

Monitor Tech Training

Spacelabs SafeNSound 5.x – Enterprise Software

Spacelabs training acknowledgement

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It is recommended that you review the Operations and Service Manuals in conjunction with viewing these materials.

All data shown in this video is from Spacelabs' simulation program and is not actual patient data.

Specifications subject to change without notice.

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Menu Navigation

1. Dashboard

Primary tab, used to manage patients, communication, and notes

2. My Patients

Contains assigned patients being monitored within the facility(s)

3. Messages

Communicate with staff via Messages

4. Staffing

Assign Caregivers with current patients

5. Bedside

Allows caregiver to admit, discharge, transfer, and manage patient location

6. Archive

Reference patient information from a prior visit

7. Clinical Insights

Provides Daily Rounding & Device Tracking reports

8. Support

Chat with SafeNSound support team

The screenshot displays the SPACELABS HEALTHCARE Monitor Tech interface. At the top, it shows 'Role: Monitor Tech' and 'x735'. The main header includes 'Dashboard - My Patients' and a search bar. Below the header, there are navigation tabs for 'My Patients', 'Alarms', 'Tasks', and 'Messages', with counts: 2 My Patients, 0 Alarms, 6 Tasks, and 2 Messages. A left sidebar lists patients with checkboxes, including '302 - Doe, Tom', '303 - Spinner, Dashboard', '304 - Dm, Philips', '306 - Osk, Levi', '309 - Scroll, Test', '310 - Load, Dashboard', '312 - Mtl, Test', '313 - Cgaadm12, Test', '315 - Admit, Test', '317 - Cg1, Test', and '319 - Changed, Hoverissue'. The main area shows 'Alarms & Tasks' for 'ICU01 - Doe, Tom' with a heart rate alarm. Below this, there are patient cards for '302 - Doe, Tom', '304 - Dm, Philips', '309 - Scroll, Test', '310 - Load, Dashboard', and '315 - Admit, Test', each displaying vital signs and clinical alerts like 'Accelerated Junctional', 'Atrial Paced', '1st Degree', 'Conduction Changes', 'Dual', 'Atrial Paced', 'Sinus Rhythm', 'Blocked PAC', 'Elevated T Wave', 'Missed Beats', 'PVC Multifocal', 'Quadrigeminal', 'Pause', 'Walking 20:47:00', 'Dual Chamber Paced', 'PAC Pac', 'Quadrigeminal', and 'Elevated ST Segment'. A bottom right corner shows a chat icon with a '5' notification.

Dashboard

1. My Patients

Contains assigned patients being monitored within the facility(s)

2. Bedside Scanning

Allows caregiver to admit, discharge, transfer, and manage patient locations

3. Customizable Screen

Option for each user to customize their Dashboard/Main Screen

4. Search Function

Quickly find a patient

The screenshot shows the SPACELABS HEALTHCARE Dashboard - My Patients interface. At the top, there is a search bar (4) and a user profile for 'Moi'. Below the search bar, there are four summary cards: 'My Patients' (2), 'Alarms' (1), 'Tasks' (0), and 'Messages' (1). The main area is divided into two sections: 'Patients' and 'Alarms & Tasks'. The 'Patients' section shows a list of patients with checkboxes for admission/discharge and location selection. The 'Alarms & Tasks' section shows a list of patients with their vital signs and alarm status. A red box highlights a menu icon (3) in the bottom right corner of the dashboard. The bottom right corner also features a '2' icon and a 'Care Team' icon.

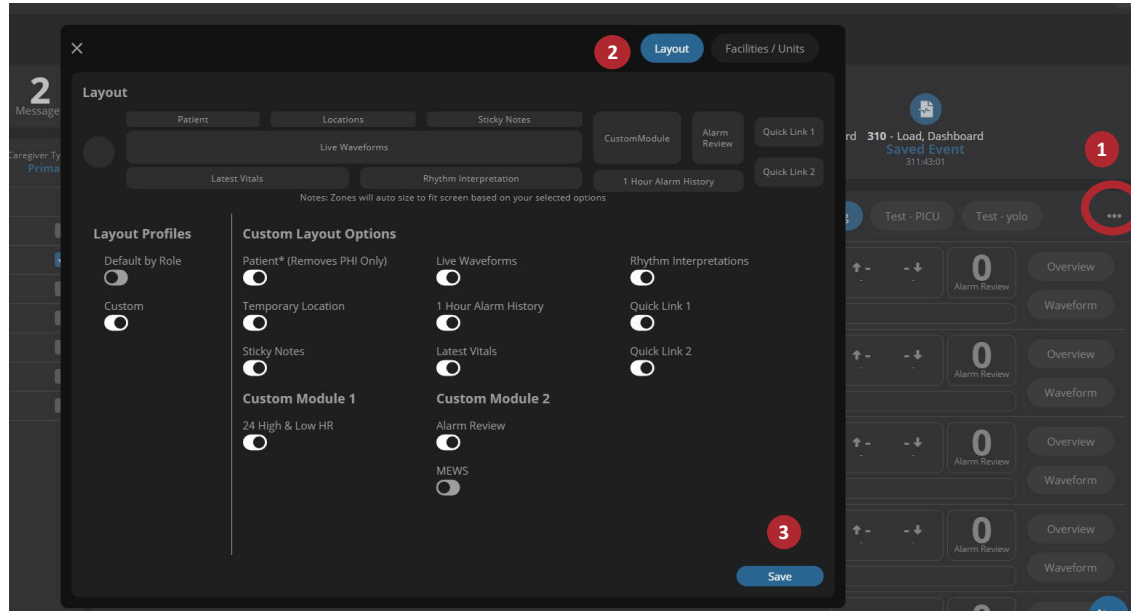
Dashboard: Customized Screen

Custom Layout Options

Allows the user to customize their dashboard view

To Access Customized Layout

1. On the Dashboard click on the ellipsis (located on the far right-hand side of the screen)
2. **Layout** opens, select user's preferred options
3. Click **Save**



