SELF-GUIDED PRACTICE WORKBOOK [N32]
CST Transformational Learning

WORKBOOK TITLE:

Provider: Anesthesia (Workbook #2)

TABLE OF CONTENTS

SELF-GUIDED PRACTICE WORKBOOK

Duration	**3 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.

Using Train Domain

You will be using the train domain to complete activities in this workbook. It has been designed to match the actual Clinical Information System (CIS) as closely 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 all steps to be able to complete activities
- If you have trouble to follow the steps, immediately raise your hand for assistance to use classroom time efficiently
- Ask for assistance whenever needed

PATIENT SCENARIO 1 – Access and Set-up

Learning Objectives

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

- Create an Anesthesia record
- Associate BMDI
- Assign macros
- Continue administering/documenting on infusions/medications from pre-operative unit.

SCENARIO

This scenario will address how to set-up to document within the SA Anesthesia module. Please note that regardless of an elective or emergency case, almost all aspects of utilization of SA Anesthesia are the same. Differences for emergency cases will be specifically pointed out throughout the various scenarios and activities.

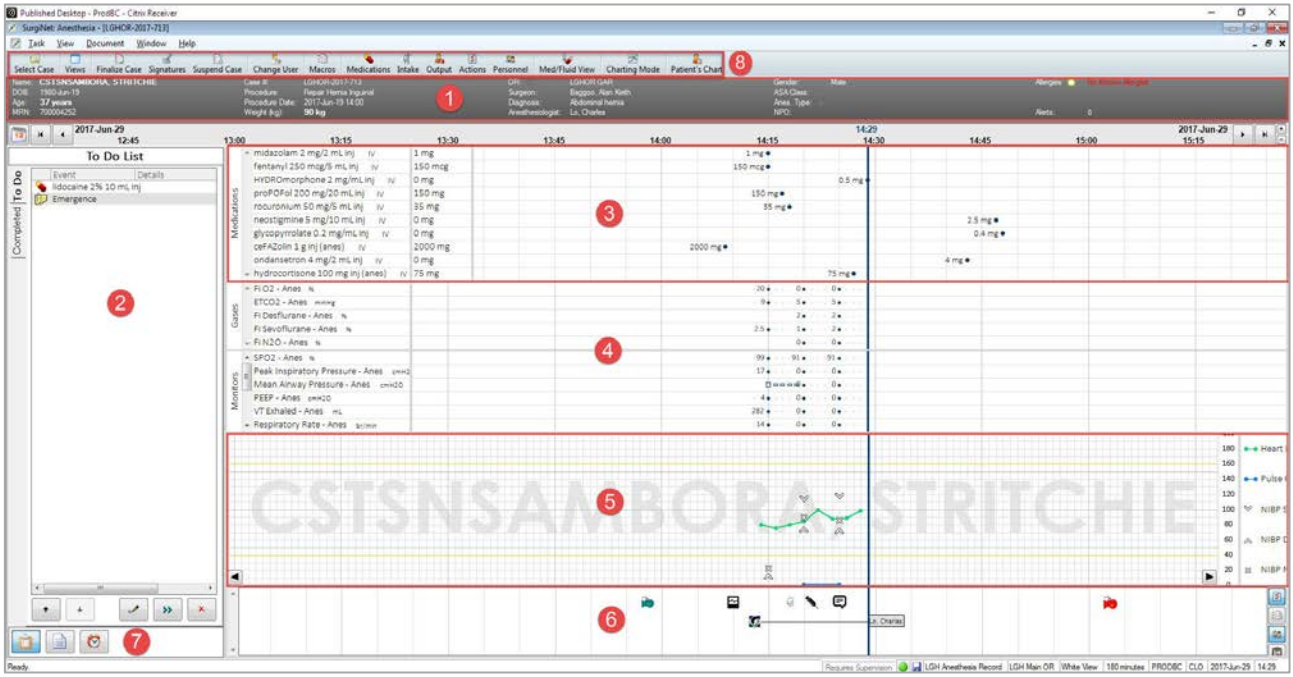
NOTE: This workbook will only address Intra-operative aspects of the Anesthetic chart within SA Anesthesia. Pre-operative and Post-operative documentation is addressed in workbook 1 (P1).

As an Anesthesiologist, you will be completing the following 4 activities:

- Creating an Anesthesia Record
- Bedside Management Device Integration (BMDI) Association
- Setting Macros
- Continuing Infusions/Medications

Activity 1.1 – Creating an Anesthesia Record

1 SA Anesthesia is a specific module within PowerChart which is designed to replace the current state paper charts Anesthesiologists use. This module is mainly used by Anesthesiologists but may be used by surgeons and other providers who perform procedural sedation within surgical and endoscopic departments where an Anesthesiologist is not present.



The screen is divided into various areas that are similar to the current paper charts that capture medications, vital signs, IVs, etc.

1. **Demographics Bar**- similar to the banner bar within PowerChart.
    - The main difference here is that the OR, ASA Class and Anes Type can be accessed directly by clicking on the name within the demographics bar to update those values.
2. **Workflow Pane** - contains the To Do, Documentation and Reminders views which you can easily toggle between.
    - T**o Do** – list of all actions/events that may need to be documented for the case. The tabs on the left toggle between To Do and Completed Actions

      To add components to the To Do List use a **Macro** (common tasks bundled together) or use manual entry for individual components.
    - **Documentation** – contains the complete lists of medications, actions, and monitoring options that may be charted to the record.

      This window can be used to manually populate the To Do List or document directly from this window.

- **Reminders** - timer reminders can be set manually as required.

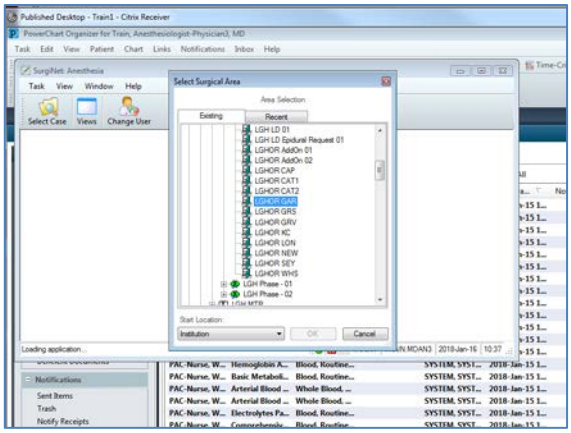
3. **Medications-** will appear at the top and display the drug name including concentration, dosage, when it was administered and the cumulative amount of drug administered.
4. **Gases and Monitors**- values are captured via Bedside Medical Device Integration (BMDI).
5. **Vital Signs Graphing**- equivalent of the graphical component of the paper record used to capture vital signs. This data is also captured through BMDI.
6. **Event Pane -** Actions/Events from the To Do List can be dragged and dropped here to capture the event details and times (i.e. staff presence in the room, surgical start/stop times, start of anesthesia, etc.).
7. The buttons in this area allow you to toggle between the To Do List, Documentation and Reminder views.
8. The section at the top is the toolbar which allows access to specific documentation elements.

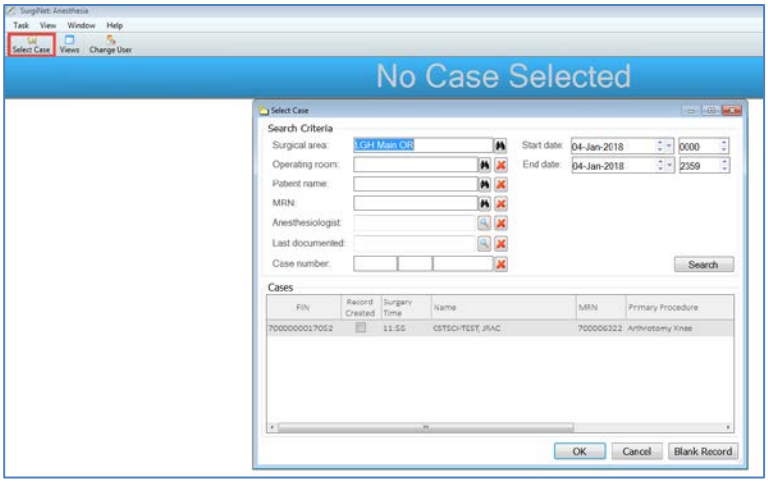
2 To open an Anesthetic record, the first step required is to associate the record to a specific patient.

The Selection Case window is where you associate the Anesthesia record to a particular patient. This is the equivalent of taking a paper chart and placing the appropriate patient label on the record.

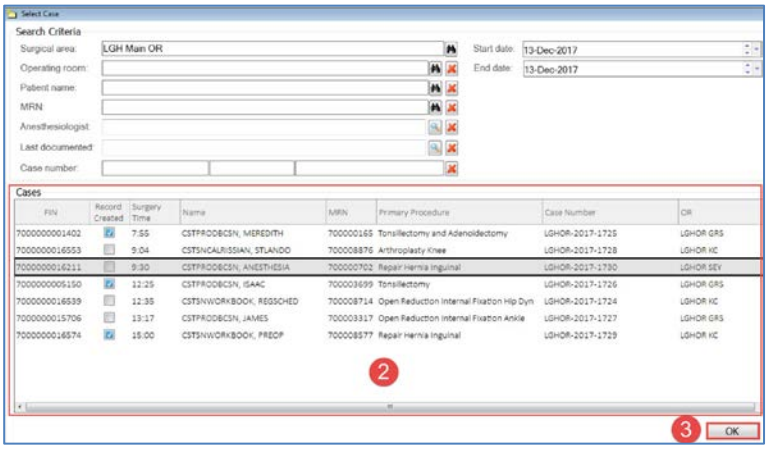
All cases booked through surgical scheduling will appear in the **Select Case** window.

1. If prompted select the area as being Main OR.
    - This only occurs the first time you login.





2. Find and click on your patient name (see your login card provided at the start)
3. Click **OK**

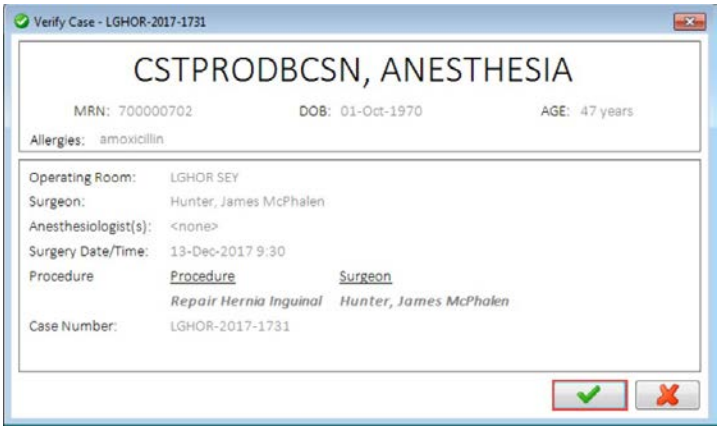


NOTE: If for any reason you cannot locate your patient in the Select Cases window, ensure the surgical location, start and end date and times are entered correctly. Alternatively, the patient name or MRN can be searched. If you cannot locate a scheduled case for your patient, a Blank Record can be initiated (button in the right lower corner) and the patient information can be assigned at any time after the case has started but before it is completed. This will be reviewed in Scenario 4, Activity 1.

4 A verification window will appear. This is an opportunity to verify that the correct patient is selected prior to creating a record.

Once you have verified you have the correct patient:

1. Click **green checkmark** icon ✓



Key Learning Points

- The SA Anesthesia module captures all the elements of a current state paper Anesthesia record.
- When associating an Anesthesia record to a patient, all booked cases will appear within the Case window.
  - If cases are missing, ensure your search criteria are correct.
  - You can search for your patient by date or name.

Activity 1.2 – Bedside Management Device Integration (BMDI) Association

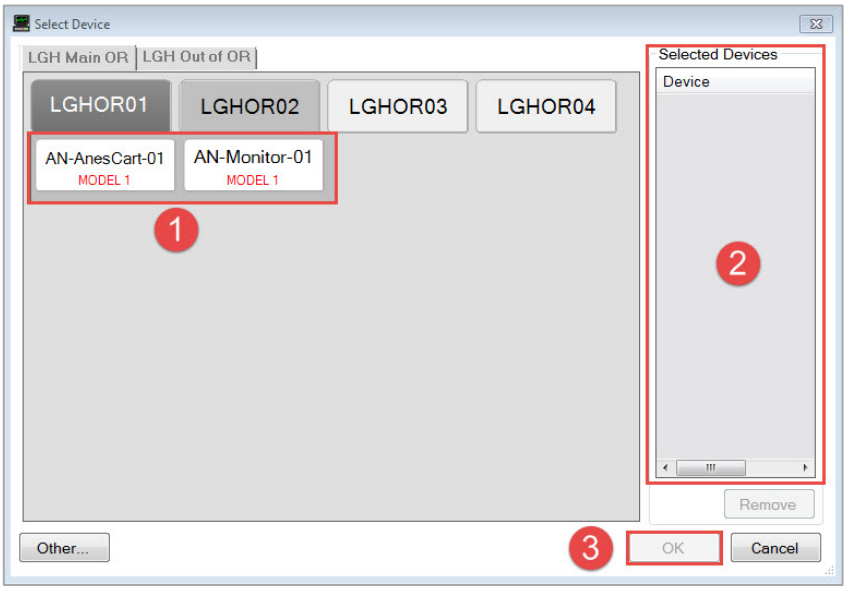
1 Once you have associated the Anesthesia record to a patient, the next window to appear is the Select Device window. Within this window, the Bedside Medical Device Integration (BMDI) is the next step to associate to the record.

