



PIC iX Multi-Patient View

Quick Guide

Release C.02/C.03

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(978) 687-1501

Printed in USA

Document Number 4535 647 94661

Second Edition

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New editions of this document will incorporate all material updated since the previous edition. Update packages may be issued between editions and contain replacement and additional pages to be merged by a revision date at the bottom of the page. Note that pages which are rearranged due to changes on a previous page are not considered revised.

The documentation printing date and part number indicate its current edition. The printing date changes when a new edition is printed. (Minor corrections and updates which are incorporated at reprint do not cause the date to change.) The document part number changes when extensive technical changes are incorporated.

Second Edition	June 2019
First Edition	June 2018

Document Conventions

Bold Typeface

Objects of actions in procedures appear in bold typeface. Note the following example:

Select the **Update** button.

Warnings

Warning

A Warning alerts you to a potential serious outcome, adverse event or safety hazard. Failure to observe a warning may result in death or serious injury to the user or patient.

Cautions

Caution

A Caution alerts you to where special care is necessary for the safe and effective use of the product. Failure to observe a caution may result in minor or moderate personal injury or damage to the product or other property, and possibly in a remote risk of more serious injury.

Notes

A Note contains additional information on the product's usage.

Introduction

The Patient Information Center iX (PIC iX) Multi-Patient View allows you to see patient information, wherever it is convenient for you, by way of a secure application.

Log On

Your IT administrator provides the web site URL, your user name and password. When you access patient data, an entry is added to the PIC iX Clinical Audit Log for additional security. Your system may be configured so that a generic user is logged on at all times, so no additional login is necessary.



Multi-Patient View Main Screen

When you log on, you may see a default Main Screen. The Main Screen can show waves, numerics, and alarms from multiple patients, as they are added to each sector. The amount of data visible in each sector depends on the screen resolution and the size of the sector.

Warning

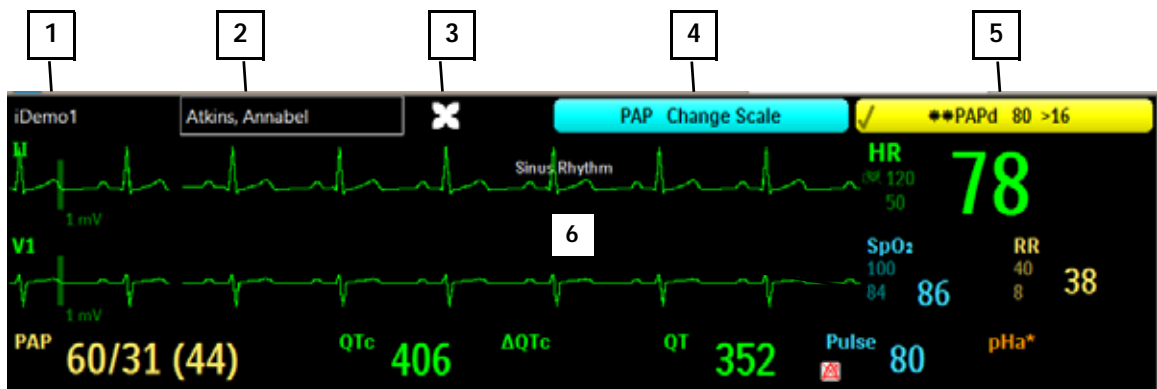
PIC iX Multi-Patient View is not intended for primary alarming. The waveforms are delayed and there are *no* audible alarms.



Main Screen Sector

The Main Screen is divided into an area for each patient, called a sector. The default layout shows two columns, each with four sectors. The top caption bar shows the bed label, patient name, resuscitation status (if added at the monitoring host), and active alarm banners.

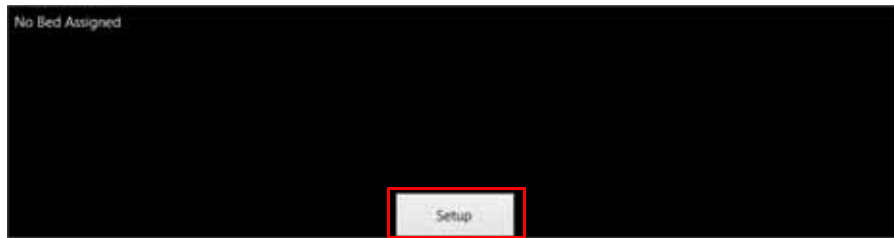
The sector shows current waves and numerics. These are determined by a priority catalog and are not configurable. The amount of data that can display depends on the size of the sector.



- 1 Bed Label
- 2 Patient Name. If the patient is assigned to a patient group, the name is outlined in the assigned group color.
- 3 Resuscitation icon
- 4 Technical/INOP alarms
- 5 Red and yellow patient alarms by priority
- 6 Sector body

Setting Up the Main Screen

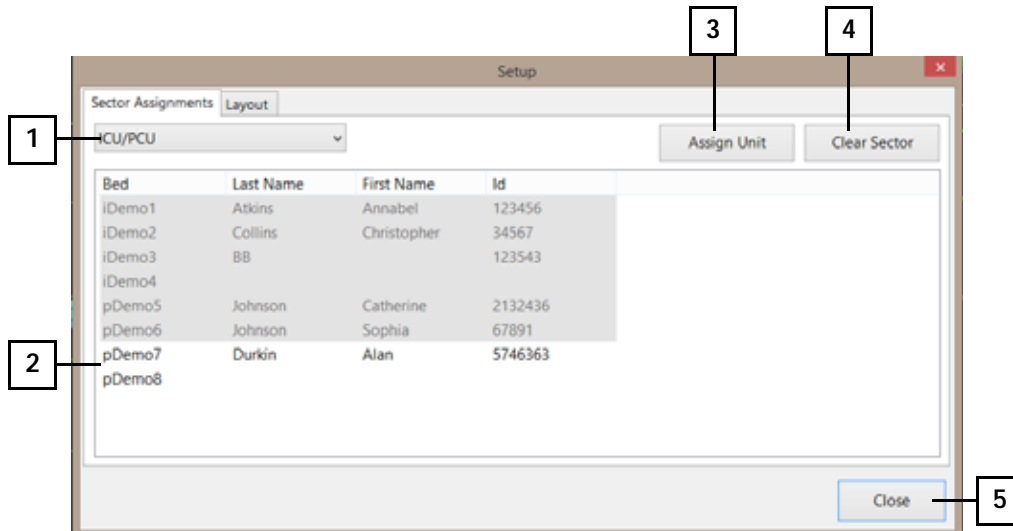
In the Multi-Patient View Main Screen, move your cursor over a sector until the **Setup** button appears. If a patient is already in the sector, a **Patient View** button also appears (see “Patient View” on page 9). To add or change a bed label or change the Main Screen layout, select the **Setup** button in the sector.



