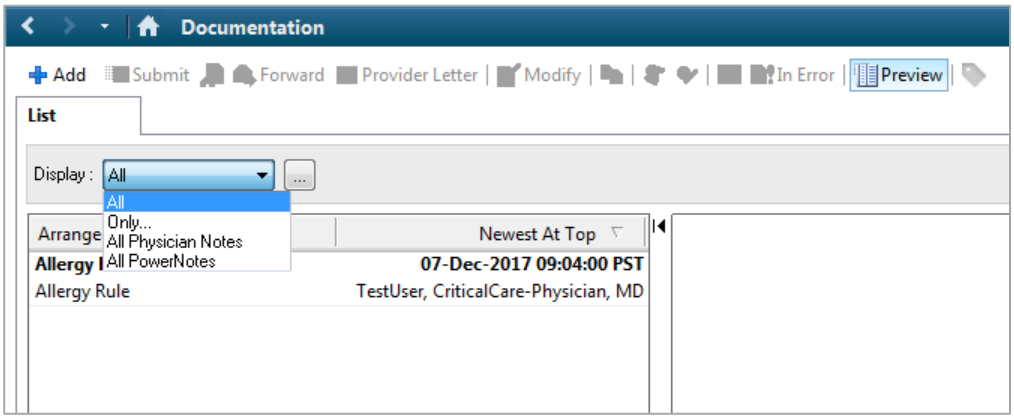


Remember that if you select a specific filter, the selection narrows and you might not display all relevant information. Ensure that the filter type corresponds with your current needs.

1 Click **Documents** to display a list of documents.
Select the document line to display the content of the document without leaving the screen. Clicking tab closes the split screen.



2 Click the component heading  to view a comprehensive display with more options. For example, the Documentation view provides a list of all documents.



3 Use the navigation buttons  to return to the Provider View.

4 For labs and other diagnostics – use filters to display results that are relevant to you.
Click the refresh icon to update the information just for this component

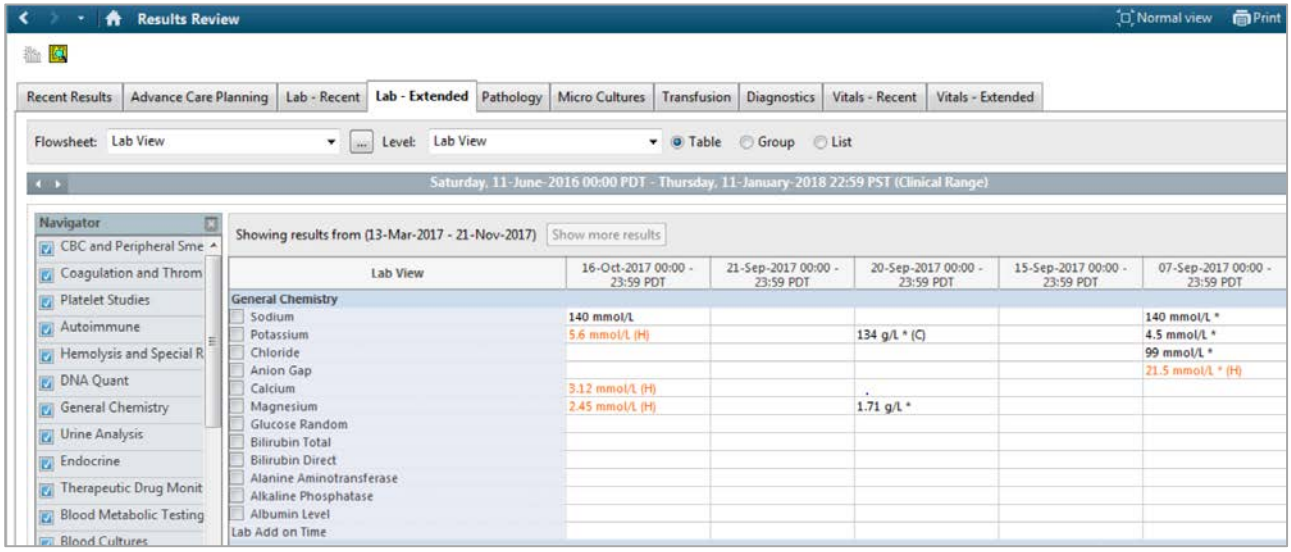
Key Learning Points

- Using **filters** will display only pertinent information
- Remember to check what filter is currently selected to ensure that it fits your current needs

ACTIVITY 2.3- Review Labs and Imaging

1 Click the **Labs** component heading to display comprehensive summaries of patient's results grouped in separate tabs.

An example of the comprehensive display of patient results grouped in separate tabs can be found below:



Key Learning Points

- Different filters and tabs can be used to review information within results review

ACTIVITY 2.4- Review CareAware Critical Care

CareAware Critical Care iAware launches a separate application when selected within PowerChart. It provides an interactive dashboard that aggregates critical patient information from multiple sources. This helps providers and clinicians gain understanding of the patient's current condition. You can toggle between PowerChart and iAware tabs.

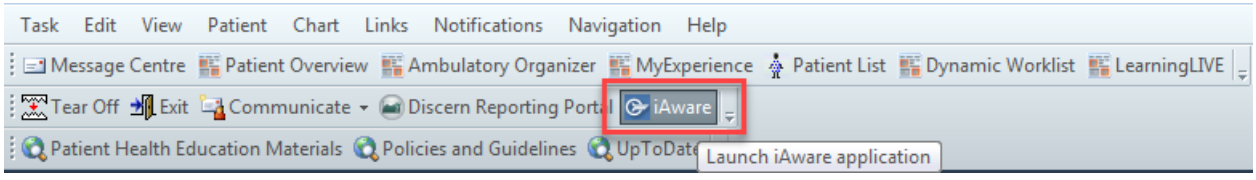
If you are searching for a patient that is not assigned to you yet and would like to see their recent findings, a **Declare a Relationship** pop-up window will appear. You may select the appropriate response based on your relationship with the patient (i.e. consulting provider).

The iAware features the following functionality:

- You can select to access individual patient that is in your **MyList**
- You can select to search patient
- You can select to review patient medications, vitals/infusions, I/O, and Blood Glucose
- You can personalize how you like to view the patient information

Note: The illustrations below will not be similar to the patient you are currently working on.

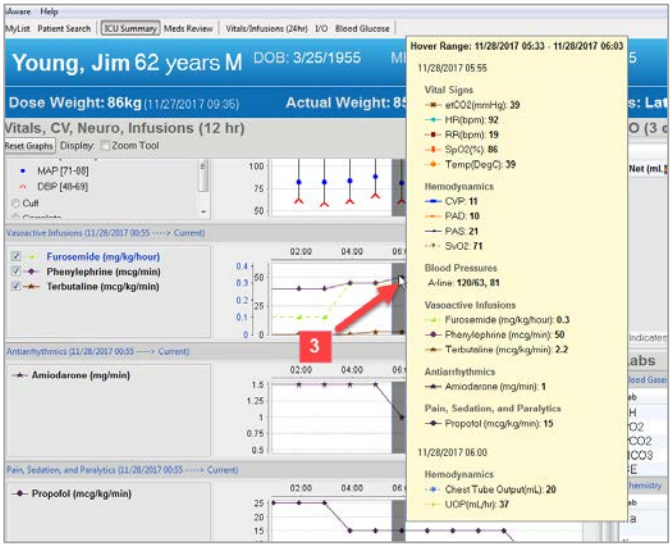
1 While you are currently in your patient's chart, click the **iAware** icon from the toolbar.



Note: The details of CareAware Critical Care functionality will not be discussed here but will be in separate reference guide.

2 A separate window appears and the view defaults in the **ICU Summary** screen.

3 By hovering over the actual time interval, detailed clinical information will be displayed.



Note: Besides being able to view patient's clinical data during shift report and handoff, CareAware Critical Care can also be applied in rounds for clinical decision-making and care planning.

Key Learning Points

- CareAware Critical Care provides critical patient information from multiple sources that helps providers and clinicians gain understanding of the patient's current condition. This helps providers and clinicians make clinical decision for treatment plan, etc.

ACTIVITY 2.5- Add an Individual Order and Modify an Existing Order

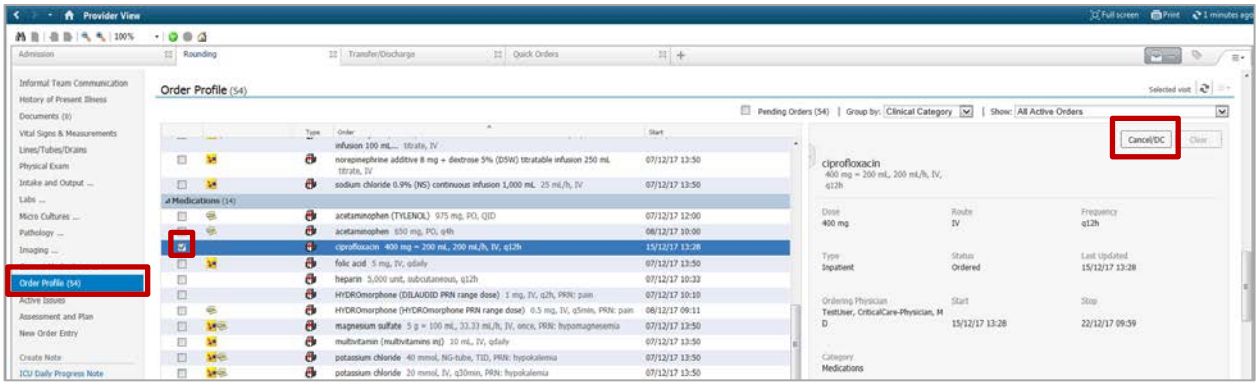
You have learned how to review and update your patient's information. One of the most important tasks is to manage orders and medications. This includes assessing, adjusting, and checking for duplicates and outdated orders. Your next step is to review the patient's current medications and orders and make necessary modifications.

In this activity, you will:

- Discontinue Ciprofloxacin
- Change Acetaminophen 650 mg PO QID to PRN
- Add piperacillin-tazobactam IV
- Add electrolytes panel, sputum culture and XR chest

When using Clinical Information System (CIS), there are recommended practices for manage medications better. When replacing a medication order with another or altering medication dosages, you should discontinue the current order and place a new one.

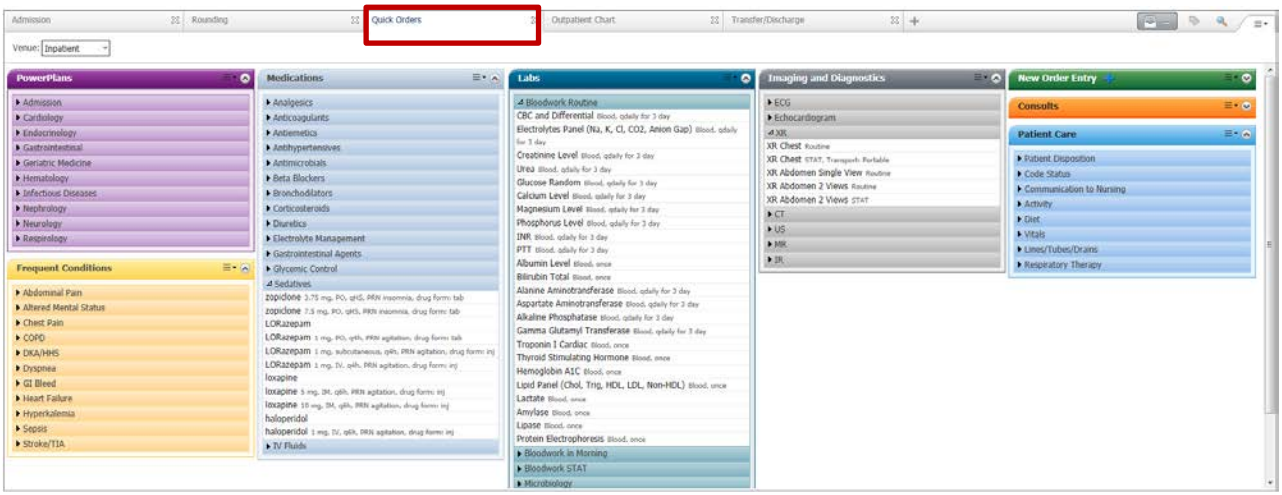
1 The first step is to stop the oral ciprofloxacin. In the Rounding tab, select **Order Profile** component and locate **ciprofloxacin** on the list. Select the check boxes next to these medications and click **Cancel/DC**.



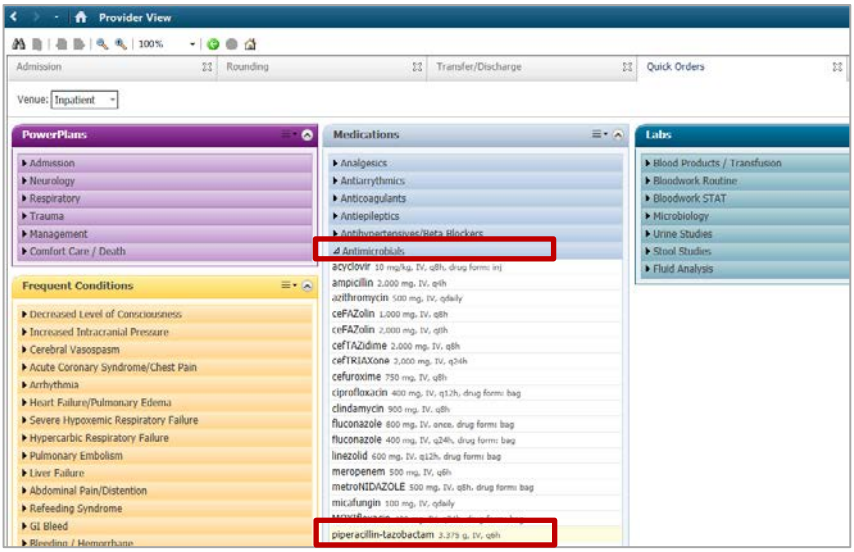
2 Now, do the same for **Acetaminophen (Tylenol) 650mg PO QID** and click **Cancel/DC.**

Note: The **Orders for Signature** icon is now green and displays the number of orders currently waiting to be reviewed and signed.