Dashboard - My Patients

1. Assigned Patients

- Assigned patients
- Retrospective Waveform Viewer
- Latest Patient Vitals, Rhythm Interpretation, MEW Score
- Location, Sticky Notes

2. Analytics

- Active patients within each facility/unit
- Assigned Patients – Current number of assigned telemetry patients

3. Notifications

- Alarm Review
- Activity
- Calls
- Patient Admit, Transfer, Removals
- Patient Orders for Patient Monitoring

The screenshot displays the SPACELABS HEALTHCARE Dashboard - My Patients interface. The dashboard is divided into several sections:

- Header:** Role: Monitor Tech, Monitor Tech (208) 699-4030, Search bar, and system icons.
- Summary:** 17 My Patients, 0 Alarms, 0 Tasks, 0 Messages.
- Patients List:** A list of patients with checkboxes for assignment. The list includes patients from various units like Demo, ED, ICU, Med-Surg, and MS.
- Alarms & Tasks:** A section for managing alarms and tasks, highlighted with a red circle '3'.
- My Patients:** A detailed view of assigned patients, highlighted with a red circle '1'. It shows patient details, vital signs, rhythm interpretations, and alarm statuses. Red circle '2' highlights the 'Monitor Tech' role.

Unit	Patient ID	HR	SpO2	RR	NBP	Alarms	MEW Score	Alarm Review	Overview	Care Team
Demo	101 - Doe, Lina	160	101	21	108	Accelerated Junctional, Atrial Flutter, Sinus Rhythm, 1st Degree	0	Alarm Review	Overview	Care Team
ED105	ED105 - Doe, A042	172	46	22	106	Sinus Rhythm, 1st Degree	0	Alarm Review	Overview	Care Team
MS97	ED111 - Doe, A056	200	46	21	106	Surgery 05:04:48, Sinus Rhythm, Sinus Tachycardia	0	Alarm Review	Overview	Care Team
ED111	ICU26 - Doe, A022	160	53	21	106	Atrial Fibrillation, Afib, Sinus Rhythm, Control Rate	0	Alarm Review	Overview	Care Team
ICU26	ICU4 - Doe, B600	172	53	22	106		0	Alarm Review	Overview	Care Team
ICU4	ICU43 - Doe, A057	160	101	21	108	Atrial Fibrillation, Sinus Rhythm, Sinus Tachycardia, BBB, 1st Degree	0	Alarm Review	Overview	Care Team
ICU43	ICU70 - Doe, A663	165	46	22	106	Nuc-Med 05:01:07, Sinus Arrhythmia, Sinus Rhythm	0	Alarm Review	Overview	Care Team
ED02	ICU9 - Doe, B612	172	59	22	106	Nuc-Med 04:40:01, Accelerated Junctional	0	Alarm Review	Overview	Care Team
ICU9	ICU91 - Doe, A004	172	59	22	106		0	Alarm Review	Overview	Care Team

Dashboard: My Patients

1. Rhythm Interpretation

Pulled from last Approved ECG strip or manually entered using the **+** symbol

2. Alarms & Tasks

- Saved Events
- Alarms
- ICSC Report

3. Indicators

- **Yellow** = Patient has a Pacemaker
- **Blue** = Patient utilizing SPO2 on Telemetry Transmitter
- **Purple** = DNR

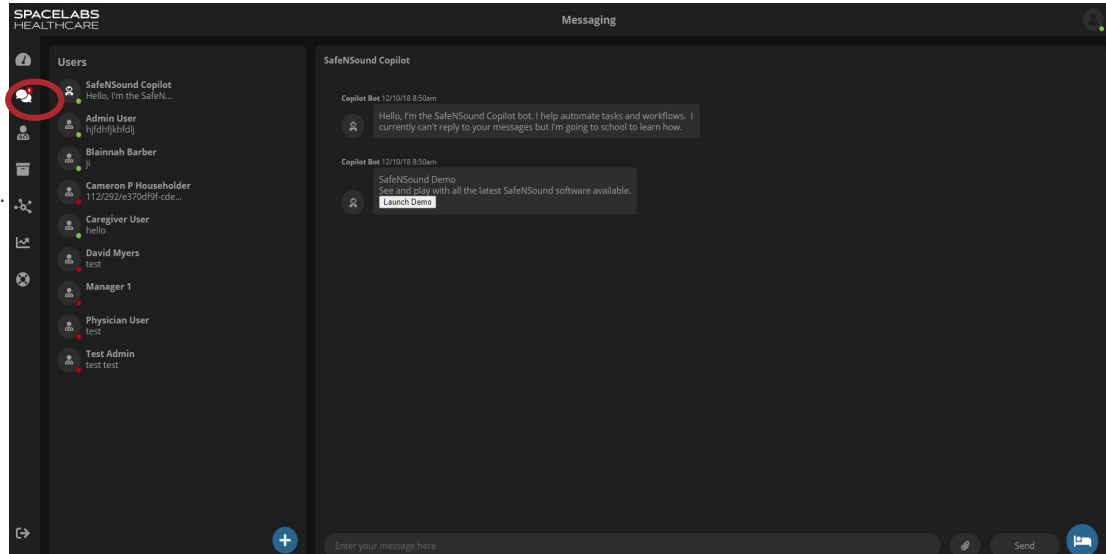
The screenshot displays the SPACELABS HEALTHCARE Dashboard - My Patients interface. The dashboard is divided into several sections:

- Top Bar:** Search bar, My Patients (2), Alarms (0), Tasks (0), Messages (0).
- Alarms & Tasks:** A red box highlights this section, which includes a red circle with the number 2. It shows a patient named "ICU01 - Doe, Tom" with a red plus sign.
- Patients List:** A red box highlights the patient list on the left, which includes a red circle with the number 3. The list shows various patient categories and names, such as "302 - Doe, A468".
- ECG and Vital Signs:** The main area displays ECG strips and vital signs for "302 - Doe, A468". A red box highlights the ECG rhythm interpretation buttons (Atrial Fibrillation, Sinus Bradycardia, Sinus Rhythm, Ventricular Fibrillation) with a red circle containing the number 1. The ECG strip shows a sinus rhythm.

Messaging Staff

Select the Messenger Icon on the left.

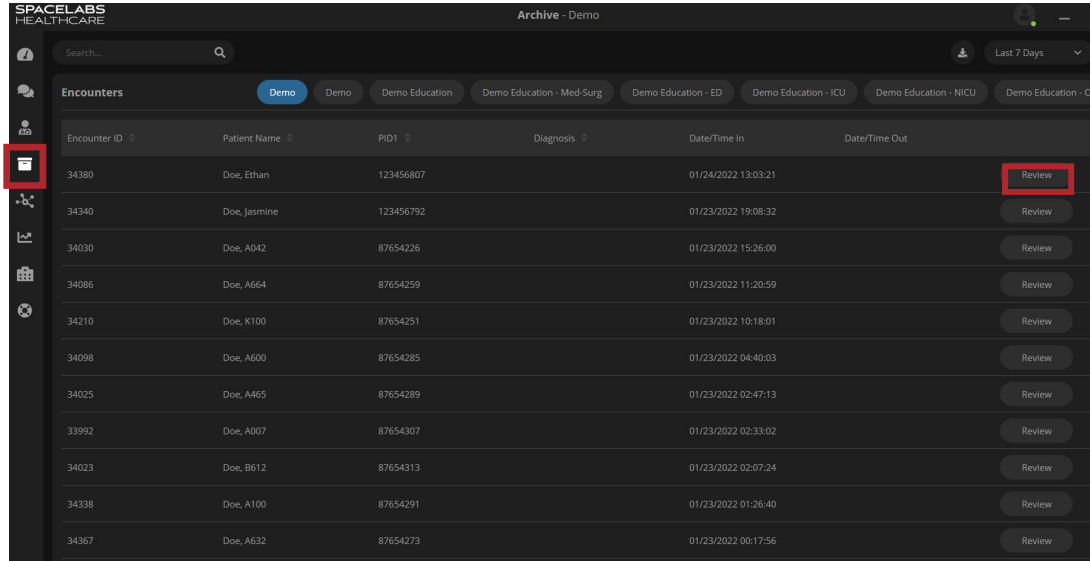
- Message staff associated to a specific patient
 - *This is based off Staff Assignments.
- Message a specific Staff Member
- Receive SafeNSound Update Messages
- Communicate with SafeNSound Support



Archive Tab

The archive tab is used when searching for patient data from a prior visit.

- Each patient has their history saved and viewable from a single review window.
- Data including saved waveforms can be stored for up to two years.
- Waveform data that has not been saved by a clinician remains for two weeks.



Help & Support Tab

Support Feature

- Located at the bottom left of the menu is the Support icon.
- Type in your question and communicate with our SafeNSound Support bot

* Follow organization's policy to report any issues

The screenshot displays the 'Encounters' screen in the Spacelabs Healthcare mobile app. The top navigation bar includes a 'Demo' button. A vertical sidebar on the left contains several icons, with the 'Support' icon (a soccer ball) circled in red. The main content area shows a table of encounters:

Encounter ID	Patient Name
34380	Doe, Ethan
34340	Doe, Jasmine
34030	Doe, A042
34086	Doe, A664

Below the table, a 'Spacelabs Healthcare' support overlay is visible. It features a red header with the text 'Spacelabs Healthcare' and a minus sign. The overlay content includes: 'Healthcare.', 'Here are some top suggestions for you:', and three suggested items:

- SafeNSound 5.1.0**: New User Login Status - Displays user login status as Online or Offline
- SafeNSound 5.1.2**: Build 935 New Auto Transfer Notification - Allows a notification
- SafeNSound Desktop Application**: This document defines the current

A 'Get in touch' button is located at the bottom right of the overlay. Below the overlay is a text input field with the placeholder 'Type your question here...'. The bottom left corner of the app shows the version 'v5.1.2'.

Navigating the Patients Tab

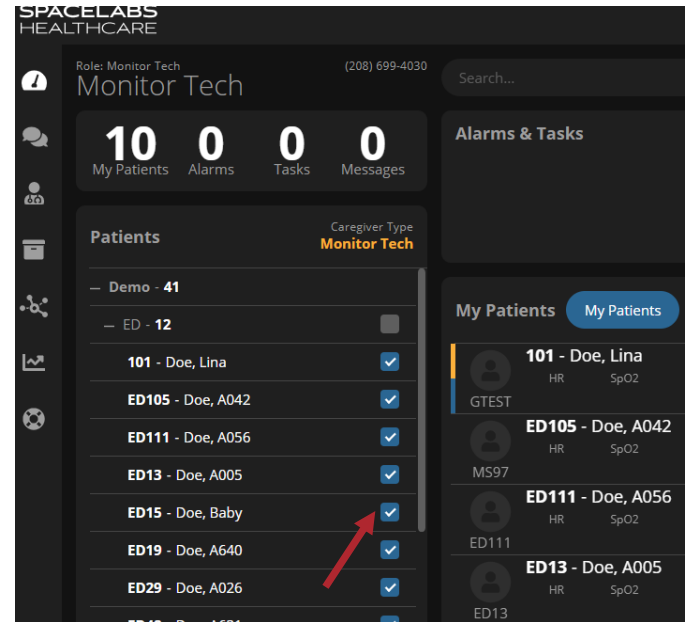
Select Hospital and Unit

- Represents all monitored patients from a Facility to individual Department level view.
- Allows the Monitor Technician to manage any combination of patient assignments specific to their needs by conveniently assigning and unassigning patients from the user's Dashboard.