BMDI automatically records data from bedside monitors into PowerChart.

SA Anesthesia will capture physiological parameters, ventilation parameters and settings, and inhaled and exhaled gas measurements. Manual entry may be required for some parameters.

To associate the appropriate anesthetic monitor and machine to the record:

1. Typically, the Anesthetic machines are labelled based on the location (site specific – e.g. OR 1, OR 2, etc.).
    - In this case, click on **AN-AnesCart-XX** (Anesthetic delivery unit/ventilator) and **AN-Monitor-XX** (physiologic monitor) assigned to you on your login card.
2. Once you have selected the appropriate device(s), the associated devices will appear in this window. If you happen to select the incorrect one, you can remove it by clicking on the device name and then **Remove** located under the Selected Devices window.
3. When the correct devices have been selected, click **OK**.

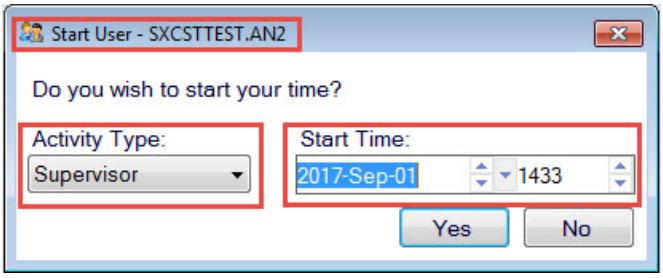


NOTE: Please ensure you associate the correct devices to your patient. The name of the device should also be visible on a label physically located somewhere apparent on each machine.

2 After the BMDI devices have been associated, the start user window will display.

This will capture the role of the person logged in (in this case you are the supervisor) for this record and the start time.

NOTE: There is always a supervisor in the case, even if there is only one provider. Other roles will be discussed at a later time.



1. Ensure that your login as shown by the name next to Start User. In this case it will be the login provided on your logon card.

1. Ensure the Activity Type is supervisor and document Start Time as appropriate.
2. Click **Yes** and the chart will now open with relevant information entered appearing.

Key Learning Points

- BMDI automatically records data such as vital signs from bedside monitors into the Anesthesia record.
- Ensure the correct device(s) are associated to the chart.
    - Labels to the names of the machines should be clearly visible on the physical machines.

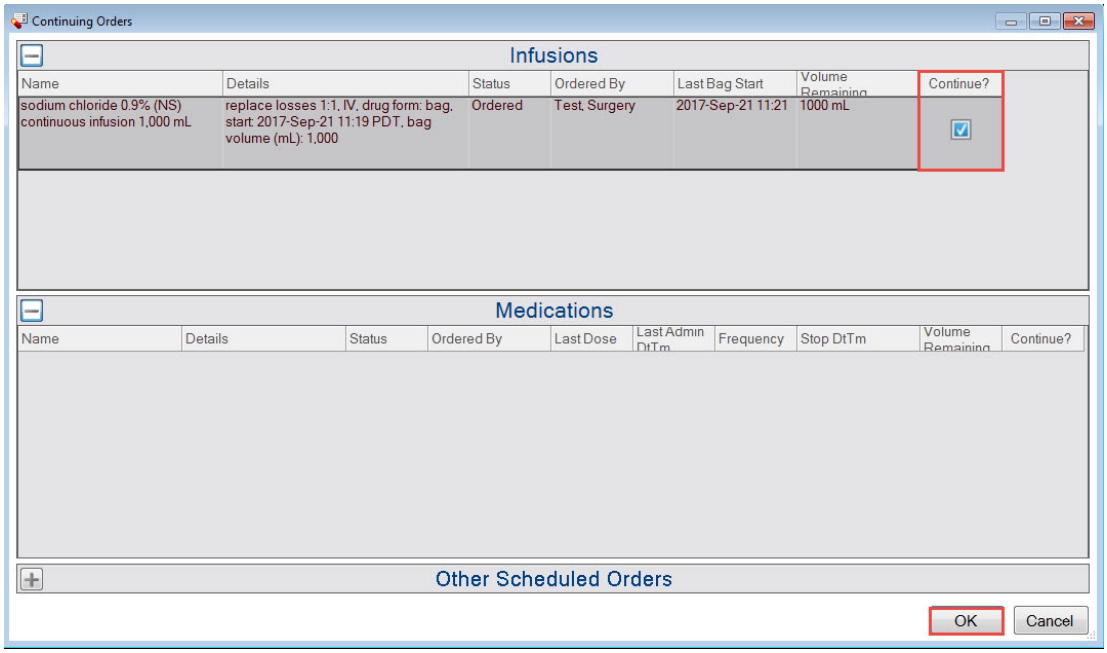
Activity 1.3 – Continuing Infusions/Medications

1 Patients who are being transferred into the OR with an existing IV infusion and/or running medications will have a prompt to the Anesthesiologist on whether or not the IV/medications will continue to run while in the OR. IV infusion and medication orders do not have to be discontinued from the pre-operative area (ED, ward, SDCU) which will allow it all to continue to run and flow into the Anesthesia record if required. To capture this, a window will appear which will display all the medications and IV infusions currently running.

These are active orders that will continue within PowerChart in the electronic MAR.

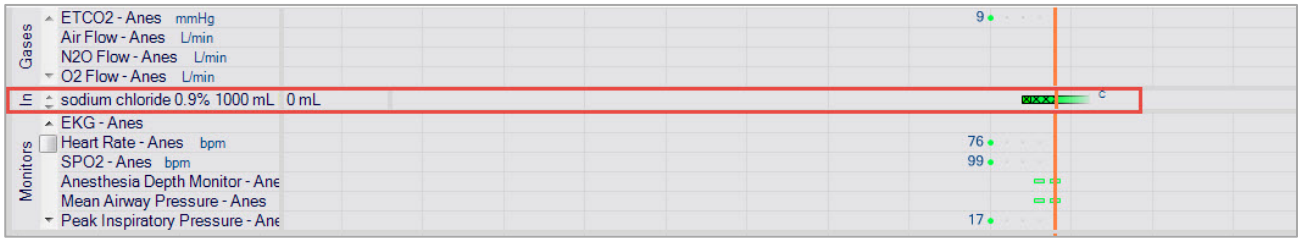
This window represents all the medications and IV infusions being administered to the patient from the pre-operative area, the orders are still active. This window will automatically appear if there are currently infusions/medications running within the system.

1. For orders that the Anesthesiologist would like to continue/finish in the OR, click the appropriate box(es) in the **Continue?** column.
    - In this activity, click the box for **Continue** for sodium chloride 0.9% 1000 mL.
2. When all orders to be continued have been selected, click **OK**.



2 Once all medications/infusions to be continued from the pre-operative area into the OR have been identified. These will automatically populate within SA Anesthesia.

Notice the sodium chloride solution is already populated. The “XXX” signifies solution administered in the pre-op area prior to entering the OR (data pulled from electronic MAR). The “C” indicates that this item has been continued into the Anesthetic record.



Key Learning Points

- Orders for medication/infusions which began in any pre-operative area do not have to be discontinued to enable a smooth transition of the documentation between PowerChart and SA Anesthesia.
- The Anesthesiologist has the option to continue infusions/medications into the Anesthetic record.

Activity 1.4 – Setting Macros

1

At this point, the Anesthetic record has opened. To begin documentation, you must select the appropriate macros. Macros are a bundle of actions and events that are commonly required together for anesthetic care. A macro is required for physiological parameters to begin to populate the anesthetic record.

By selecting the appropriate macros, several actions including medications, fluids, and events can be documented rapidly.

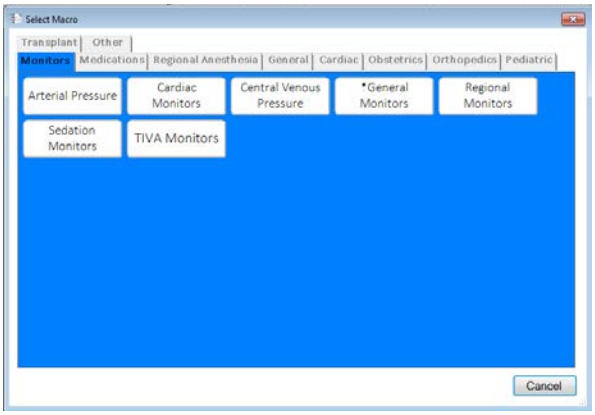
Ensure the most appropriate macro is selected as there are various tabs to organize the categories.

Each line within the window is referred to as a component (i.e. SPO2 – Anes, PEEP – Anes, EKG – Anes, etc.). Each component of the macro can be set start upon execution of the macro (by selecting the Execute checkbox) or to manual be activated only when selected from the To Do List.

To execute a macro:

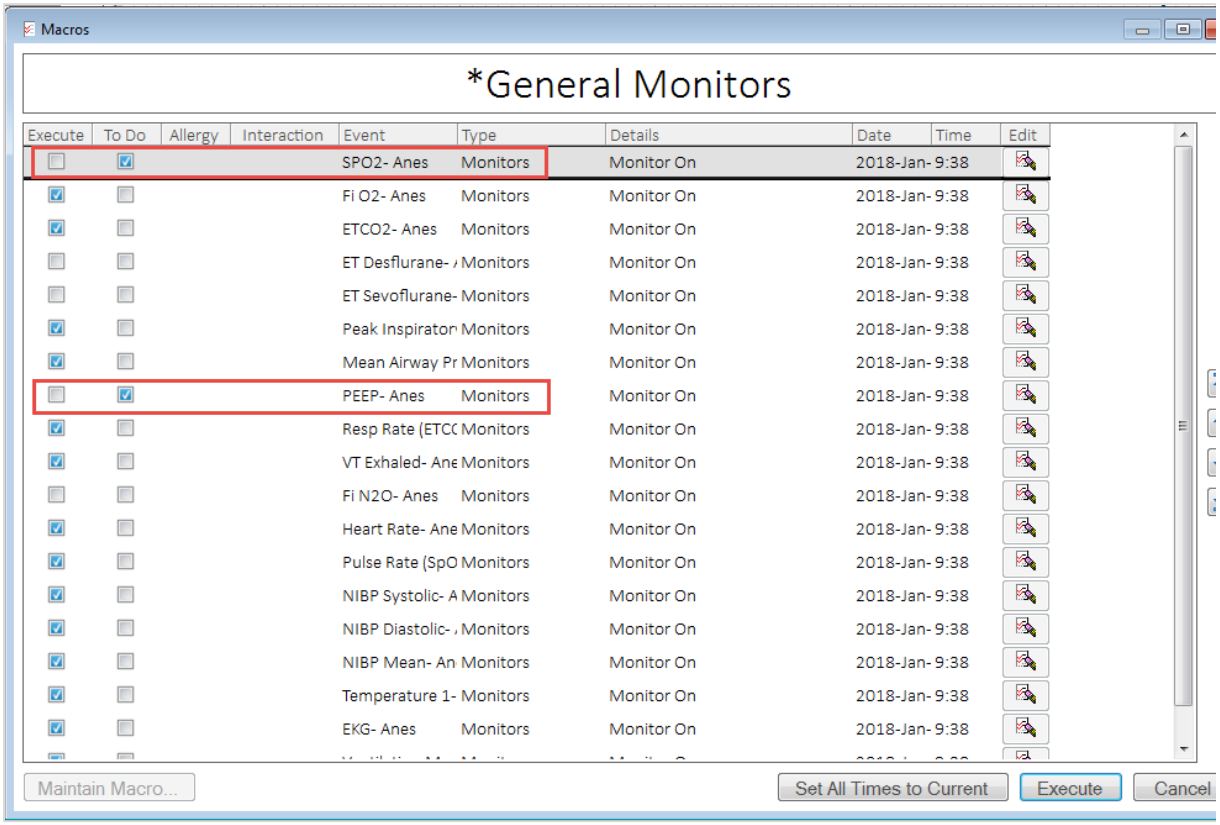
1. Click on the **Macros** icon 

from the toolbar or you can click F3 on your keyboard to open the macro window. The window to select macros will appear.
2. You will notice the various tabs of macros available to choose from as displayed in the long rectangular red box.
    - Click on the **Monitors** tab from the toolbar
    - Click **General Monitors**