The **Setup** window displays two tabs: **Sector Assignments** and **Layout**.

Sector Assignments

Select the **Sector Assignments** tab in the Setup window to assign beds to sectors. From the drop-down list at the top of the window, select units that you have access to on the server. You may need to open a different web site to see patients on a PIC iX servers at different software revisions.



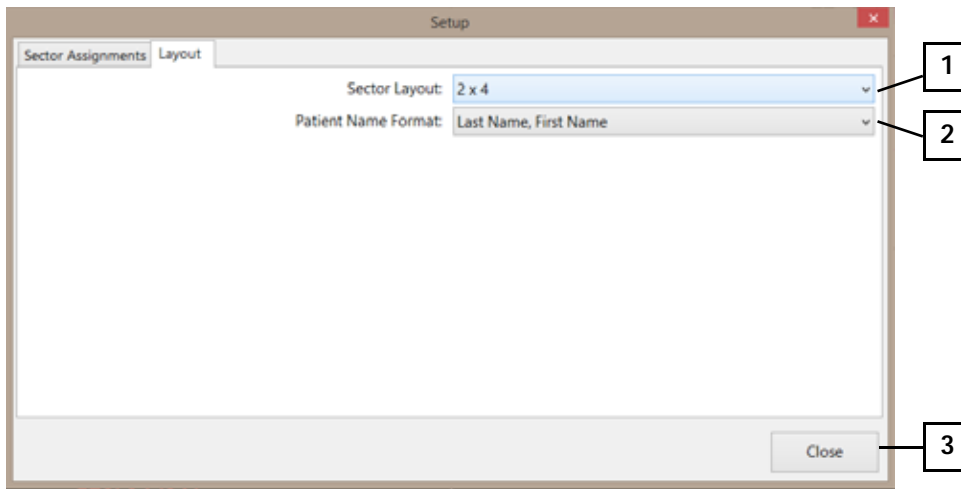
- 1 Select the unit name from the drop-down list to view the list of beds available to assign to a sector.
- 2 Select the bed label to assign to the sector. Bed labels that are already assigned are shaded gray.
- 3 Select **Assign Unit** to assign all sectors of the selected unit. The sectors are assigned starting top to bottom of the first column, in alphabetical order.
- 4 Select the bed and then select **Clear Sector** to clear the bed label from the selected sector.
- 5 Select **Close** or the red X in the top right to close the Setup window.

Layout

Select the **Layout** tab in the **Setup** window to change the number of columns and rows in your Main Screen layout.

Caution

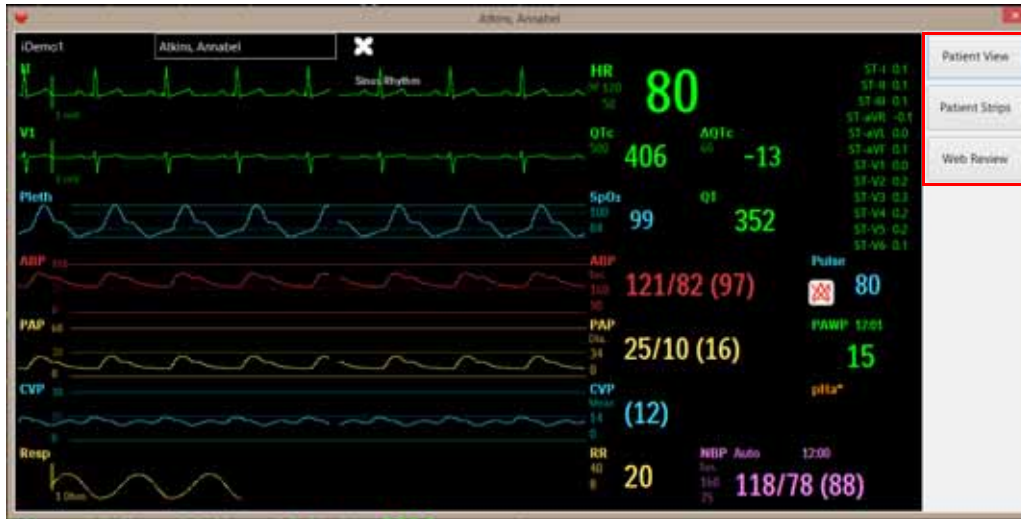
It is possible to make a sector too small to see data or a wave. Only choose the number of columns and sectors that allow for desired viewing of waves and data. This also depends on your screen resolution.



- 1 Select the number of columns and sectors from the **Sector Layout** drop-down list. You can choose from one to four columns and up to eight sectors per column, for a maximum of 32 sectors. The default layout is 2 x 4, two (columns) with four (sectors) per column, for a total of eight sectors.
- 2 Select the format of the patient name from the **Patient Name Format** drop-down list. If you do not want the sector to show patient identification, select **None**.
- 3 Select the **Close** button or the red X in the top right to close the **Setup** window.