Select Patient Assignment

- Selecting the patients listed, can be done by individually checking each box, or selecting a department to check all patients.
- Taking ownership of a patient(s) will place the patient(s) on the specific user's dashboard.

*If another user has ownership of this patient, it will take them from their dashboard, placing the patient(s) on your dashboard. This does not move the patient(s) on the central monitors.



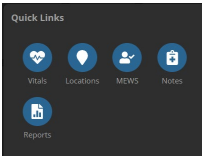
Managing a Patient - Overview Tab

1. Heart Rate Trend and Vitals

- Manually entered or integrated with EMR
- Lowest and Highest heart rate shown for each hour

2. Quick Links +

Conveniently access Reports, Notes, and manually update patient's Vitals, MEW Score, and Location.



3. Pending Alarms/Saved Events

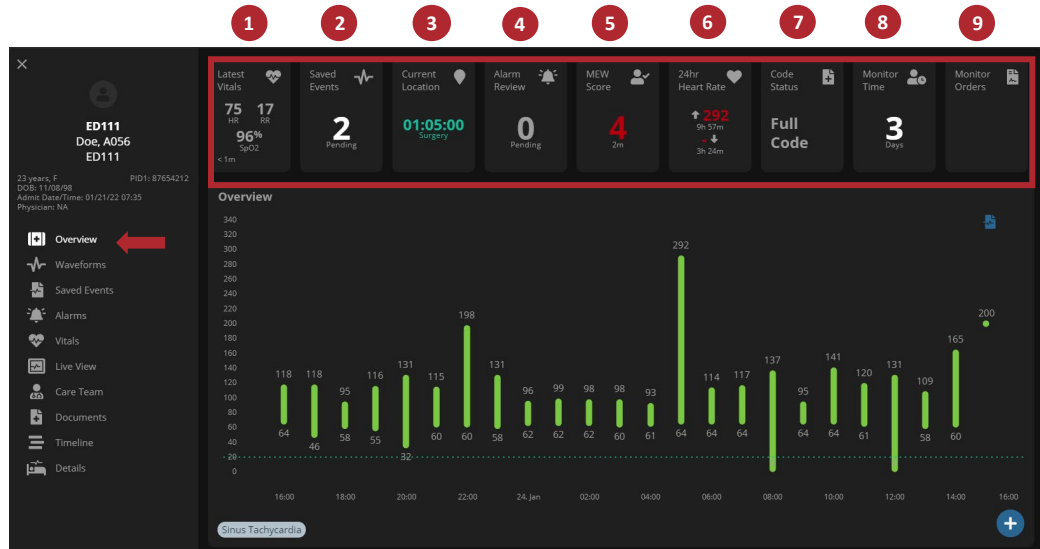
Use the right and left arrows to review Pending Alarms throughout the timeline.



Managing a Patient - Overview Tab

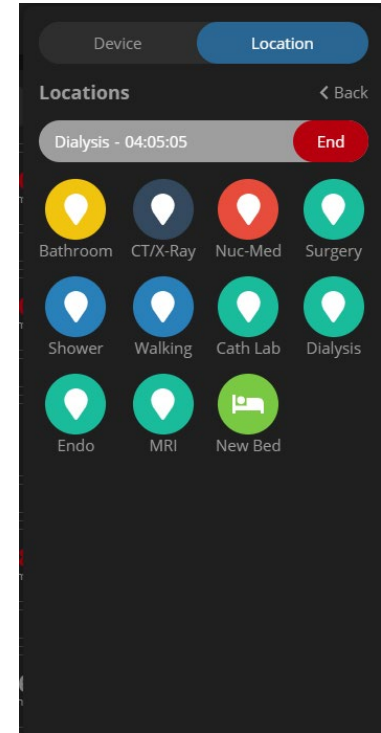
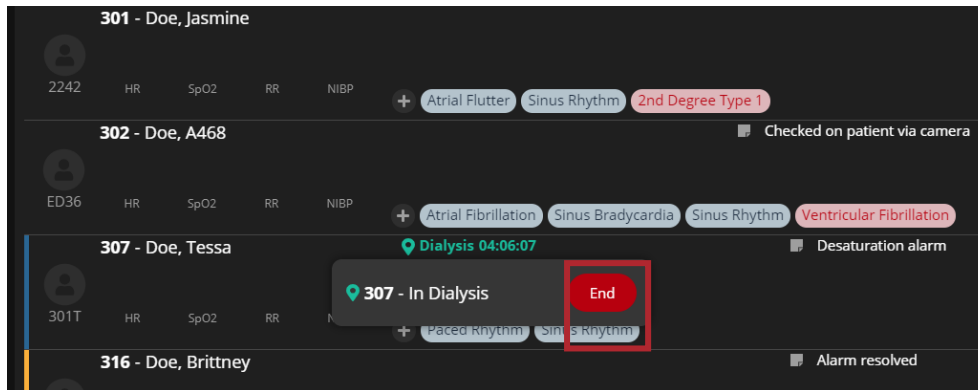
Patient Cards