3 The third step is to place new orders. Go to your **Quick Orders** tab and select the new orders:



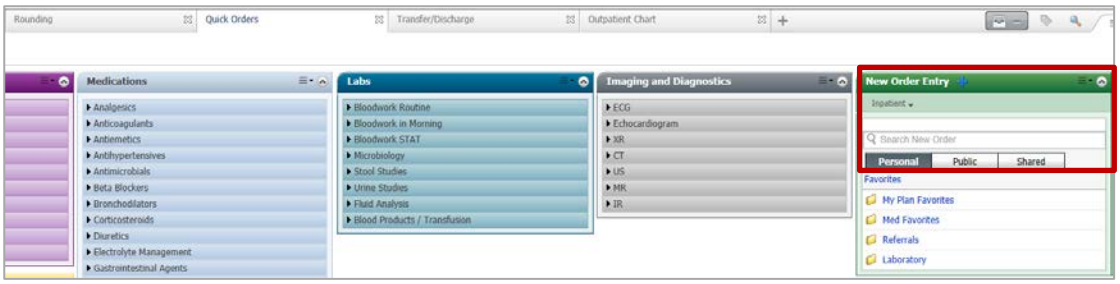
4 Expand the Antimicrobial group within the Medications column header. Select the **piperacillin-tazobactam 3.375 g IV q6h**.



5 Continue adding the following orders:

- **Electrolytes Panel** under Labs > Bloodwork Routine
- **Sputum Culture** under Labs > Microbiology
- **XR Chest** under Imaging and Diagnostics > XR
- **Acetaminophen** under Medications > Analgesics

Note: If you cannot locate an order under your folders, the **New Order Entry** component can be expanded.

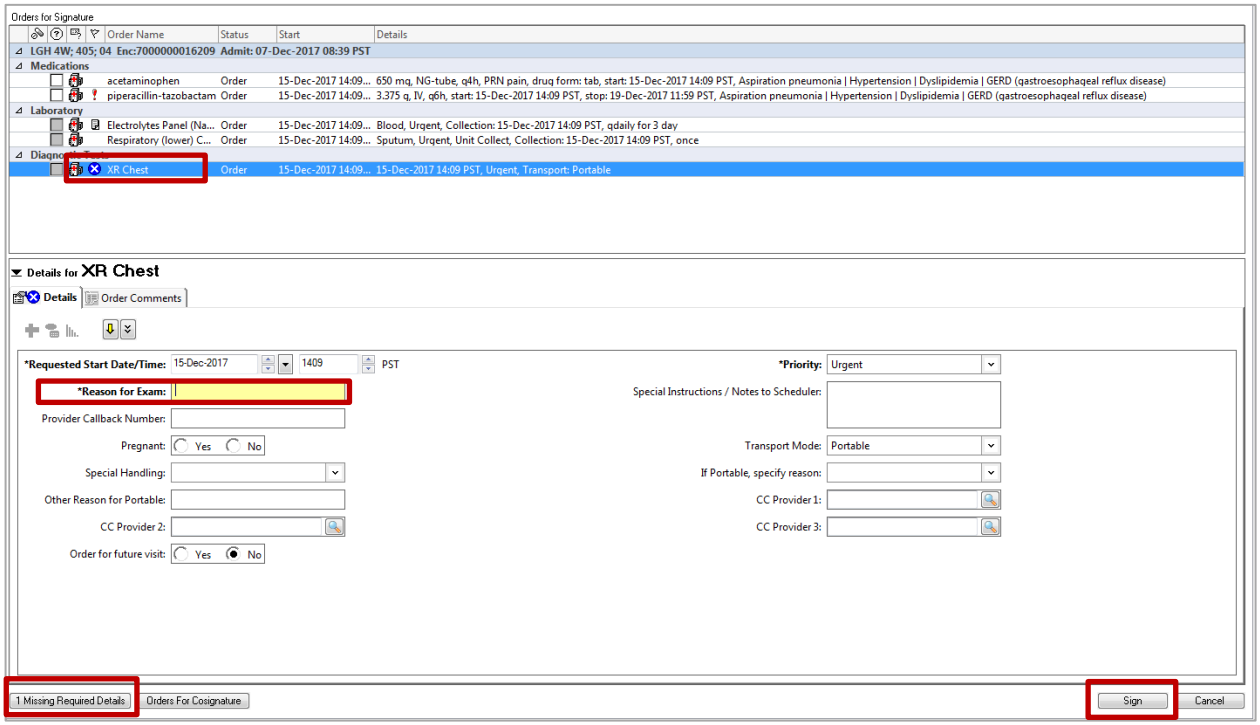


6 Once all the orders are selected, click **Orders for Signature**  icon.

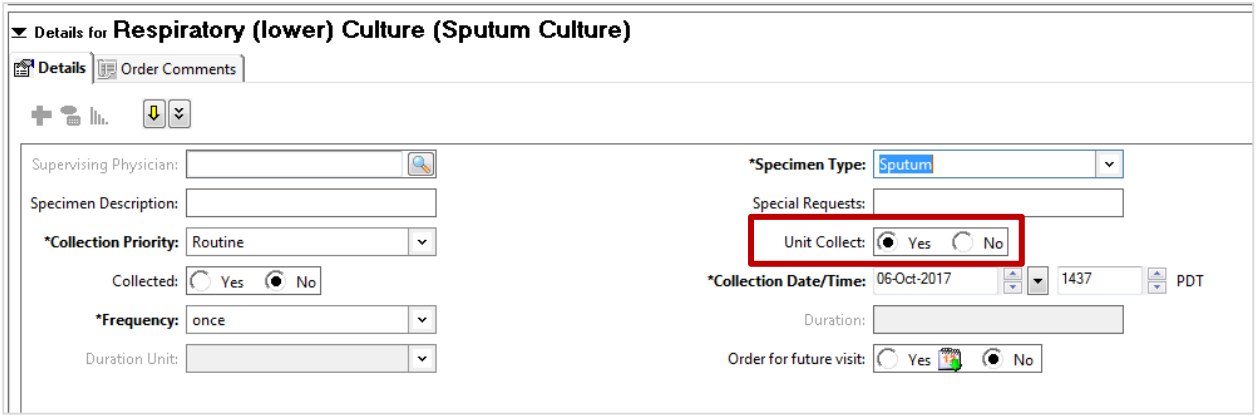
In the Orders for Signature box, click **Modify** to make adjustments to order sentences and/or complete mandatory fields.

Alternately you can click **Sign** and if there are missing required details you will be brought to the scratchpad to complete them.

7 You will be prompted to add missing order details that are required. In our example, you need to add the reason for the chest x-ray. Go ahead and type in the **Reason for Exam.**

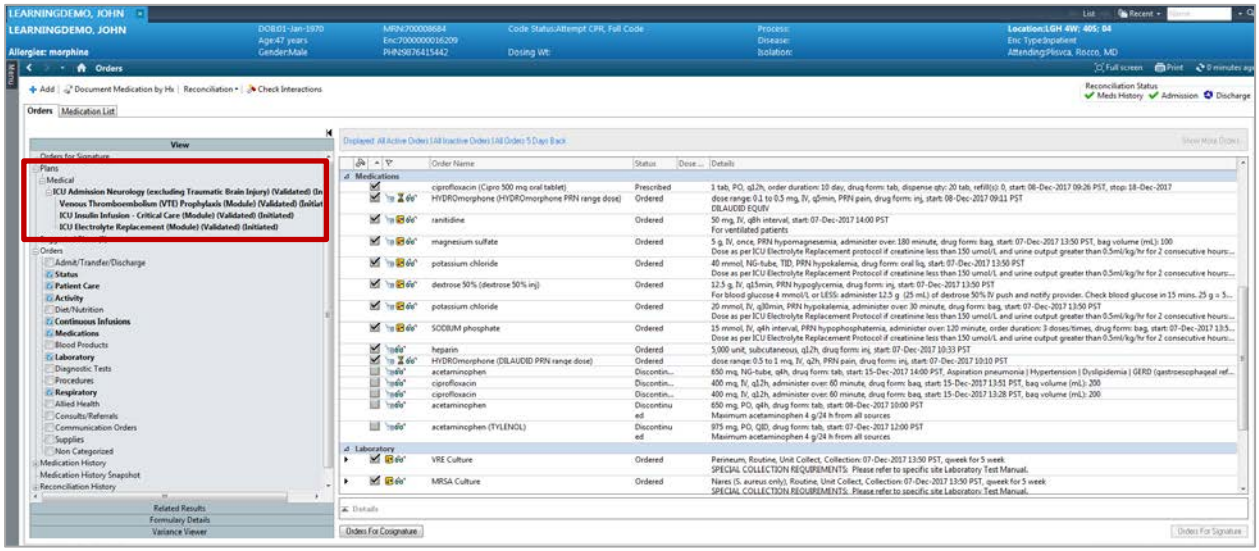


8 Next, display details for the sputum culture test. **Note:** For Unit Collect, **Yes** is preselected. This means that the unit collects the specimen and is responsible for printing the label and delivering the specimen to the lab. There is also an option to indicate if the specimen has already been collected.

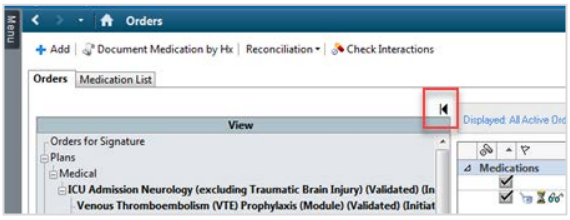


9 Click **Sign** when you have completed all necessary details and you will be returned to the **Quick Orders** page.

10 If you would like to review all orders for your patient, click the **Order Profile** heading within the **Rounding** tab. Here you can review PowerPlans that have been initiated and those in a planned status. Orders are organized into different categories.



11 Use the arrow to collapse or expand the Navigator View on the left side for more screen space.



Key Learning Points

- There are many ways to place a new order. Use the method that is the most convenient for your current situation.
- To replace a medication, start by discontinuing the existing order and then place a new one.

ACTIVITY 2.6- Update Active Issues

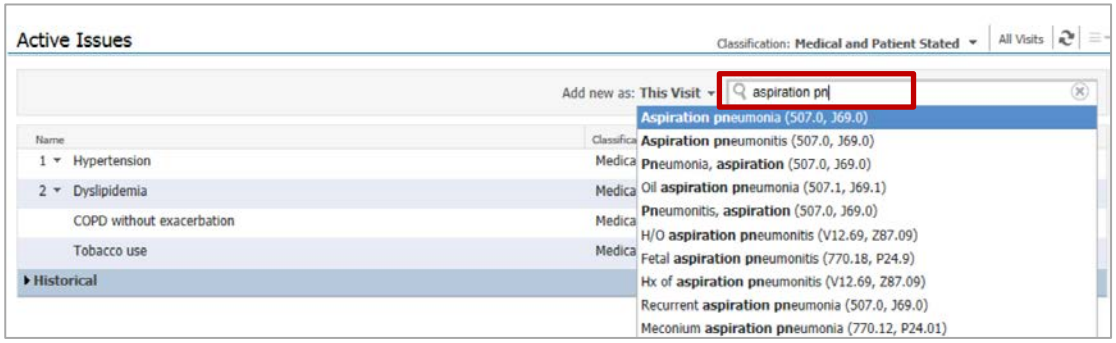
Active Issues is one of the components on the Rounding tab. Now, you will add aspiration pneumonia post fall incident to your first patient's active issues.

For each issue documented under the Active Issues component, you can select the following descriptor:

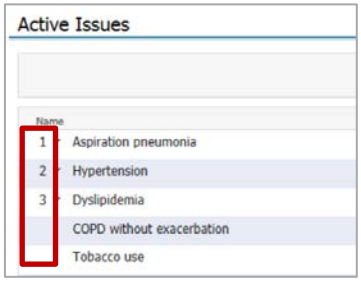
- **This Visit** - issue is a focus of the current encounter - it is not shared between encounters and not carried over to the next encounter.
- **Chronic** – issue is ongoing and can be active or resolved. Chronic problems are shared across encounters and carried over to the next encounter. Chronic issues will appear under Medical History.
- **This Visit and Chronic** – is both and is carried over to the next encounter. Note the difference when adding Diagnosis versus Problems. Diagnoses are for the current encounter (reason for visit) and problems are chronic issues (i.e. medical, social, or others).

The diagnoses and problems recorded here will carry over from visit to visit, which builds a comprehensive summary of the patient's health record. Keeping a patient's problems and diagnosis up-to-date is important.

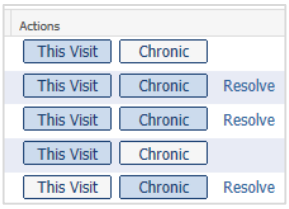
1 To add aspiration pneumonia to your patient's issues, select **This Visit** and begin typing *aspiration pn*.



2 You can also update problems as displayed in the workflow view:



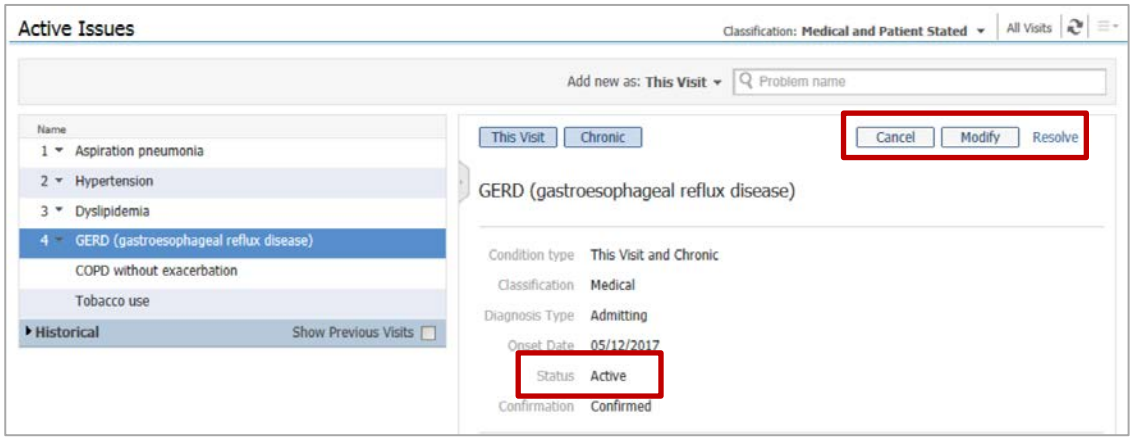
- This visit diagnoses are numbered as primary, secondary, tertiary, etc. You can easily rearrange this order by clicking the digit and selecting a different number.