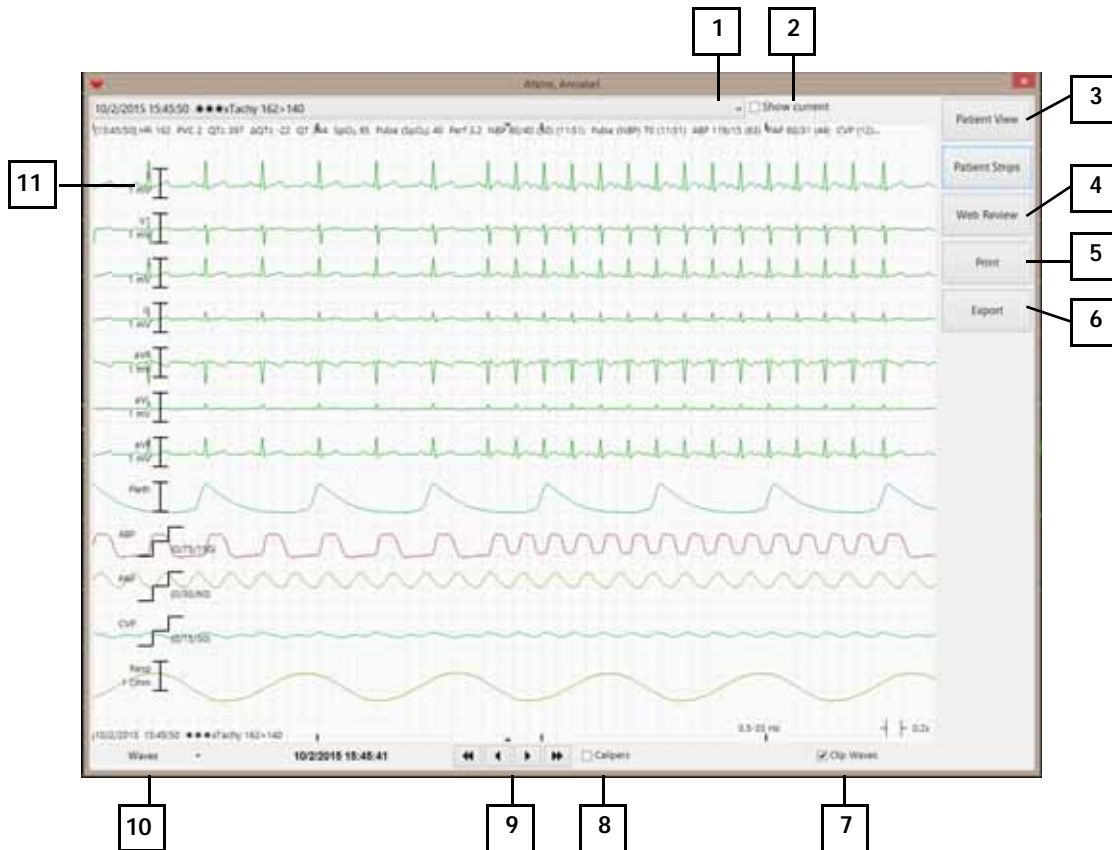
Patient View

After a patient is added to a sector, the **Patient View** button is visible when the sector is in focus. The Patient View provides a detailed view of the waves, numerics, and alarms for measurements that are being monitored. From the Patient View, you can access the Strip chart to annotate, print, or copy strips. You can also view PIC iX Web retrospective data.



Patient Strips

Select **Patient Strips** in the Patient View to review waves associated with the last 20 alarms/events, or to view the most recent stored waves. This application opens with the most recent alarm strip. Annotation can be made and printed or exported.



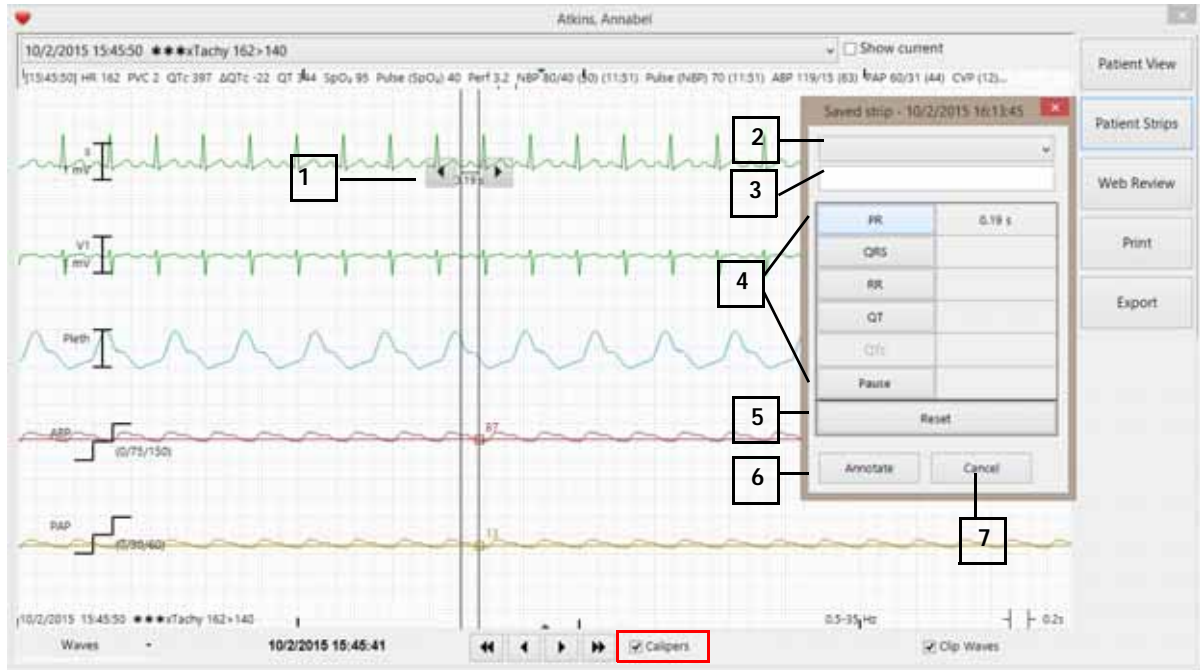
- 1 Select the alarm to view from the drop-down list. Only alarms cached since the time the sector was added are available to view. For older alarms, use Alarm Review in Web Review.
- 2 Select the **Show current** check box to show the most recent stored waves.
- 3 Select **Patient View** to return to Patient View.
- 4 Select **Web Review** to view all stored data in retrospective review applications.
- 5 Select **Print** to send a 30-second strip to the assigned printer.
- 6 If configured, select **Export** to copy and paste the displayed strip to the Electronic Medical Record.
- 7 Select the **Clip Waves** check box to minimize wave overlap. Clear the check box to see full amplitude waves.
- 8 Select the **Calipers** check box to open the electronic calipers (eCalipers) measurement tool. See “Electronic Calipers (eCalipers) Measurement Tool” on page 11.
- 9 Use the right and left arrows to navigate the 30-second strip.
- 10 Select the waves to display from the **Waves** drop-down list. Default is ECG waves.