1. Latest Vitals
 - Saved ECG events by Monitor Tech, pending RN approval
2. Saved Events
 - Locations Update; customizable
3. Current Location
 - Pending a rhythmia review; customizable
4. Alarm Review
 - Modified Early Warning Score
5. MEW Score
 - Highest and lowest HR in 24 last hours
6. 24 Hour Heart Rate
 - Can be manually entered or pulled from the EMR
7. Code Status
 - Time Monitored
8. Time Monitored
 - Monitored Orders
9. Monitored Orders
 - Tele Orders from EMR



Managing A Patient - Location Management

- When a monitoring device is removed from a patient, the bedside caregiver can send a notification to a monitor tech to provide the patient location.
- Location management allows the caregiver to quickly sync a patient's location with Central Monitoring without a phone call.



Managing a Patient - Waveforms

Waveforms: Scale Changes

Change the size of the patient's waveform for better viewing.

- To change the size of the waveform, click on "mm/mV"
The options include: **0.25x**, **0.5x**, **1x** (normal), **2x** and **4x** in size.
- When the strip is selected in the 6 second format, it will save in standard 10mm/mV size.



Managing a Patient - Waveforms

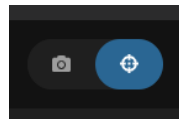
Select Patient

Select Waveforms Tab

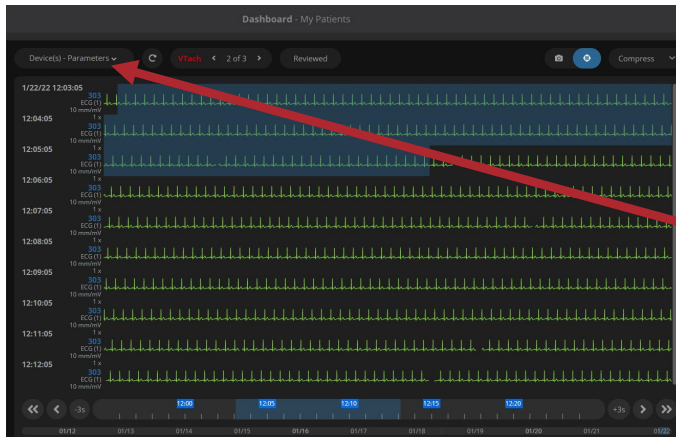
To Navigate Waveforms

1. Select either the single arrow right or left (44 Second Navigation or 1 page), the double arrows right or left (30 Minute Navigation), or +/- 3 seconds
2. You may also click within the navigation to go to a point in time.
3. Use the right and left arrows to review Pending Alarms
4. Click waveform feeds **On/Off**
5. Option for **Strip** or **Compress** view





The compass (to the right of the camera) allows for custom saved events in strip or compressed waveform view.

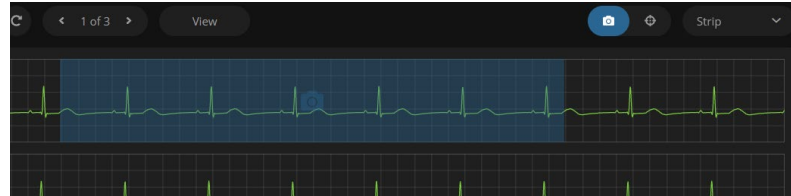


In compressed waveform view you can save up to 10 minutes at a time by narrowing the number of feeds you are viewing.

Managing a Patient - Waveforms

Save a Waveform

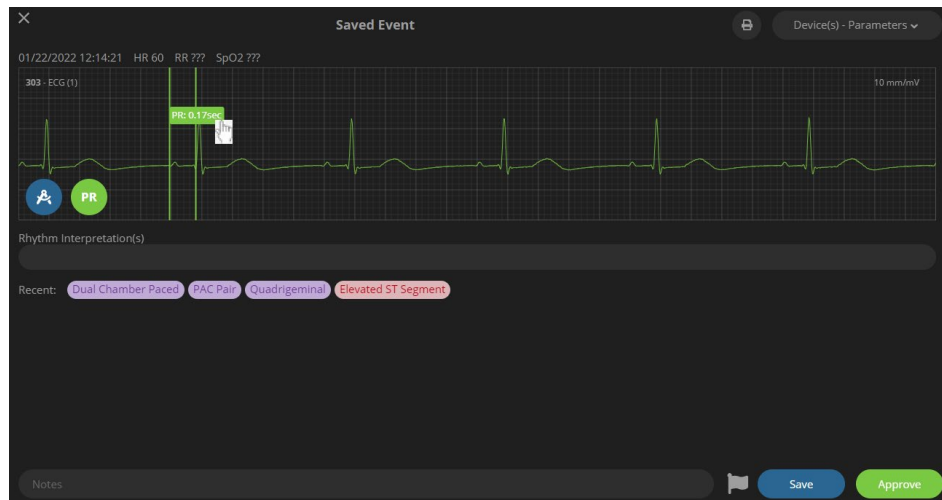
1. Scroll over the desired waveform.
2. A light blue snip-it area will appear
3. Click the waveform to open a snapshot.
4. Select the caliper icon and desired parameter measurement.
5. Click and drag in the desired area of the waveform to measure the beat. (Scroll over the caliper line to drag and change the measurement)
6. Continue to add PR, QRS, RR, QT measurements.
7. Select the appropriate Rhythm Interpretations by clicking in the Rhythm Interpretation field and selecting the appropriate Rhythm Interpretation.
8. Type a note or flag the waveform, if necessary, by clicking the flag icon.
9. Select **Save**.