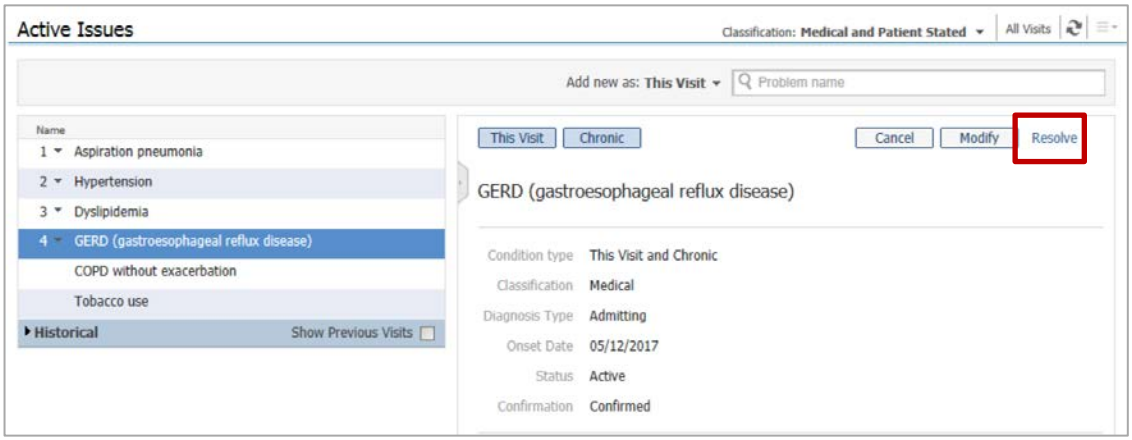
- You can change any diagnosis from this visit to a chronic problem or both by clicking the appropriate buttons.
- You can also click **Resolve** to move a problem to the Historical section.

3 Click the active issue to display more details. Without leaving this view, you can:

- **Cancel** this problem
- Type **Comments**
- Change the **Status**



4 For your practice, resolve GERD active issue. Remember to click the tab to collapse and remove the split screen.



5 To modify details, select the line and click **Modify** button.

For your practice:

- Add *lower back pain* as an active issue and change it to a chronic problem.
- Add *obesity* as chronic problem and resolve it.

Key Learning Points

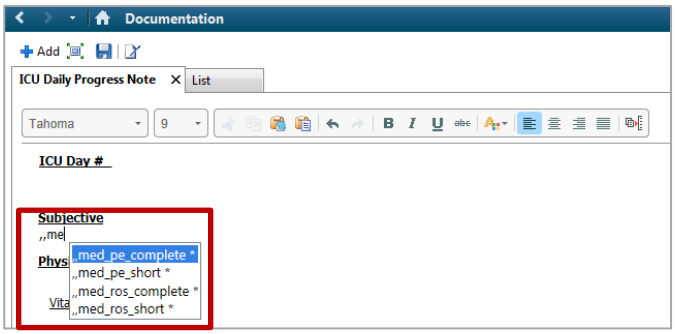
- Use Active Issues to manage problems and diagnosis for patient's current visit
- This Visit refers to diagnosis or problems for this current hospitalization. Chronic refers to past medical history that may be active during this hospitalization or may have already resolved prior to admission.

ACTIVITY 2.7- Create a Progress Note and Use Auto Text Entry

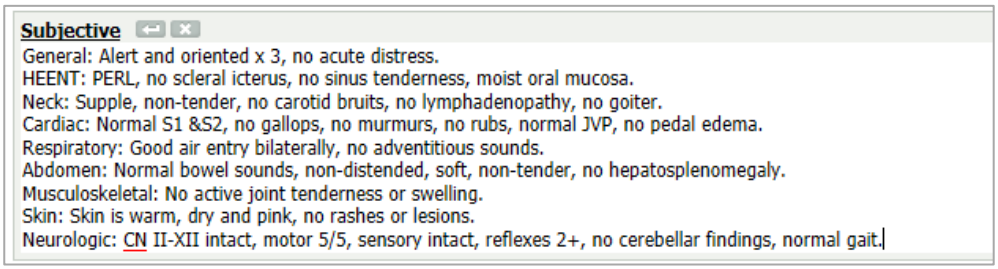
Similar to the Admission tab, the Rounding tab also provides one click access to the most relevant note type. You already know how to remove sections or edit text. Now let's learn how to avoid entering repetitive information by using the auto text feature.

1 From the list under Create Note, select **ICU Daily Progress Note** which will pull existing relevant information.

2 To activate a free text box under the **Objective** heading, type ***,,med***. A list of auto text entries starting with "comma comma med" are displayed. Double-click on ***,,med_pe_complete**.



3 The programmed auto text entry populates in the box. Edit this text to complete your note.



Auto text entries are shared across the organization helping to adhere to agreed standards. You can also create your own auto text entries. You will learn how to create auto text entries in a more personalized learning session.

Click **Sign/Submit.**

Key Learning Points

- Use auto text entries for commonly entered information
- Auto text entries shared between all providers help to maintain standards when documenting patient's care

ACTIVITY 2.8- Create a Procedure Note

While you are still in the Rounding tab, you need to document the procedure that you performed on this patient (i.e. insertion of CVC). It will be the same steps as Activity 2.6 except you select procedure note.

Note: When you click on **Select Other Note,** ensure to choose within the **Note Templates** in order for the correct document template to populate.

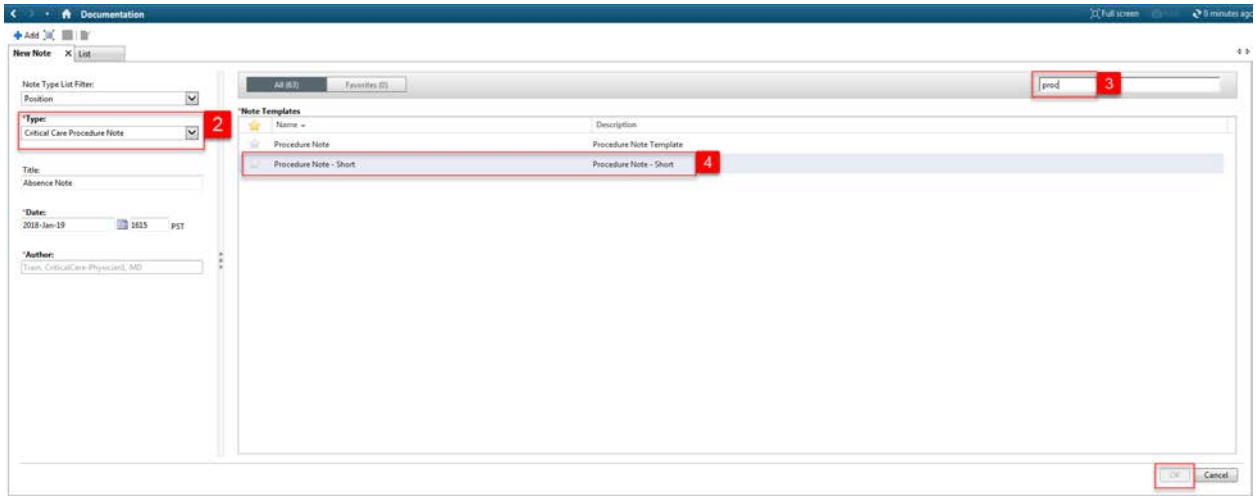
1 From the workflow component list under Create Note, click on **Select Other Note.**

2 In the mandatory **Type** field, click on the drop-down icon and select **Critical Care Procedure Note.**

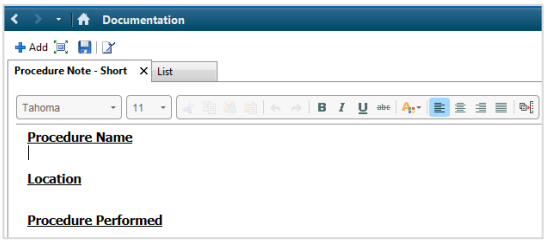
3 In the **Search** field, type in **Proc** and it displays a list of notes under **Note Templates.**

Note: You can also scroll down to see what available templates are listed in the **Note Templates.**

4 Select **Procedure Note Short**.

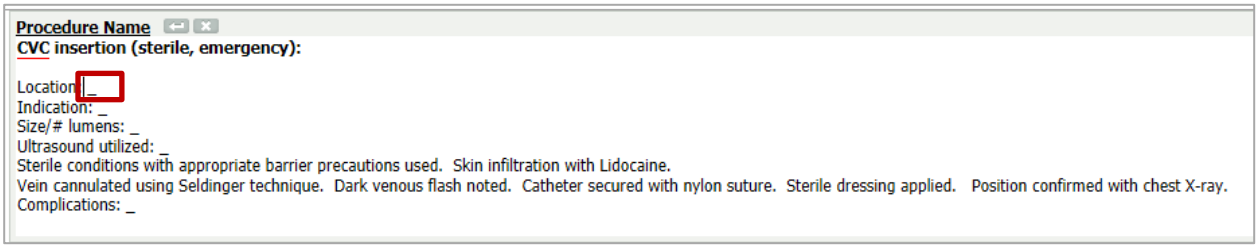


Click **OK**. This will take you to the actual template.



5 To activate a free text box under the **Procedure Name** heading,, type ***,,cc***. A list of auto text entries starting with "comma comma cc" are displayed. Double-click on ***,,cc_cvc_insertion_sterile****.

6 For your practice, click **F3** on your keyboard. This will take your cursor to the very first underscore data entry. In this example, it will be **Location.** Press F3 again and this will take you to the next data entry.



For practice, type in a sentence in this document.

Click **Sign/Submit** once your documentation is complete.

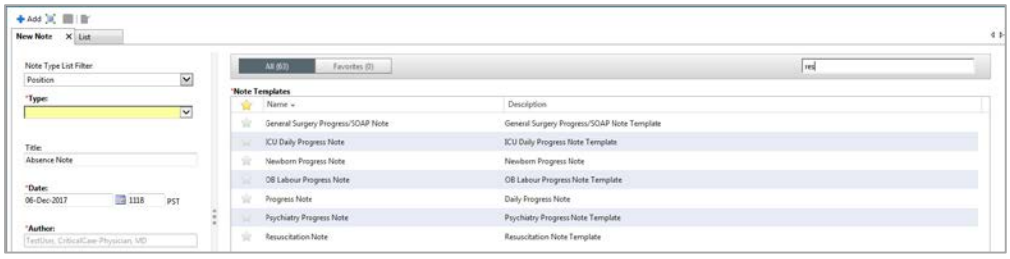
ACTIVITY 2.9- Code Blue

In the event of a code blue, as a critical care provider, you have access to the Code Blue orders under the Quick Orders tab. Depending on the code blue situation, you can immediately enter the Code Blue orders at the time of the event. However, if entering orders at the time of the code blue event is not feasible, verbal orders may be given to the clinical staff involved in the direct patient care.

At the end of the code blue event, you will back enter orders as soon as possible as the patient's condition permits. For example, all continuous IV infusion, all adverse drug and intervention reactions during code, and ongoing medication orders, etc. Further examples are shown in the diagram below. Note that code blue medications that were administered only at the time of event (i.e. epinephrine) may not require you to back enter those orders.

Recommended data elements that should be back entered	Recommended Role responsible for entering data	When
All continuous infusion rates such as NS, D5W, Levophed, Insulin, Heparin entered into I&O	Clinicians	Back entry of data elements would occur as soon as possible as the patient's condition permits. Infusion informatio nwould be documented on the eMAR and in the IV drips section of iView
All Point of Care test results such as capilliary blood glucose, ABGs, electrolytes	Clinicians	Back entry of data elements not required if patient death occurs during the Code Blue. All POC enteries would be documented on the appropriate POC DTA in iView.
All Intake and output – NG losses, fluid boluses, urine output, emesis	Clinicians	Back entry of data elements would occur as soon as possible as the patient's condition permits.
All Adverse drug and intervention reactions during code	Shared by Provider and Clinicians	Back entry of data elements would occur as soon as possible as the patient's condition permits.
Orders – lab tests and ongoing medication orders (i.e. vasoactives, antibiotics, etc.)	Providers	Back entry of data elements would occur as soon as possible as the patient's condition permits.

The hard copy Code Blue record will be the source of truth which will be placed in the patient's chart-let. It is recommended that the time of the Code Blue event be a "flag" in iView with a comment of "Code Blue event see Code Blue Record" by the nursing staff. In addition to this flag, you, as a critical care provider, need to document the summary of the event in the **Resuscitation Note**. It is the same steps as **Activity 2.7**.



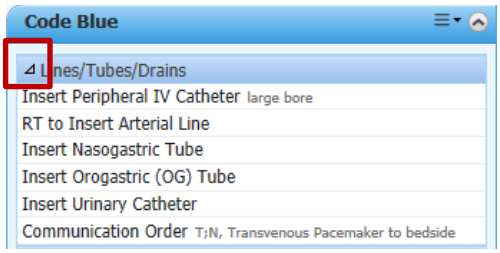
Note: For further details on back entry orders, refer to your hospital's policy and procedures.

In this activity, you will review the Code Blue component and look at each section to see what is available. At this point, you already have experienced entering orders under the Quick Orders tab. It will be the same steps when ordering Code Blue orders. Let's go ahead and practice.

