What's Inside this Guide:

Solution Training Guide

INet®

CERNER

Table of Contents

Overview

This reference guide was designed to supplement a hands-on, instructor led session. Pictures of various screens have been included in order to show general information placement. Please note that these are standard screens and may not match exactly to those at your site.

Learning Objectives

At the end of this session, class participants will be able to:

- Navigate the *INet®* Interactive View Window

- Associate/disassociate patients from monitors

- Adjust the timescale to be appropriate for the patient

- Recognize what bands will display for each end user

- Filter and find appropriate results

- Document simple and complex results

- Modify and unchart results

- View results

- Modify user and patient preferences for each view

Course Length

The class is designed for one-half of a day.

Course Audience

The target audience for this course will consist of those who will be responsible for:

- Testing INet

- Writing INet test scripts

- Training INet super users

Prerequisites

All participants are expected to be competent in the following areas:

- Computer basics

- Microsoft Windows

- Train the Trainer – *PowerChart®* solution

- Train the Trainer – Order Management

- Train the Trainer – Documentation Management

Information Security and Confidentiality

When dealing with computerized health care records, specific confidentiality and security issues must be followed to protect the patient. There are increasing HIPAA and JCAHO regulations that dictate how these records are handled.

- When selecting a password, don't choose anything obvious, such as your birth date, social security number, or spouse and children's names.

- Do not tell anyone your password.

- Your system may require you to change your password at regular intervals.

- When you open a chart you will be asked to identify your relationship to the patient, for example primary RN, consulting physician, etc. The system keeps an audit trail, or record, of who enters each chart and when. It records who read the chart and who recorded each piece of information in the chart.

- Security should be designed so that employees can only perform functions within the system that are necessary for their position/role. Also, employees should only be able to view data that is necessary to perform their job. For example, a lab technician should have the ability/security to utilize all of the functions within the PathNet® solution, but an ED Nurse should not have that ability.

- Do not leave the computer while still signed on.

- Do not access any charts that do not apply to your current job and caseload.

- Each facility has its own specific confidentiality and information security policy. It describes the repercussions of not following these rules.

Tips and Tricks

Cerner Application

- Press and release the secondary (usually right) mouse button and see if any of the menu items apply.

- Use your cursor to hover over the buttons to see if any of the button names jog your memory.

- If a single mouse click doesn't work, try a double mouse click.

Help Files

Complete one of the following steps to access Help for the application:

- Locate the Help file in the winintel folder where the Millennium applications are stored. The Help file shares the same name as the EXE file, except the file extension is .HLP. For example, the Help file for PowerChart.exe is PowerChart.hlp.

- With the application open and running from the appropriate domain, select HNA Topics or Help Topics in the Help menu, or press F1 on your keyboard.

Solution Terms

In the Help table of contents, located in the left pane of the application's Help viewer, expand the Glossary book, and then select the Glossary topic to display the glossary in the main pane of the Help viewer. Select the first letter of the term you want defined, then click the term to display the definition.

Throughout Help, words in green font with a dotted underline indicate terms with definitions. Click on a term in green, dotted underlined text to display the term's definition.

Solution Icons

Solutions use unique icons to designate buttons that have specific functionality. To view the icons and their meanings for a particular application, open the table of contents, located in the left pane of the application's Help viewer. Expand the Menus and Toolbars book, and then select the Toolbar topic to display the application's icons in the main pane of the Help viewer.

Getting Started

Logging In

Follow this procedure to log into the system:

1. At the Main Menu window, double-click on the PowerChart icon.

2. At the Cerner log-in window, type your user name in the User Name field.

3. Press the Tab key to move to the next field and type your password into the Password field.

4. Click on the OK button or press the ENTER key.

Logging Out

When you have completed your activities, remember to log out of the application you are working on for security purposes. Logging out can be done in one of the following three ways:
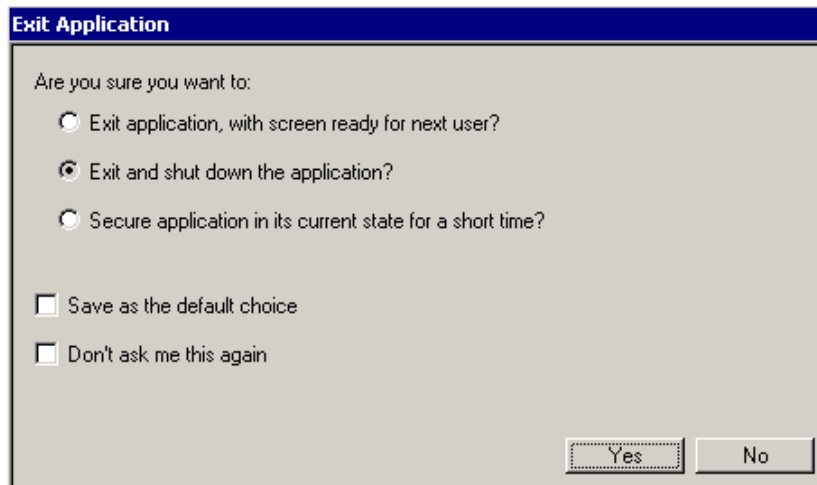
1. If you are exiting the application temporarily, but planning on returning to that computer shortly, click on the suspend user icon on the toolbar. This will return the screen to the log on window and place the cursor in the password field.

2. If you want to shut down the application completely, you can click on the exit icon from the toolbar or the "x" in the upper right hand corner of your screen. Keep in mind that shutting down the application will require the next user to re-launch the application, which requires a greater amount of time.

3. If you choose the icon displayed below, you will enter the Exit Application window. This first option available allows you to prepare the application for the next user. This will return the screen to the log on window and place the cursor in the user name field. The second option will completely shut down the application and the third option will allow you to suspend the application.

Exit Application

Are you sure you want to:

○ Exit application, with screen ready for next user?

◉ Exit and shut down the application?

○ Secure application in its current state for a short time?

☐ Save as the default choice

☐ Don't ask me this again

[Yes]   [No]

What is the *INet®* Solution? Who Uses It?

INet® is the *Cerner* solution for the Critical Care space. It is an integral part of the *Cerner Millennium®* application suite. The *INet®* solution has been specifically designed to be used by critical care nurses, physicians, and other ancillary personnel that function on a daily basis with critical care patients.

The *Interactive View* flowsheet has proved within clinical workflow to bring value to clinicians within general care as well as critical care. The *Interactive View* is Cerner's recommended solution for the general care as well as critical care clinician's patient care documentation solution.

The *INet®* solution is a part of *PowerChart®*. It is located within each patient's chart and enables you to access relevant, up-to-date patient data when and where you need it. You can review, enter, modify, and manage results as needed. *INet®* integrates closely with other *Cerner Millennium®* solutions including *CareNet®* Order Management and *CareNet®* Documentation Management. Depending on code level and scope, it can also integrate with the *PharmNet®* solution for medication administration, the *PathNet®* solution for laboratory result viewing, and the *RadNet®* solution for radiology result viewing.
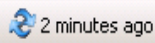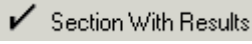
INet® Basics
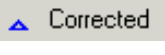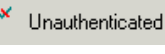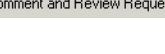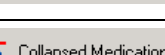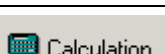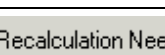
This first section of the document is meant to give you a basic overview of the *INet*® Interactive View Window. The functionality of each part will be discussed later in the document.

INet® Buttons and Icons

INet® buttons and icons are located in various places on the screen and provide easy access to documentation functions.

Toolbar buttons access additional functionality. When you are in the *INet*® tab, the *INet*® toolbar is located just to the right of the As Of button.

Button or Icon	Action
2 minutes ago	As Of button – Used to refresh the display of the INet® Interactive View.
	Collapse Navigator– The Doc Set Navigator window is displayed or hidden by using this toggle button.
	Show Empty Columns/Rows – The system will collapse the view to show only rows with documented results or expand the view to show all included rows by using this toggle button.
	Review Results – Bookmarks the new results within your view as no longer new.
	Sign – Used to sign results into the database.
	Cancel – Used to cancel any unsigned results in the view.
Section With Results	Section With Results – Any section with results within the current timeframe will display a black check mark to the immediate left of the section name.
Section With Critical Results	Section With Critical Results – Any section with critical results within the current timeframe will display a black check mark and red exclamation point to the immediate left of the section name.
! Critical	Critical result – Any critical result in the view will display in red text with an exclamation point character to its immediate right.
↑ High	High result – Any high result in the view will display in orange text with an up arrow to its immediate right.
↓ Low	Low result – Any low result in the view will display in blue text with a down arrow to its immediate right.
⩗ Abnormal	Abnormal result – Any abnormal result in the view will display in brown text with a lightning bolt icon to its immediate right.

Button or Icon	Action
Unsigned	Unsigned result – Any unsigned result in the view will display in purple text with no icon.
▲ Corrected	Corrected result – Any corrected result in the view will display with a blue triangle icon to its immediate right.
✗ Unauthenticated	Unauthenticated result – Any unauthenticated result will display with a check mark and slash icon to its immediate right.
◥ Result Comment	Result Comment – Any result in the view that has a comment will display with a black triangle in the upper-right hand corner of the cell.
◿ Review Request Comment	Review Request Comment – Any result in the view that has been forwarded to a clinician's Inbox will display with an open triangle in the upper-right-hand corner of the cell.
◿ Result Comment and Review Request Comment	Result comment and Review Request Comment – Any result in the view that has a comment and has been forwarded to a clinician's Inbox will display with two black triangles in the upper-right hand corner of the cell.
✦ Expanded Medication	Expanded Medication –
✦ Collapsed Medication	Collapsed Medication –
▦ Calculation	Calculation – Any row that is a calculation will display this icon to the left of the row label.
≠ Recalculation Needed	Recalculation Needed – Any calculation in the view that needs to be recalculated based on its contributors changing will display this icon to the immediate right of the current result.
⚑ Flag	Flag – Any result in the view that has been flagged for further review will display with a yellow flag to its immediate right.
⚑ Previously Flagged	Previously Flagged – Any result in the view that has been previous flagged for further review will display with a dithered flag to its immediate right.
▦ I&O Totals Items	–Results that are displayed from defined Intake and Output totals within the Interactive View.
✅	Band icon – This icon displays next to the band name on the Interactive View.
▦	Customize View – Use this button to customize your view for this patient or change your user or view preferences.
▦	Insert Date/Time – Use this button to insert the current date and time on the view.
▌! Rejected by Pharmacy	Rejected by Pharmacy – Any IV Drip that has been rejected by Pharmacy with display the mortar and pestle icon with an exclamation point immediately above the order name.

Button or Icon	Action
Request Pharmacy Verification	Request Pharmacy Verification – Any IV Drip that has not been verified by Pharmacy yet will display the mortar and pestle icon immediately above the order name.
Nurse Review	Nurse Review – Any IV Drip that has not been reviewed by a Nurse yet will display the eyeglasses icon immediately above the order name.
Pharmacy Comment	Pharmacy Comment – Any IV Drip that has a Pharmacy Comment attached to it will display the note with a push pin icon immediately above the order name.
Admin Note	Admin Note – Any IV Drip that has an Admin Note attached to it will display the note with a paper clip icon immediately above the order name.
Hard Stop Renewal	Hard Stop Renewal – Any IV Drip that is approaching its hard stop renewal time will display the red hourglass and lock icon immediately above the order name.
Soft Stop Renewal	Soft Stop Renewal – Any IV Drip that is approaching its soft stop renewal time will display the yellow hourglass icon immediately above the order name.
Documentation Dose Unit is Loading	Documentation Dose Unit is Loading –
Modified Order	Modified Order – Any IV Drip that has been modified will display a yellow delta icon immediately above the order name.
Order present	Order Present – Any result connected to an order will display the paper with glasses icon to its immediate left. Hover over this icon to see the associated orders.
Overdue task	Task has not been completed before the defined overdue timeline
Current task	Documentation for a "due" task is included within the column section
PRN/Continuous task	A PRN/Continuous task has been ordered on the patient and the results of task completion can recorded in the column section.
Processing task	A task has not been completed by the system after the end user has taken action.