- 11 Select the calibration bar on the wave to change the wave gain.

Electronic Calipers (eCalipers) Measurement Tool

Select the **Calipers** check box in the strip tile to open the electronic caliper tool for ECG measurements.

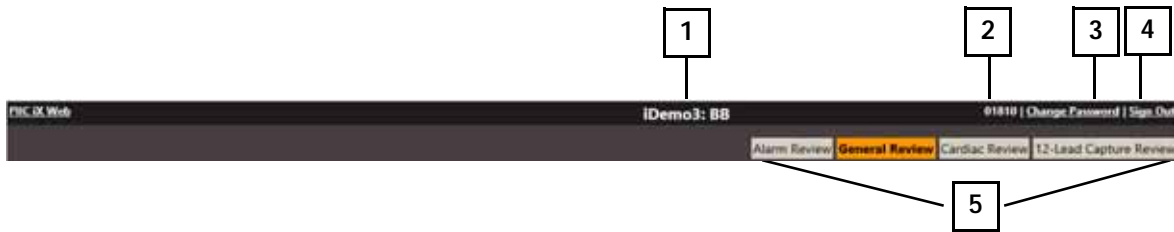
Note — Annotations, comments, and measurements that you enter in Multi-Patient View are *not* stored at the PIC iX Physio Server and are *not* stored locally.



- 1 Click the vertical line where you want to start the caliper measurement, then drag the double arrow to the end point of the measurement.
- 2 Select a label to add to the strip, such as **Complete heart block** or **Atrial Fibrillation**.
- 3 Type up to 30 characters to print on bottom of the strip.
- 4 Select the measurement button on the left to add the value on the right. Choices are: **PR**, **QRS**, **RR**, **QT**, **QTc**, and **Pause**.
- 5 Select **Reset** to clear the measurements.
- 6 Select **Annotate** to add all measured fields to the bottom of the strip.
- 7 Select **Cancel** to close the eCalipers dialog box.

Web Review

The Multi-Patient Web review application opens with Alarm Review. You can choose other review applications in the top right side of the window. The selected review application is highlighted in orange.



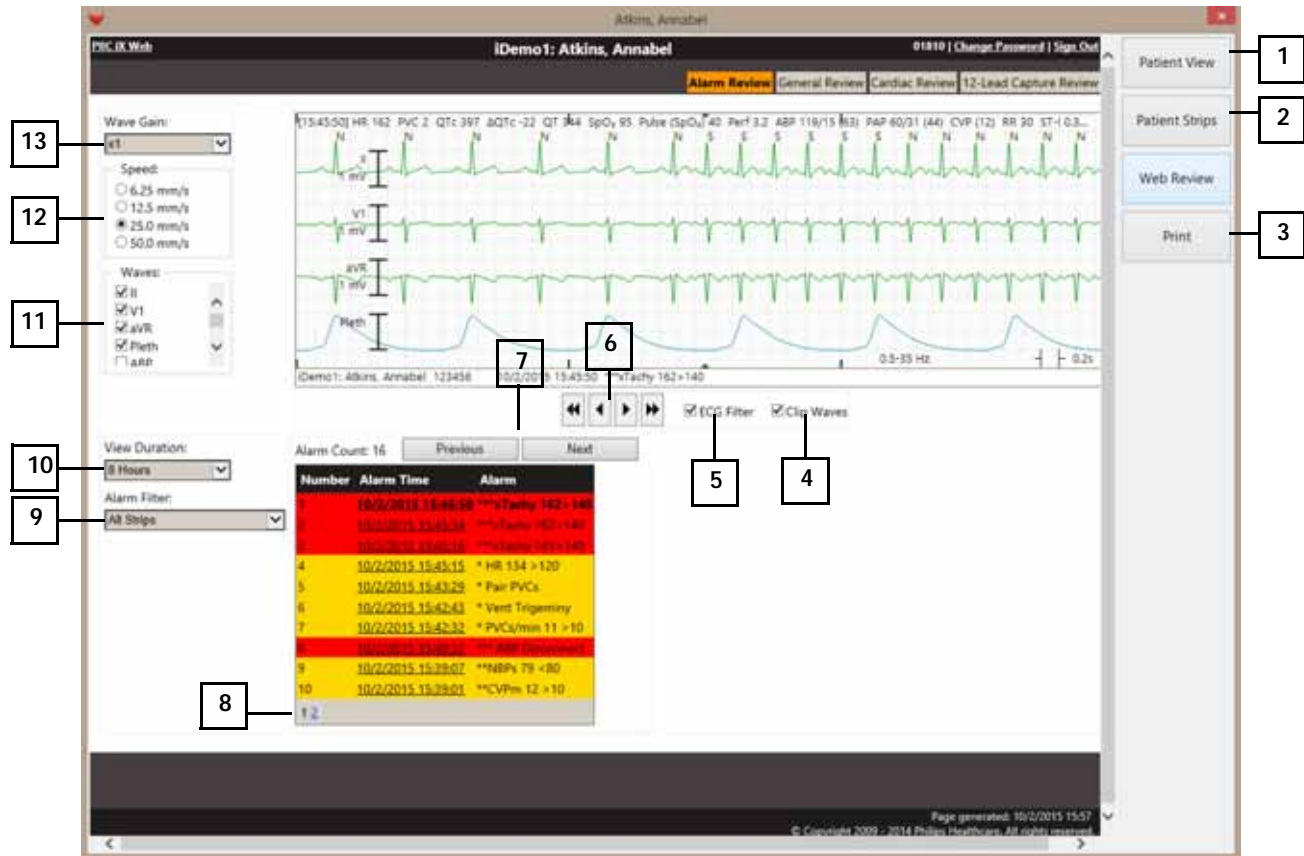
- 1 Selected bed label and Patient Name
- 2 User Name
- 3 Change the user password.
- 4 Log out of Multi-Patient View.
- 5 Select a different application.