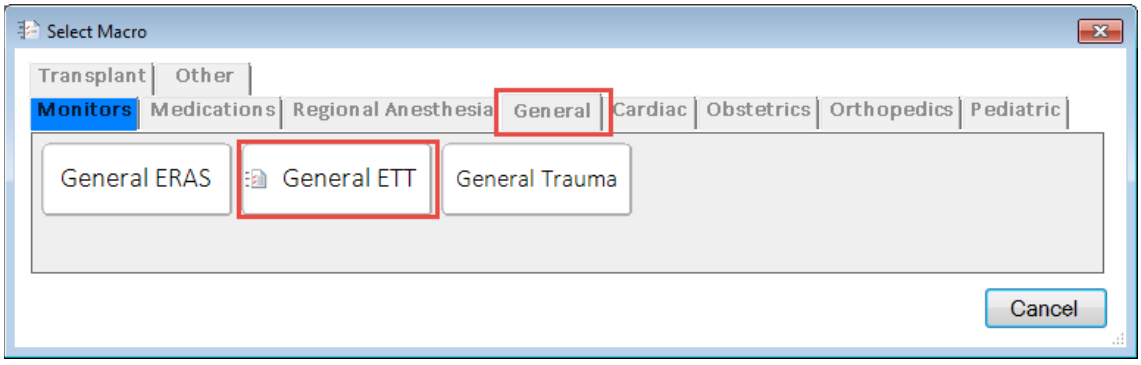


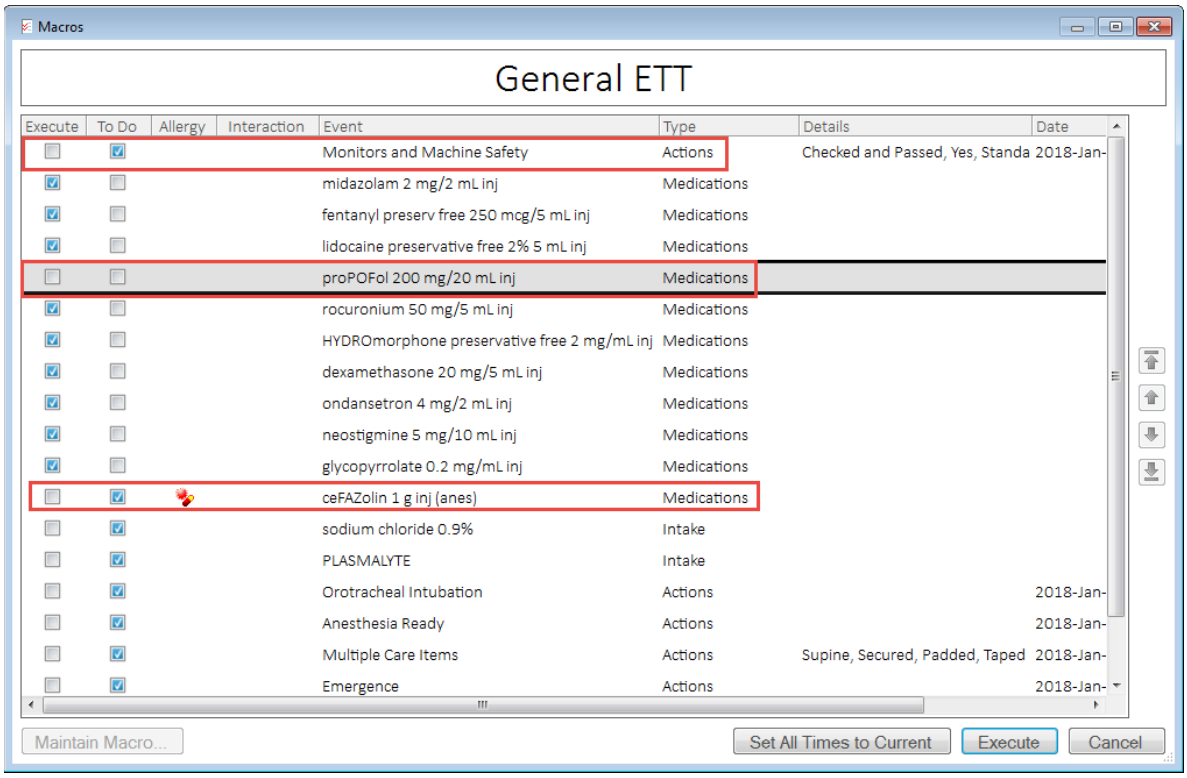
- The details to the macro are now open.
- Click on **SPO2 – Anes** and **PEEP – Anes** in the To Do column
- Click **Execute.**

NOTE: Clicking Execute will distribute all components to the appropriate sections of the chart.



3. Click on the Macro icon again and select the **General ETT** macro located under the General tab.





4. Determine what you would like to Execute or have on your To Do List from the macro. In this scenario, change the following:
    - Click on **Monitors and Machine Safety** to the To Do List.
    - Click on **cefazolin** and add it to the To Do List.
    - Click on **propofol** to delete the checkmark on the Execute column. There should now be no checkmarks within the Execute column for propofol.
    - Click **Execute**

Key Learning Points

- Macros allow for several actions/events (such as a medication, fluid, or actions) to be documented with a single execution.
- Marking components in the Execute column means these are actions written to the chart
- Marking components in the To Do column means these actions will be listed on the To Do List until they are executed during the case or acknowledged prior to the record being finalized.

PATIENT SCENARIO 2 – Basic Functionality

Learning Objectives

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

- Toggle between PowerChart and SA Anesthesia
- Utilize the workflow pane to document
- Suspend, finalize and print a record

SCENARIO

This scenario will address basic functionality within SA Anesthesia.

NOTE: This workbook will only address Intra-operative aspects of the Anesthetic chart within SA Anesthesia. Pre-operative and Post-operative documentation is addressed in workbook 1 (P1).

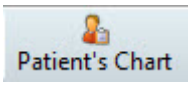
As an Anesthesiologist, you will be completing the following 4 activities:

- Accessing PowerChart from SA Anesthesia
- Workflow Pane – To Do List
- Creating Reminders
- Suspending the record

Activity 2.1 – Accessing PowerChart from SA Anesthesia

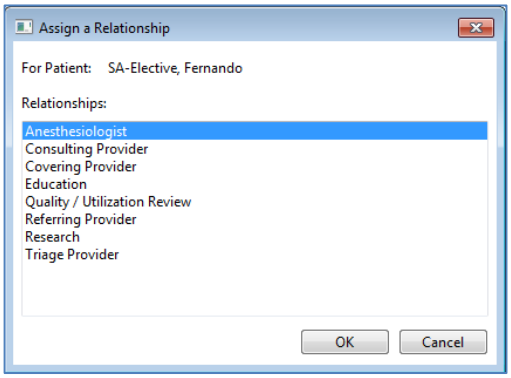
1 SA Anesthesia is an application CIS. As a result, you can easily toggle between SA Anesthesia and PowerChart to be able to easily review aspects of the chart that cannot be viewed within the SA Anesthesia module.

To toggle to PowerChart from SA Anesthesia simply click the **Patient's Chart** icon located in the toolbar.

Click on the 

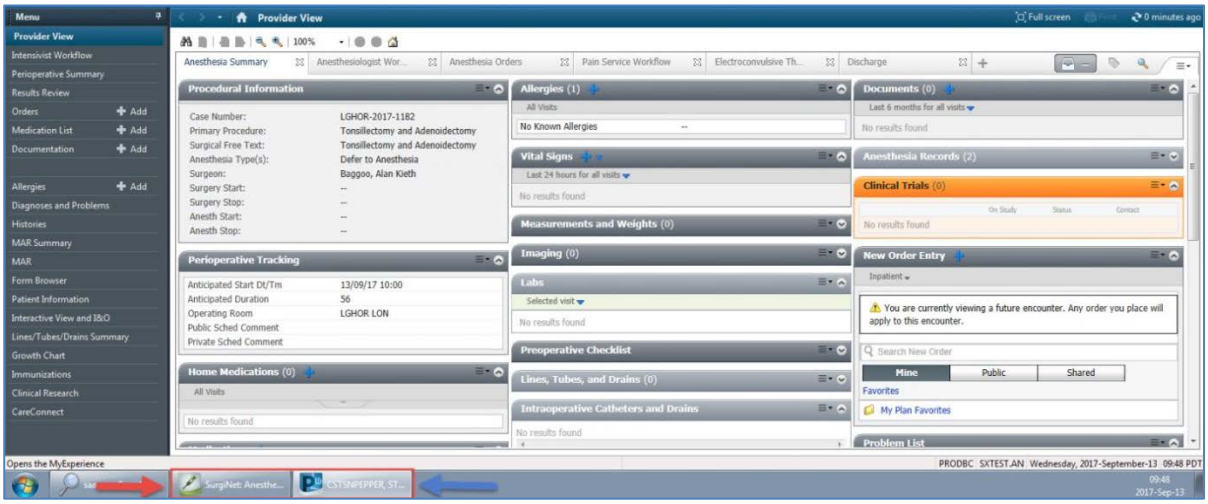
icon.

If prompted assign your relationship as an Anesthesiologist.



2 When you are in the Anesthetic record and toggle to PowerChart (patient's chart), you can easily toggle back to the Anesthetic record. This method can be used to toggle back and forth between the two applications.

To toggle back from PowerChart to the Anesthesia record:



- The BLUE arrow indicates the icon to toggle to PowerChart.

- Click on the 

- Located at the bottom of the screen, there are icons which indicate what you have opened within Windows. The RED arrow indicates the icon to toggle back to SA Anesthesia.
  - Click on the 

Key Learning Points

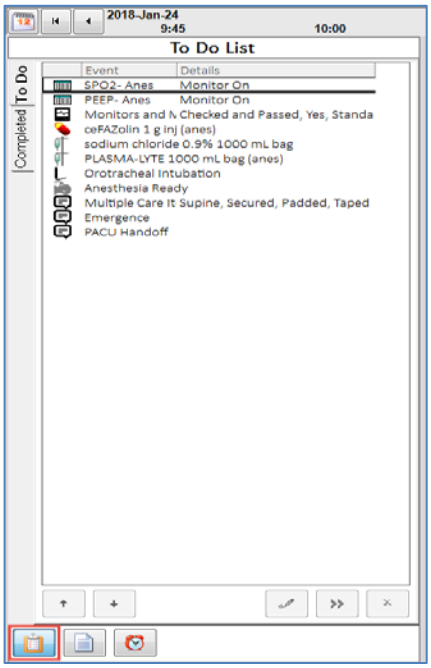
Navigation between PowerChart and SA Anesthesia is can be completed through a single click.

Activity 2.2 – Workflow Pane – To Do List

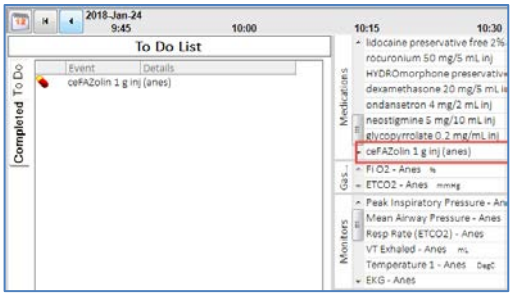
1 The To Do List can be utilized as a prompt to remind anesthesia providers of the tasks that are potentially required throughout the case. Not all items within the To Do List have to be executed at the time of finalization.

Macros are one way to include actions in the To Do List. You may also add actions through the Actions icon on the toolbar at any point in time within the active case. Actions selected individually from their respective menu can be left click and dragged to the To Do List or left double clicked onto the chart immediately.

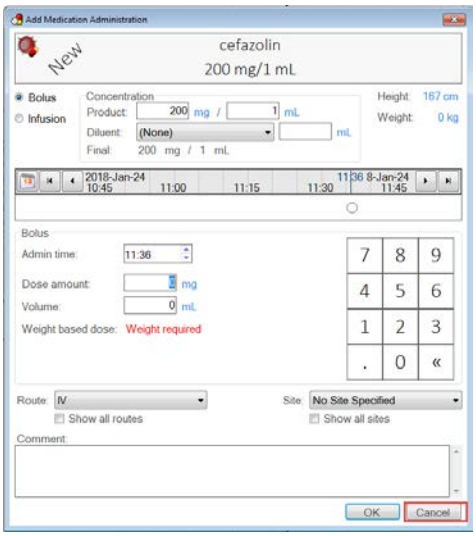
When you are ready to execute a component from the To Do List. Ensure you are on the To Do List, if not, click on  to access the To Do List:



1. Double click **cefazolin**.
    - Cefazolin was set-up to populate in the To Do List from the macro set-up in Scenario 1, Activity 3.
2. Notice it has now dropped off the To Do List. It has moved to the Completed tab and appears on the Medications List to the right of the workflow pane.



3. The medication window will appear and details may be completed. Completion of this window will be reviewed in Scenario 3, Activity 3. Click **Cancel** to leave this window.

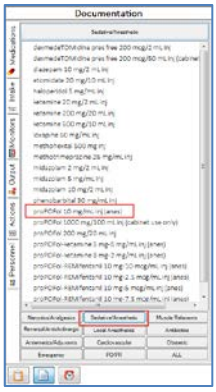


- Whenever you click an action/event from the To Do List, it will drop off this list and move to the Completed list. In this case, medications will also then populate into the Medications section of the chart. Although the medication administration details were not completed by clicking cancel, you can always access the details window again by clicking on the medication name.

2 Aside from populating the To Do List from macros. Actions may also be added to the To Do List by simply toggling to the Documentation Workflow Pane.

1. Clicking on **Documentation Workflow Pane** icon.

During Scenario 1, Activity 3, propofol was removed from appearing on any list. In this case, you as the Anesthesiologist changed your mind and would like to add it to the To Do list.

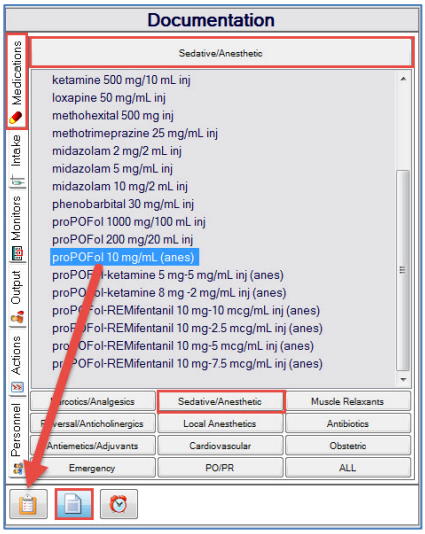


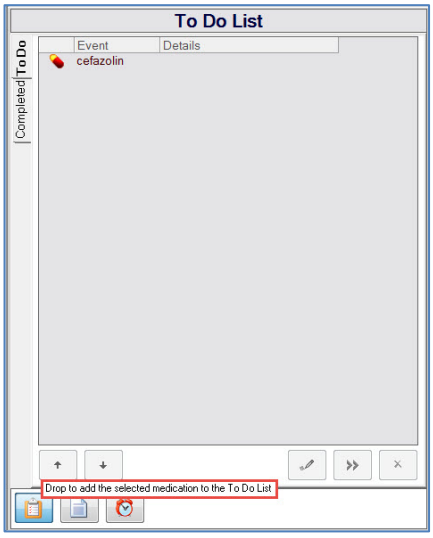
In this screenshot, you are now in the Documentation window (of the Workflow Pane) within the Medications tab and have the list of Sedative/Anesthetic open.