INet® Organization

The Interactive View / I and O band is the area that you will use to document, view, modify, unchart, and generally work with various types of results. After selecting the Interactive View / I and O tab you will see the *INet®* Interactive View:

There are three main sections of the *Interactive View / I and O*:

- Navigator

- View Window

- Filter and Seeker Window

Doc Set Navigator Overview

The left side of the *Interactive View / I and O* is the Navigator section, which functions similarly to that of the Flowsheet. The Navigator is made of up of a number of sections and bands. The sections have specific formatting that helps the end user to determine what information is being displayed on the view window.
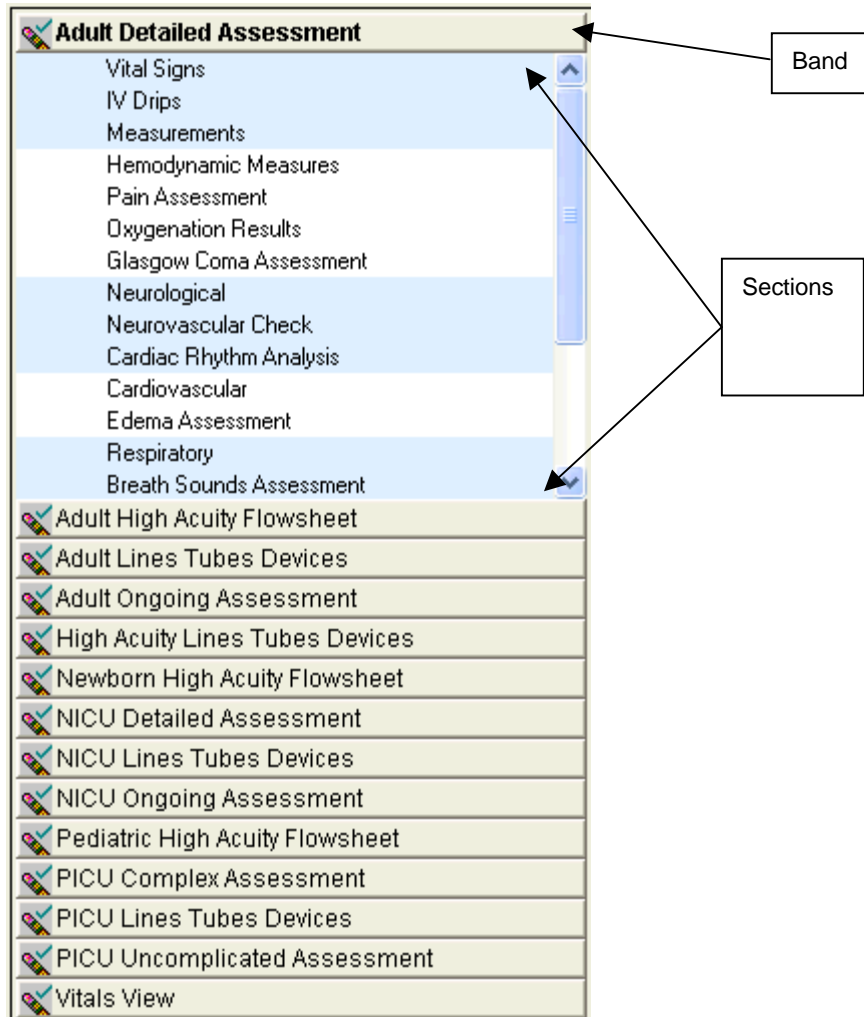
View Window Overview

The view window is used to actually add, modify, unchart, and work with the results. It is the area where you can see past, current, and possibly future documentation on the patient no matter who created the result. The actual window view is made up of several sections:

- Timescale

- Sections

- Sub-sections

- Event sets

- Units of measure

- Calculation
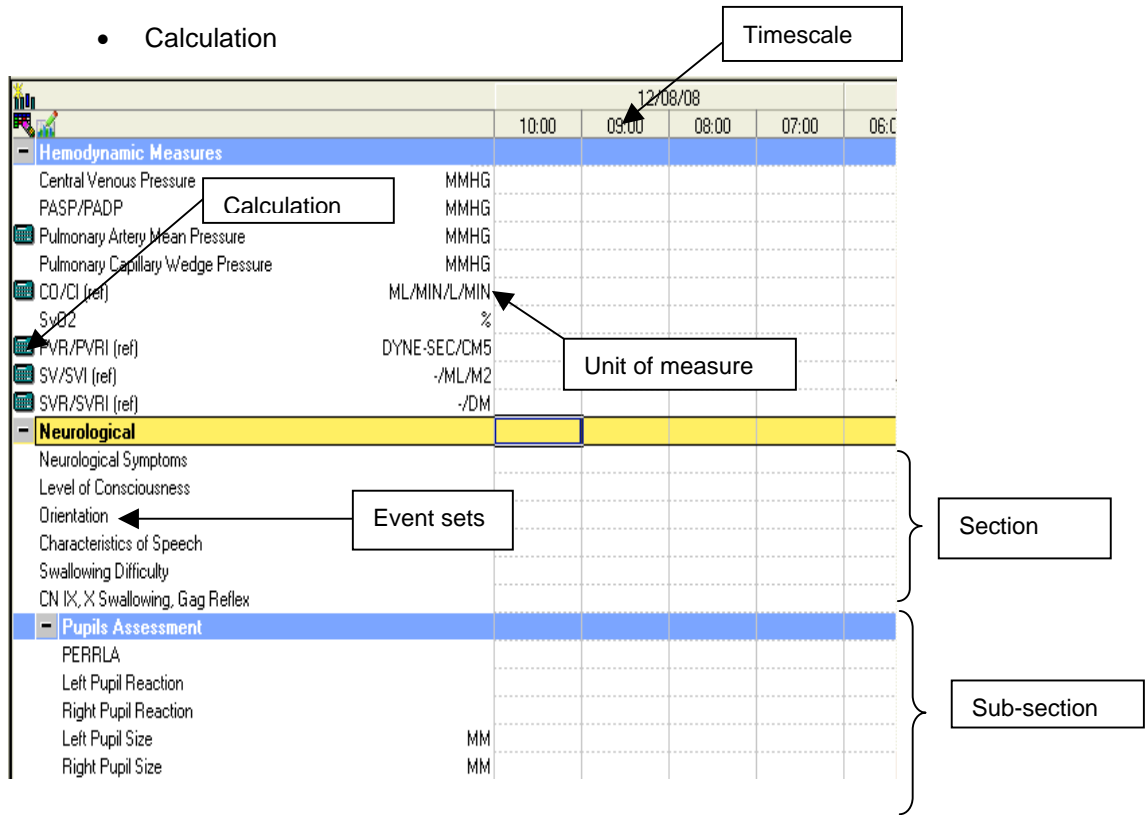
Filter and Seeker Window Overview

The Filter and Seeker windows are used for searching and filtering results. The Filter window allows the clinician to find specific items. The Seeker window is used to give a graphical representation of the current flowsheet that allows the user to quickly move to other areas. Paired together, the filtering can color specific results a different color and the Seeker window can allow the clinician to skip directly to the filtered data.

Filter Window   Seeker Window
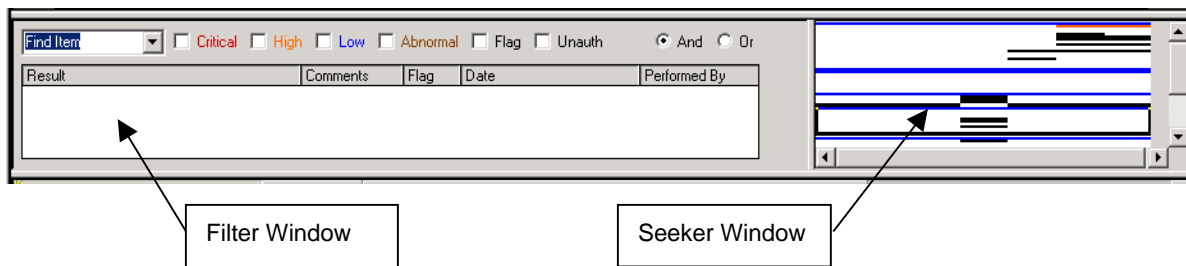
Resizing Windows

In addition to the Collapse Navigator button , you can resize the windows by placing your cursor on one of the bars that separates one section from another.

The easiest way to get rid of the Navigator section (or get it back) is to use the Collapse Navigator button . If you would like to make the Navigator smaller or larger instead of getting rid of it completely, however, you can click the bar between the Navigator section and the other two sections and adjust the bar accordingly. Please note that slider bars may display on the Navigator section if you make the section too small.

There is also a horizontal bar separating the View Window from the Filter/Seeker Windows. You may adjust this bar as desired to make either window larger or smaller. A vertical bar also exists between the Filter and Seeker Windows to expand or contract your view of that window.

Note: If you're Filter Window appears to be painting incorrectly or text is missing, such as the New or Unauth labels, you will need to expand your Filter Window by either adjusting the Seeker Window or Navigator Window as described above.

Changing the Date/Time Range on the View

Similar to other *Cerner* solutions, the clinician can change the date and time range for the *INet®* Interactive View. This can be accomplished in one of three ways:

- Click on the arrows on either side of the current date/time range to expand or contract your time range. Using the arrows on the left-hand side of the range will expand or contract the start date. Likewise, using the arrows on the right hand side of the range will expand or contract the end date.

- Right-click the blue bar and select an appropriate option.
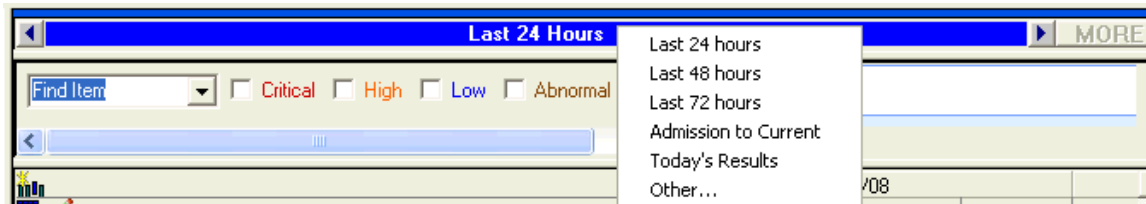
- Select Change Search Criteria from the Options menu.
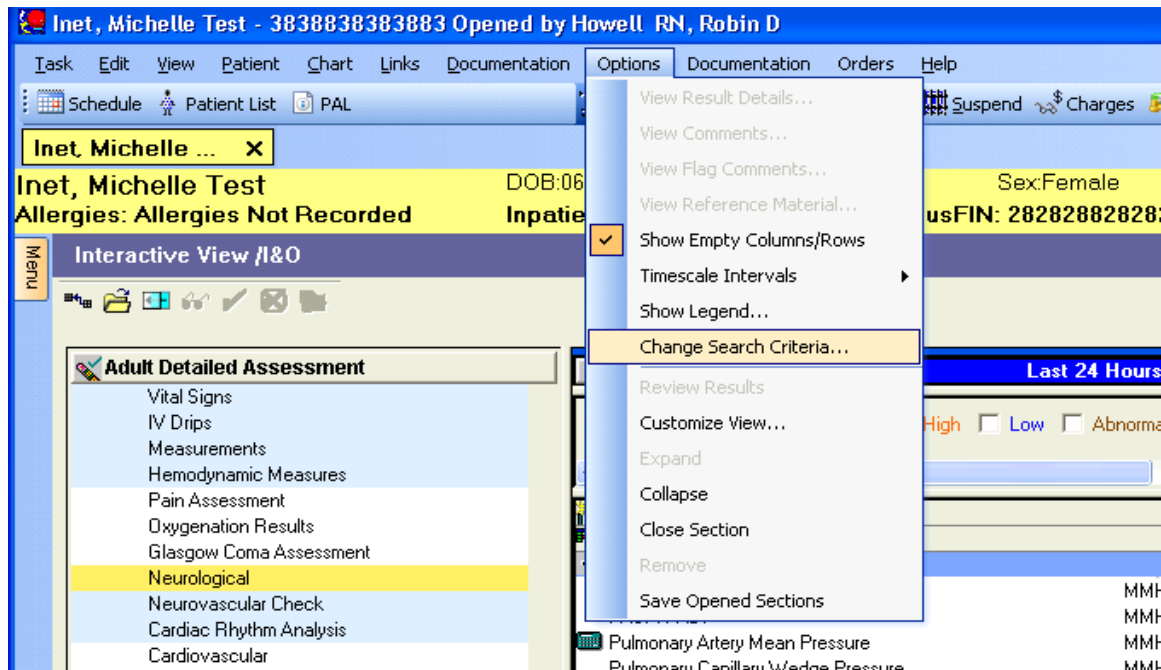
If you select the Other… choice when you right-click on the blue bar or change the date and time from the Options menu, a secondary window is displayed. Use this window to make manual changes to the date/time range.