Applications

Select	To
Patient Selection	Return to the Patient List to choose a different patient.
Alarm Review	See all alarm strips for a selected View Duration, up to 48 hours.
General Review	View compressed waves, strips, graphic trends or tabular trends, with corresponding alarms and arrhythmia events, up to 7 days.
Cardiac Review	View ECG Full Disclosure, ST Snippets/Map and ECG Statistics in addition to General Review elements.
12-Lead Capture Review	Review all 12-lead ECG captures taken either at the bedside monitor or the PIC iX.
Patient Window	See waves, numerics and alarms of selected patient; view a strip – make caliper measurements and print or copy to a clipboard to paste into patient documentation. Not available on the IntelliVue FlexCare patient monitor.

Alarm Review

Alarm Review displays all stored alarms and saved strips up to 48 hours. The application displays a strip in the top section of the window and a tabular list of alarms on the bottom section of the window. An alarm count above the tabular list corresponds to the selected View Duration and Alarm Filter.



- 1 Select to return to **Patient View**.
- 2 Select to return to **Patient Strips**.
- 3 Select to open a **Print** dialog box that permits printing the strip.
- 4 Select the **Clip Waves** check box to minimize wave overlap. Clear the check box to see full amplitude waves.
- 5 Clear the **ECG Filter** check box to see the ECG wave at 0.05 to 40 Hz. Select the check box to keep the wave on a single flat baseline.
- 6 Use the single- and double-arrow buttons to move through the 30-second strip.
- 7 Select the **Previous** and **Next** buttons to review strips in order, rather than selecting an individual alarm.
- 8 Select a page number to view additional alarms.
- 9 Select the alarm type from the **Alarm Filter** drop-down list, then select the alarm from the tabular list. Default is **All Strips**.

- 10 Select the time period from the **View Duration** drop-down list. Choices are 1 to 48 hours.
Note — To view older alarms, see the Event tile in General Review application.
- 11 Select or clear the check boxes in the **Waves** pane. You can display up to four waves. Default is ECG waves.
- 12 Select the strip wave speed from the **Speed** drop-down list. Default is 25.0 mm/s.
- 13 Select the wave size from the **Wave Gain** drop-down list. Choices are x1 to x4. Default is x1.

General Review

General Review shows all patient monitoring data for up to seven days. You can use multiple data formats to view and correlate two different data types. For example, you can view compressed strips with graphic trends, or view detailed wave strips with alarm and events. The figures and tables in this section describe the tiles and controls that are available in the General Review application.



Tiles Available in General Review

The following tiles are available in the General Review application.

Tile	Definition
Compressed Wave	Default of primary ECG wave compressed for 12-minute duration.
Event	List of all alarms and events for a specific event type, within selected View Duration.
Graphic Trend	Linear trends of selected parameters. Default is Heart Rate.
Strip	Detailed view of waves for a given time period; strip is 30 seconds in duration. See Alarm Review for details of available controls.

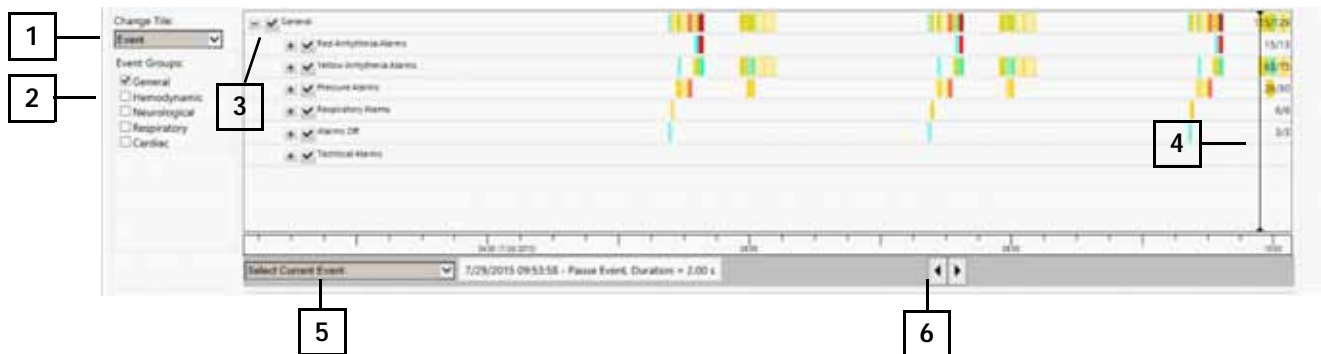
Tile	Definition
Tabular Trend	Displays a list of vital signs sourced during the selected View Duration.
Timeline	Select an area anywhere in the timeline to change the time focus of the displayed data.