1. Click on **Sedative/Anesthetic**

   The correct medication has been located. You would like to add it to the To Do List as you do not want to administer it now, but want a reminder to do so later.

2. Click on proPOFol 10mg/mL (anes) and hold down the left mouse button.
3. While holding the left mouse button, drag it to the To Do List icon and then release the left mouse button (as indicated in the screenshot above). A prompt will appear that you can drop to add the medication to the To Do List (Screenshot below).

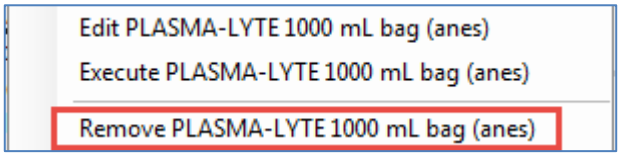




3 Components within the To Do List can be edited/removed at any time as requirements for the patient may change throughout the case.

To edit/modify any component within the To Do List:

1. Right click on the component you would like to edit. A window will appear with options of actions.
    - As the patient already has a NS infusion going there is no need to have a Plasma-Lyte infusion.
    - Click on **Remove PLASMA-LYTE 1000mL bag (anes)**.



Key Learning Points

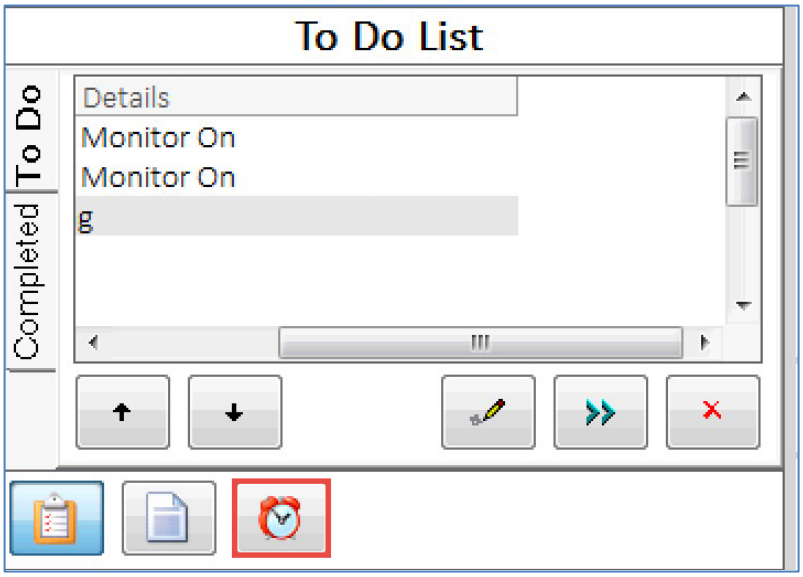
- The To Do List serves as a reminder of all the medications and tasks that were set for the case.
- The To Do List items can be ignored at the time of finalization.

Activity 2.3 – Creating Reminders

1 The Reminders panel is where you can set reminders for tasks. It is a free text box to capture what you would like a reminder in regard to. The time of when the task is due can also be set and the repeat reminders functionality is also available.

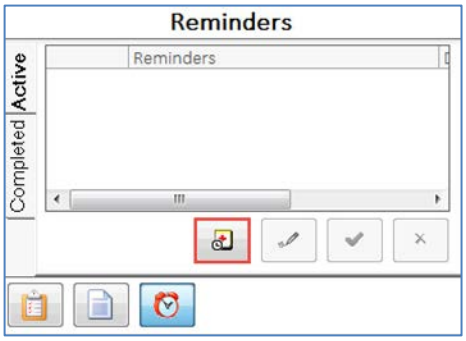
The To Do List only captures the tasks that are still required; however do not capture when they are due. This functionality can be used in conjunction to the To Do List. An example of this would include re-dosing of antibiotics 4 hrs after the initial pre-incision prophylactic dose. Setting a reminder to re-dose might be helpful.

1. Toggle from the Documentation List to the Reminder window by clicking on the Reminder Icon in the workflow pane.

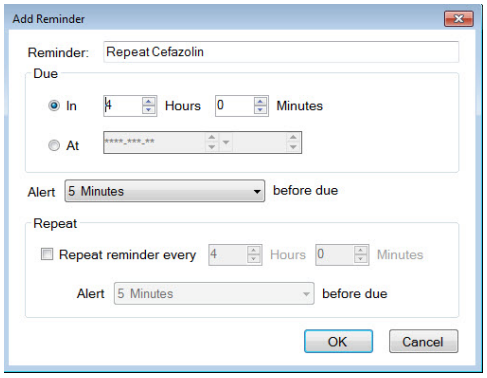


2 While within the Reminder workflow pane, you may view, edit or add additional reminders.

Click on the highlighted icon to add a reminder.



3 This window will appear when you click to add a reminder. Details to the reminder are to be completed here.



For this example, we will utilize a case which is expected to last 7 hours (skin-to-skin time). The antibiotic prophylaxis of Cefazolin 1000 mg will need to be re-dose 4 hours after the last dose (0745 – based from the electronic MAR). Set a reminder to re-dose the Cefazolin.

Utilizing the example of setting a reminder to re-dose a prophylactic antibiotic for a longer case.

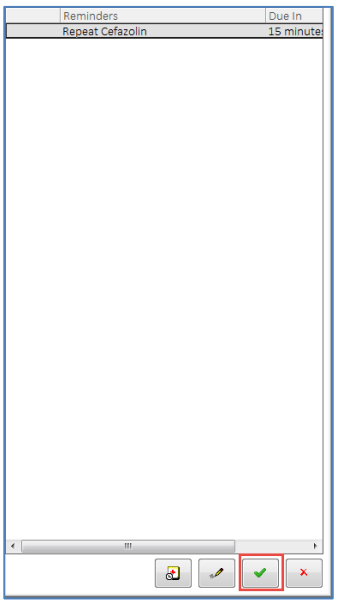
1. Reminder: Repeat Cefazolin
   - Notice the yellow background in the free text box – a yellow background indicates that this is a required field.
   - Click on the Reminder text box to enter = *Repeat Cefazolin*
2. Due In = *15 min*.
   - Ensure you have the correct time choice as there are 2 options. If you enter the number of hours, it will be based on the time the reminder is set, not the time of the last dose based on the electronic MAR.
   - If timing is critical you can calculate the 4 hours from current and set it based on the Due At time.
3. Alert = 1*5 minutes* before due
   - Choose the alert interval you would like from the drop-down list.
4. Click OK

4 Once a reminder has been added, the reminder will appear in the reminder window and display the Due In time.

To mark tasks off as Complete:

1. Click Repeat Cefazolin

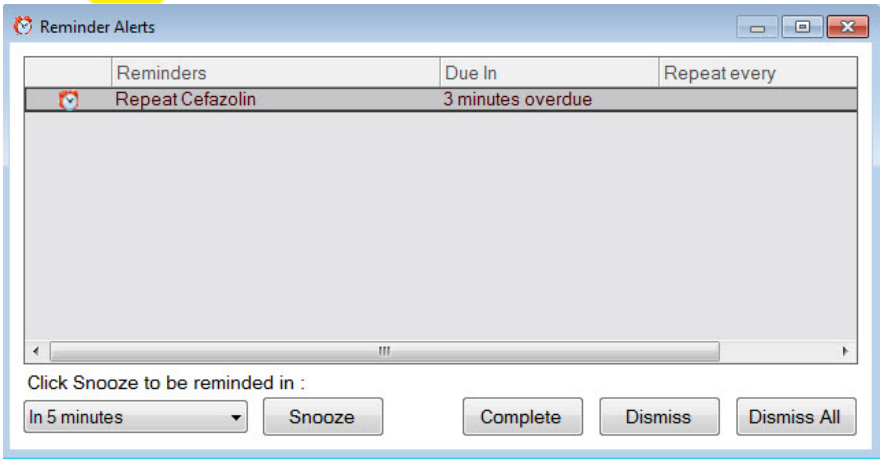
- Click **green checkmark** icon ✓ to sign your documentation.



5 Aside from the repeat window available from the workflow pane. A pop-up will also appear when the reminder time has come based on what was set.

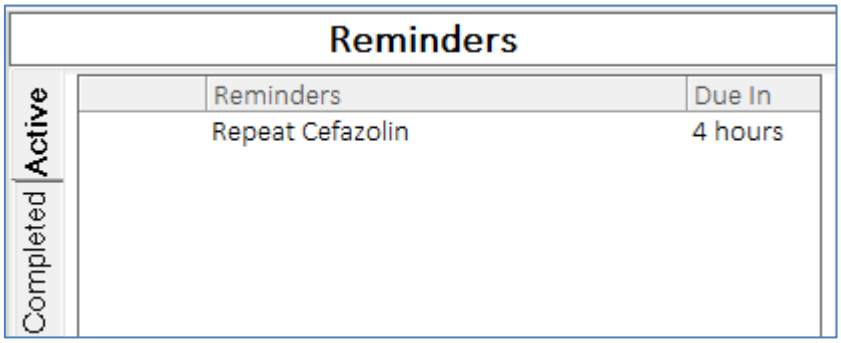
There is a choice to snooze, complete, dismiss or dismiss all.

NOTE: Selecting **Complete** does not link you to the details window to document a re-dose. Manual access to document the re-dosing is required.



Click **Complete**

6 As tasks are completed and marked off as completed, it will move from the Active tab to the Completed tab.



Key Learning Points

- Reminders can be used in conjunction with the To Do List.
- The To Do List captures tasks to complete only; whereas, reminders will have a specific reminder available for each task including the time the task is due.
- Selecting **Complete** does not link you to the details window to document a re-dose. Manual access to document the re-dosing is required

Activity 2.4 – Suspending the Record

1 The functionality of suspending a case is possible for situations such as transfer of a patient from the block room to the OR. The case can be suspended while in the block room prior to transfer to OR, and then open the record up again in OR on another terminal.

Suspending a case will let you choose what you would like to continue to chart and what to discontinue. For instance, the IV will continue to administer whereas, all medications may be discontinued.

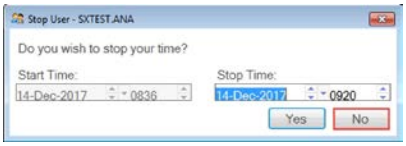
The record will not be available to other users through documentation within PowerChart until it has been finalized. It will only be viewable to Anesthesiologists.

To suspend a case:

1. Click on the 

icon located in the toolbar.
2. A window will appear which will ask you if you are sure you want to stop charting. Connection to Bedside Medical Device Integration (BMDI) devices will be lost and data will stop following. BMDI will be reviewed at a later time (Skill Sharpener).

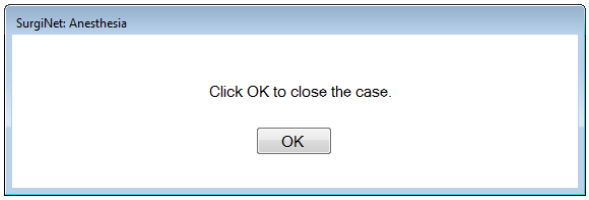
- Click **Yes**
- Most patients will have to be disconnected from devices to be transported. Patients transported with monitoring will be associated to a new device in the receiving unit.



3. Click **No** for the Stop User time as you are still the provider for this patient during transport.

NOTE: For transition of care to another Anesthesia Provider, Yes would be selected for this window.

4. An alert will pop up that indicates that any issues are present. In this case the NS infusion has no stop time, however since this infusion is ongoing click **OK** to acknowledge this.



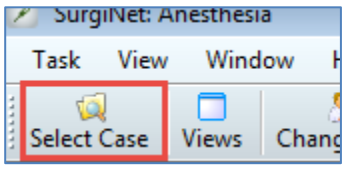
5. Click **OK**

2 When you arrive in the PACU, you can open the Anesthesia documentation again.

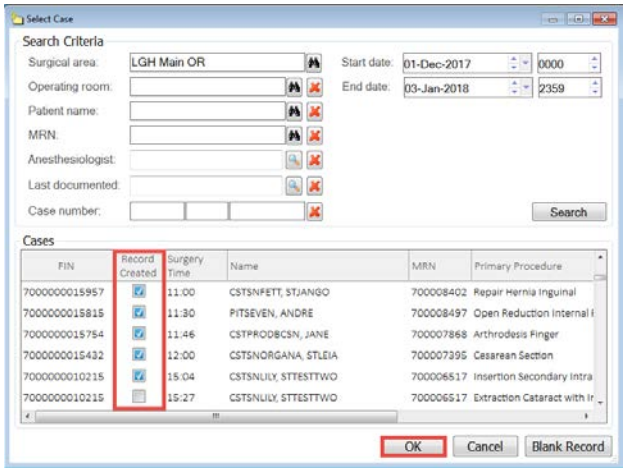
It is possible to suspend a case on multiple occasions.

To re-open the Anesthesia record suspended for the patient, first ensure SA Anesthesia module is open.