From this window you may make the following choices date/time range choices:

- Clinical Range – The system will display any results that fall within the time period specified in the From and To boxes.

- Today's Results – The system will display any results that fall within the current day.

- Last X Hours – The system will display the results that fall within the number of hours specified in the box.

- Admission to Current – The system will display any results that fall within the time period of admission date/time and current date/time.

Please note that these functions are unavailable when you have activated any section or column for documentation purposes.

Navigator Window

The Navigator window is used to give clinicians a high-level overview of what type of information they are seeing in the view window and if there are any new results in any sections. The Navigator is also used by clinicians to move more easily within a view and between views.

Bands vs. Sections

The new *INet®* Interactive View allows the system to combine multiple views or flowsheets together onto one tab so that clinicians can more easily navigate between discrete documentation events. Each of these views is called a band. Each band is composed of sections. The currently active band is displayed in bold text.
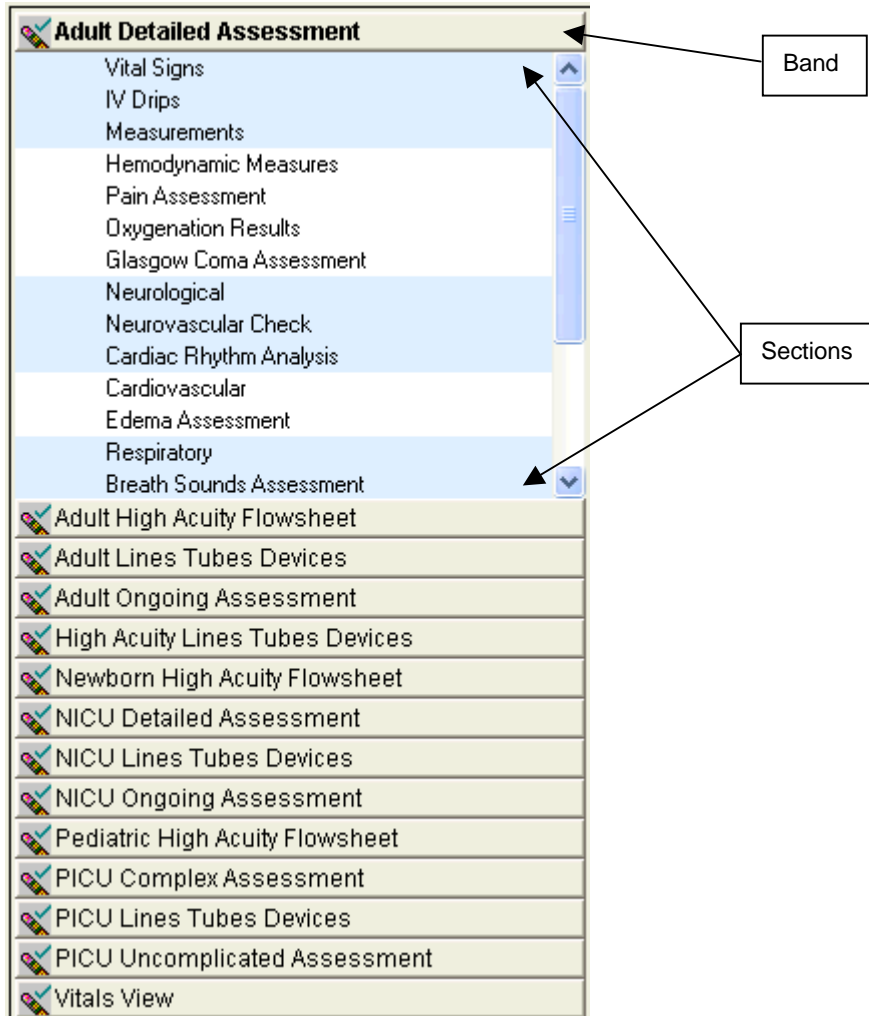
To navigate between bands:

1.   Sign-in to the *PowerChart®* solution and select the *Interactive View / I and O*.

2.   Click the appropriate band.

3.   If the selected band is not the first band, the band will move to the top of the Navigator under any bands that are already at the top of the Navigator.

4.   The band name is displayed in bold text and the sections are displayed below the band.

To navigate between sections:

1.   Sign in to the *PowerChart®* solution and select the *Interactive View / I and O*.

2.   Click on the appropriate band.

3.   Select the appropriate section.

4.   The section then displays in the view window with the appropriate event sets.

Displaying of Bands

The display order of the bands is determined by your system administrator. Bands may be created for only a specific position or for a position/location combination. If your system has any bands that are created for a position/location combination, those bands **are displayed first**. Thus, a clinician looking at the *Interactive View / I and O* for one patient in one unit might have a different list of bands when compared to a different patient in a different unit.

Section Formatting

The section names within the Navigator have specific formatting to allow the clinician to understand what type of results they should expect to see in the view window. This formatting is meant to help the Navigator give a quick overview of what is going on with the results and what things they need to do to manage those results.

The following formatting features may be combined to create the section formatting:

- Black Section Name without a check mark – This is a section that does not contain any charted results for the current time period.

- Black Section Name with a check mark – This is a section that contains charted results that the clinician has entered and/or results that the clinician has bookmarked.

- Bold Section Name – This is a section that contains charted results that the clinician has not bookmarked, or not marked as seen.

- Light Blue Section Highlighting – This is a section that is currently open and available in the view window.

- Yellow Section Highlighting – This is the section that has been selected by the clinician and should be open and available at the top of the view window.

- No Section Highlighting – This is a section that is currently available for view, but will not display in the view window until selected.

- Red Exclamation Point – This is a section that contains charted critical high/low results for the current time period.
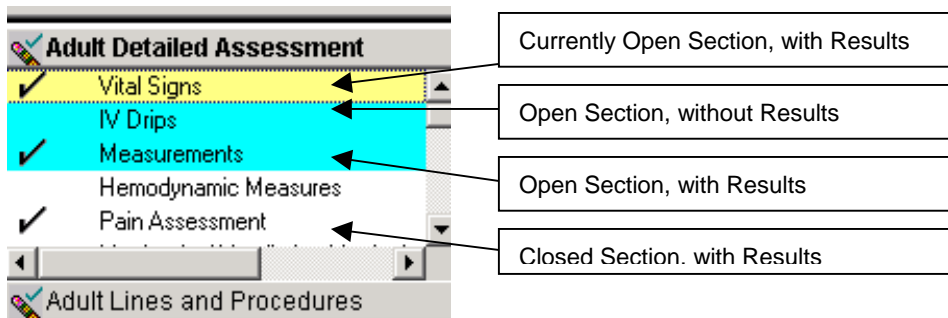
Filter and Seeker Window

The Filter and Seeker widows are used by clinicians to have a quick way to find specific results that they would like to see. The Filter window is used to search for specific results or all results with specific characteristics. The Seeker window is used to show a high-level map of the flowsheet that is color-coded to show where results lie within the currently opened sections.

Searching for a Specific Item

The Filter window can be used to search for a very specific item. For example, a user may want to search for the Respiratory Rate instead of looking for it on the flowsheets.
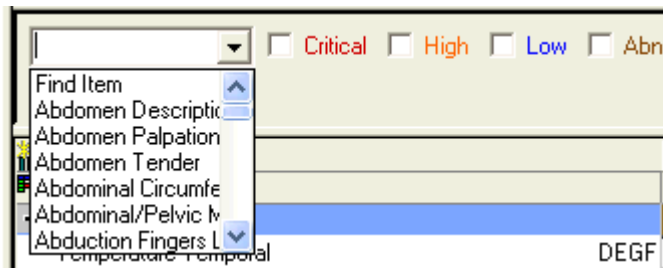
1.   Open the *PowerChart®* solution to the *Interactive View / I and O*.

2.   Make sure that the Filter window is visible. To make the Filter window visible, see the Resizing Windows section above.

3.   Select the item that you are looking for from the list.

4.   Your results are displayed in the white box below the list.

In addition to the results in the Filter window, your results on the flowsheet should now appear in a light green color.

Showing All Results with Specific Characteristics

The Filter window can also be used for searching for items that have specific characteristics. For example, the clinician might need to see all new, critical results on a patient to determine a plan of care. In addition, the search parameters can be set to perform the Boolean searches of And and Or.

To search for all items with specific characteristics:

1.   Open the *PowerChart®* solution to the *Interactive View / I and O*.

2.   Make sure that the Filter window is visible. To make the Filter window visible, see the Resizing Windows section above.

3.   Click any of the boxes next to the result indicators (Critical, Low, New, and so on).

4.   Select the appropriate radio button to perform an And or Or search.

Similarly to the specific item search, your results should display on the view window in a light green color. Also, as you select a specific result, the view window should focus on the cell that you have selected from the Filter window.

		12/11/08				
09:00	08:00	07:00	06:00	05:00	04:00	
98.4	99.5 [2]	102.3 ↑	98.9		98.2	
					95 ↓	
		165 ↑	99		95	
		25 ↑	15		12 ↓	
125/65	140/68 [2]	160/94 ↑	125/56 ↓		115/55 ↓	
85	92 [2]	116	79		75	

Seeker Window

The Seeker window is used to give the clinician a broad overview of the current view window. Event sets display in the Seeker window as color-coded boxes to aid in finding specific results more quickly.

The following colors are used within the Seeker window:

- Red – Critical Results

- Orange – High Results

- Blue – Low Results

- Brown – Abnormal Results

- Light Green – Results from the Filter Window

- Light Blue – Section Dividers

- Black – Any result that does not fit the above conditions

Black, Boxed Area
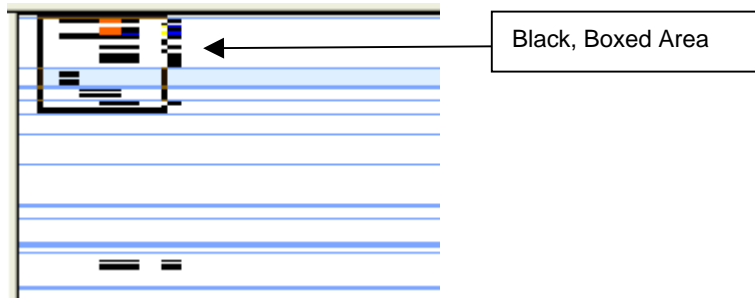
The Seeker window can also be used by the clinician to move around the view window with ease.

To move to a different area of the view window:

1. Open the *PowerChart®* solution to the *Interactive View / I and O*.

2. Make sure that the Seeker window is visible. To make the Seeker window visible, see the Resizing Windows section above.