Compressed Wave Tile



- 1 Select the Strip view from the **Change Tile** drop-down list.
- 2 Select the duration of the compressed wave view from the **Wave Duration** drop-down list. Default is 12 minutes.
- 3 Select the wave size from the **Wave Gain** drop-down list. Choices are from x1 to x4. Default is x1.
- 4 In the **Waves** panel, select up to four waves to display in the strip. Default is the primary ECG wave.
- 5 Select the double arrows to navigate the compressed wave to a previous or next wave duration, i.e. 12 minutes.
- 6 Select anywhere in the compressed tile to change the time focus to correlate with other data types. A red rectangle indicates the corresponding time selection.

Event Tile



- 1 In the **Change Tile** drop-down list, select the Graphic Trend, Tabular Trend, or Multi-Lead tile.
- 2 In both the top and bottom tile, select the data type to view in the Event Groups pane.
- 3 Select or clear specific events in the selected event group to add or remove events in the view.

- 4 Select anywhere in the tile to change the time focus, shown with a black cursor (thin vertical line).
- 5 Select the list events in view from the Select Current Event drop-down list. Default is the current event based on time focus.
- 6 Navigate to the next or previous event as you view the tile above, such as with the Strip tile or the Compressed Wave tile.

Graphic Trend Tile



- 1 Select Event, Tabular or Multi Lead tile from the **Change Tile** drop-down list.
- 2 Choose the parameter to display on the left side of the tile from the **Left Parameter** drop-down list. HR, if available, is the default.
- 3 Choose the parameter to display on the right side of the tile from the **Right Parameter** drop-down list. SpO2, if available, is the default.
- 4 For the left-side parameter, select the **Show Histogram** check box to display a histogram in addition to the graphic trend.
- 5 Select anywhere in the tile to change the time focus, shown with a black cursor (thin vertical line).

Tabular Trend Tile

	02:30	03:00	03:30	04:00	04:30	05:00	05:30	06:00	06:30	07:00	07:30	08:00	08:30	09:00	09:30	10:00	10:08
HR							120	50	120	120	120	50	120	120	120	80	120
Pulse (SpO ₂)							80	80	80	80	80	80	80	80	80	80	80
Pulse (ABP)								50	120	120	120	50	120	120		58	120
Pulse (PAP)							140	50	120	120	140	50	120	120	140	98	120
SpO ₂							85	99	99	99	99	99	99	99	99	99	99
ABP							49	79/40 (51)	121/53 (103)	121/53 (103)	30	40	68/29 (39)	121/53 (103)	121/53 (103)	113/74 (90)	121/85 (103)
RR							20	20	20	20	20	20	20	20	20	20	20
PAP							60/31 (44)	25/11 (14)	25/12 (18)	25/12 (18)	60/31 (44)	25/10 (14)	25/12 (18)	25/12 (18)	60/31 (44)	25/11 (17)	25/12 (18)
CI/PI							0	12	12	12	12	12	12	12	12	12	12
PVC							0	0	0	0	0	0	0	0	0	0	0
ST-I							0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.2
ST-II							0.4	0.2	0.3	0.4	0.4	0.2	0.3	0.4	0.4	0.2	0.4
ST-III							0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.2
ST-wVR							-0.3	-0.2	-0.3	-0.3	-0.3	-0.2	-0.3	-0.3	-0.3	-0.1	-0.3

- 1 In the **Change Tile** drop-down list, select the Tabular Trend, Graphic Trend, or Multi Lead tile.
- 2 Choose the tabular interval from the **Tabular Interval** drop-down list. Default is the NBP interval, which only shows vital signs with an NBP.
- 3 Select any column to change the time focus, indicated with dark gray shading.

Strip Tile

The Strip tile provides a detailed view of waves for a given time period. The strip is 30 seconds in duration. The Strip tile controls are the same as those in the Alarm Review application. See “Alarm Review” on page 13.