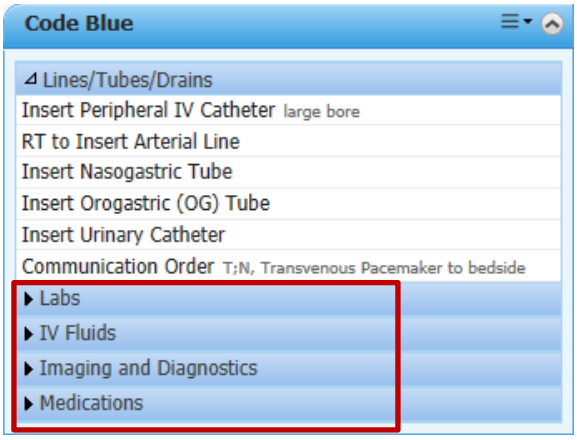
1 Click **Quick Orders** tab and select the **Code Blue** component.

2

Click the expand icon ▶ to display the list under **Lines/Tubes/Drains.** To hide the list, simply click the same expand icon ⊿.



For more practice, click on all the remaining sections listed below:



3 Assuming that the code blue event is completed, you can now back enter orders for the following:

- Sodium chloride 0.9% (NS) continuous infusion
- Amiodarone Continuous Infusion (Module)

4 Once all the orders are selected, click **Orders for Signature** icon.

In the Orders for Signature box, click **Modify** to make adjustments to order sentences and/or complete mandatory fields.

Alternately you can click **Sign** and if there are missing required details you will be brought to the scratchpad to complete them.

5 Go ahead and add information in the missing order details for Amiodarone similar to what you did in *Activity 1.6 – Adding to Phase*.

Once completed, click **Sign.**

Note: When the nurse sees the above orders in the patient's chart, he/she will acknowledge the medication orders by indicating the time it was administered, not the time it was ordered.

Key Learning Points

- In the event of a code blue, as a critical care provider, you have access to Code Blue Quick Orders
- Where entry of orders is not possible during a code blue event, orders should be back entered as soon as possible.
- A resuscitation note also needs to be completed post a code blue event

PATIENT SCENARIO 3- Transferring a Patient Within Internal Site

Learning Objectives

At the end of this Scenario, you will be able to:

- Complete patient transfer related tasks in the Clinical Information System

SCENARIO

Your patient has been in the ICU for several days now and has shown improvements. He remains hemodynamically stable and is more alert and awake. The receiving provider has accepted the patient upon your request for transfer back to the Medicine unit.

Transfer scenarios are difficult to recreate in a training situation as both internal and external transfers involve many health care professionals. Keeping this limitation in mind, you will complete the following activities:

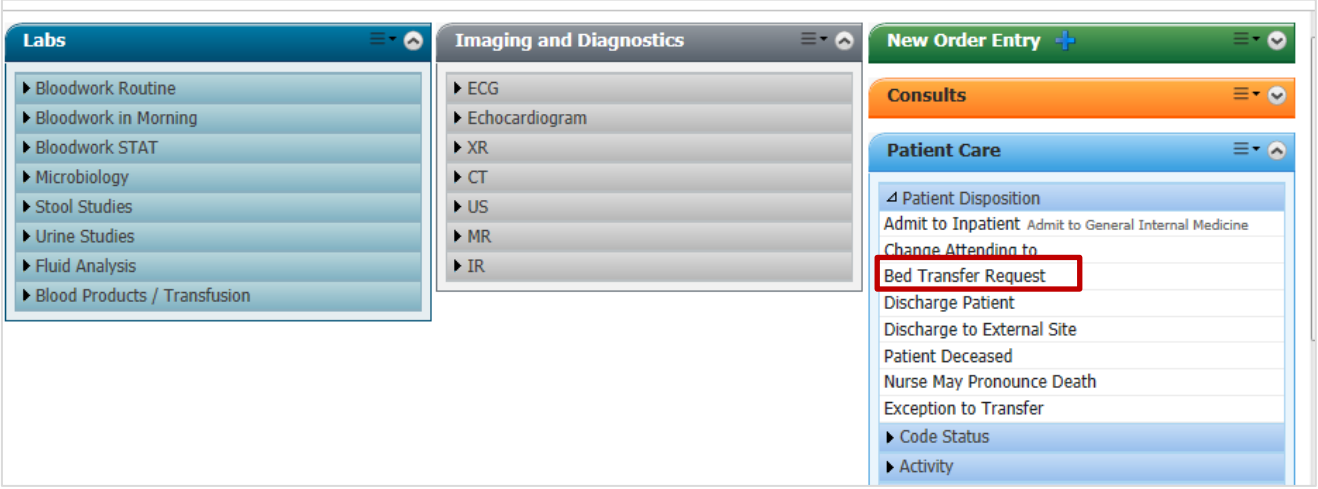
- Initiate a transfer from ICU to inpatient and place a **Bed Transfer Request** order.
- Reconcile medication and non-medication orders at transfer of care.

ACTIVITY 3.1- Initiate Transfer from ICU to Inpatient Within Internal Site

Once the decision to transfer a patient is made by the provider, communication takes place outside of the Clinical Information System (CIS) to ensure proper transfer of responsibilities. It is important that the sending physician still discusses all aspects of care and shares any concerns with the receiving physician.

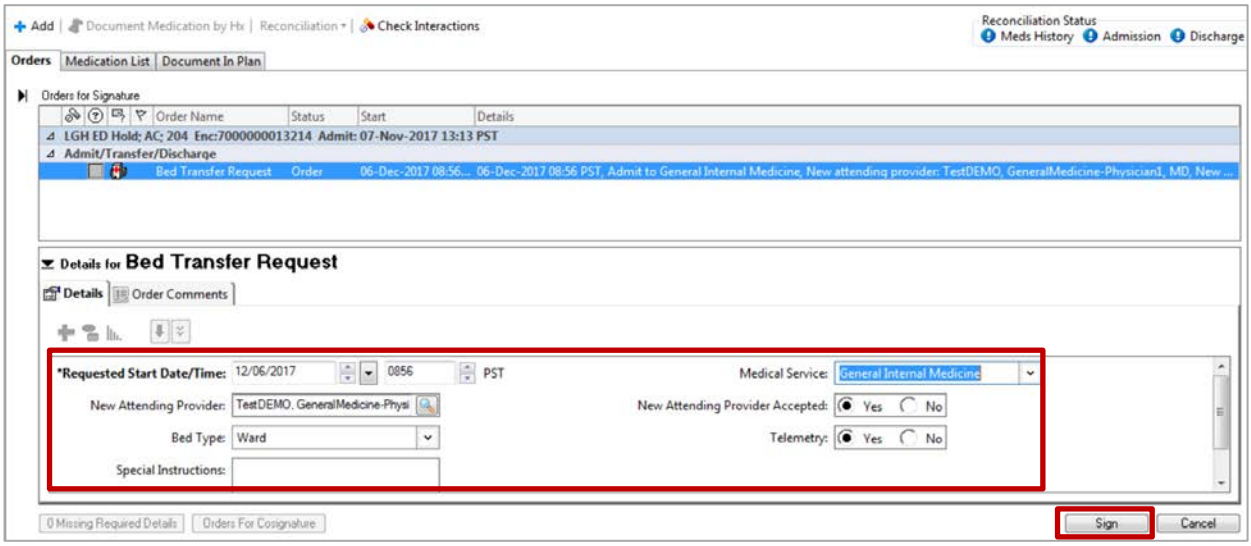
You notify the ICU charge nurse of the plan to transfer patient out of ICU to Medicine Unit. Note that this is a shared responsibility between you and other clinicians who have the ability to initiate a **Bed Transfer Request** order.

1 Place the Bed Transfer Order from the **Quick Orders** tab **> Patient Disposition** folder.



2 In the **Orders for Signature** window, click **Modify** to add details that you think are necessary:

- Name of the new attending provider
- Bed type
- Medical Service
- If patient has been accepted by the new provider



Click **Sign** to complete the process.

Key Learning Points

- The **Bed Transfer Request** order initiates the process of searching for a bed. It also allows for identifying new medical service and transferring responsibility of care.
- Verbal communication between units is critical.

ACTIVITY 3.2- Reconcile Medication and Non-Medication Orders at Transfer of Care Within the Site

When transferring a patient to an acute inpatient area within the site, all current medications and orders must be reconciled.

The transfer medication reconciliation is similar to the admission reconciliation; however, it also includes **non-medication orders**. In the Clinical Information System (CIS), this task may be performed as many times as necessary, including whenever the patient is transferred.

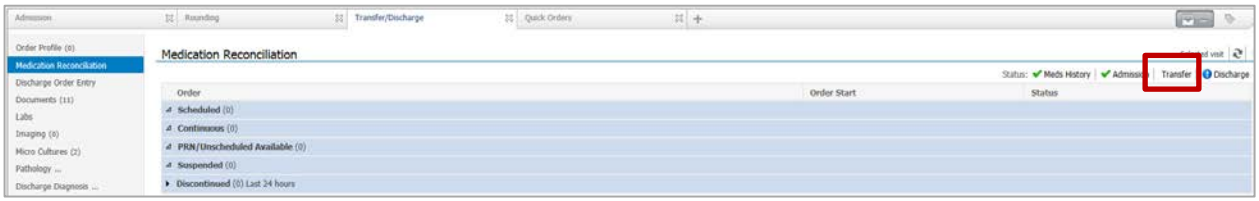
The critical care provider is the one responsible for planning transfer medication reconciliation when the patient is being transferred out of the critical care area. The receiving provider will review and sign it to initiate orders once the patient has arrived to their new unit/patient care area.

When your first patient is being transferred back to the Medicine Unit, the Critical Care provider plans the transfer reconciliation.

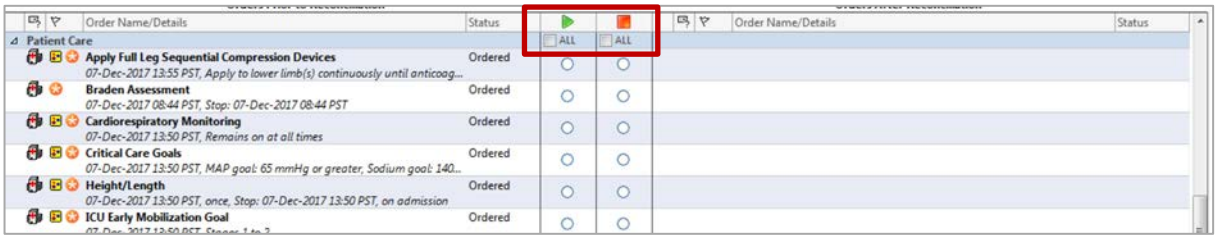
The transfer reconciliation displays all orders, not only medication orders. On transfer within the hospital, you can continue orders that are already in place. This allows for safe and effective transfer of care. It works the same way as admission and discharge reconciliation.

1 In the **Transfer/Discharge** tab, locate the **Medication Reconciliation** component.

Click **Transfer**.



Note: You must reconcile every order and ensure to select which orders you want to continue or discontinue. Some group of orders will have an **All** button option; you may choose this if it is appropriate for patient care.



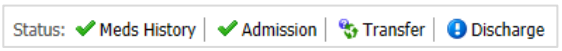
For your practice, continue all home and active medication orders by clicking the radio buttons in the Continue (Green Arrow) column.

Select the Do Not Continue (Red Box) radio buttons for all non-medication orders by using the ALL checkboxes at the top of each group of non-medication orders.

Note: Until you reconcile all orders, the **Sign** as well as **Plan** button will remain inactive. When the provider chooses **Plan**, his or her decisions remain saved in the Transfer Reconciliation window but orders and order changes will not be activated. Patient care is continued per current state orders until the transfer reconciliation is signed.

2 For our scenario, click **Plan**.

The status of planned transfer reconciliation is **partial pending** indicated by icon.



The receiving provider reviews orders and makes decisions to continue, discontinue, or add orders. The receiving provider will Sign once the orders have been reviewed. Sometimes it might be appropriate to stop all current orders and place new ones.

Key Learning Points

- The receiving provider is responsible for the review and signature of the transfer medication and non-medication reconciliation upon receipt of the patient.
- When a patient is transferred out of the ICU, the intensive care provider makes decisions about current orders and leaves the reconciliation in planned status so the current orders continue until the receiving provider signs off.

PATIENT SCENARIO 4- Discharging a Patient

Learning Objectives

At the end of this Scenario, you will be able to:

- Complete discharge steps, reconcile orders and medications.
- Update discharge diagnosis.
- Complete discharge documentation.

SCENARIO

This activity may not be relevant to your current critical care setting. However, if you are covering at other areas within the hospital where you do get to discharge a patient home, you have this tool to guide you on how to do so.