1. Click on **Select Case**



2. The Select Case window will open.



3. Click on the correct patient located in the Cases window in the bottom section.
4. Notice in the Record Created column, there is a checkmark with a blue background. This indicates a record has already been started for this patient and this case.
5. Click **OK** after the correct patient has been selected. The existing record will open.

Key Learning Points

- Suspending a case is used when transferring a patient between units or for interrupted workflows (e.g., labour epidural management)
- A case can be suspended more than once.
- The record will not be available to other users through documentation within PowerChart until it has been finalized. It will only be viewable to Anesthesiologists.

PATIENT SCENARIO 3 – Initial Documentation

	Learning Objectives
	At the end of this Scenario, you will be able to: ■ Complete initial documentation required for a case.

SCENARIO

This scenario will address the specific areas which can be documented within SA Anesthesia.

NOTE: This workbook will only address Intra-operative aspects of the Anesthetic chart within SA Anesthesia. Pre-operative and Post-operative documentation is addressed in workbook 1 (P1).

As an Anesthesiologist, you will be completing the following 8 activities:

- Documenting Anesthesia equipment checked
- Enter ASA and Anesthesia Type from the Demographics bar
- Documenting Medications
- Documenting IV fluids
- Documenting Output
- Documenting Action/Events
- Documenting Personnel
- Documenting Point of Care (POC) test result

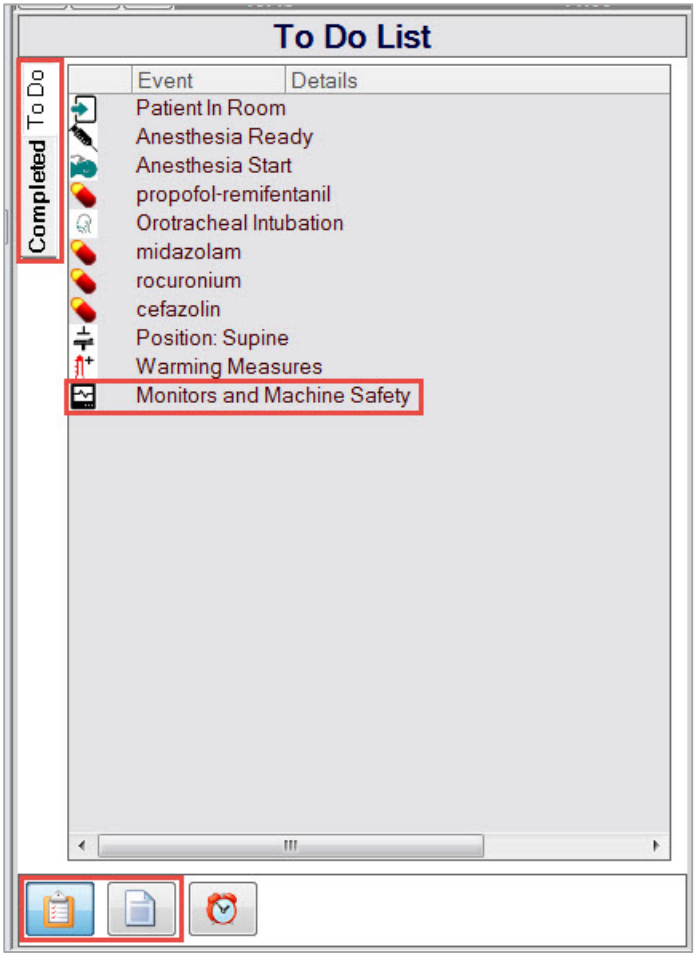
Activity 3.1 – Documenting Anesthesia equipment checked

1 One of the first things that may be documented is that the Anesthesia equipment is present, checked and ready prior to the patient entering the OR.

To complete documentation on equipment checks:

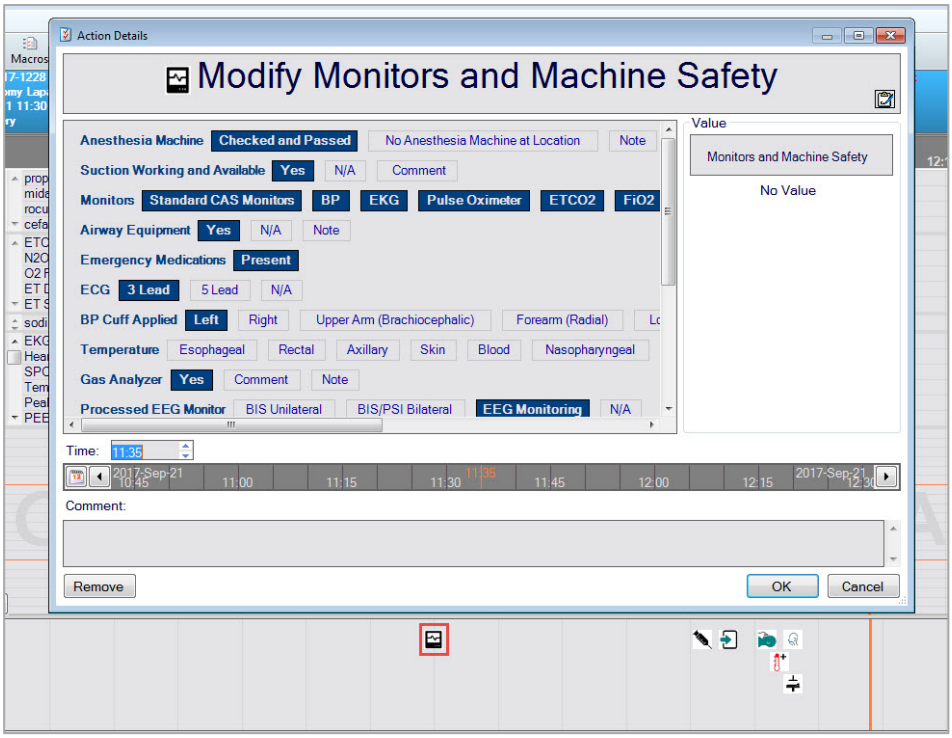
Double clicking on **Monitors and Machine Safety** to document on it and execute to the appropriate time.

NOTE: The timeframe for when items are executed can be changed at any time.



2 When documenting Monitors and Machine Safety, double click on the icon in the action panel and the details window will appear. Documentation of details will be captured at this time.

Some basic metrics will be selected.



Select the following:

- BP cuff on left
- 5 lead ECG
- No Nerve Stimulator

Click **OK** when done

Key Learning Points

- Documentation of Monitors and Machine Safety will have a specific details window to do document upon.

Activity 3.2 – Enter ASA and Anesthesia from the Demographics bar

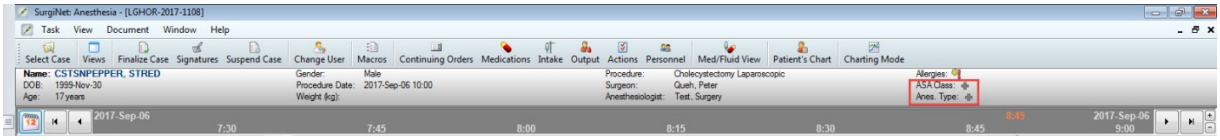
1

At any point in your intra-operative workflow, the ASA class and Anesthesia type can be updated in the system. These metrics are located in the Demographics bar. Metrics you can update within the Demographics bar are apparent by the + icon next to it.

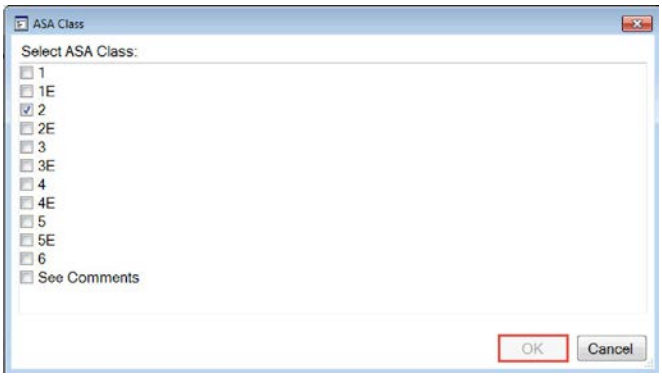
These metrics must be completed to prior to Finalizing the case, if not an error will pop up and you will have to complete it.

To enter an ASA or Anesthesia type:

1. Click the **+** icon beside ASA Class located within the Demographics bar.

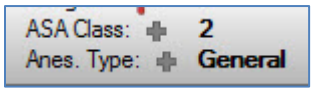


2. Click the **box** next to 2.



3. Click **OK**.
4. Click the **+** icon beside Anes Type
5. Click the **box** next to General
6. Click **OK**.

The updates should now be visible.



Key Learning Points

- Certain metrics from the Demographics bar can be updated from this area as denoted from the + icon beside the metric.
- These metrics must be completed prior to finalizing the case, if not an error will pop up and you will have to complete it.

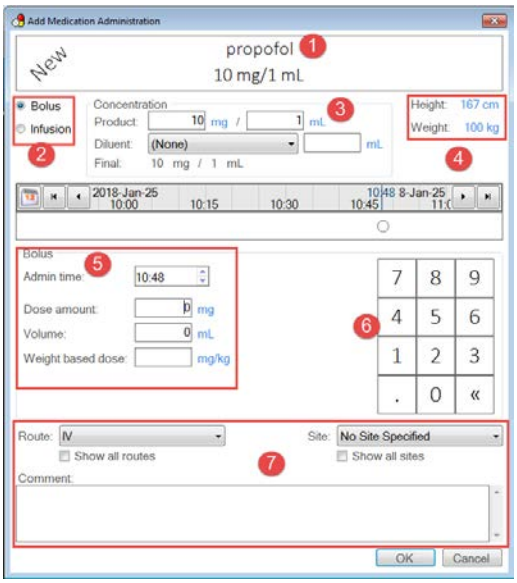
Activity 3.3 – Documenting Medications

1 Once particular medication has been selected, details of the administration can be completed through this specific window.

If this is a new administration being added to the record, the word NEW will appear in the top left-hand corner of the Add Administration dialogue box.

NOTE: All medications and dosages recorded within SA Anesthesia will flow into the electronic MAR.

Documenting Infusions will be similar to the steps as documenting medications.



Orientation to the medication details window:

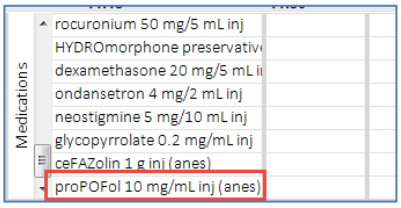
1. The name of the medication and strength of the medication as determined by the pharmacy formulary.
2. This is where you indicate if you are administering a bolus or infusion.
    - In this activity, we will review a bolus of a medication. Documenting a medication infusion is similar to the documentation of an IV fluid (reviewed in Scenario 3, Activity 4).
3. Details to the concentration of the medication.
4. Height and weight of the patient. These components can be modified within this window by clicking on the blue value (i.e. <0> or <50kg>).
    - These values are typically pulled from PowerChart and do not require to be edited in this window.
5. This window will adjust based on whether it is a bolus or infusion. The details of the bolus/infusion are documented here.

6. Keypad to click on to update numbers within the window.

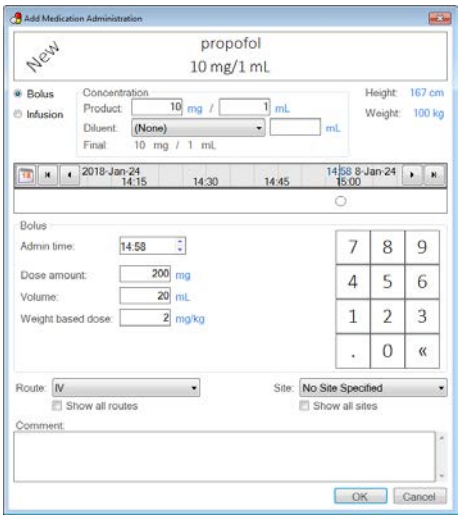
7. Additional details on where the medication is being administered. Based on the routes and sites you have previously documented.

2 To document the details of the medication:

1. Double click Propofol from the To Do list.
2. Find your medication in the medication list and then click on the medication.

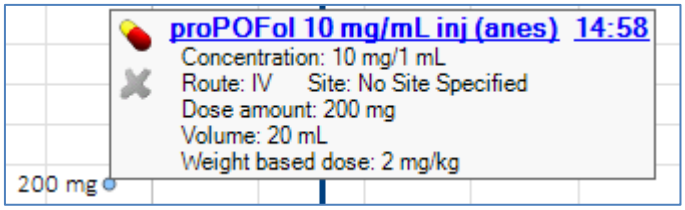


3. Ensure **Bolus** is selected.
4. For the Bolus details window: enter the administration time, click on the time box and press **N** on your keyboard.
    - Pressing “N” on your keyboard when you are in any box that contains a time will automatically populate the current time – N=Now
5. Enter a dose amount of **200** mg.
    - You will notice based on the dose amount you entered and the weight within the system, the weight based dose is automatically calculated.
6. The administration route is **IV**.
7. Site is **Hand – Right**.
8. Click **OK**.