3. Click anywhere in the black, boxed area (see figure above).

4. Drag the black box to another part of the view.

5. The view window is updated, as appropriate.

Working within the View Window
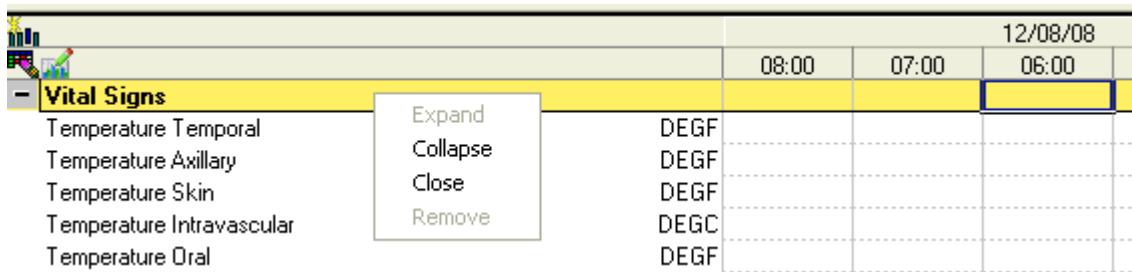
This section explains the functionality of the view window and describes how to interact with the results and results process on the *INet®* Interactive View. The items contained below should not be construed as process recommendations in themselves, but rather a discussion of functionality to aid in determining best practices and processes surrounding the documentation of care in the critical care space.

Working with Sections

Often the clinician will need to adjust the view window to suit the particular documentation needs of a patient. This section is meant to cover several of the ad hoc ways to change the view and customize it based on user preferences. Please see the section below for more information customizing the view in one screen.

The easiest way to condense sections is to use the ➕ and ➖ buttons at each section header within the view window. These buttons allow the clinician to condense or expand a section as needed within the view.

The other method to deal with sections is to use the options displayed by right-clicking on the section header.

- Expand – This option will expand a section. It is equivalent to the ➕ button.

- Collapse – This option will collapse a section. It is equivalent to the ➖ button.

- Close – This option will close the section and take it out of the view window. The section will still be available in the Navigator window.

- Remove – This option will close the section and remove it from the Navigator window.

> **Note:** Any changes that are made in an ad hoc manner will not be saved by the system until the clinician chooses the Save Opened Sections from the Options menu.

Setting Column Timescales

The specific column in which a clinician documents a result determines how that result is saved and viewed in the database. To assist in making the process easier, the *INet®* Interactive View may be set up to show different timescales as appropriate for the specific view. Examples of the prepopulated timescales include columns for every hour, every two hours, and so on. The clinician may change these timescales as necessary to fit the needs of the user and the patient.

There are two possible types of timescales, actual and interval. If the clinician has set his/her view to display using an actual timescale, the system will display any results within the timeframe specified and also create a blank column that has a date/time combination of the current time. If the clinician chooses an interval timescale, the system displays any results within the timeframe specified and creates columns, as appropriate, for the frequency. In both cases, the system only displays results and creates columns within the timeframe that has been specified. For more information on changing the timeframe, please see the section above.

To Change a Timescale:

1.   Open the *PowerChart®* solution to the *Interactive View / I and O*.

2.   Select the appropriate timescale interval from the Timescale Intervals option on the Options menu.
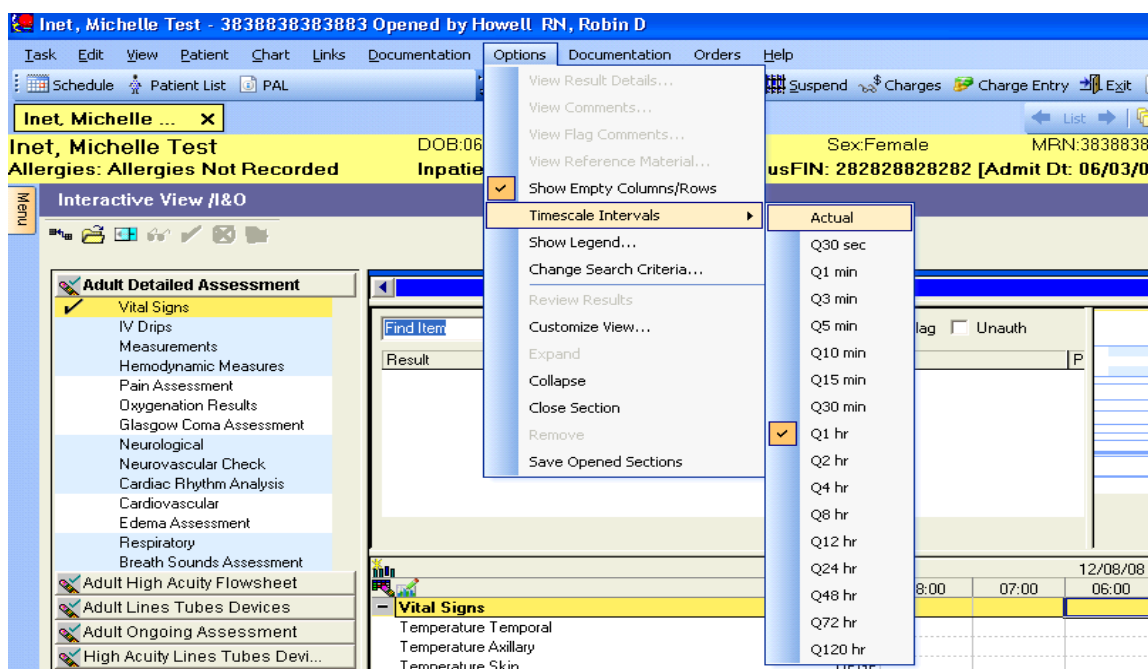
The system should adjust the view window to match the selected timescale.

Note: The default timescale and the appropriate (allowed) timescales may be determined by your system administrator and may vary.

Inserting Dates and Times

On occasion, it may become necessary for the clinician to create a column in an ad hoc manner. The Insert Date/Time function is used to create any such columns that are necessary, but not precreated from setting the Timescale Intervals. The actual function will create a column with the current date and time; however, the end user may change that date and time as appropriate.

To insert a date or time:

1. Open the *PowerChart®* solution to the *Interactive View / I and O*.

2. Right click on any date or time in the view window.

3. Select the Insert Date/Time Option.
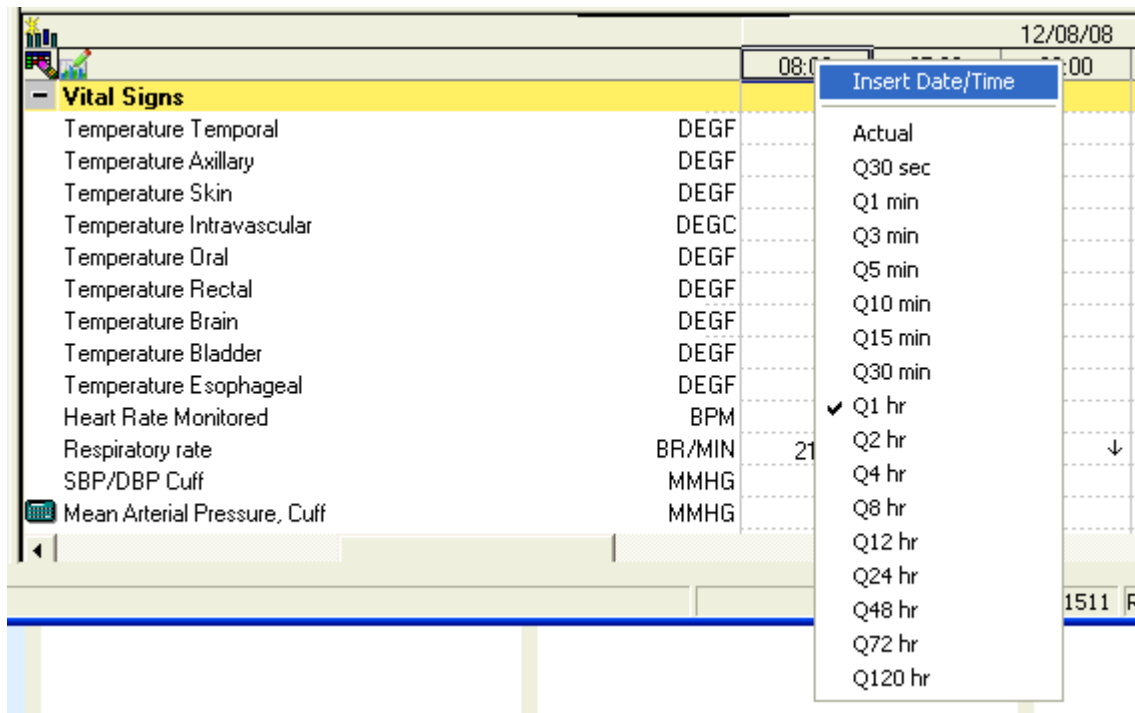
4. The new time is highlighted. (The 13:18 PM column is the column that has been inserted manually.)

5. If necessary, right-click the newly created column and select the Change Date/Time Option.

6.   A date and time box are displayed in which you can change the date and time.

7.   Click anywhere outside of the date and time boxes for the change to take effect. The new column is still displayed in bold within a box.

Note: **If the clinician refreshes the view before anything has been documented on the inserted date/time column, the column will disappear and the process will have to be repeated.**

Hiding Empty Rows and Columns

The clinician may need to condense the view to only show the rows and columns that actually have documented results, rather than showing all rows that are currently being displayed. Use the Show Empty Columns/Rows button [image] to toggle between the condensed and complete views.

Using the Legend

A quick reference for all the display characteristics of results is always available to the clinician.

To access the legend:

1.	Open the *PowerChart®* solution to the *Interactive View / I and O*.

2.	Select the Show Legend…option from the Options menu.

3.	The legend is displayed.
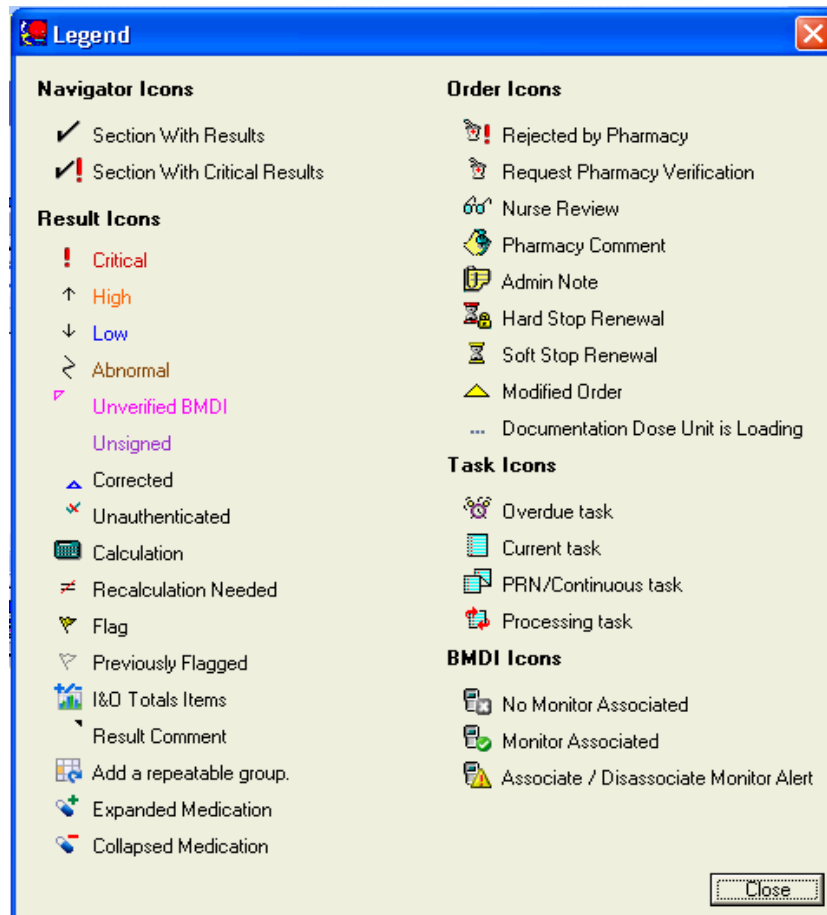
Click the Close button to close the legend window.

Activating Sections and Columns

To document a group of individual results, the clinician must activate a section or an entire column. Once a section or column has been activated, any values defaulted in through the design of the working view should be displayed as long as they are within your view. If you cannot see the event set with the defaulted information on your view, then the system will not default in that information until you bring that event set into view.