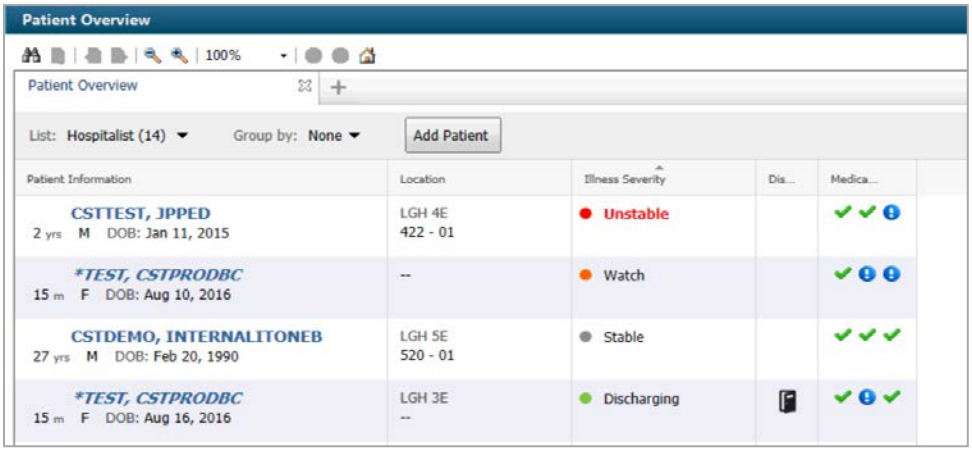
In this activity, you will complete the necessary steps and following activities for patient discharge:

- Review orders
- Reconcile medications at discharge and create prescriptions
- Place a 'Discharge Patient' order and future order
- Update discharge diagnoses
- Discharge patient to external site
- Complete discharge documentation

ACTIVITY 4.1- Review Orders

You can use Patient Overview to communicate with other providers about the patient's status. Although it does not create any action items, it serves as a communication tool during patient handoff. It provides a snapshot of patient's status and also helps you manage your work:

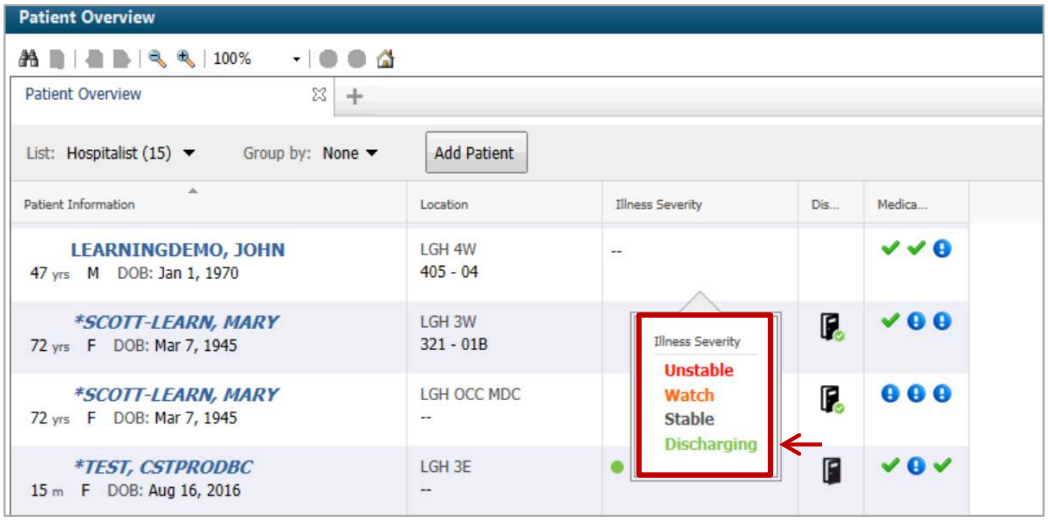
- You can see where the patient is located: unit / room / and bed number
- You can make a note of patient's illness severity
- You can see the discharge status
- You can track medication reconciliation completion



You can select a patient list and click a column heading such as Location to display all patients in the same unit together. Clicking Patient Information will place names in alphabetical order.

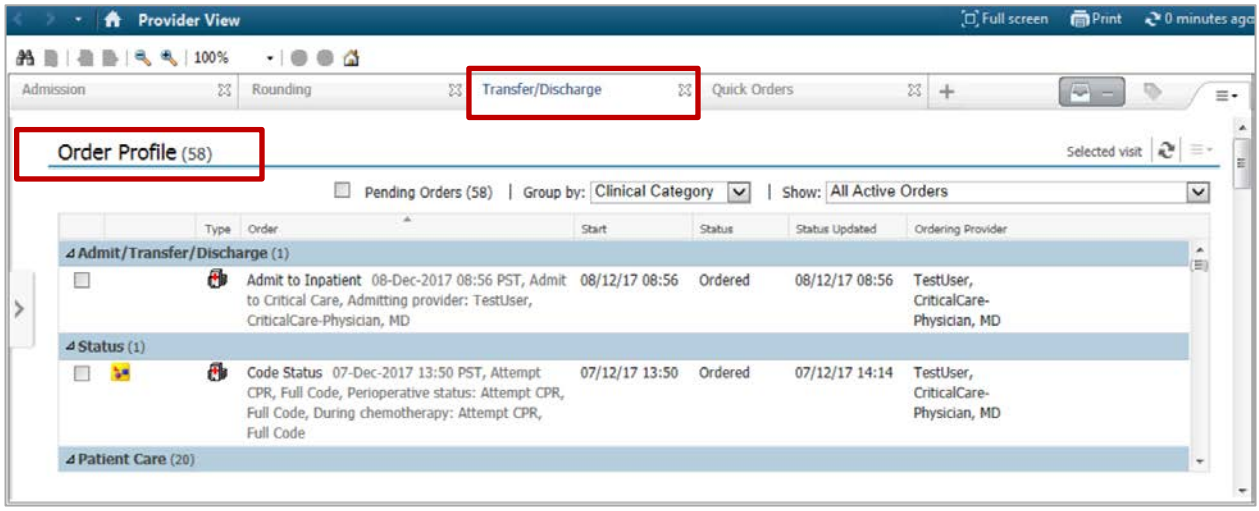
Patient Overview also displays a snapshot of patient status under the **Illness Severity** column. You can easily add or change your patient status by clicking the corresponding space under this column and selecting one of the options from the list. You can click the column heading to sort all patients.

1 To begin the process of discharging the patient, locate your second patient from the Attending Provider list under Patient Overview and mark the illness severity as discharging. Then open the patient's chart by selecting the patient name.

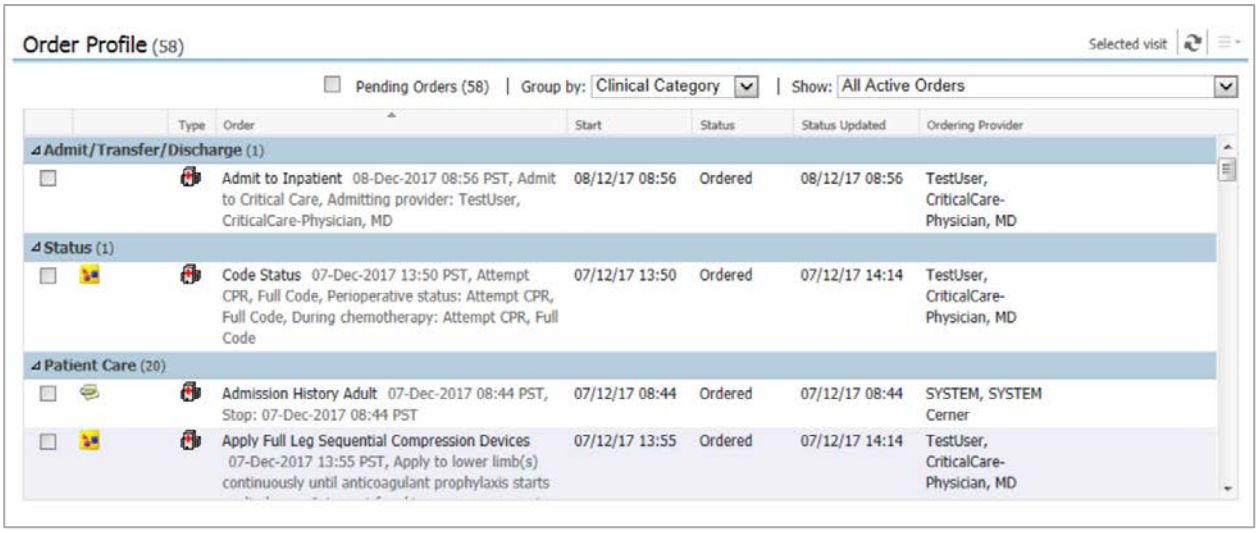


Note: The screenshot may not be similar as your current screen.

2 In the **Discharge/Transfer** tab, navigate to the **Order Profile** component.



3 Review patient's orders to be aware of any outstanding lab or imaging orders.
Visual cues provide additional information.



Note: No manual action is required to stop orders at discharge. When a patient physically leaves the unit and is discharged from the system by the unit clerk or nurse, their encounter becomes closed. This will automatically discontinue their orders. Any orders to be completed in the future or orders with pending results that you have placed prior to discharge will remain active.

Key Learning Points

- Outstanding orders are automatically discontinued after discharge except for future orders and orders with pending results

ACTIVITY 4.2- Reconcile Medications at Discharge and Create Prescriptions

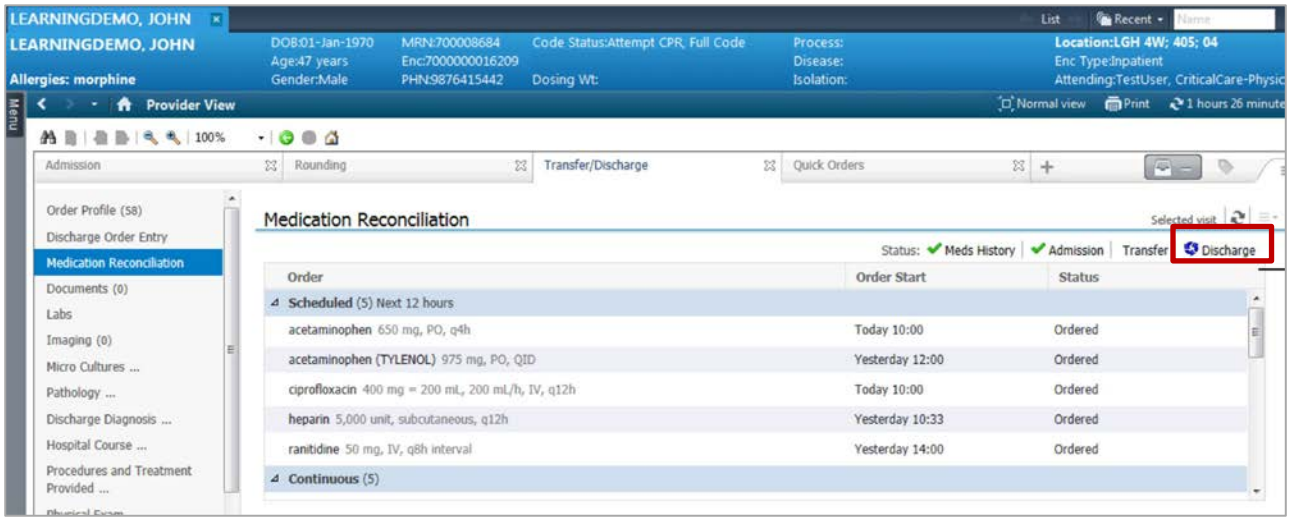
Now that you have reviewed the current orders, you are ready to complete your discharge medication reconciliation. The list of medications to reconcile includes:

- **Home Medications** - medications that the patient was taking at home prior to admission. These medications were documented with BPMH but were not continued during the hospital visit.
- **Continued Home Medications**- medications the patient was taking at home prior to admission and continued during this admission. Note that this section clearly highlights which medications were substituted by an equivalent hospital formulary medication. Substitutions are marked by icon. The home medication and the substituted medication will appear together in the medication list. In this case the home medication, lisinopril, is listed above the substituted medication, trandolapril.
- **Medications** - new medications that the patient started during this inpatient stay.
- **Continuous Infusions** -inpatient fluids and medications that were given by continuous infusion. (Note: These cannot be continued in the Discharge Medication Reconciliation tool).

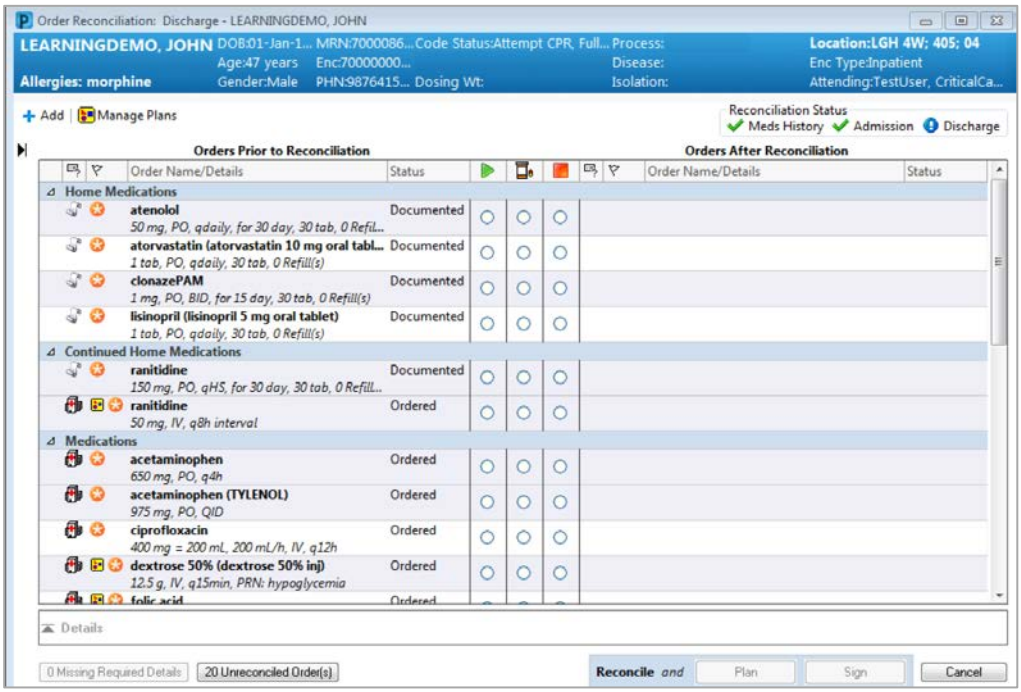
You will determine which home medications and inpatient medications your patient should continue after discharge. Continued medications will be carried forward and available as documented home medications within the patient's medication history. This will be viewable at the patient's next visit.

You can also create a prescription for the existing or new medications directly in the reconciliation screen.