Managing a Patient - Waveforms

Locking Calipers

1. Place the caliper.
2. Hover over the caliper measurement.
3. Note the pointing finger – Click
4. You can now drag the locked caliper throughout the strip.
5. To stop, place caliper in the correct position on the waveform and click away from area– the caliper will remain where it was placed.



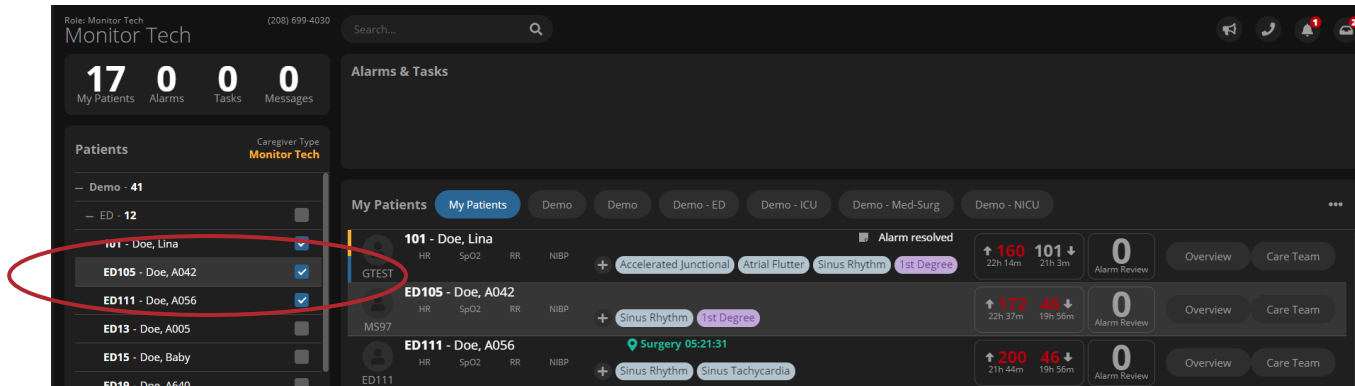
Adjusting Calipers

1. To adjust or re-do a caliper, click the caliper icon you want to re-do or replace.
2. Drag and drop caliper on another portion of the waveform.
3. Original measurement will disappear and the new one will remain.

Bookmarkers

Helpful for Monitor Techs when creating strips

- **Bookmarkers** save the users place when opening a patient record.
The highlighted patient indicates the last patient record opened.



Flagged Events

Monitor Tech or Clinician may designate an important event with a Flag.

- Some example use cases include:
 - A patient event that influences monitoring
 - A tool used during hand-off between caregivers as a reminder of important events.
 - Physician visits
 - Unanticipated changes or important user specific communication
- Mark the flag before saving the strip.
- A Flagged event report is available for all flagged events



Managing a Patient - Waveforms

Saved Events – How to Approve

**Typically, RN will approve the Saved Strip created by the Monitor Tech. Caregiver can find the Saved Events in the Saved Events Tab or in the Tasks bar as a Pending Event to Approve.*

1. Click on any patient
2. Click on the **Saved Events** tab.
3. Select any saved event marked Pending
4. Click **Approve**
5. To approve multiple saved events, click **Select All**,
6. Then click **Approve**.
7. Locate a specific Saved Event by using the search box.

EMR Waveform Integration Process

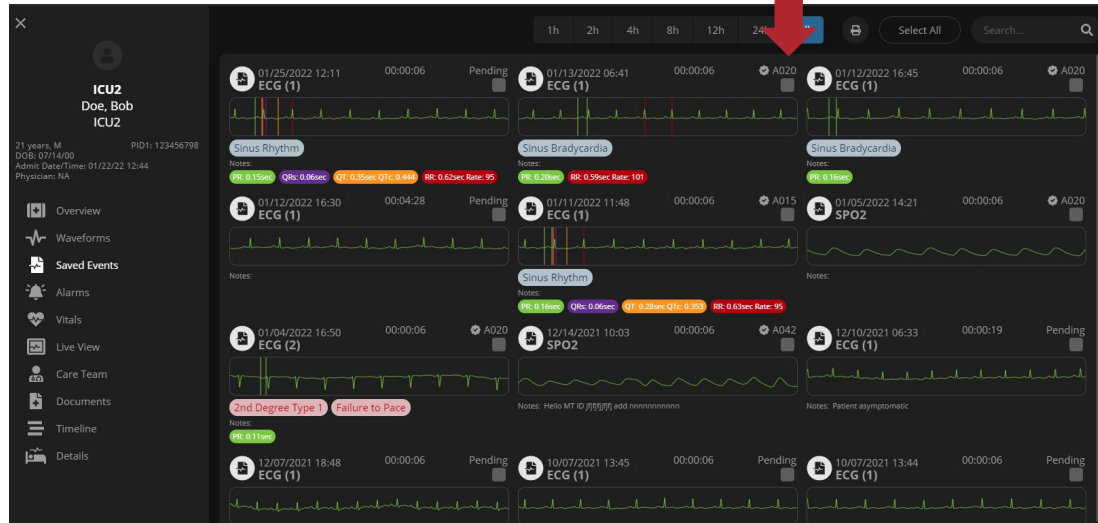
- If EMR Waveform Integration is in place, the document will be saved to a PDF automatically and sent to the EMR.
- A Print button is available if a physical copy of the saved event is needed.



Managing a Patient - Waveforms

Approved Saved Events

- Saved Events that have been approved will be marked with an approval seal and the username of the approver.
- Notice the Saved Event for Sinus Rhythm has an approval seal in the top right corner of the saved event.