To activate a single section:

1.   Open the *PowerChart®* solution to the *Interactive View / I and O*.

2.   Navigate to the appropriate section that needs to be activated.

3.   Double-click on the yellow cell at the intersection of the section name and the column in which the clinician would like to document.

4.   A check box with a check mark is displayed in the cell, and the first chartable event set should be selected.

To activate an entire column:
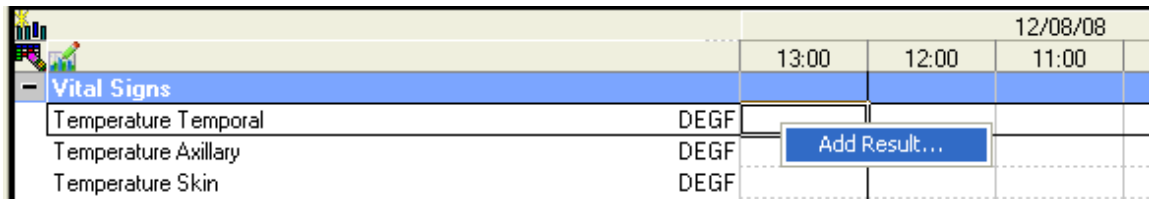
1.   Open the *PowerChart®* solution to the *INet®* tab.

2.   Navigate to the appropriate column that needs to be activated.

3.   Double-click the time cell for the appropriate column.

4.   In all sections, a check mark is displayed in the blue cell at the beginning of each section.

Documenting Individual Results

On occasion, a clinician may need to document an individual result without activating an entire section or column. Depending on the current view, this process might be faster than activating an entire section/column or could be used to avoid the defaulting in of information from the BMDI values.

To document an individual result:

1.	Open the *PowerChart®* solution to the *Interactive View / I and O*.

2.	Navigate to the appropriate section that has the event set to be documented on.

3.	Right-click on the cell that is at the intersection of the correct event set and time column.

4.	Select Add Result….
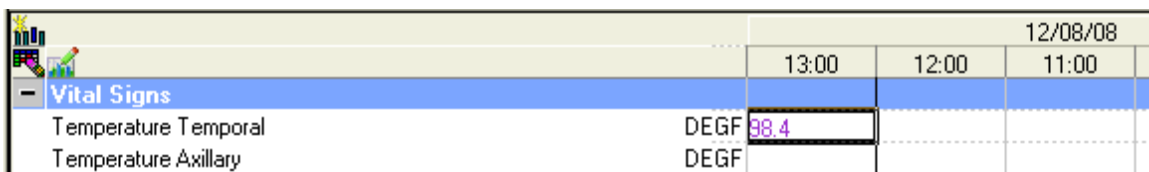
The cell becomes active and allows you to document an appropriate response.

Documenting Numeric/Free-Text Responses

To document a numeric or free-text response:

1.	Open the *PowerChart®* solution to the *Interactive View / I and O*.

2.	Navigate to the appropriate section that has the event set to be documented on.

3.	Activate the section or column or right-click and choose Add Result… as appropriate.

4.	Enter the appropriate numeric or alphanumeric into the cell. The result should display in purple text.

Documenting Single-Select Responses

To document a single-select response:

1.   Open the *PowerChart®* solution to the *Interactive View / I and O.*

2.   Navigate to the appropriate section that has the event set to be documented on.

3.   Activate the section or column or right-click and choose Add Result… as appropriate.

4.   Click on the cell to be documented on. A list is displayed.
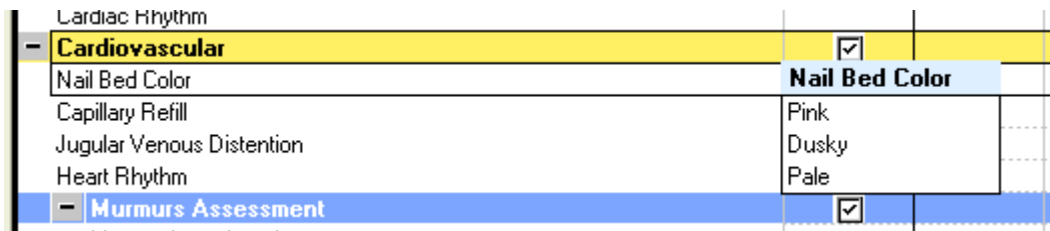
5.   Select the appropriate choice from the list.
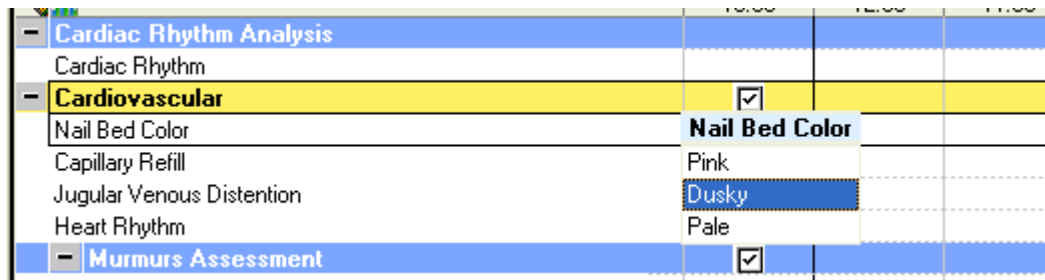
6.   Click another cell to continue documentation. The choice you have documented is highlighted in purple text until signed. Move your mouse pointer over the result to see the entire result.
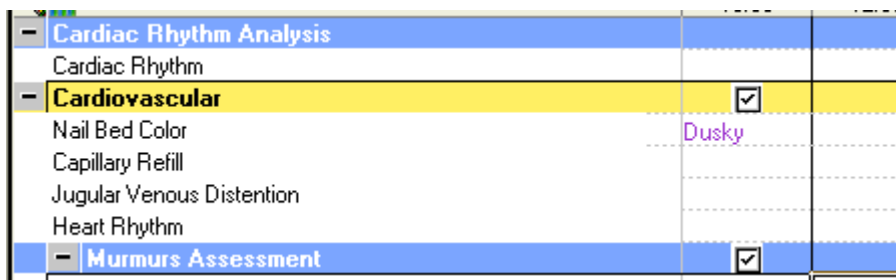
Documenting Multiple-Select Responses

To document a single-select response:

1.   Open the *PowerChart®* solution to the *Interactive View / I and O*.

2.   Navigate to the appropriate section that has the event set to be documented on.

3.   Activate the section or column or right-click and choose Add Result… as appropriate.

4.   Click the cell to be documented on. A list is displayed.
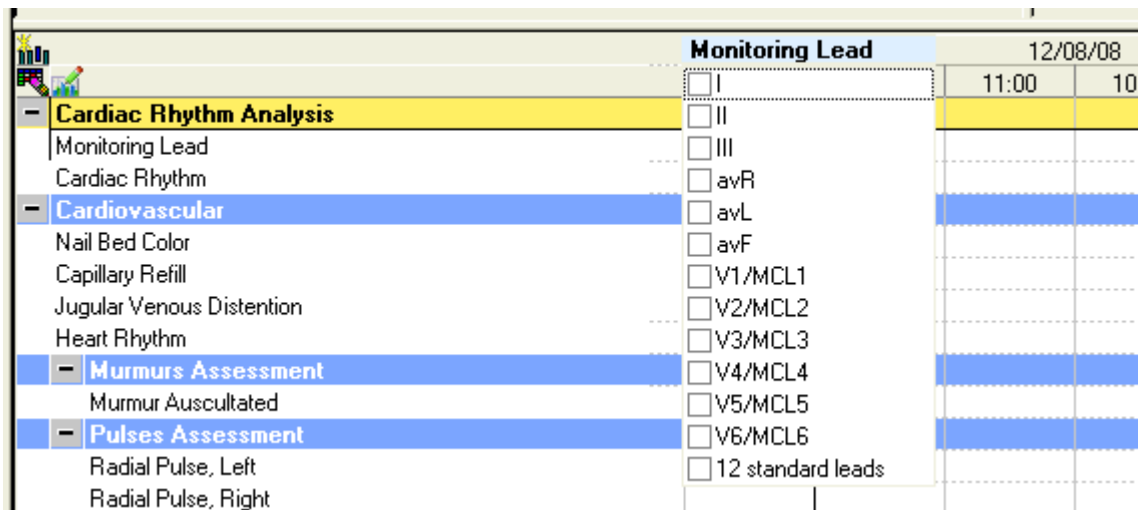
5.   Select the appropriate choices from the list.
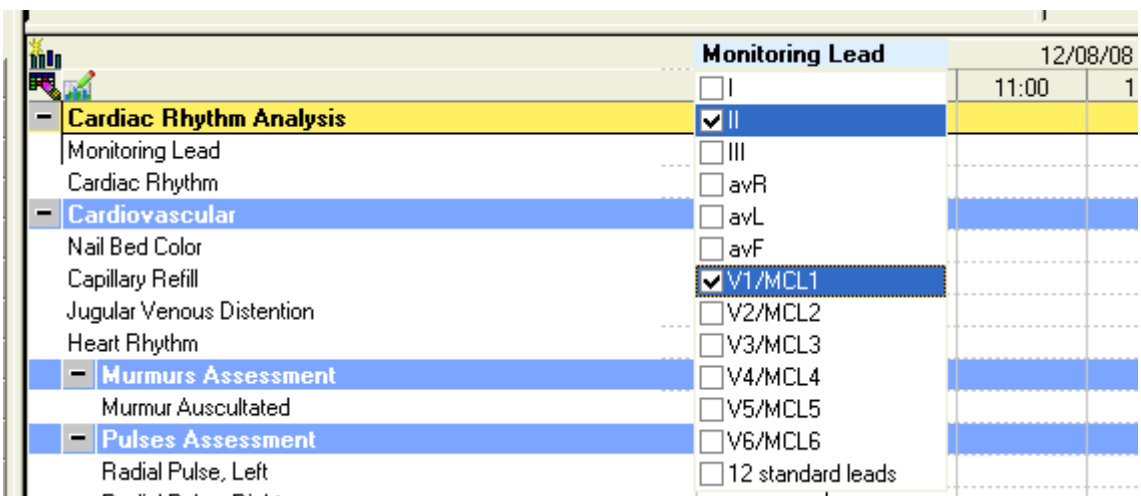
6. Click another cell to continue documentation. The choice you have documented is highlighted in purple text until signed. Move your mouse point over the result to see the entire result.

Documenting the Same Result on Multiple Sections

Depending on client design, certain event sets might be duplicated throughout the view. Most of the time, these duplications are included in multiple sections to aid the clinician in entering like data in similar areas. From the system perspective, a clinician may only document one result for the same event set at a time. Once a clinician has documented a value once, it appears in many other places where that event set is duplicated within the view window.

For example, if a Respiratory Rate is included in both the Hemodynamics and Respiratory sections, if the clinician documents the rate in the Hemodynamics section, it will also display in the Respiratory section. Likewise, if the user corrects the value in the Respiratory section, the system will automatically change the value in the Hemodynamics section to reflect the change.

Documenting Critical Results

The system included some client-defined and some system-defined reference ranges for specific items. Each time an end user signs any results into the database, the system will determine if the documented value is within any of the reference ranges. It is these reference ranges that allow the system to code results as High, Low, Critical, and so on.