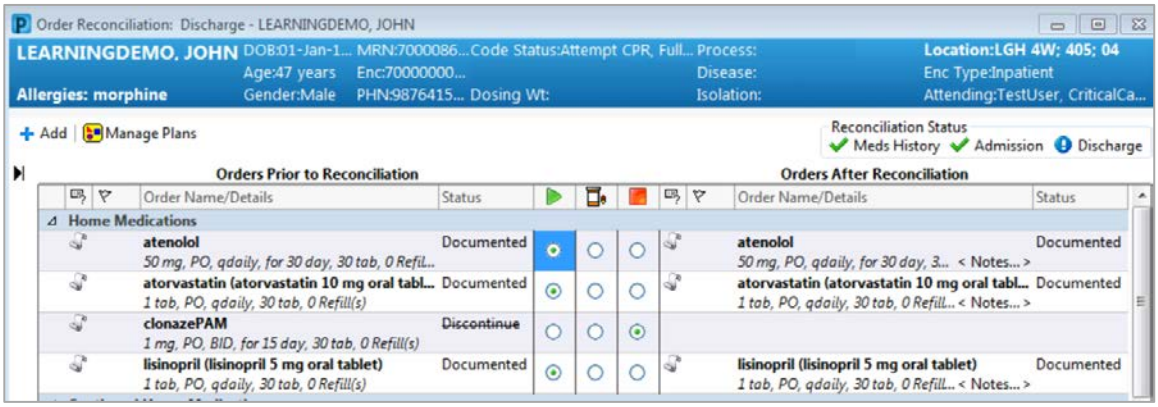
1 Navigate to the **Medication Reconciliation** component and click **Discharge**.



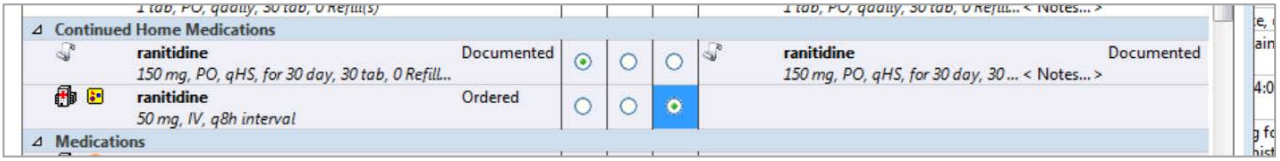
2 The reconciliation window displays the current status of medications.



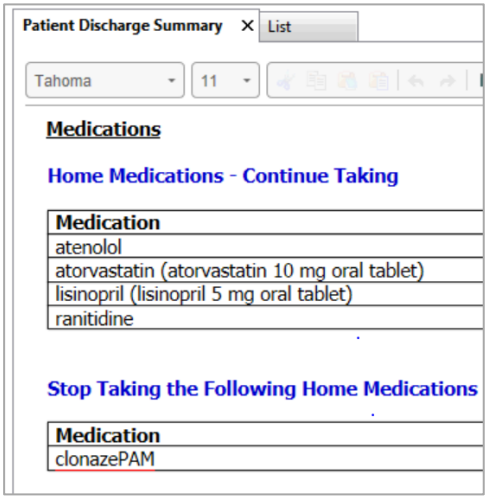
3 For **Home Medications** that have been stopped while in hospital, select which ones the patient should stop taking permanently and which ones the patient should return to taking at home.



4 For **Continued Home Medications**– continue all of the patient's documented home versions of the medications listed below and discontinue inpatient versions of the same medications including trandalopril which was a substitution.

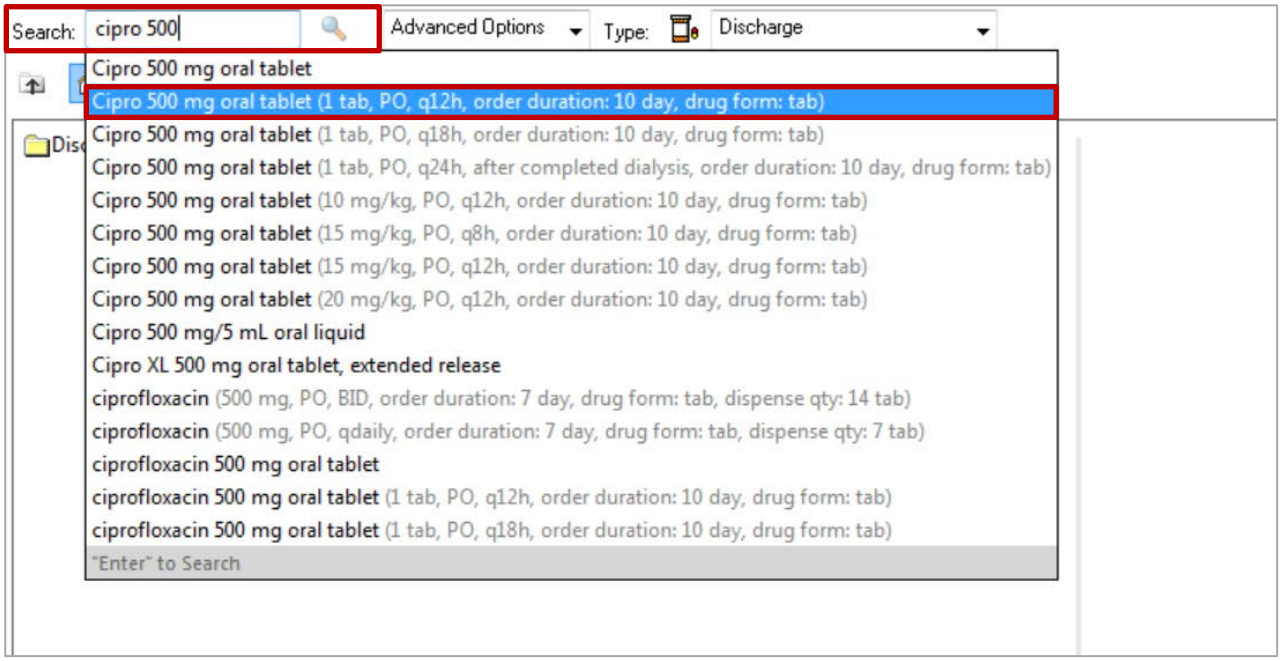


Note: The patient discharge summary clearly identifies which home medications are continued and which must be stopped.



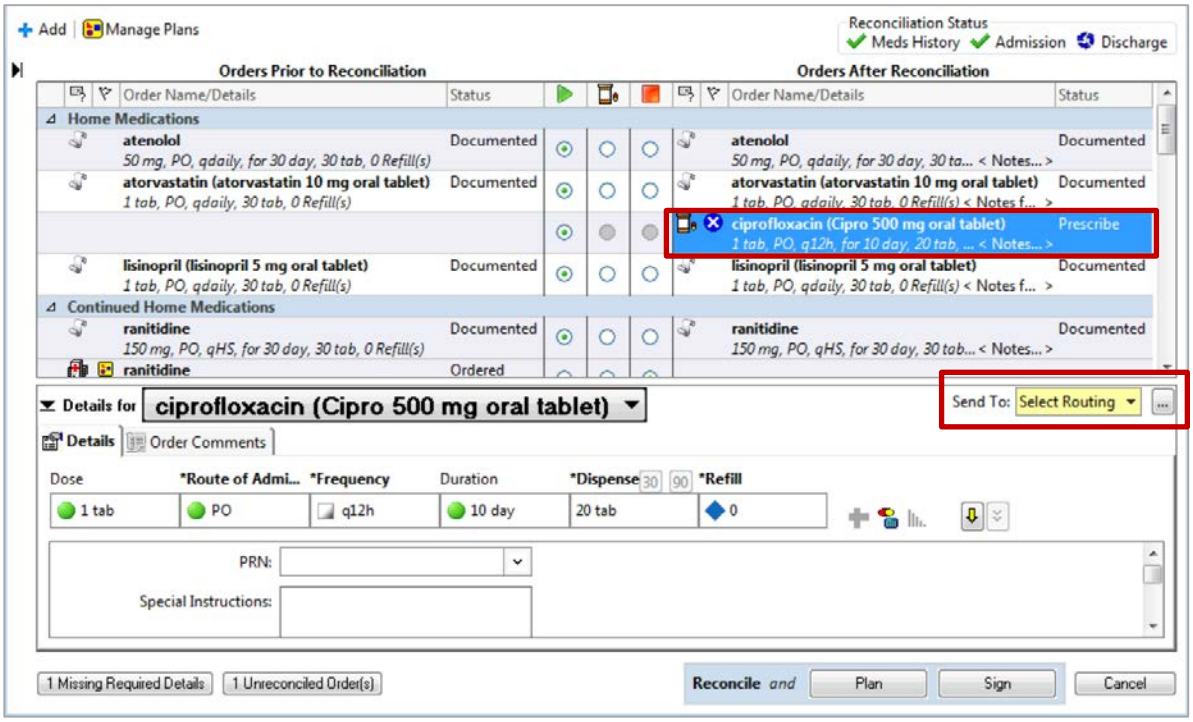
5 Discontinue all inpatient medications.

6 Next, you will create a prescription for oral Cipro. Click the + Add icon to add ciprofloxacin once daily. Search for Cipro and select Cipro 500mg oral tablet, 1 tablet, PO, q12h, 10 day.



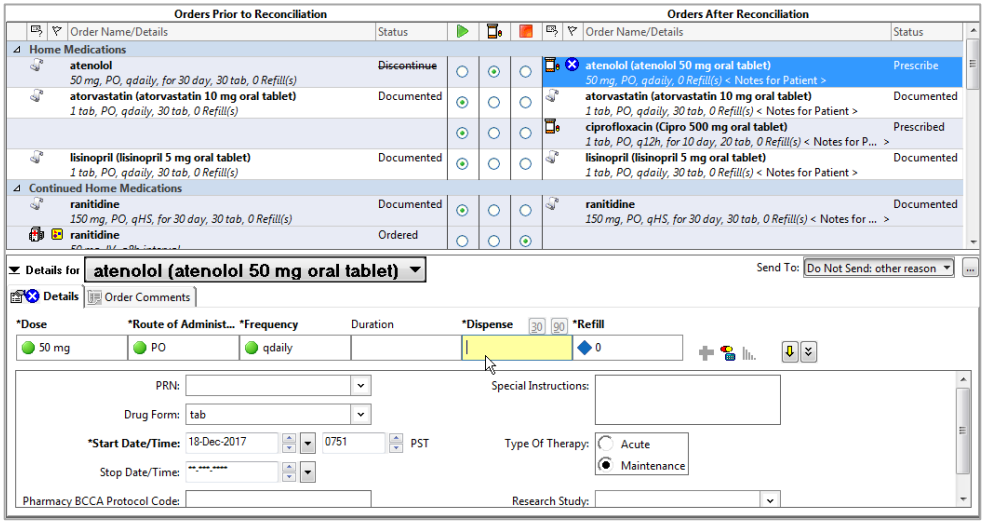
Select **Done**

7 The Cipro prescription details appear. Complete any yellow, required fields.



Select the *Send To* drop-down. For training purposes, select Do Not Send: Other Reason.
Note: printer selection is identified in this drop-down

8 As you are finalizing your review you remember the patient indicated they were almost out of their Atenolol at home and have asked for a new prescription for it.



Click on the radio button in the  prescription column beside the Atenolol and complete the missing required field(s).

9 All medications must be reconciled to successfully complete the discharge medication reconciliation process.

Once all medications are reconciled, click **Sign** to complete discharge reconciliation. The presciption prints automatically.

Here's an example of a prescription:

PRESCRIPTION

Vancouver Coastal Health
Promoting wellness. Ensuring care.

Lions Gate Hospital
231 E. 15th Street
North Vancouver, BC V7L 2L7

Patient Name: **LEARNINGDEMO, JOHN**

DOB: 1970-JAN-01 Age: 47 years Weight: Sex: Male PHN: 9876415442

Allergies: **morphine**

Allergy list may be incomplete. Please review with patient or caregiver.

[ ] Blister Packaging _____- week cards; dispense_____cards at a time; Repeat_____

[ ] Non-Safety vials [ ] Other _____

Faxed to Community Pharmacy: _____ Fax: _____

Faxed to Family Physician: _____ Fax: _____

If you received this fax in error, please contact the prescriber

Patient Address: 590 W. 8th Avenue, Vancouver, British Columbia Canada

Home Phone: (778) 999-9999
Work Phone:

Any narcotic medications need a duplicate prescription form to be completed
Over the counter medications can be filled on PharmaNet at patient's discretion

Prescription Details: Date Issued: 2017-DEC-18

atenolol 50 mg oral tablet
SIG: **50 mg PO qdaily**
Dispense/Supply: **30 tab**

Cipro 500 mg oral tablet
SIG: **1 tab PO q12h for 10 day**
Dispense/Supply: **20 tab**

_____
Prescriber's Signature
TestPET, CriticalCare-Physician, MD
Prescriber's College Number: TEMP000282
Prescriber's Phone: (604) 001-0282

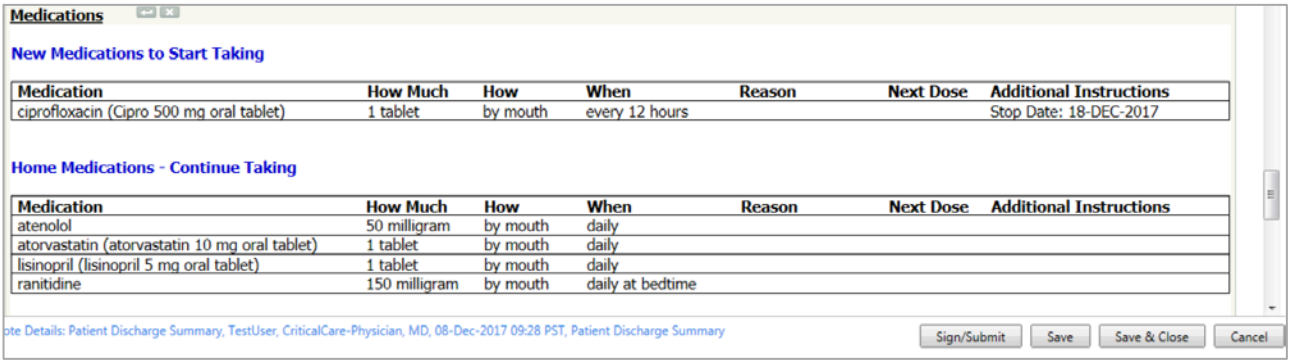
bc_rx_procs

This record contains confidential information which must be protected. Any unauthorized use or disclosure is strictly prohibited.

Page: 1 of 1

Note: Narcotics prescriptions will continue to be written manually on the secure triplicate paper prescriptions.

A medication summary will be included in the Patient Discharge Summary as well as in the Discharge Summary.