Managing a Patient- Alarm Review

- The **Alarms and Tasks** icon collects all the Alarms that require evaluation when Alarm Review is utilized. This helps critical alarms stand out for proper review and documentation

*Specific alarms are collected based on organizational policy.

The screenshot displays the SPACELABS HEALTHCARE dashboard for a user named Lindsey Kuykendall, Role Manager. The dashboard is titled "Dashboard - My Patients" and features a search bar at the top. On the left sidebar, there are navigation icons and a "Patients" list with counts for various departments: Demo (41), Demo Education (9), ED (1), ED2 - Doe, Ethan (2), Med Surg (5), 301 - Doe, Jasmine, 302 - Doe, A468 (highlighted), 307 - Doe, Tessa, 316 - Doe, Brittney, 322 - Doe, Pam, NICU (1), OR (0), and PACU (0). The main content area is divided into sections. The "Alarms & Tasks" section at the top has a red arrow pointing to its icon. Below it, the "My Patients" section shows a list of patients, with "302 - Doe, A468" selected. This patient's vital signs are displayed: HR 62, SpO2 98%, RR 32, and NBP. A red arrow points to the "1 Alarm Review" button next to the patient's name. Below the patient list, there are two ECG waveforms for "ED2 - Doe, Ethan" with a "Sinus Rhythm" label. The bottom right corner of the dashboard shows a "Care Team" button and a "1 Alarm Review" button with a red arrow pointing to it.

Managing a Patient – Alarm Review

1. Select Patient
2. Select Alarms Tab
 - Each individual alarm is displayed for that specific patient.
 - Search functionality to find specific patient alarm.
 - Three Tabs: Limit Alarms, General Alarms, Parameter Changes.
 - Selected Alarm strip can be measured with calipers and saved.



Managing a Patient – Vitals Tab

1. Select Patient
2. Select Vitals Tab

- Chronological view of the patient's automated or manually entered values for HR, Resp, SpO2 and Blood Pressure
- Graph & Trends visual representations
- SpO2 is also displayed as a histogram
- Click the waveform to see the vitals up to every second of data
- View data from a specific period by utilizing the Custom calendar

3. Data Resolution

- Decide the resolution of patient vitals by Beat2Beat™, or 1-minute intervals.
- Beat2Beat™ displays the highest resolution of vital data being generated from the monitoring device.

➤ 4. Waveform Link

- Click “Waveforms” to quickly move to the waveforms tab



Managing a Patient – Communication

Notifications

1. Activity

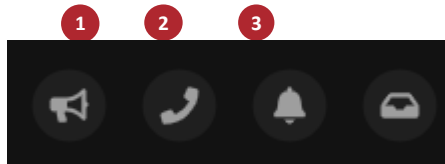
Latest quick message status – accepted or declined. Messages can be cleared.

2. Active Communications

Quickly answer and end calls
2nd click- Call History by user

3. Assign, Remove and Transfer

Manage Notifications of scanned Admit, Discharge, and Transfer
2nd click – Complete Notification History



4. Order Management

Displays pending telemetry orders
2nd click – Access Order Management



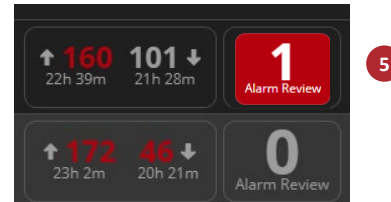
Pending Orders - Orders on all monitored patients until assigned through bedside scan or reviewed.

Matched Orders - Orders that have matched to a patient through bedside scan or reviewed.

Reviewed Orders - Orders that have been reviewed as Duplicate Order, Order Error, or Awaiting Assignment

5. Alarm Review

Displays Alarms pending review next to each patient on the Overview page



Managing a Patient - Communication

1. Answer Call

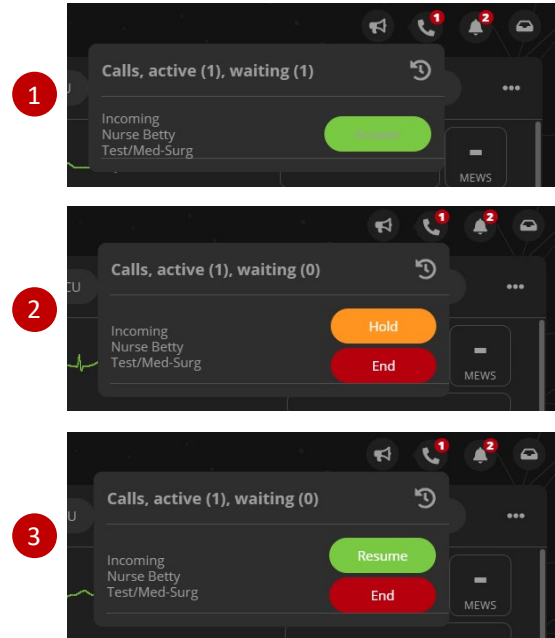
- Inbound call that is waiting to be answered

2. Hold or End Call

- Active inbound or outbound call that can be placed on hold or picked up by another user. End call will end the active call.