Occasionally, some items might include a critical high or low reference range. If a clinician tries to document a result that falls in a critical high or low range, the system will prompt the clinician with an error message similar to the one below. Click the Yes to continue; otherwise, select No.
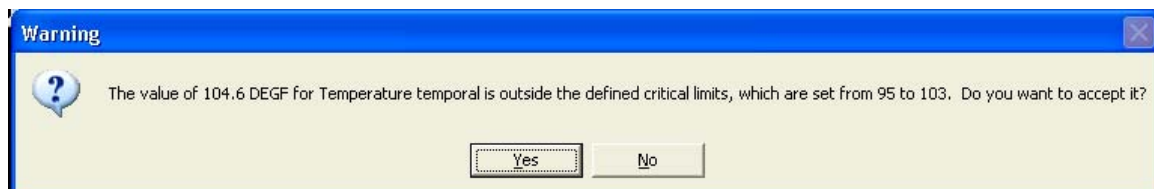
Documenting Unfeasible Results

Like critical results, the system may include some client-defined and system-defined reference ranges for feasible values. Each time a clinician signs any results into the database, the system will determine if the documented value is outside of any feasible range. If the documented value is outside of a feasible range, the system will display an error message similar to the one shown below.

Warning

The value of 108.2 DEGF for Temperature temporal is outside the defined critical limits, which are set from 95 to 103. Do you want to accept it?

[Yes]   [No]
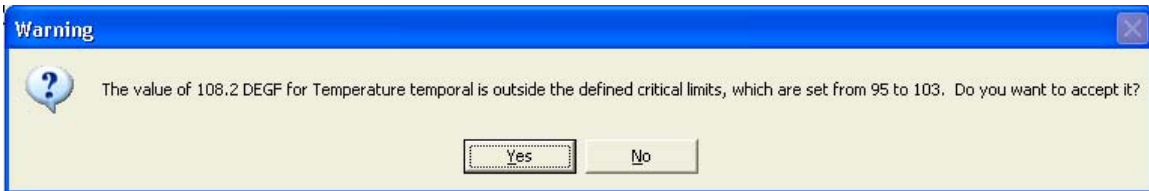
Documenting Complex Results

In general, most results that you document will only be a single result at a time. The *INet®* Interactive View, however, will support a complex result where the clinician can actually document one item which is actually stored in the database as two specific results. For example, during the course of a patient stay, a clinician will need to document a blood pressure. Previously, the clinician would have to document the systolic portion of the blood pressure separately from the diastolic portion. With the *INet®* Interactive View, the clinician can document and view these two values in one cell, called a Display Association Grouper, yet save the result as two discrete values for charting and reporting purposes.

To document a complex result:

1.   Open the *PowerChart®* solution to the *Interactive View / I and O*.

2.   Navigate to the appropriate section that has the event set to be documented on.

3.   Activate the section or column or right-click and choose Add Result… as appropriate.

4.   Click the cell to be documented on. Two boxes are displayed.

5.   Enter your first response. Either click in the second box or press TAB to move to the second box.

6.   Enter your second response, and press ENTER to move to the next cell.

Working with Calculations

In general, the system will automatically calculate fields that have been designated with a calculation ⊞ icon. Depending on the setup of the equation, the system may display a value as soon as any of its contributor values have been documented to create a running total or the system may only display a value once all its contributor values have been documented. The system will also prevent a clinician from entering in another value in the calculated field. To modify the calculation, the clinician must modify the contributor values that make up that calculation.

To view the contributors to a calculation, a clinician may:

- Move the mouse pointer over the calculation ⊞ icon. The system displays the calculation.

- Right-click on a calculated result and choose View Calculation…. A window is displayed showing the equation in words, then in numbers along with the contributing results and the date and time that they were documented.

- Select the View Calculation…option from the Documentation menu. A window similar to the one above is displayed.

Recalculations

Occasionally, if a contributor result is modified outside of the *INet®* Interactive View, a recalculation may be necessary. The system should alert the clinician if a manual recalculation is needed with the recalculation needed icon ⇄ .

To recalculate a cell:

1.   Open the *PowerChart®* solution to the *Interactive View / I and O*.

2.   Navigate to the appropriate section that has the event set to be recalculated.

3.   Right-click the cell and select Recalculate… or choose the Recalculate option from the Documentation menu.

Working with IVs

The ability to document titratable drips on the *INet®* Interactive View is determined by the medications process build. Several prerequisites must be met to document titrations on a titratable IV on the *INet®* Interactive View including:

- An order for a continuous IV must be signed into the database. A titratable drip may not be ordered as a medication. For example, the clinician may not just place an individual order for dopamine. The clinician must build an IV with a base solution and dopamine for the system to recognize the order as a continuous IV.

- The additive for the IV must have been built as a medication that could possibly be titrated. In the previous example, dopamine must have been built as a possible titratable medication for the system to recognize that the IV should appear on the *INet®* Interactive View.

- A Begin Bag event must have been documented either from the eMAR or the *INet®* Interactive View.

After an order has been signed into the system, Cerner recommends that the clinician chart the begin bag event from the eMAR, rather than the *INet®* Interactive View. Cerner also recommends that normal charting on the IV, such as Infuse or Bolus events, should also be documented from the eMAR even though these events could be documented from the *INet®* Interactive View. This process can prevent any confusion on where to document specific IV events in that all charting for most IV events occurs in the same place for both titratable and maintenance IV drips.

Working with the IV Charting Window

The IV Charting window for titratable IVs includes extra functionality that the normal IV charting window does not include. The Begin Bag event contains additional fields such as Dose and Weight to allow the system to calculate the titrations correctly.

To chart a begin bag event on the eMAR for a titratable med:

1. Open the *PowerChart®* solution to the eMAR tab.

2. Navigate to the appropriate Continuous IV to begin documentation.

3. Select the Pending box for the IV.

4. Depending on security settings and the pharmacy verification status of the order, a warning may display notifying the clinician that it is an unverified medication. Please note that some security settings may not allow documentation until the order has been verified by pharmacy.
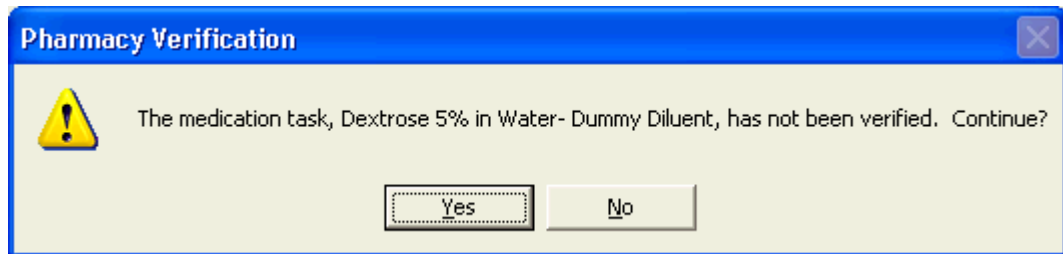
5. The IV window is displayed with the Begin Bag event already selected.

6. Enter the appropriate IV information including Site, Bag #, and Volume.

7. Select an appropriate dosing unit of measure. If the unit of measure includes a weight unit of measure, the weight box is displayed.

8. Confirm that the weight that appears is the appropriate weight for basing titration calculations.

DOPamine 400 MG [5 MCG/KG/MIN] + Dextrose 5% in Water- Premix Diluent 250...
250 ML, IV, 12/10/08 15:52:00, 100 ML/HR, 2.5 HR, 50, 50 KG

☑ Yes ☐ No   DOPamine 400 MG
☑ Yes ☐ No   Dextrose 5% in Water- Premix Diluent 250 ML

*Performed date / time	12/10/08 ▲▼ ▼ 1557 ▲▼	Comment...
*Performed by	Test , P2 RN 🔍	Clear
Witnessed by	🔍	Apply
*Bag #	1	
*Site	Left Arm ▼	
*Volume (ML)	250	
*Rate (ML/HR)	7.5	
*DOPamine Dose	4 MCG/KG/MIN ▼	
*Weight	50 KG 11/03/08 10:00	Begin Bag

In Progress

9.   Enter an appropriate dose amount or rate. The system will calculate the dose or the rate based on the unit of measure selected and the documented dose or rate.

10.   Click the Apply button.

11.   Click the Sign ✔ button to commit the IV charting to the database.

DOPamine 400 MG [5 MCG/KG/MIN] + Dextrose 5% in Water- Premix ...

✓ ⊘ | ⌨

DOPamine 400 MG [5 MCG/KG/MIN] + Dextrose 5% in Water- Premix Diluent 250 ML
250 ML, IV, 12/10/08 15:52:00, 100 ML/HR, 2.5 HR, 50, 50 KG

◀ ▶   12/10/08 3:56 - 12/11/08 3:56   ◀ ▶

	12/10/08 15:57
Begin Bag	Bag #1
Site Change	Left Arm
Infuse	
Bolus	
Waste	
Rate Change	7.5 ML/HR
DOPamine	4 MCG/KG

DOPamine 400 MG [5 MCG/KG/MIN] + Dextrose 5% in Water- Premix Diluent 250...
250 ML, IV, 12/10/08 15:52:00, 100 ML/HR, 2.5 HR, 50, 50 KG

☑ Yes   ☐ No   DOPamine 400 MG
☑ Yes   ☐ No   Dextrose 5% in Water- Premix Diluent 250 ML

*Performed date / time	12/10/08	⬍ ▼	1557	⬍	Comment...
*Performed by	Test , P2 RN		🔍		Clear
Witnessed by			🔍		Apply

*Bag #   1

*Site   Left Arm ▼

*Volume (ML)   250

*Rate (ML/HR)   7.5

*DOPamine Dose   4   MCG/KG/MIN ▼

*Weight   50 KG   11/03/08 10:00

Begin Bag

In Progress
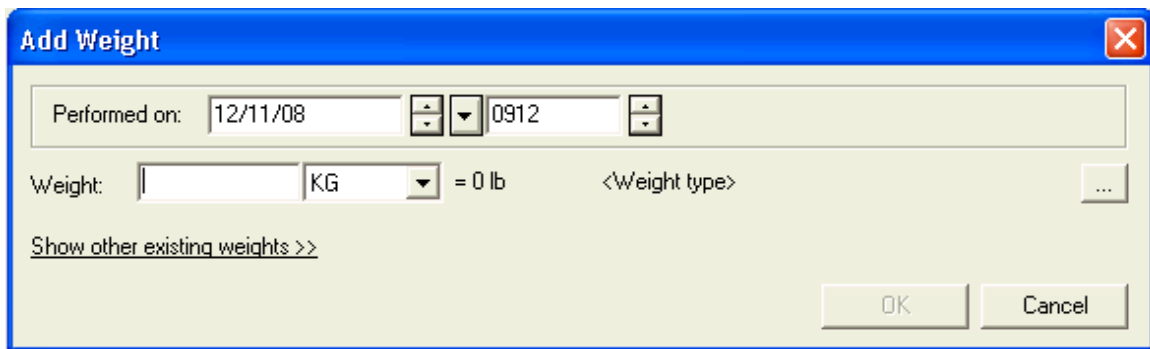
12. The charting is displayed on the eMAR.

Changing the Weight from the IV Documentation window

The IV documentation window allows for the clinician to dynamically change the weight that is being used for titrations.

To change the weight from the IV documentation window:

1.   Click the button that is displaying the currently charted weight. This button is not displayed if a unit of measure including a weight is not selected for the dose unit of measure.

2.   The Add Weight box opens.
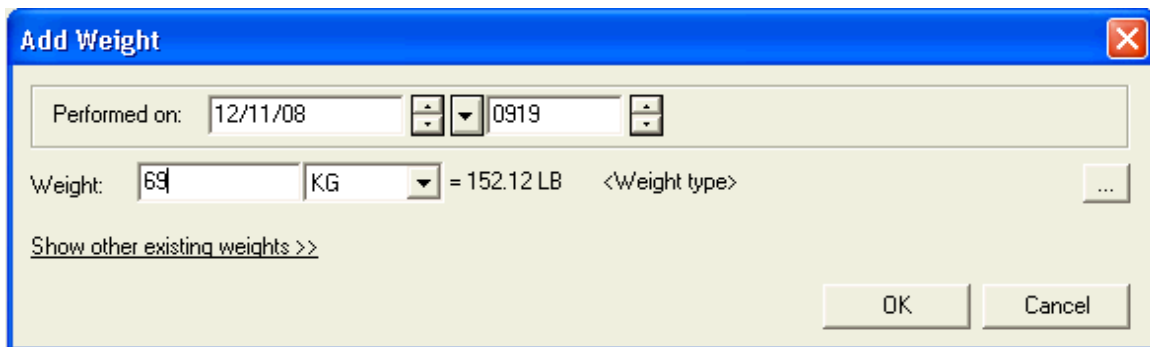
3.   Confirm the Performed on: date and time.

4.   Enter a weight in the Weight field. The conversion to pounds also is displayed.

5. The Show other existing weights>> link will allow a clinician to see the other existing weights on a particular patient. The clinician may use the Last and From options to query the database for other results. Use the Query button to perform the search based on the criteria specified.