Medications

New Medications to Start Taking

Medication	How Much	How	When	Reason	Next Dose	Additional Instructions
ciprofloxacin (Cipro 500 mg oral tablet)	1 tablet	by mouth	every 12 hours			Stop Date: 18-DEC-2017

Home Medications - Continue Taking

Medication	How Much	How	When	Reason	Next Dose	Additional Instructions
atenolol	50 milligram	by mouth	daily			
atorvastatin (atorvastatin 10 mg oral tablet)	1 tablet	by mouth	daily			
lisinopril (lisinopril 5 mg oral tablet)	1 tablet	by mouth	daily			
ranitidine	150 milligram	by mouth	daily at bedtime			

ote Details: Patient Discharge Summary, TestUser, CriticalCare-Physician, MD, 08-Dec-2017 09:28 PST, Patient Discharge Summary

Sign/Submit | Save | Save & Close | Cancel

Key Learning Points

- Medication Reconciliation on discharge includes both home and hospital medications
- Both home and inpatient medications can be converted into prescriptions during the discharge reconciliation process
- Discontinued medications become historically documented on the chart
- Continued medications and prescriptions will be captured in the patient's documented medication history and carried forward to the next visit
- Discharge medication information is included in notes provided to the patient and patient's lifetime providers on record

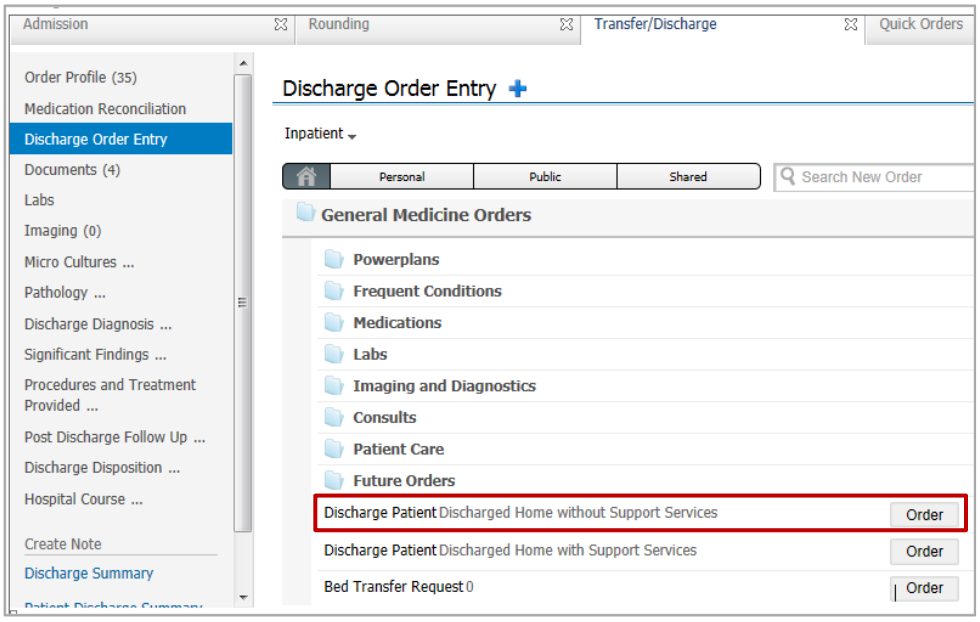
ACTIVITY 4.3- Place a Discharge Order and Future Order

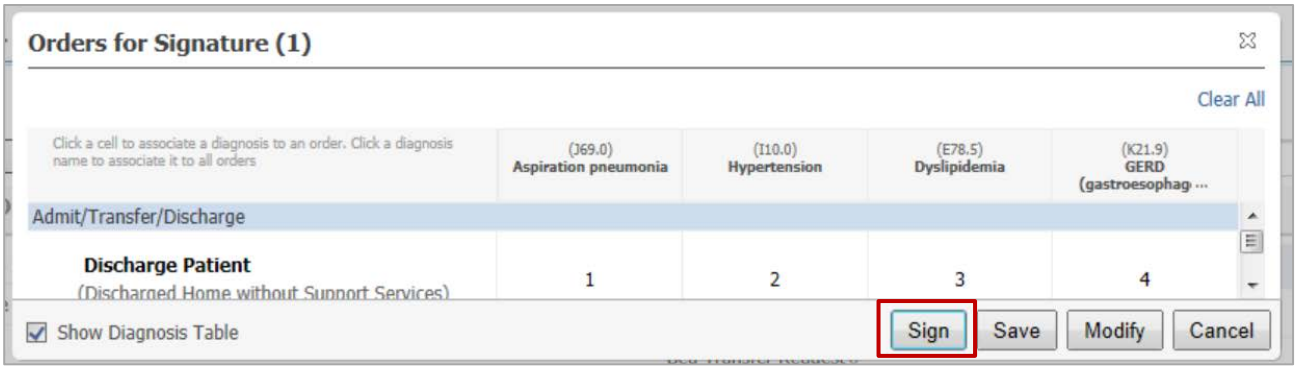
The **Discharge Patient** order creates tasks informing the team that the patient is ready to be discharged. The order is also required by Hospital Act Regulation. After the patient physically leaves the hospital, the encounter can be closed.

However, the CIS provides you the ability to create future orders to be completed after the patient has been discharged. If a specimen is expected to be collected either at home or at an external facility, a printed requisition should be given to the patient.

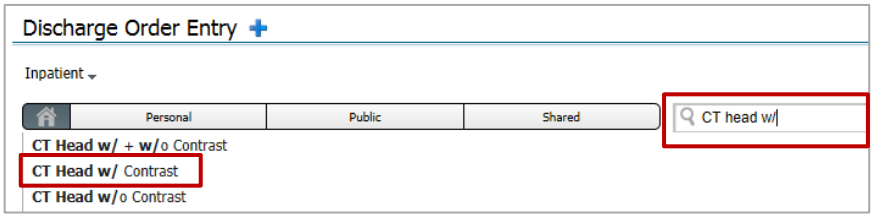
For your first patient you decide to place a future order for a CT head scan with contrast. You also want to provide him with a referral to Neurology.

1 In the Transfer/Discharge tab, select **Discharge Order Entry** and select the appropriate order sentence. For our example, click **Order** to select **Discharge Patient without Support Services**.





2 To add a **CT head scan** as a future order, search the catalogue directly from the current component. Search and select the order from the drop-down.



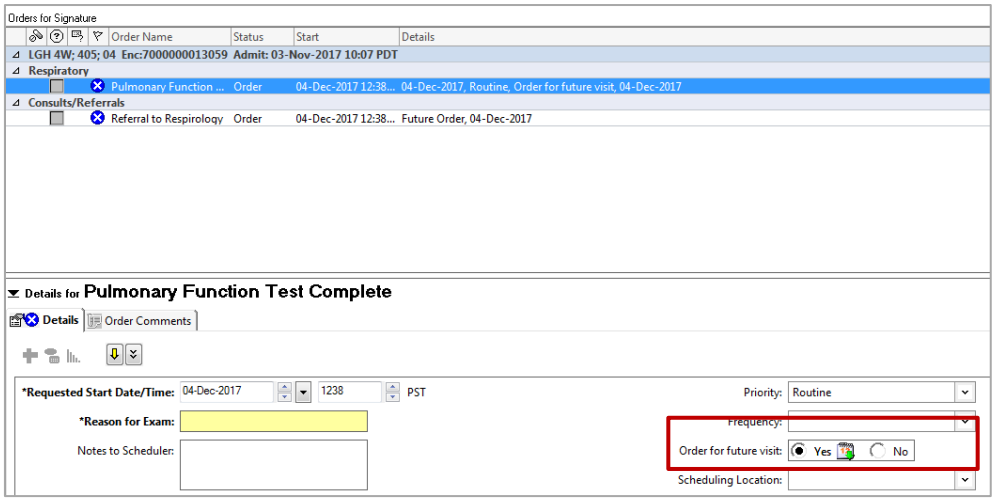
Repeat steps to add the **Referral to Neurology**.

3 Click the **Orders for Signature** icon and then click **Modify**.

Note: Place the cursor over the individual order in the Orders for Signature window, and click ⊗ on the right side to remove the order placed in error.

4 Click the order to display **Details** and add missing required details.

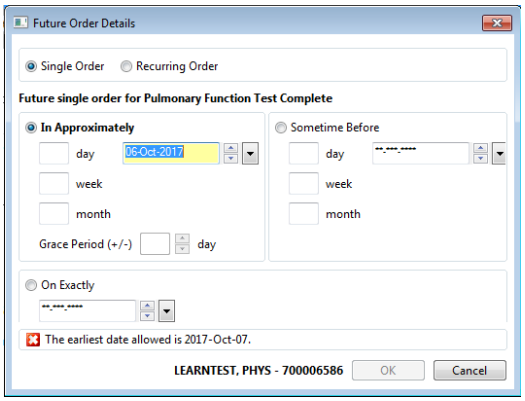
Note: There are certain orders (i.e. pulmonary function test) where you need to check **Yes** for **Order for future visit.** If this was the case, click the calendar icon and specify the date you would like the test to be completed. These details are to guide appropriate booking, not to book the actual test.

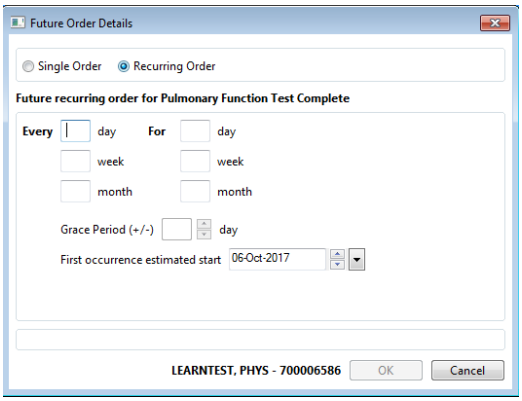


You have an option to select different details recommending when the test should be completed or if it has to be repeated.

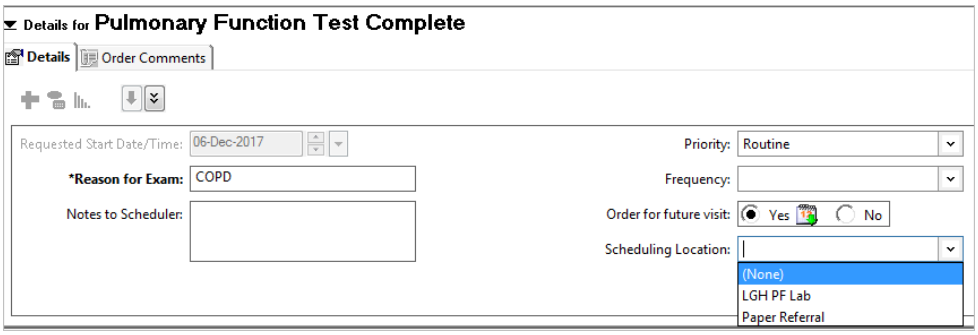
Select one of the options:

- One time test (single order) or recurring
- An approximate time from now
- An approximate time before a specific date
- Time range in days for a grace period
- Exact date

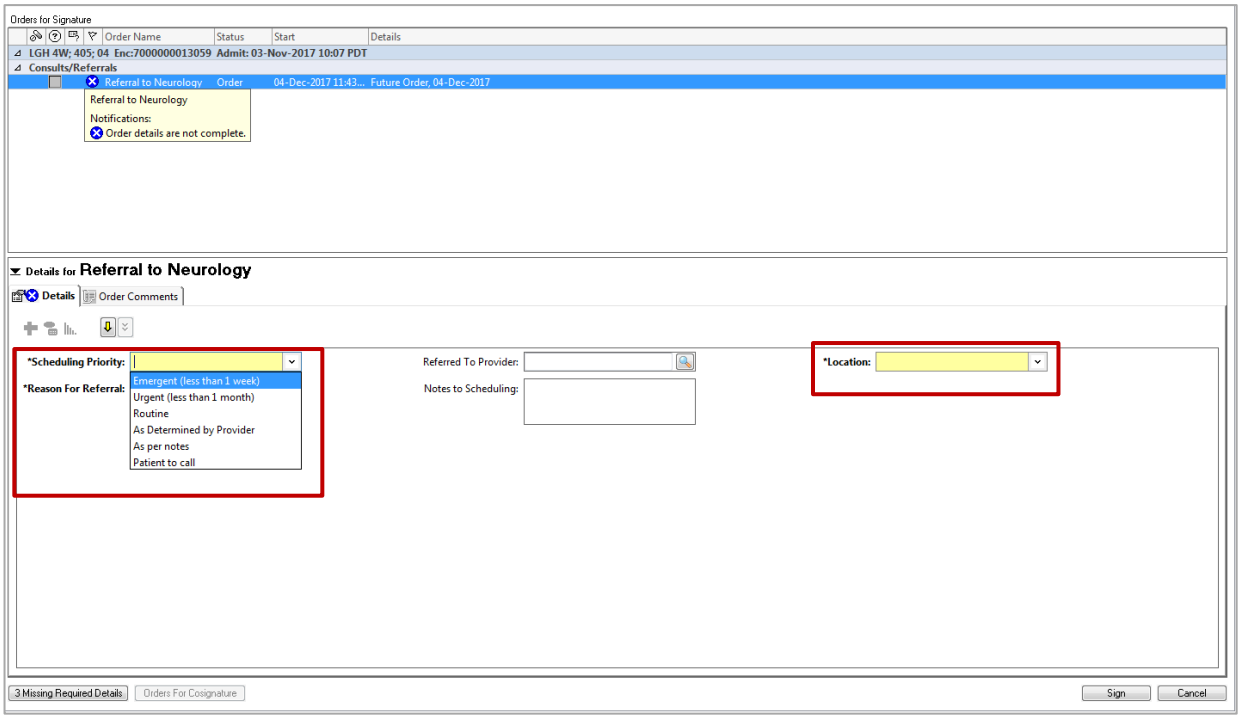




From the **Location** drop-down, you can select any location that is part of the system. For our example, select LGH PF Lab. In real life, the lab selected will be prompted to proceed with the order.