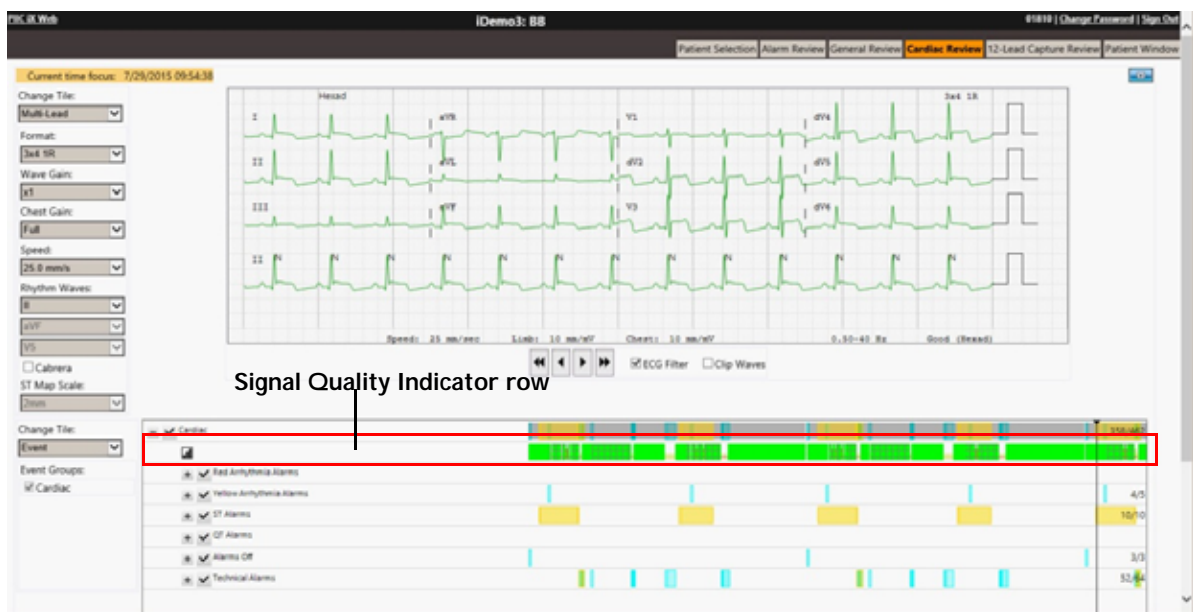
Timeline



- 1 Select the **View Duration** of the Event, Tabular Trend, and Graphic Trend tiles, shown in the white area. Default is 12 hours.
- 2 Select the **Timeline Duration** shown in gray. Default is 24 Hours.
- 3 Select the double arrows to navigate back or forward by one Timeline Duration, up to seven days.
- 4 Select the single arrows to navigate back or forward by one View Duration.
- 5 Select anywhere in the timeline to change the time focus, shown with a black cursor (thin vertical line).

Cardiac Review

Cardiac Review is similar to General Review but includes additional tiles, including Multi-Lead and 12-Lead Full Disclosure, ST Snippets, and ECG Statistics. These additional tiles are described below. For descriptions of the tiles that are also in General Review, see “General Review” on page 14.



Tiles Available in Cardiac Review

Tile	Definition
Compressed Wave	Default of primary ECG wave compressed for 12-minute duration.
Event	List of all alarms and events for a specific event type, within selected View Duration.
Graphic Trend	Linear trends of selected parameters. Default is Heart Rate.
Strip	Detailed view of waves for a given time period; strip is 30 seconds in duration. See Alarm Review for details of available controls.
Tabular Trend	Displays a list of vital signs sourced during the selected View Duration.
Timeline	Select an area anywhere in the timeline to change the time focus of the displayed data.

Tiles Only in Cardiac Review

Tile	Definition
Multi-Lead	Displays a retrospective review of waves for all available ECG leads. Multi-Lead or 12-Lead Full Disclosure.
Event tile Signal Quality Indicator row	For Cardiac events, the tile includes a 12-Lead Signal Indicator row (see figure above). Colors represent the signal quality: bright green indicates good quality, yellow for fair, and gray for poor. A grid in the row indicates 10-wire diagnostic ECG waves.
ST Snippets	Displays one-minute averaged ST snippets, shown in Standard or Cabrera Format.
ECG Statistics	Displays all available ECG statistical data generated by the Philips ST/AR algorithm. For example, Percent of time paced, or Atrial Fibrillation, or Heart Rate Variability statistics.

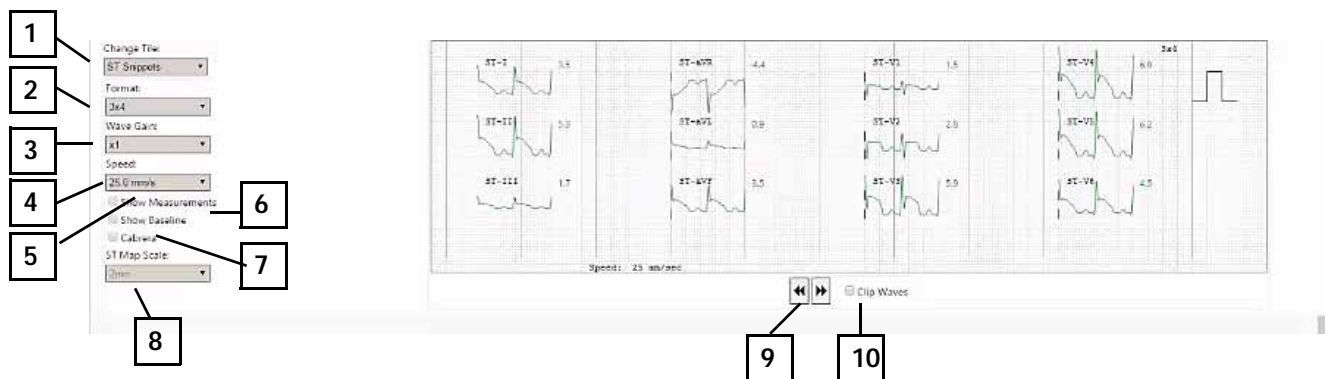
Multi-Lead Tile

The screenshot shows the Multi-Lead Tile interface. On the left, a control panel contains several dropdown menus and checkboxes, numbered 1 through 8. The main area displays a grid of ECG waveforms for leads I, II, III, aVR, aVL, aVF, V1, V2, V3, V4, V5, and V6. At the bottom, there are navigation and filter controls, numbered 9 through 11.

- 1: Change Tile: Multi-Lead
- 2: Format: 12-lead
- 3: Wave Gain: 1
- 4: Chest Gain: Full
- 5: Speed: 25.0 mm/s
- 6: Rhythm Waves: R
- 7: ST Map Scale: ST
- 8: ST Map Scale: ST
- 9: Navigation: Previous
- 10: Navigation: Play/Pause
- 11: Navigation: Next