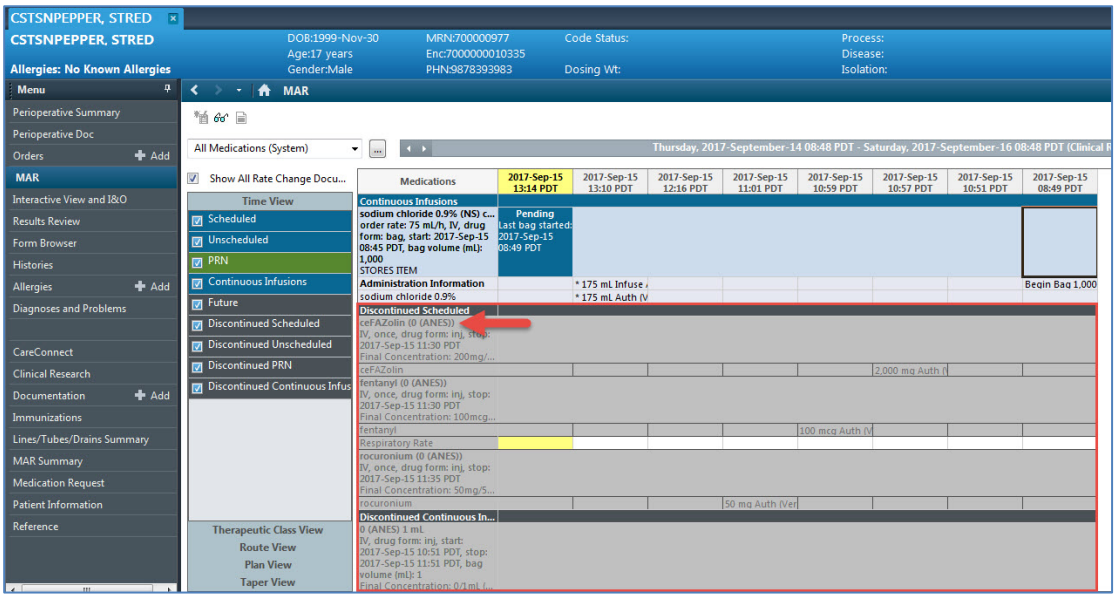
3 Once the details to the bolus have been added, it will appear on the Anesthetic record.

The bolus of Propofol has been charted for the time that was entered. Hover the mouse cursor ("hover to discover") over the bolus, a temporary window will appear to display additional details to the bolus.



4 All medications/infusion administered by Anesthesia are entered into SA Anesthesia. This data will flow into the electronic MAR of the patient chart to make it easily accessible for all to view the medication administered intraoperatively by Anesthesia. This data will flow through to the electronic MAR with a 30 minute lag time as well as anything remaining at suspend or finalize.

All Anesthesia medications/infusions will be in a grey background under the Discontinued section as these medication orders were only for Anesthesia purposes. Anesthesia related orders will also be noted by (ANES). Below is an example of this.



Key Learning Points

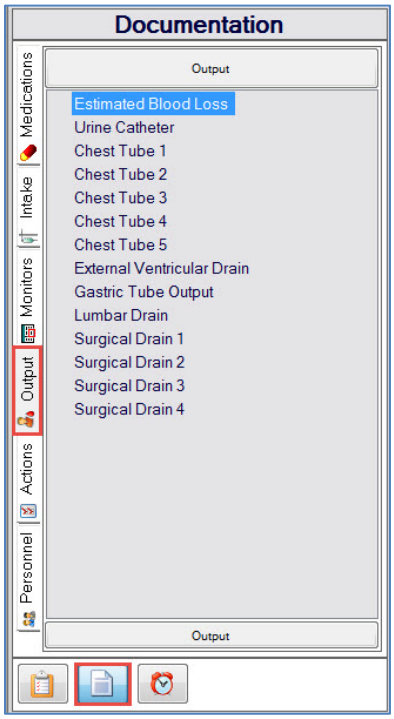
- Medications can be added to the To Do List via a macro or drag and drop from the Documentation List.
- When documenting a new medication being administered, NEW will appear in the administration window on the top left-hand corner as an indicator.

Activity 3.4 – Documenting Output

1 Outputs which can be documented include estimated blood loss (EBL), urine from a catheter, EVD, chest tube, gastric or drain outputs.

To select the output documentation window in the workflow pane:

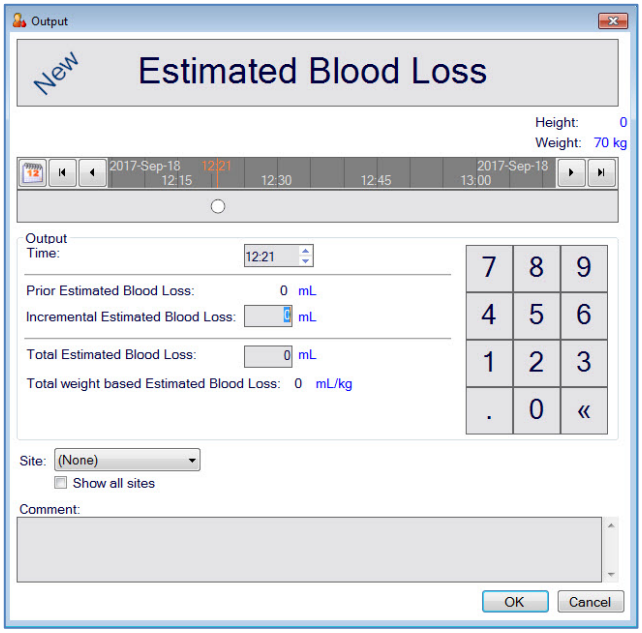
1. Click on the **Output** tab.
2. Double click on the appropriate source of output, in this case, **Estimated Blood Loss**.



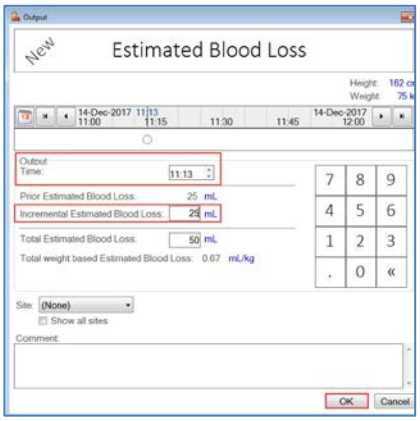
2 Details to the EBL are now required through the details window.

- Output time – this captures the time the EBL was documented.
- Prior Estimated Blood Loss – cumulative volume of EBL documented prior.
- Incremental EBL – The current EBL that you are documenting to add to the total EBL.
- Total EBL – total volume calculated including current documented volume + prior EBL.
- Total weight based EBL – total volume calculated in mL/kg in EBL. Automatically calculated based on patient weight.

NOTE: Definitions of the metrics across all outputs are the same.



3 Enter the details to estimated blood loss.



Please enter the following:

- Output time – 5 minutes ago
- Incremental EBL – 200 mL
- Click **OK**

Enter a second EBL occurrence:

- Output time – Now
- Incremental EBL – 25 mL
- Click **OK**

Total EBL calculated and documented in the record.

Key Learning Points

- Outputs include: Estimated Blood Loss, Urine Catheter, EVD, Chest Tubes, Gastric Tubes and Drains.
- Time and Incremental metrics are the only details to add. All other details will automatically be calculated by the system.

Activity 3.5 – Documenting Action/Events

1 Documenting times of actions or events throughout the case is possible within the SA Anesthesia.

Typically, the list of actions/events is best to work from the To Do List as it will serve as a reminder to ensure required fields are documented. This can be populated via a macro; however, it can also be created manually by dragging and dropping actions/events from the documents list.

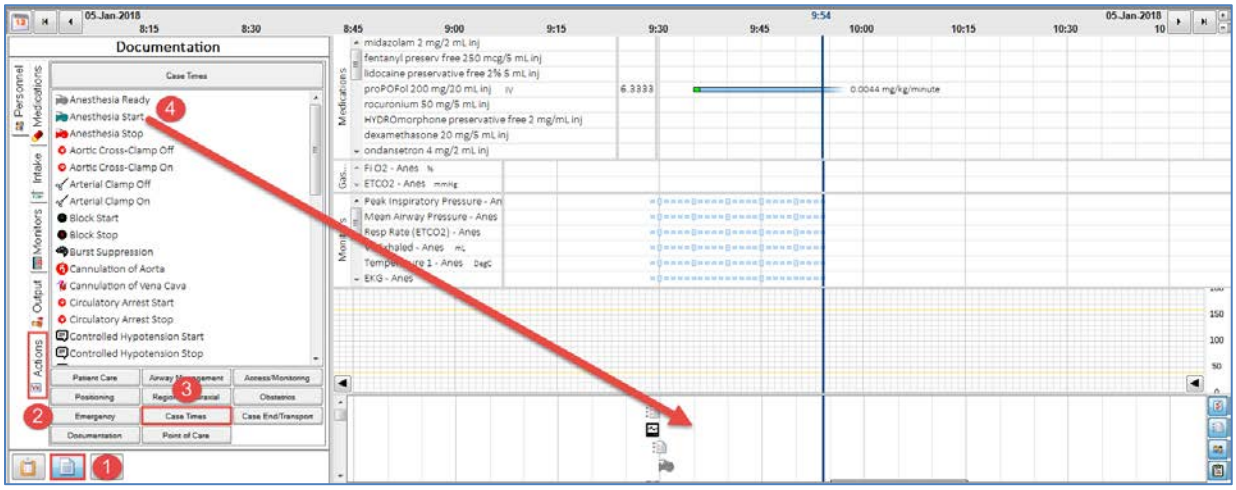
The following case times are also being captured by the Circulating Nurse and flow to the Anesthetic record:

- Patient in/out of room time
- Procedure start/stop time

To document an action/event, choose the action/event to document and drag and drop it into the lowest window pane.

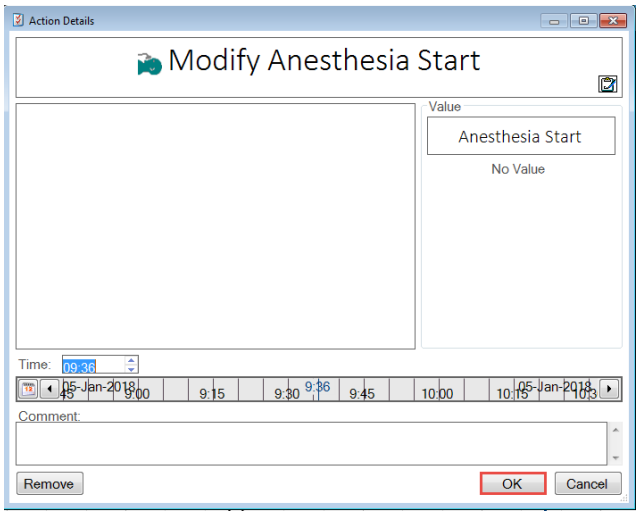
In this case, the Anesthesia Start time is what you would like to document.

1. As Anesthesia Start is not in the To Do List, click on the  **Documentation** icon.
2. Click the **Actions** Tab.
3. Click **Case Times**.
4. Click and hold down on the left mouse button on **Anesthesia Start** in the Documentation window. Drag and drop the Anesthesia Start to the appropriate time in the lower section of the record.



Once an action item has been placed, double click the icon to add details.

- Anesthesia Start only contains a free text note box for additional comments. The level of detail will depend on the action/event.
- Click **OK**



When the “hover to discover” functionality is utilized, the additional details will appear temporarily on the chart without clicking anything. You must move the cursor over the details popup for it to persist. Moving away from the popup will allow it to close.

If changes to the details are required, you can re-open the Details Window by clicking on the Bold Event Name.

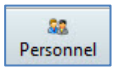
Key Learning Points

- Documenting action/events by drag and drop from the To Do List.
- Details available to document is specific based on each action/event.
- “Hover to discover” can be utilized to have a quick view of the details documented.

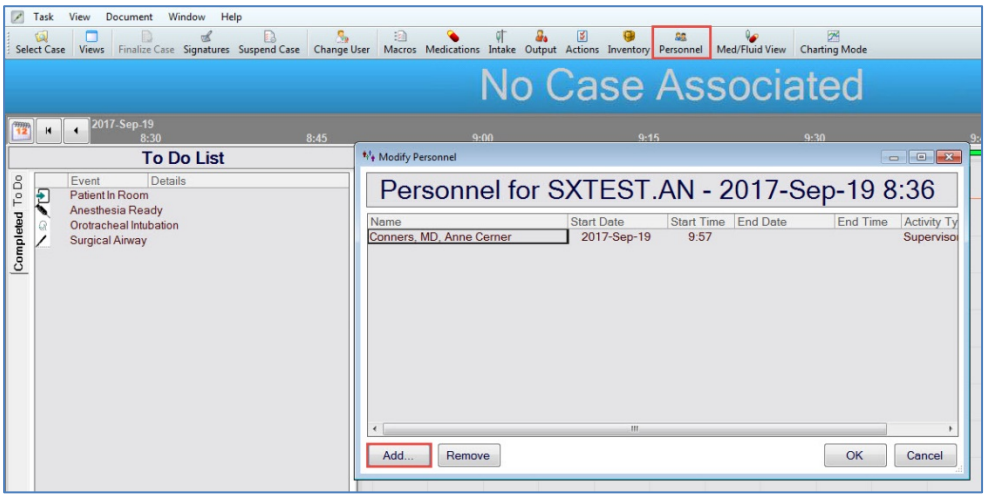
Activity 3.6 – Documenting Personnel

1 To document the Anesthesia Department Personnel in the room. Locate the Personnel icon in the toolbar. The Modify Personnel window will appear and the personnel documented will already be populated in the window.

Anesthesia personnel captured will be viewable to the Nursing staff to ensure accuracy. If not, discrepancies in documentation will be noted.

1. Click the 

toolbar button.
2. Click on the **Add** button to add person to the chart.
    - To remove personnel, select the provider and then click **Remove** (Not required for the activity).