6. The system will automatically default a Method of measurement. To change the Method, click the ellipsis (…) button in the upper right-hand corner. A Weight Modifier *PowerNote* screen is displayed.

7. Click the appropriate Method and Circumstance, if applicable.

8. Click the Close button to return to the Add Weight screen.

9. Click OK the Add Weight screen to accept the new weight.

Documenting Titrations from the *INet®* Interactive View

Once a clinician has documented a Begin Bag event, future titrations may be completed from the *INet®* Interactive View as part of the direct-charting functionality.

To document a titration on the *INet®* Interactive View:

1. Open the *PowerChart®* solution to the *Interactive View / I and O*.

2. Navigate to the IV Drips section on the appropriate view.

3. Activate the section by double-clicking the section header. Alternately, the clinician may activate the entire time column by double-clicking the time column instead of just a section.

> **Note:** **If a begin bag event has not been completed for the particular IV, the IV charting window will display to the clinician.**

4. The system will move the cell focus to the first rate in the view. The weight that the system will use for calculations and the date and time it was charted are displayed immediately below the charting box.
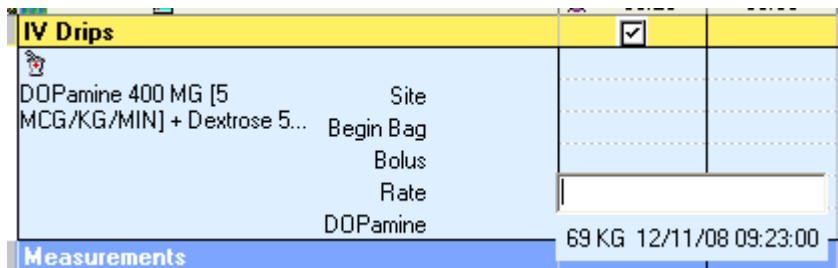
5. Document the appropriate rate or dose. The system automatically calculates the other value.
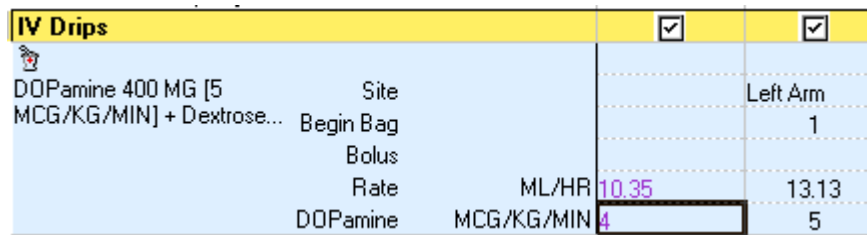
6. Click the Sign button to sign the documentation.

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Owner: Methods

Clearing Values

The ability to clear values is regulated by the status of the result. If the result has already been signed into the database, then the only way to clear a value is to unchart it by right-clicking on the result and choosing the Unchart option. If, however, the result has not been signed into the database, then the clinician has several options in clearing values.

To clear all unsigned results at once, click the cancel button on the toolbar. This will clear any documentation that has been made since the last time data was signed into the database.

To clear individual results, right-click on the result and select Clear or select the Clear option from the Documentation menu.

Signing Results

Any results, including defaulted values and BMDI results, that are entered into the *INet®* Interactive View are not actually saved in the OCF tables until the results are signed (similar to how orders are not committed to the database until they are signed).

To sign all results, press the sign button. This will commit all unsigned results to the database.

Adding Comments

Often, it will become necessary for a clinician to document additional responses that are not completely covered by the coded responses that are given. In these special cases, Cerner recommends that the clinician add a comment. At current code levels, no *other* functionality exists on the *INet®* Interactive View as it does within *PowerForms* to allow the capturing of free-text information.

To add a comment to a result:

1.   Open the *PowerChart®* solution to the *Interactive View / I and O*.

2.   Navigate to the appropriate section that has the event set to be commented on.

3.   Right-click on the result and select Add Comment…or select Add Comment…from the Documentation menu. You may add a comment to both signed and unsigned results.

4.   If multiple results are displayed in a single cell, select the appropriate result to which you want to add a comment.

5. A dialog box is displayed in which you can document your comment.

Note: **You cannot add a comment to a cell that does not have a result or value in it.**

Viewing Reference Text

Similar to the *PowerForm* functionality, reference text is available at the individual event set level. This reference text is commonly used to remind clinicians of site-specific policies and procedures or other information that may help them to document appropriately. Reference text is currently determined by (ref) beside the event set.
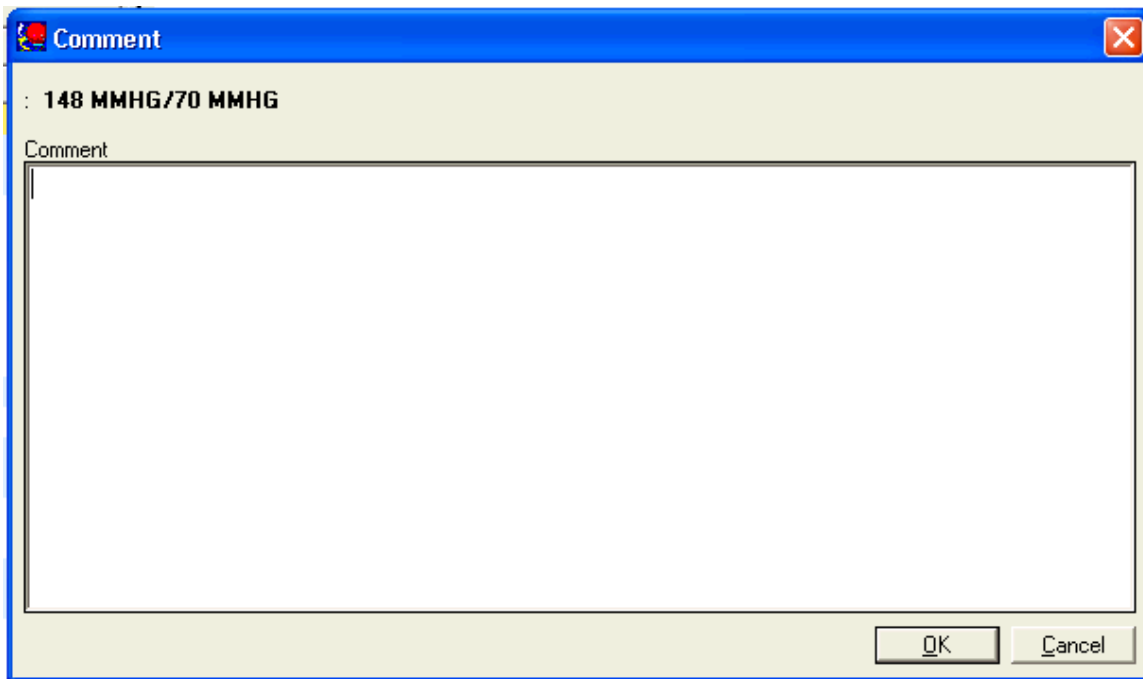
To access reference text:

1.   Open the *PowerChart®* solution to the *Interactive View / I and O*.

2.   Navigate to the appropriate section that has the event set to be documented on.

3.   Right-click on the event set name and select View Reference Material…or select View Reference Material from the Options menu.
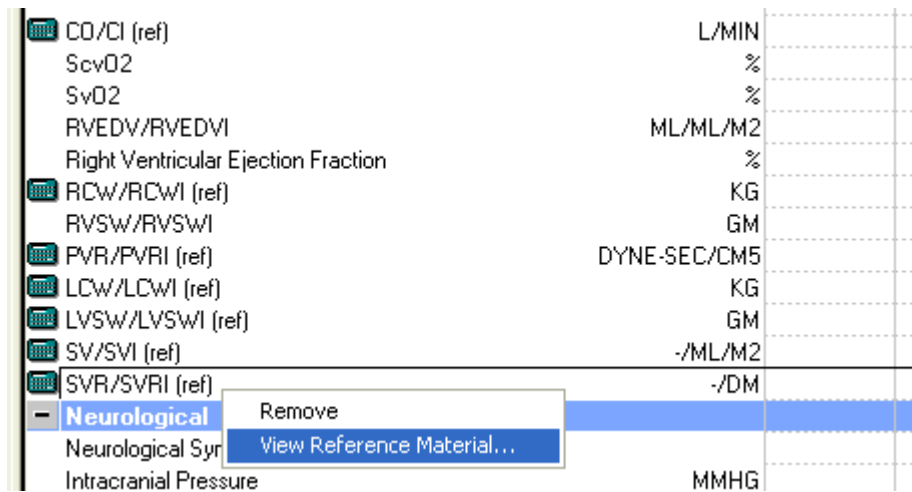
4.   The appropriate reference text is displayed in a separate window.
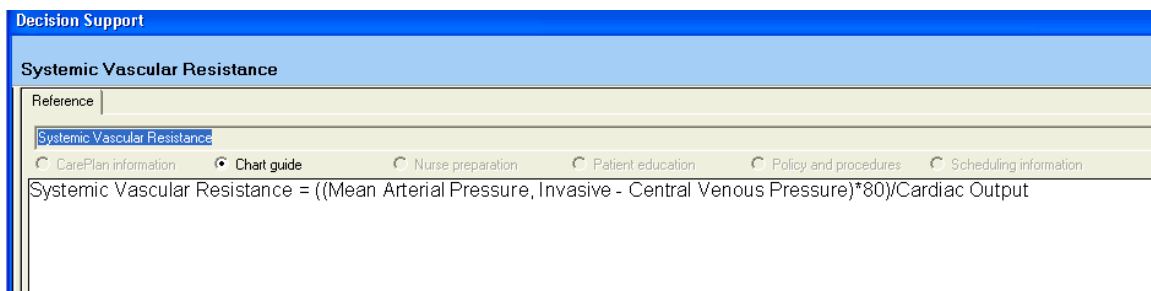
Note: There is no indicator to the clinician that a specific event set has reference text associated with it. The menu options are not available if there is no reference text.