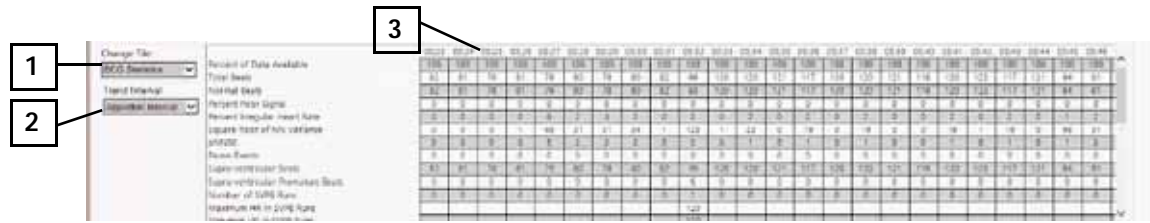
- 1 Select Compressed Wave, Strip, or Multi-Lead tile from the **Change Tile** drop-down list.
- 2 Select the tile layout from the **Format** drop-down list. Default is 3x4 with one rhythm wave (1R).
- 3 Select the wave size from the **Wave Gain** drop-down list. Choices are x1 to x4. Default is x1.
- 4 Select the **Chest Gain**. Based on Wave Gain; choose Half or Full. Default is Full.
- 5 Select the wave speed from the **Speed** drop-down list. Default is 25 mm/sec.
- 6 If the selected format includes a rhythm wave (R), select the 10-second **Rhythm Waves** to display.
- 7 Select or clear the **Cabrera** check box to show Cabrera or Standard format.
- 8 If the selected format includes an ST Map, select the **ST Map Scale**.
- 9 Use the single- and double-arrow buttons to move through the 30-second strip.
- 10 Clear the **ECG Filter** check box to see the ECG wave at 0.05 to 40 Hz.
- 11 Select the **Clip Waves** check box to minimize wave overlap. Clear the check box to see full amplitude waves.

ST Snippets Tile



- 1 Select Graphic Trend, Tabular Trend or Multi Lead tile from the **Change Tile** drop-down list.
- 2 Select the tile layout from the **Format** drop-down list. Default is 3x4 with one rhythm wave (R).
- 3 Select the wave size from the **Wave Gain** drop-down list. Choices are x1 to x4. Default is x1.
- 4 Select the wave speed from the **Speed** drop-down list. Default is 25.0 mm/s.
- 5 Select the **Show Measurements** check box to display ST measurement points with a dotted line.
- 6 Select the **Show Baseline** check box to show the baseline wave and value in yellow.
- 7 Select the **Cabrera** check box to use Cabrera format. Clear the check box to use Standard format.
- 8 If the selected format includes an ST Map, select the scale from the **ST Map Scale** drop-down list.
- 9 Use the arrow buttons to navigate forward and backward in time.
- 10 Select the **Clip Waves** check box to minimize wave overlap. Clear the check box to see full amplitude waves.

ECG Statistics Tile



- 1 Select the Graphic Trend, Tabular Trend or Multi Lead tile from the **Change Tile** drop-down list.
- 2 Select the interval of each column in the tile from the **Trend Interval** drop-down list. Some statistics are only available utilizing the default interval of Algorithm Interval, which is generally about one minute.
- 3 Select a column to change the time focus.

12-Lead ECG Capture Review

The 12-lead ECG Capture Review application allows you to review all diagnostic captures within the Philips Patient Monitoring System.

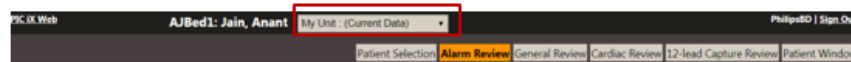
The following figure and table describe the available controls in the 12-lead ECG Capture Review application.



- 1 The **Previous Page** and **Next Page** arrows are only available if the capture requires more than one page.
- 2 Select High and Low pass filters from the **Filters** drop-down list.
- 3 Select limb gain from the **Limb Gain** drop-down list. Choices are from x1 to x4. Default is x1.
- 4 Select chest gain from the **Chest Gain** drop-down list. Based upon Wave Gain; select Half or Full. Default is Full.
- 5 Select the Strip wave speed from the **Speed** drop-down list. Default is 25 mm/s.
- 6 Select the tile layout from the **Format** drop-down list. Default is 3x4 with one rhythm wave (1R).
- 7 Select the 10-second rhythm waves to display from the **Rhythm Waves** drop-down list. Choices depend on the selected format.
- 8 Select the date/time of capture.

Prior Data

If data has been collected from the monitoring system in more than one patient stay, during either a previous admission or from a different PIC iX unit than the current unit, a drop-down list is displayed next to the name in the applications.



To view data from one stays, select the stay from the drop-down list. Each stay on the list includes the unit and duration of the stay.

The caption bar changes from black to teal and displays **Prior Data** in the caption bar. When you are done reviewing stored data, select the current patient stay from the drop-down list.

PIC iX Multi-Patient View Quick Guide

PIC iX Web (Prior Data) A/Bed1: John, Anest. My List: Discharge (Duration)

Patient Selection Alarm Review General Review Cardiac Review 12-lead Capillary

Wave Gain: x1

Speed:

- 6.25 mm/s
- 12.5 mm/s
- 25.0 mm/s
- 50.0 mm/s

Waves:

- II
- Pleth
- Resp

ECG: HR 160 PVC D QTc 419 ADTe 13 QT 289 SpO₂ 84 Pulse (SpO₂) 80 Perf 4.5 RR 90

Pleth

Resp 1 Chm

A/Bed1: John, Anest 100 9/19/2017 22:01:48 **RR 39 +45 6.50-40.00 Hz

Alarm Filter: All Strips

Alarm Count: 32 Previous Next

Number	Alarm Time	Alarm
1	9/19/2017 22:01:48	**RR 59 +45
2	9/19/2017 21:55:27	**SpO ₂ 84 <90
3	9/19/2017 21:28:18	**NBPv 121 +120
4	9/19/2017 21:28:34	**RR 38 >30
5	9/19/2017 21:28:12	**SpO ₂ 84 <90
6	9/19/2017 20:09:39	**RR 59 +45
7	9/19/2017 20:03:18	**SpO ₂ 84 <90
8	9/19/2017 19:36:09	**NBPv 121 +120
9	9/19/2017 19:26:25	**RR 38 >30
10	9/19/2017 19:26:04	**SpO ₂ 84 <90

Timeline Duration: 24 Hours

ECG Filter Clip Waves

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Part Number 4535 647 94661
Printed in USA June 2019
Second Edition

453564794661



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