5 For your practice, add missing details for the referral.



Fill in the following data:

- **Scheduling Priority:** *Emergent (less than 1 week)*
- **Reason for Referral:** type in “follow-up post fall”
- **Location:** *Paper referral*

6 Click **Sign** to complete the process.

Note: For locations that are not part of the CIS, the **Paper Referral** option is to be selected. Although the process remains on paper, placing this order in the CIS informs care providers for this patient that the specific referral has been placed.

Key Learning Points

- A **Discharge Patient** order documents the decision to discharge a patient (required by the Hospital Act Regulation) and informs Patient Registration.
- Future orders can be placed in the system and remain active after patient is discharged.
- You can easily place recurring future orders using appropriate options
- Selecting a specific location prompts individuals at the location that the order has been placed. Selecting Paper Referral indicates that the process remains manual but the order is captured in the patient's electronic chart.
- Future orders remain active after a patient's discharge

ACTIVITY 4.4- Complete Patient Discharge to an External Site

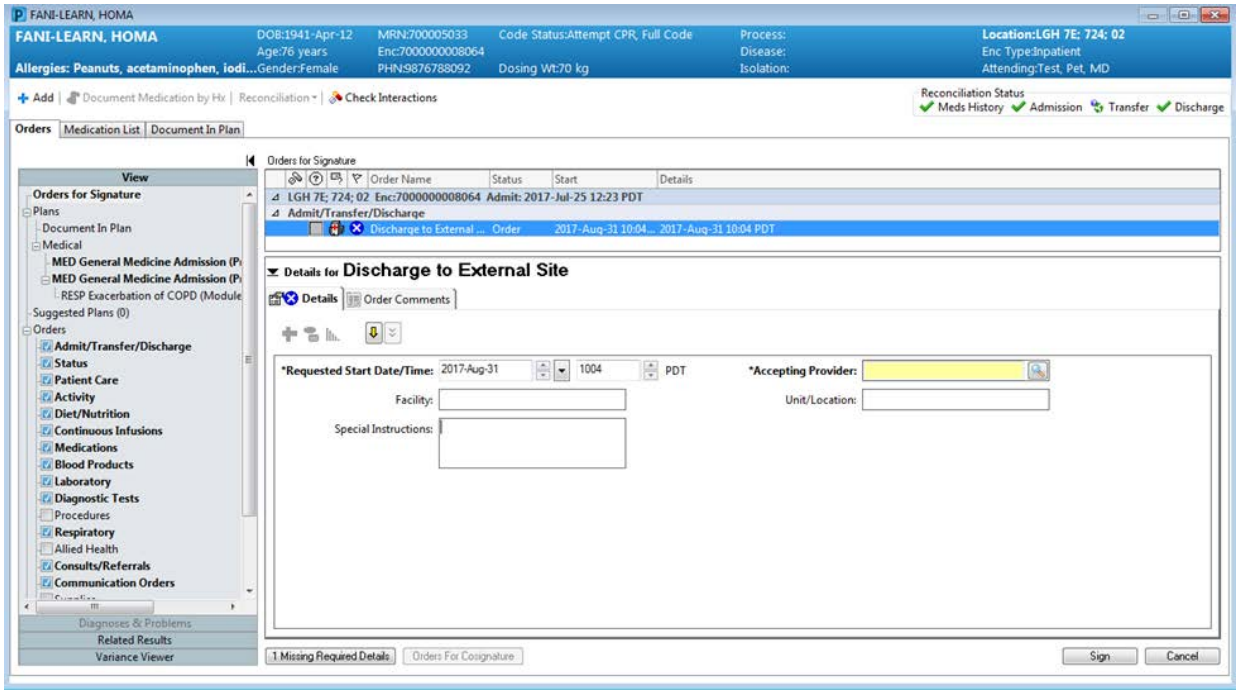
In the event that your patient requires a higher level of care (i.e. services not available at your current facility) or patient repatriation, patient transfer to another site may be necessary. For this activity, you will learn how to transfer your patient to another site.

You contact Patient Transfer Network (PTN) to identify the receiving provider and arrange for provider to provider communication. This action takes place outside of the Clinical Information System (CIS). In this example, a receiving provider has been identified and has accepted the patient. You completed handover and the patient is now ready to be transferred.

To proceed with transfer, you will discharge the patient from your site. It is not possible to complete this scenario in the classroom but you are familiar with the discharge process from previous activities.

When the receiving provider accepts the patient, you initiate the process of discharging your patient by placing a **Discharge to External Site** order.

1 Use one of the techniques you have learned before and place a **Discharge to External Site** order.



Key Learning Points

- When transferring your patient to an external site, you discharge the patient from the current site.
- Discharge to External Site order initiates the process of moving your patient to another site
- If the external site uses the same CIS, the patient chart is available for the receiving team
- If the external site uses a different CIS, paper-based documentation may still be required as per organizational procedures

ACTIVITY 4.5- Complete Discharge Diagnosis and Discharge Documentation

Continue to work through the discharge workflow on the Discharge Patient tab.

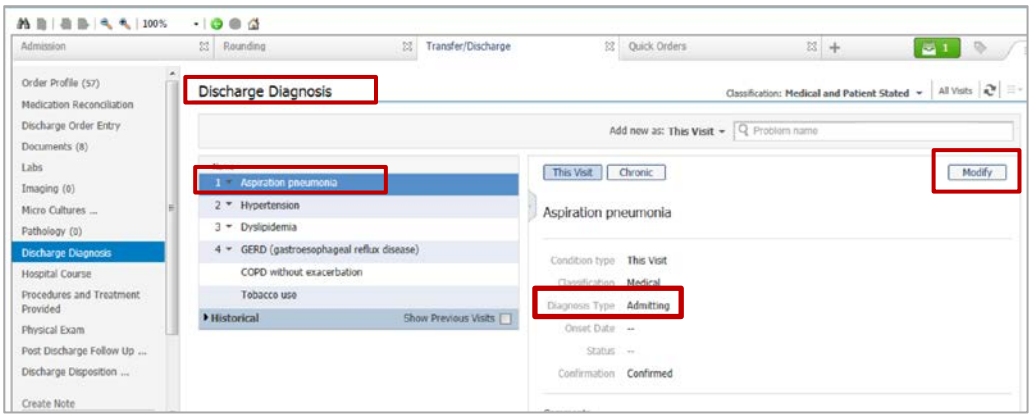
Review the following:

- Documents
- Labs
- Microbiology
- Pathology

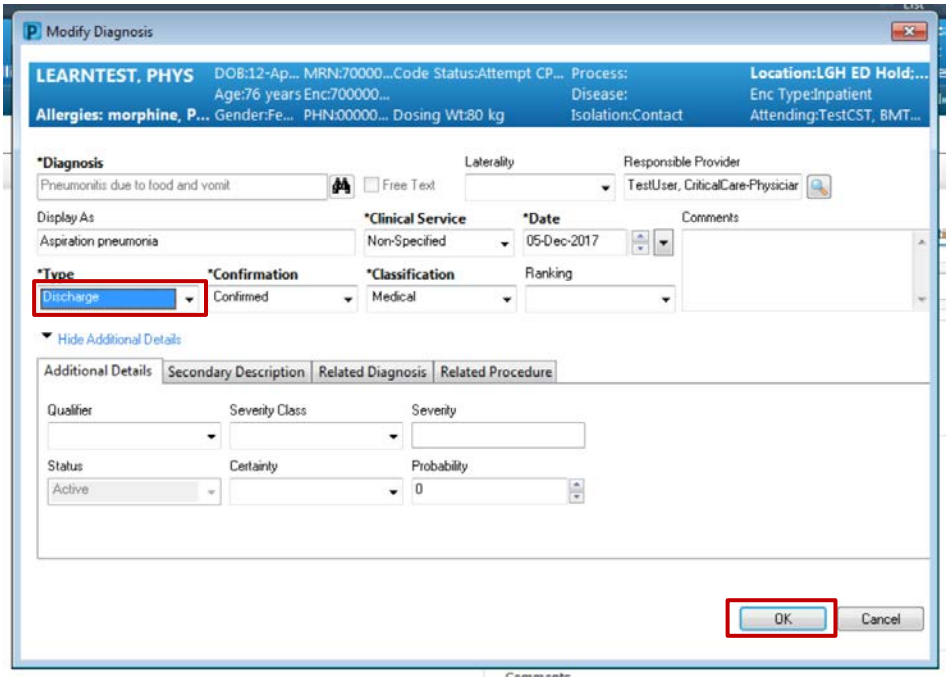
Using Dynamic Documentation, you will create the Discharge Summary. It will be distributed through Excelleris to the list of automatically included providers. You can also select other providers who should receive a copy. You can also prepare the Patient Discharge Summary to be printed for the patient by the nurse once completed and handed to the patient.

Confirm the Discharge Diagnosis:

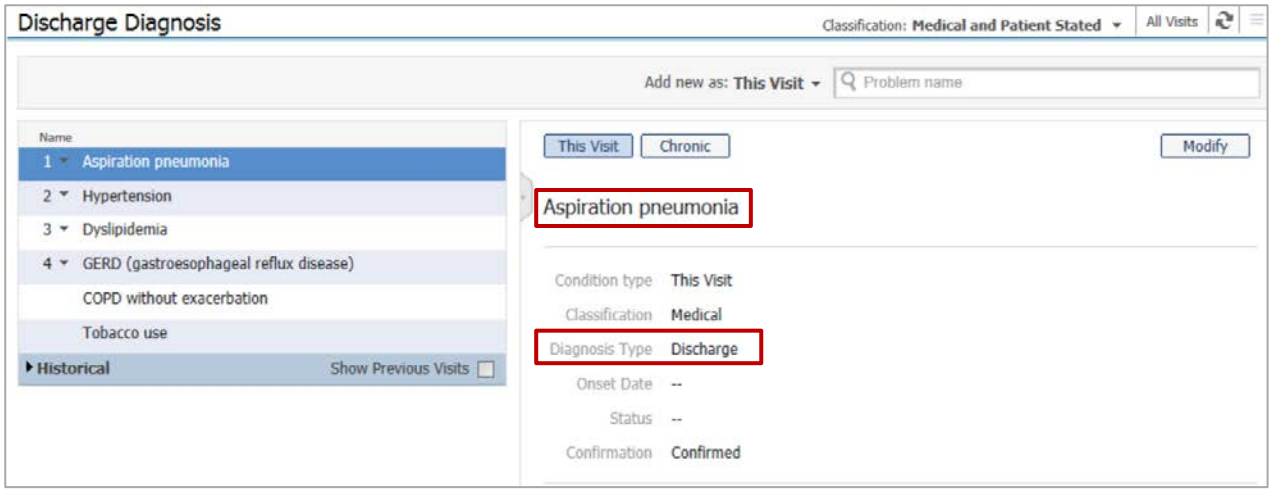
1 Expand details for aspiration pneumonia to ensure it states that this is a discharge diagnosis and note the status. Select **Modify**.



Ensure the Diagnosis Type reflects *discharge*.



Note: You can add comments for better communication with other care team members.



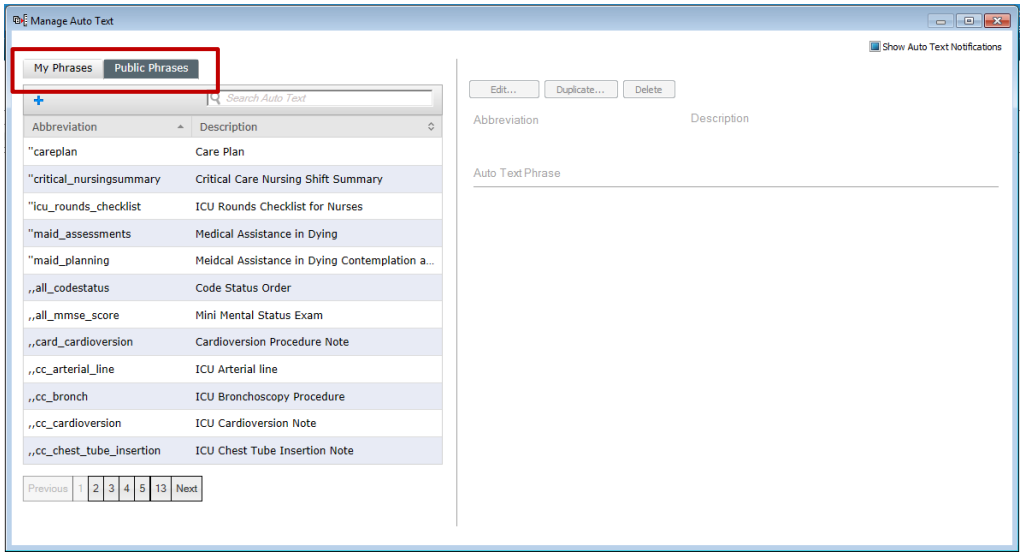
2 Start documenting patient's discharge by typing information under:

- Significant Findings
- Procedures and Treatment Provided
- Hospital Course (This component allows multiple providers to add text to it, making your job at discharge simpler as you will be able to see what others have entered through the patient's stay.)

Entries made in these components will auto-populate the appropriate sections in your discharge summary.

Remember that you can use auto text entry to speed up the process.

The **Manage Auto Text** window will appear.



3 Once you are ready to create discharge notes, click the note links provided under **Create Note**. There are two note links available there:

- **Discharge Summary** – create the note but Instead of clicking **Sign/Submit**, click **Save & Close** to finish the note later in the Message Centre
- Complete the **Patient Discharge Summary** and click **Sign/Submit** when complete**.**

Note: The CIS will automatically send a saved document to your Message Centre. The document will be saved as a draft and will only be visible to you.

Key Learning Points

- A **Discharge Patient** order documents the decision to discharge a patient (required by the Hospital Act Regulation) and informs Patient Registration.
- Future orders can be placed in the system and remain active after patient is discharged.
- You can easily place recurring future orders using appropriate options
- Selecting a specific location prompts individuals at the location that the order has been placed. Selecting Paper Referral indicates that the process remains manual but the order is captured in the patient's electronic chart.
- Future orders remain active after a patient's discharge

Thank you for completing the Critical Care Provider workbook!

Please contact your instructor for your Key Learning Review.