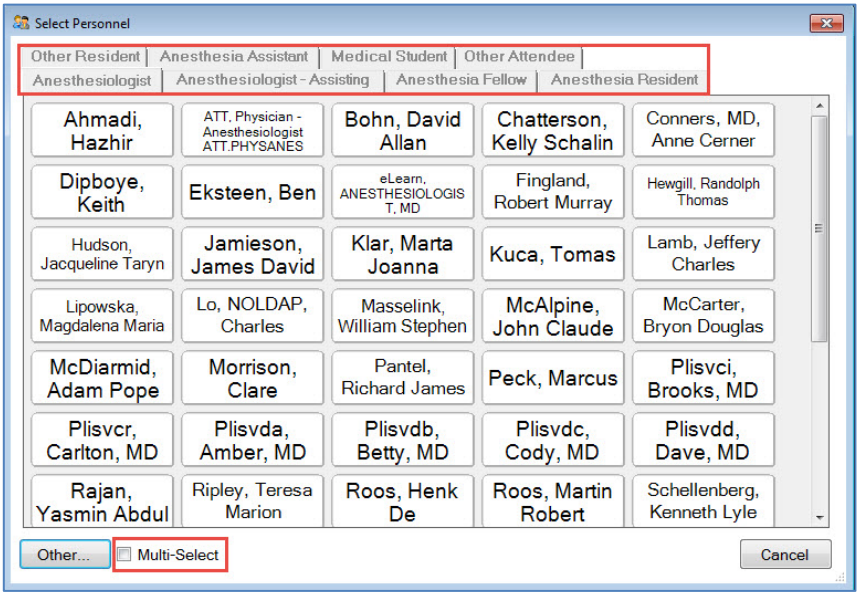


2 The Anesthesia staff list will appear and be organized based on roles. The various tabs at the top represent the different roles to locate the appropriate staff member. The list of staff names is based on individual logins.

To add a provider(s):

1. To add multiple staff members, click on **Multi-Select** first, then select the appropriate staff members.
2. Select the staff names to add the person to the list. Add the following personnel.
   - Anesthesia Fellow – Test User, Perioperative – Anesthesia Fellow
   - Medical Student – TestUser, MedicalStudent
   - Click **OK**.

NOTE: You can only have one supervisor at a time.



Key Learning Points

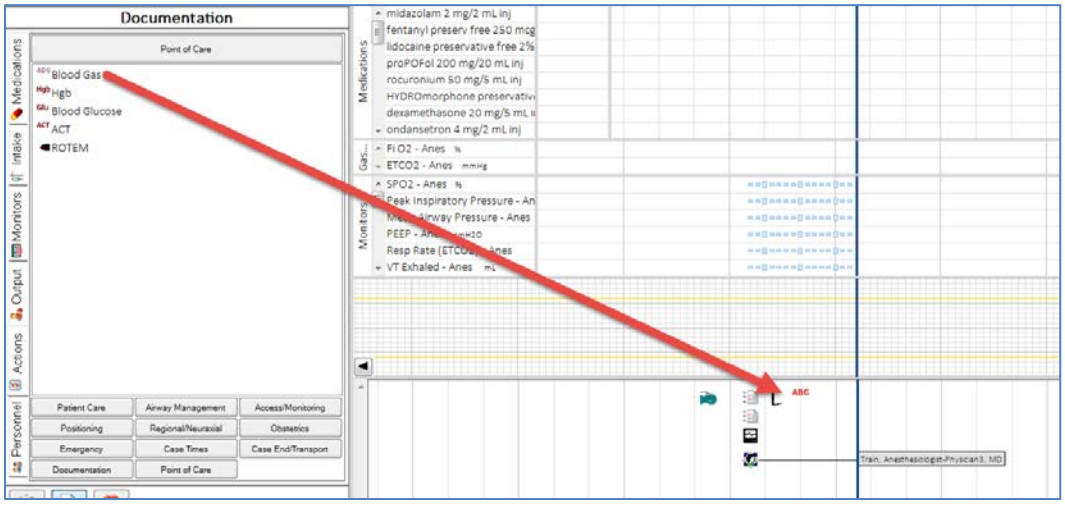
- Documenting Anesthesia personnel can be accessed through the Personnel icon on the toolbar.
- Personnel documented in SA Anesthesia flows into the intra-operative documentation for nursing. Discrepancies will be flagged for nursing to address.
- You can only have one supervisor at a time.

Activity 3.7 – Documenting Point of Care (POC) test results

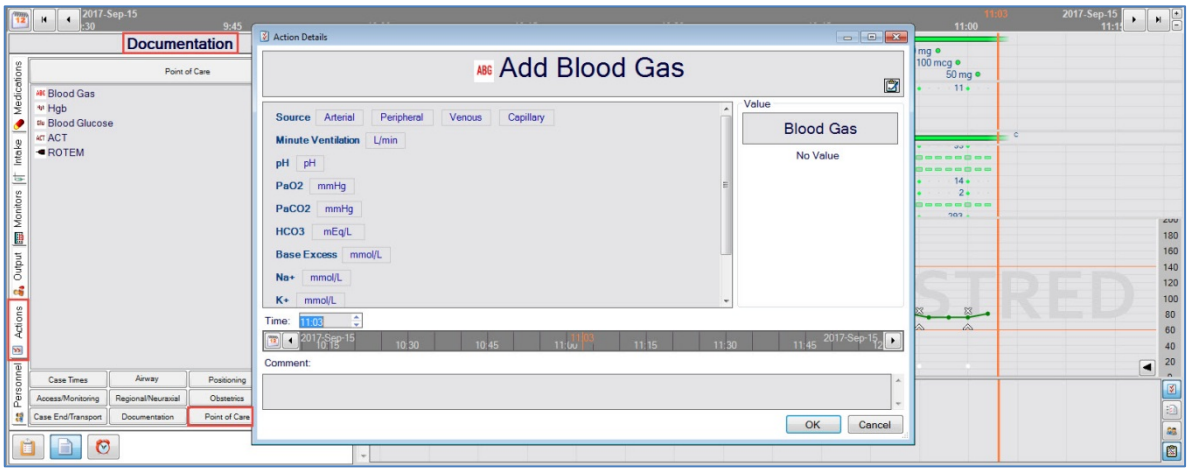
1 Point of Care (POC) testing is often used in the intra-operative environment as Anesthesia requires real time data on the patient status.

To document POC results:

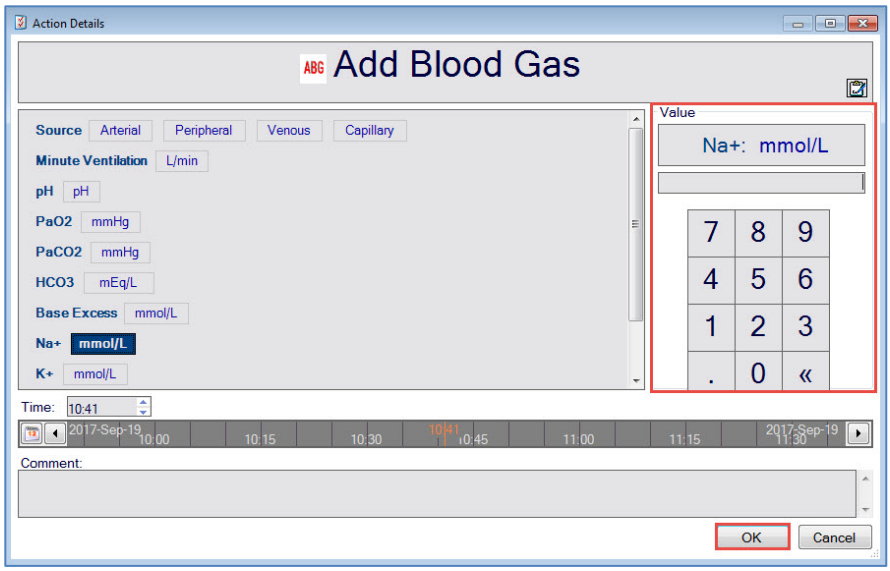
1. Click the **Actions** icon tab from the Documentation section of the workflow pane.
2. Click on **Point of Care** at the bottom of the workflow pane.
3. Select the POC test you would like to add
    - In this case, add a **Blood Gas** by dragging the icon to action pane.



2 Values received from the results can be manually entered into SA Anesthesia. POC devices are not interfaced with the PowerChart or SA Anesthesia.

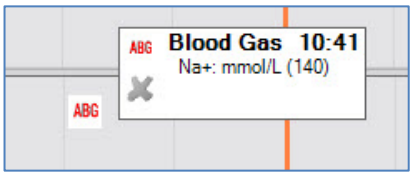


1. Select a specific result received to be entered.
    - Click on **mmol/L** next to Na+
2. The section on the right hand side of the window is where the result value is entered.
    - Enter 140 mmol/L for Na+.
3. Click **OK**.



3 The charted Arterial Blood Gas (ABG) will appear in the same section of the chart as the actions/events.

Hover to discover to view additional details.



Key Learning Points

- POC results have to be manually entered into SA Anesthesia to appear on the finalized record.

PATIENT SCENARIO 4 – Advanced Functionality and Documentation

Learning Objectives

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

- Creating and associating blank records for emergency cases
- Advanced functionality for documenting

SCENARIO

This scenario will review more advanced functionality and troubleshooting for common discrepancies.

As an Anesthesiologist, you will be completing the following 3 activity:

- Modifying an Infusion
- Finalizing a record
- Creating and Associating Blank Record

Activity 4.1 – Modifying an Infusion

1 To change the rate of IV solution.

The following are quick buttons to identify the action you would like associated to the solution.

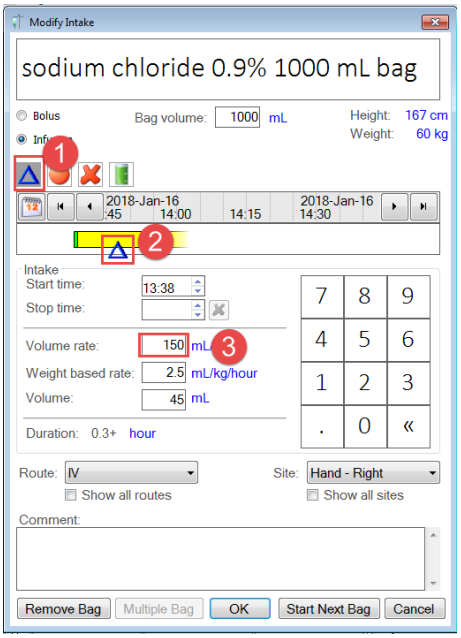
 : This icon allows rate changes to be made. Click this blue triangle and then click in the time frame that the rate needs to be changed in. Enter the correct rate in the appropriate field and a blue separator appears in the bar, indicating a change was made.

 : This icon allows the stop time of the infusion to be entered. Click the red circle and then document the proper time to indicate the conclusion.

 : This icon deletes the rate change indicators that might be present in the bar.

 : This icon allows documentation of incremental doses over a time frame. Click this icon and then click the medication line to document incremental volumes.

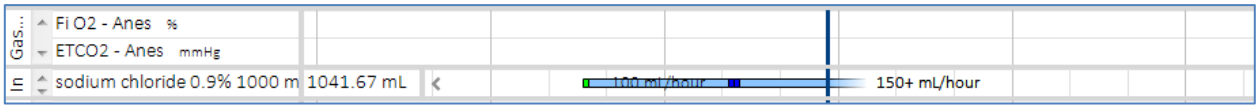
To modify the rate of an existing infusion.



1. Click somewhere along the line of the existing solution to open the details window. In this activity, we will utilize the IV solution of Sodium Chloride 0.9% 1000mL bag.
2. Click on the  icon to signify you are changing the infusion rate.
3. Move your mouse cursor to the time bar – the cursor arrow will turn into the blue triangle. Move this to the time the infusion rate was changed and click the left mouse button to place

the change.

4. Change the volume rate, weight based rate or volume.
    - For this activity, change the infusion rate to 200mL/hour.
    - The blue section of the bar indicates when the change in infusion rate was changed.



Key Learning Points

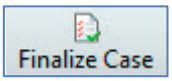
- IV infusions can continuously be charted seamlessly. The infusion rate of the previous bag will be visible on flowsheet.

Activity 4.2 – Finalizing the record

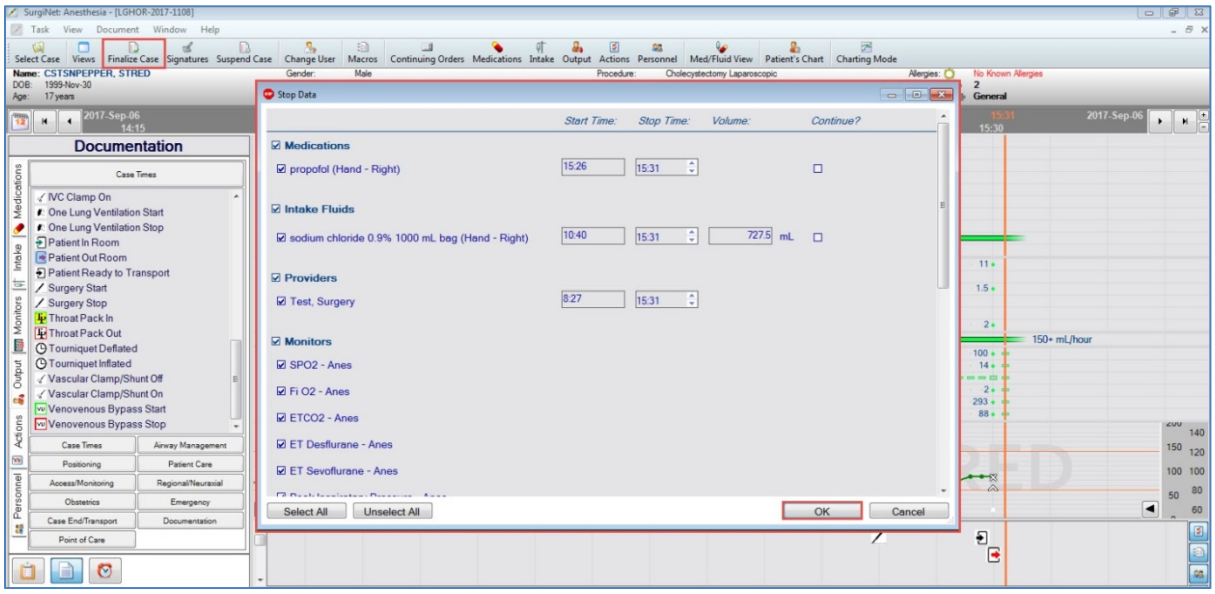
1 Upon completion of the case, the last step with the Anesthesia record is to finalize the record. Finalizing a record will trigger 2 tasks to occur that cannot be executed before finalization.