Viewing Results

Working with the Result Detail Window

Similar to other *PowerChart®* flowsheets, you can pull up more information on any result that has been documented and signed into the database. This extra information is displayed in the Result Detail window.
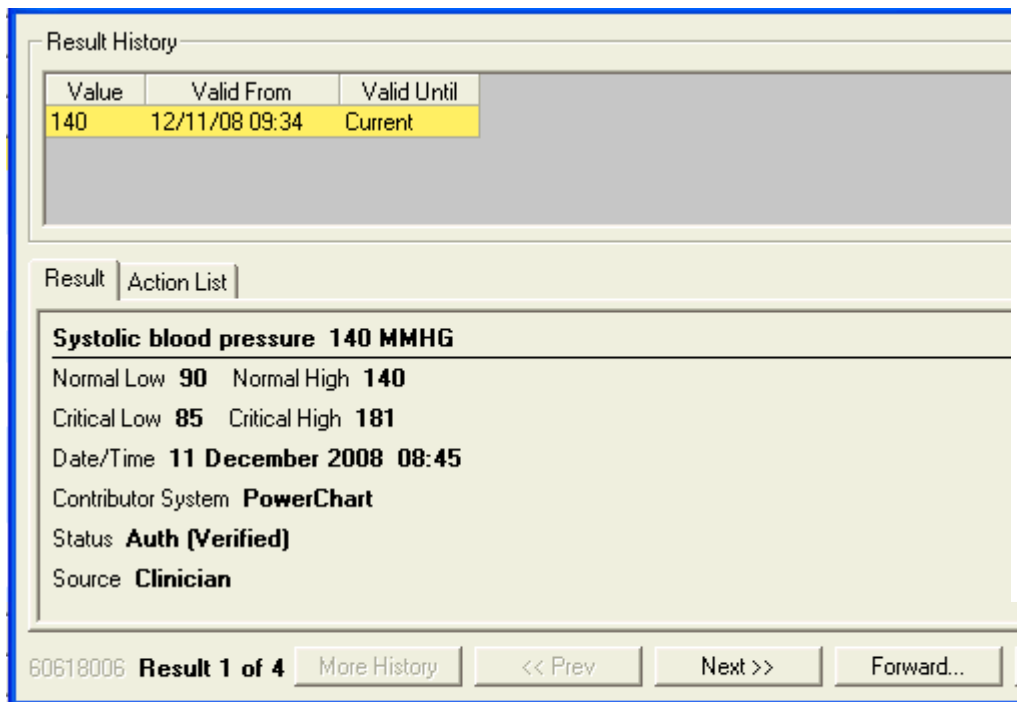
A clinician can use the Result Detail window to see the history of the value, including any changes, reference ranges, the status of the result, any comments attached to that result, and the personnel who signed or modified the result.

To access the Result Detail window:

1.   Open the *PowerChart®* solution to the *Interactive View / I and O*.

2.   Navigate to the appropriate section that has the result to be viewed.

3.   Right-click on the result and select View Result Details…or select View Result Details… from the Options menu.

4.   The Result Detail window is displayed with the appropriate result information.

Reviewing Results

The *INet®* Interactive View includes result review functionality that allows a clinician to mark results that he or she has seen. When a result is reviewed, the text will change from a bold font to a normal font. Also, if there are no more new results within a section, the section name will change to a normal font.

The system will only review results that are within the clinician's view at the moment the review takes place. The system will not review any new results that are outside of the current view that would require scrolling to view.

To review any new results:

1.   Open the *PowerChart®* solution to the *Interactive View / I and O*.

2.   Navigate to the appropriate section that has the results to be bookmarked.

3.   Click the review results button on the toolbar.

4.   Navigate to other sections and repeat the process to review results that were not within the view beforehand.

Viewing Comments

To view comments associated with a result:

1.   Open the *PowerChart®* solution to the *Interactive View / I and O*.

2.   Navigate to the appropriate section that has the result to be viewed.

3.   Right-click on the result and select View Comments…or select the View Comments…from the Options menu.

4.   The Result Detail window is displayed with the comment tab showing.

Setting Preferences

The *INet®* Interactive View is highly customizable to fit the needs of a particular clinician or patient. Clinicians may change preferences on what items they would like to see on their views and how they will interact with the system.
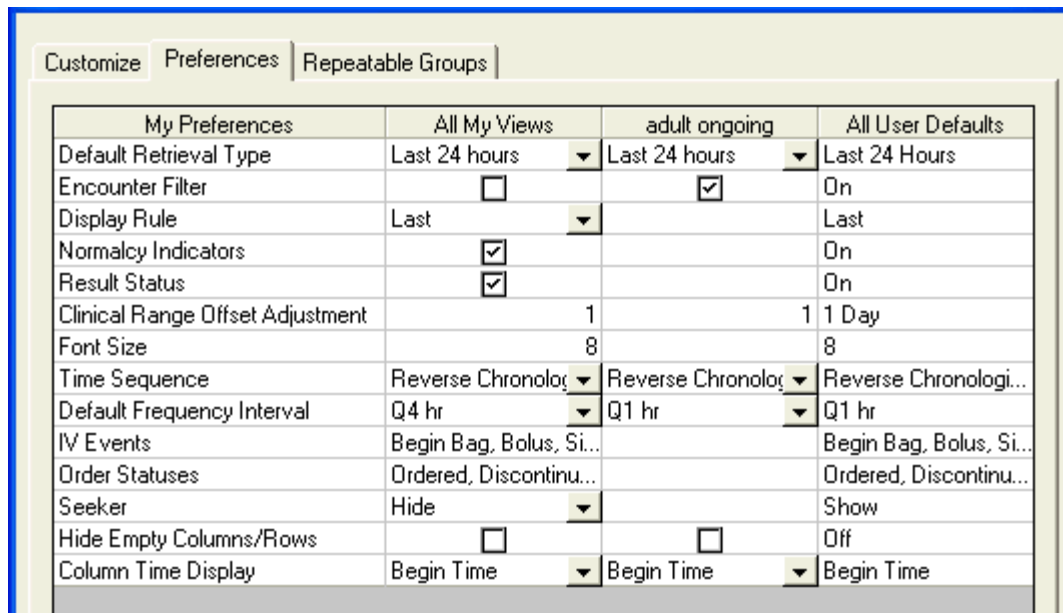
User Preferences

User preferences control how the system will create the flowsheet and how clinicians will interact with the view. Default preferences are set up by the System Administrator.

User Preferences may be set at two levels:

- View Level – Any changes to preferences at this level will affect this specific view for all patients.

- User Level – Any changes to preferences at this level will affect all views on all patients.

To access the User Preferences screen:

1.   Open the PowerChart® solution to the Interactive View / I and O.

2.   Click the Customize View… [icon] button in the view window to access the preferences window or select Customize View…from the Options menu.

3.   Select the Preferences tab to reach the user preferences.

My Preferences	All My Views	adult ongoing	All User Defaults
Default Retrieval Type	Last 24 hours	Last 24 hours	Last 24 Hours
Encounter Filter	☐	☑	On
Display Rule	Last		Last
Normalcy Indicators	☑		On
Result Status	☑		On
Clinical Range Offset Adjustment	1	1	1 Day
Font Size	8		8
Time Sequence	Reverse Chronolog	Reverse Chronolog	Reverse Chronologi...
Default Frequency Interval	Q4 hr	Q1 hr	Q1 hr
IV Events	Begin Bag, Bolus, Si...		Begin Bag, Bolus, Si...
Order Statuses	Ordered, Discontinu...		Ordered, Discontinu...
Seeker	Hide		Show
Hide Empty Columns/Rows	☐	☐	Off
Column Time Display	Begin Time	Begin Time	Begin Time

The end user may change the following options on the *INet®* Interactive View:

- Default Retrieval Type – This is the default date/time range for pulling in results. It can be adjusted to automatically display a number of options:

  - Clinical Range – Any results within a specified range before and after the current date/time appear. Use the Critical Range Offset Adjustment preference to change the number of days that constitutes the Clinical Range.

  - Today – Any results that were documented during the current day are displayed.

  - Last 24/48/72 Hours – Any results that were documented within the last 24/48/72 hours are displayed.

  - Last X Hours – The system will display any results that were documented within the last X hours. If a clinician selects this option, a secondary window appears to allow him or her to enter the number of hours.

  - Admission to Current – Any results that were documented from the admission date forward appear.

- Encounter Filter – This setting determines if the end user will only see results that have been documented on this encounter. Leave this unchecked if you would like to see all results for the specified timeframe no matter to which encounter they are connected.

- Display Rule – This setting determines how the system will display multiple results in the same cell. The options are Last, First, Max, and Min.

- Normalcy Indicators – This setting determines if the system will show the normalcy indicators (up arrow, down arrow, and so on) for the specific results. Results will still display with the normalcy colors regardless of this preference.

- Result Status – This setting determines if the system will show the icon for an unauthenticated result status.

- Clinical Range Offset Adjustment – This setting determines the number of days the system will contract or expand the clinical range when the end user uses the arrow buttons on either side of the blue timescale bar.

- Font Size – This setting determines the font size that the system will use to display results.

- Time Sequence – This setting determines if the interactive view will display in chronological or reverse chronological order.

- Default Frequency Interval – This setting determines if the system will prepopulate the interactive view with defined columns based on an interval.

- IV Events – This setting is reserved for future use.

- Order Statuses – This setting is reserved for future use.

View Preferences

The actual *INet®* Interactive View can be adjusted on-the-fly to aid the clinician in customizing the view so that it displays appropriately for the patient's acuity and current treatments. For example, the tracheostomy section does not currently display on the *INet®* Interactive View as many patients do not have tracheostomys. If, however, a particular patient does have a tracheostomy, the clinician may add the tracheostomy section to allow for documentation of care and treatment to it.
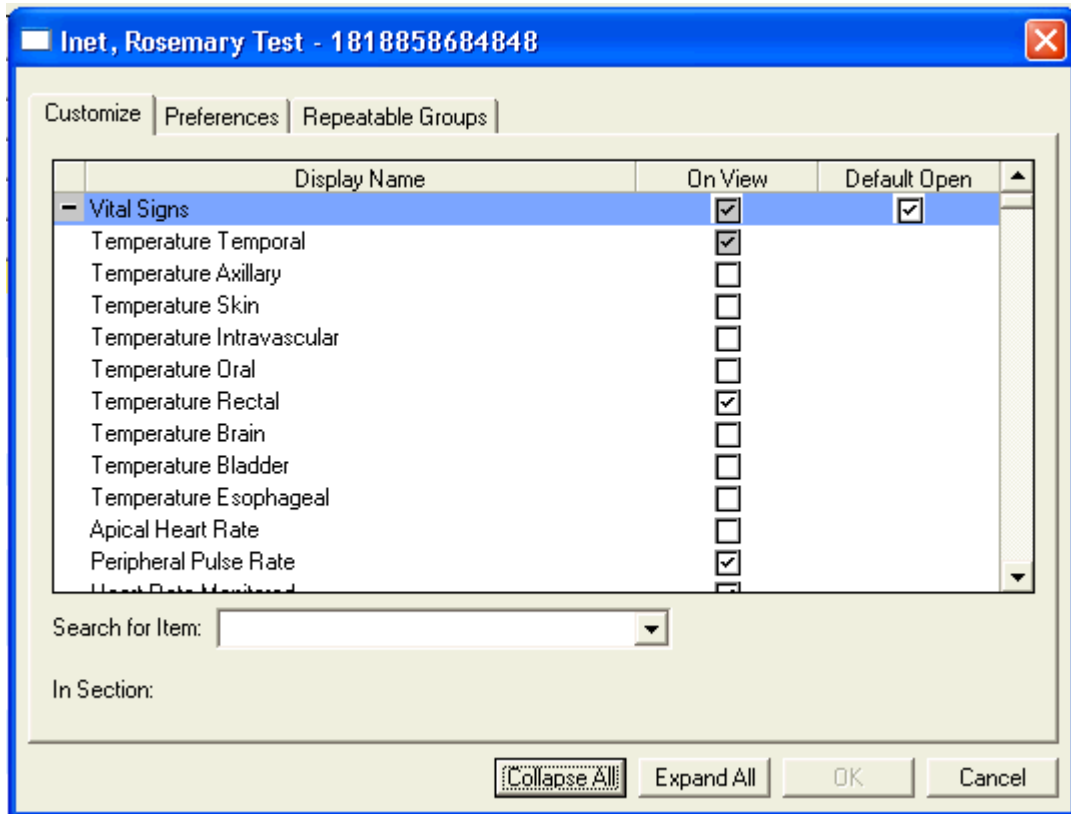
To adjust view preferences:

1.   Open the *PowerChart®* solution to the *Interactive View / I and O*.

2.   Click the Customize View… button in the view window to access the preferences window or select Customize View… from the Options menu.

3.   Select the Customize tab, if it is not already displayed.

4.   Click the check boxes in the On View and Default Open columns to change preferences on what displays to this particular view.

Note: A clinician will never have the opportunity to remove a required section from view. The clinician may change the default open option to determine if the section will already be opened when the Interactive View / I and O is opened.

Document Revision History

Revision Number:	Effective Date:	Description:
001	December 11, 2008	April 21, 2009 Go Live Training Material