- Data is now viewable from the Documents section of PowerChart.
- During finalization, you can complete the unfinished documentation including medications, fluids, or actions.

To finalize a case:

1. Click on the 

icon in the toolbar.
   - This will open a Stop Data window.
   - All data elements that will stop will appear. There is a column to capture what can be continued under the Continue? column. You may choose to click the box to add a checkmark to indicate that you would like to continue something.
2. When complete and satisfied with the Stop Data window, click **OK**.
   - This will open the next window - Finalize window.



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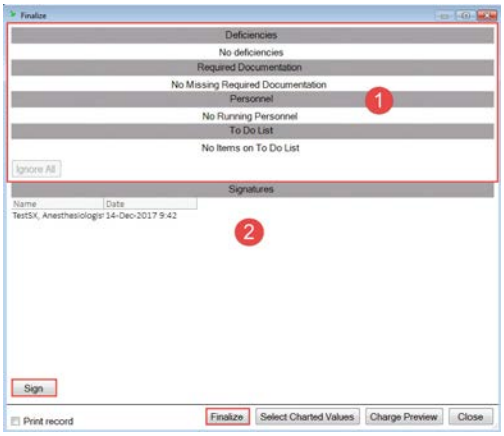
2 Prior to finalizing a record, this window will inform you of items that may require to be addressed prior to be finalized. Some tasks are a hard stop and must be addressed in order to be finalized.

- Review any documented deficiencies. Example: Missing amount for documented medications
- Review all required documentation. Example: ASA and Anes Type
- Review personnel, or documented providers that are not assigned to a stop time. Ensure a Supervisor signs the document.
- Review your To Do list. Tasks listed on your To Do List are required to be completed before finalization. Can either document upon it or ignore it.

This window is separated into 2 main sections:

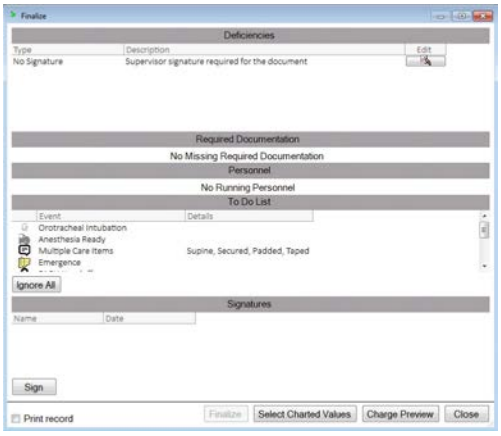
1. The top window will display deficiencies.
   - If there are no deficiencies, the screenshot below (A) is what will appear.

(A)



   - If there are deficiencies to address, something similar to the screenshot below (B) will appear with deficiencies listed. The type of deficiency will determine how it may be addressed. For this scenario click **Ignore All**.

(B)



2. The bottom window will display staff members who have signed the record. Additional

signatures may be required. An example is that a first-year resident has been documenting on the record throughout the case; however, a first year resident requires the attending to sign prior to being able to finalizing the record.

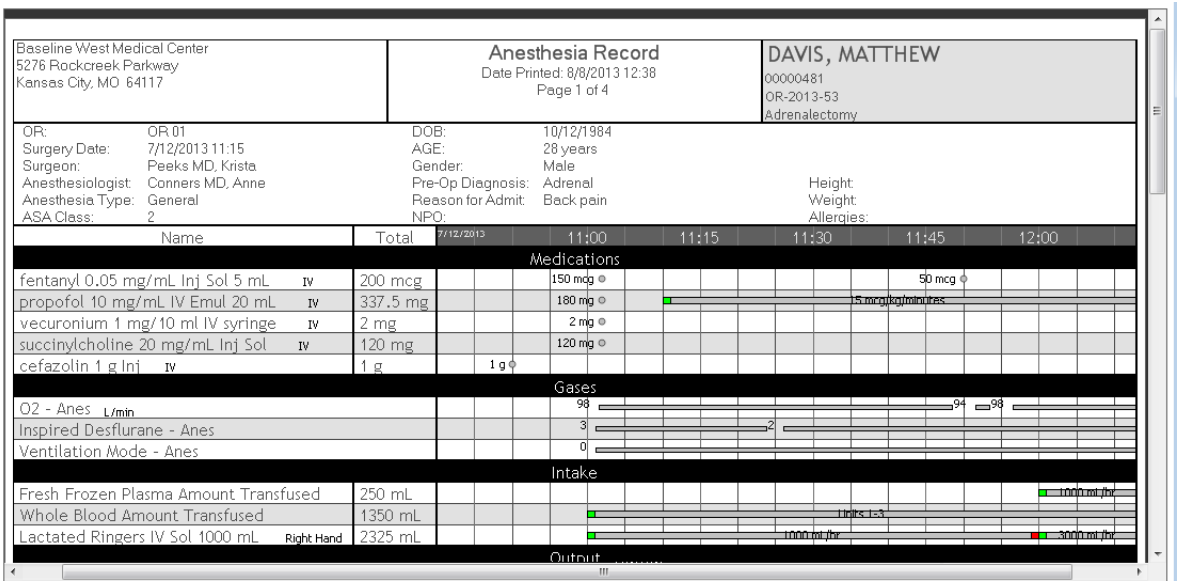
NOTE: All medications and fluid administrations require Supervisor signature present for the entire duration of the administration.

- To add a signature to the record, click on **Sign**.
- Enter your personal login information and click **OK** (for training purposes use the login provided).

3 Once a case is finalized, it will be available to view by all other users within the patient chart and can also be printed.

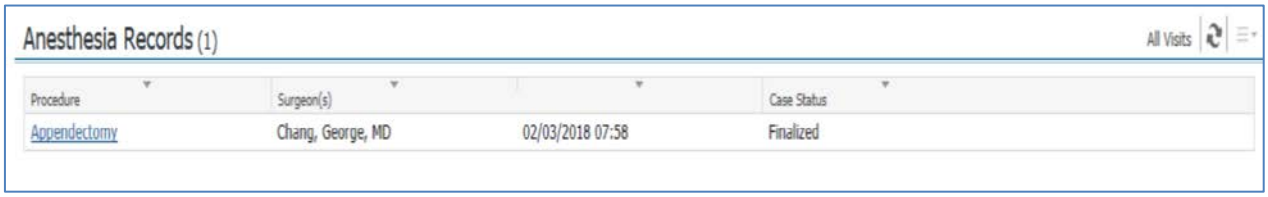
This is an example of what a completed record looks like, a view from the Documents section of

PowerChart or the Anesthesia view within SA Anesthesia.



To view a Finalized copy of an Anesthesia Record (not available in Train Domain):

1. Open patient's chart and navigate to **Provider View**.
2. Click **Anesthesiologist Workflow** tab.
3. Scroll down to Anesthesia Record and click **procedure name** hyperlink.



Anesthesia Record appears in new window.

Key Learning Points

- Finalizing a record will enable all users to view the record.
- Deficiencies need to be addressed prior to finalization.

Activity 4.3 – Creating and Associating Blank Records

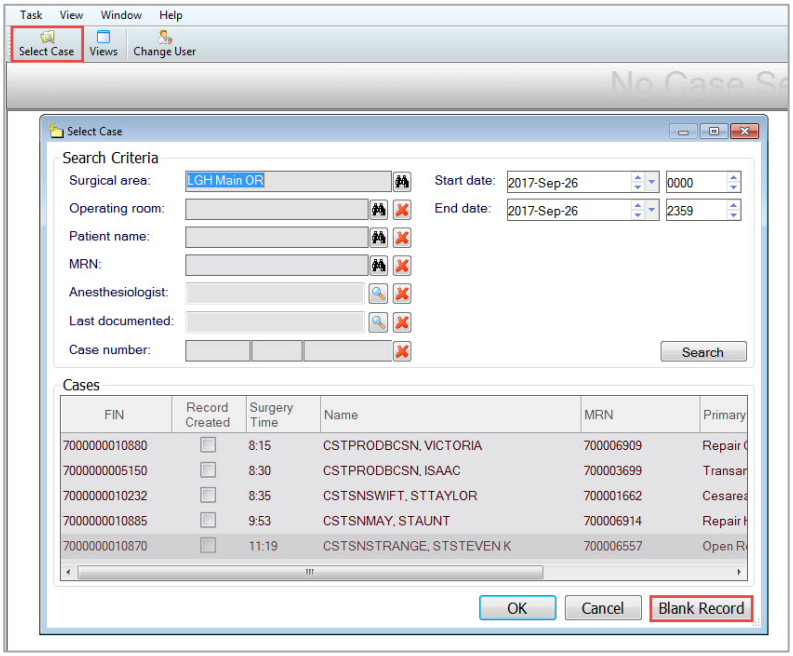
1

Cases that have been scheduled will automatically appear on the Select Case window. For Emergency cases which have not yet been scheduled, a blank anesthesia record can be created in the meantime to be merged with a scheduled case later.

Creation of a blank record does not affect access to functionality; it simply means that the record is not associated to a particular patient at this time.

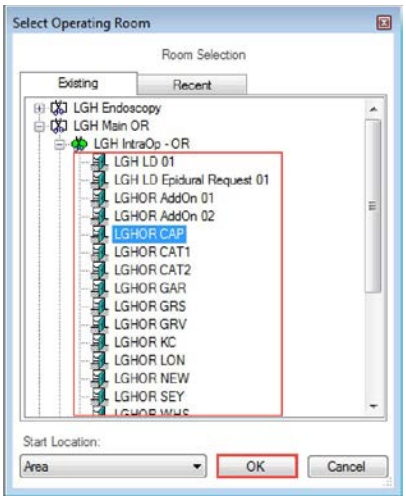
To create a blank record:

1. Click on the **Select Case** icon on the toolbar.
    - The Select Case window will appear.
2. Click on **Blank Record**.



3. Click on binoculars icon next to Created Location

4. Select appropriate OR room
5. Click **OK**



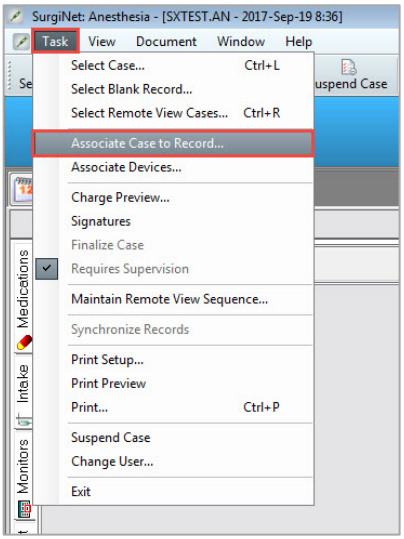
6. Click **OK**

- Notice the location is now populated.

At any time within the case, when the patient has been created and booked within the system, the record can be associated back to the appropriate patient.

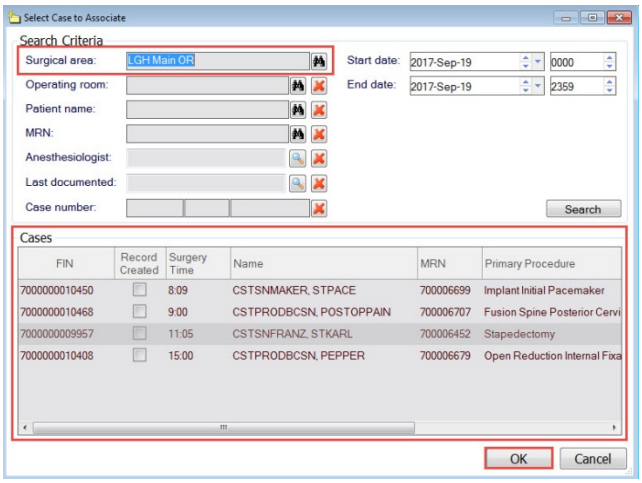
To associate a blank record to a patient:

1. Click on **Task Associate** > **Case to Record…**



The Select Case to Associate window will appear.

1. Ensure the appropriate surgical area is listed. This will ensure you are looking at the correct list to review the patients.
2. Search for the correct patient to associate the blank record to. Click to highlight the appropriate patient. Please use the patient that is provided on your login card.
3. Click **OK**.



Key Learning Points

- In the event of an emergency, a blank record can be started regardless of whether or not a patient is scheduled for the case.
- The record can be associated back to a specific patient when the patient has been scheduled.

End Book Two

You are ready for your Key Learning Review. Please contact your instructor for your Key Learning Review.