3. Resume or End Call

- Resume an active call or end active call



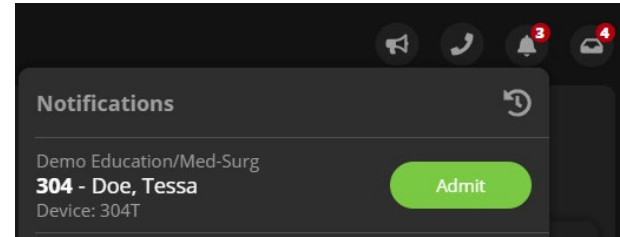
Managing a Patient – Communication

Admit, Discharge, and Transfer

1. Assign (Admit)

- Device and Patient Assignment Request

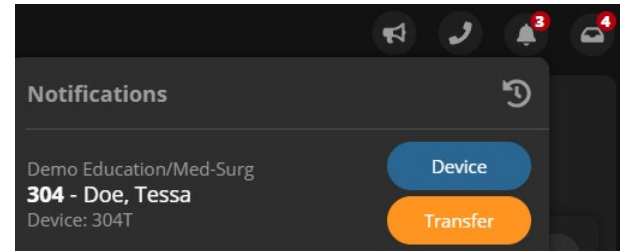
1



2. Remove (Discharge)

- Device and Patient Removal Request

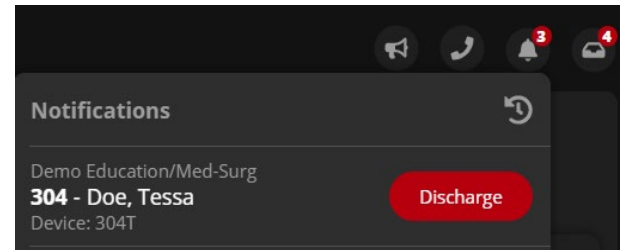
2



3. Change/Transfer

- Device and Bed Transfer Request

3



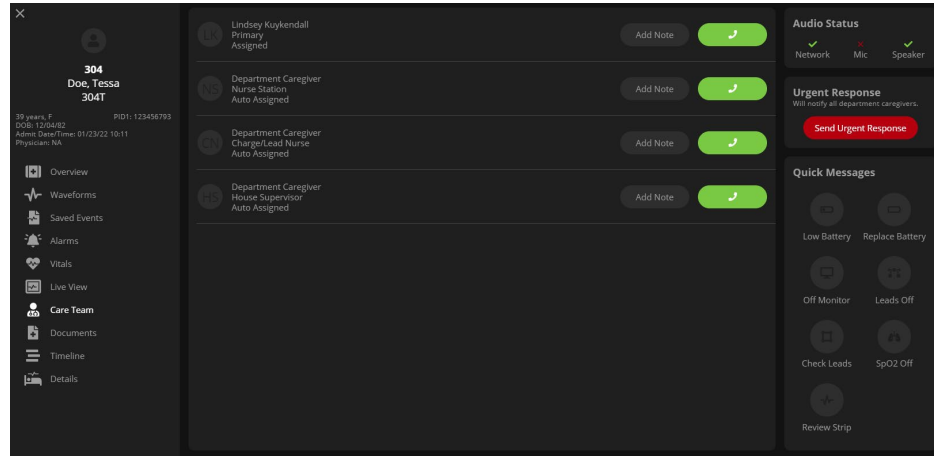
Managing a Patient- Communication

1. Select a Patient

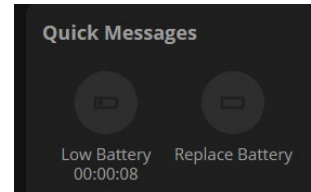
2. Select the Care Team Tab

- One click contact to a Caregiver
- Place notes about an Inbound or Outbound call
- Flag any important event
- Quick Messaging
- One click feature to send an automated message to the Caregiver.
 - If a Caregiver is not available, the message will contact the next identified caregiver in the communication escalation pathway

*Determined by organization

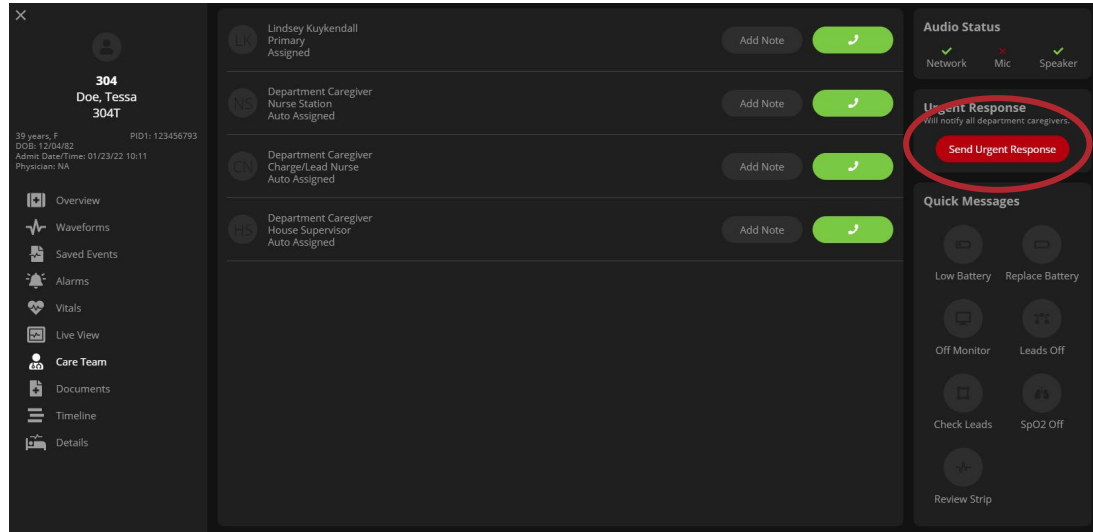


Once a message has been sent a reminder timer below the button will appear letting you know how long it's been since the last quick message of the same type was sent.



Managing a Patient - Communication

1. Select a Patient
2. Select Care Team Tab
 - Send Urgent Response
Allows immediate, multi-cast message across all caregivers in the specific department
 - Message: **Urgent Response (Bed Number)**



Managing a Patient - Communication

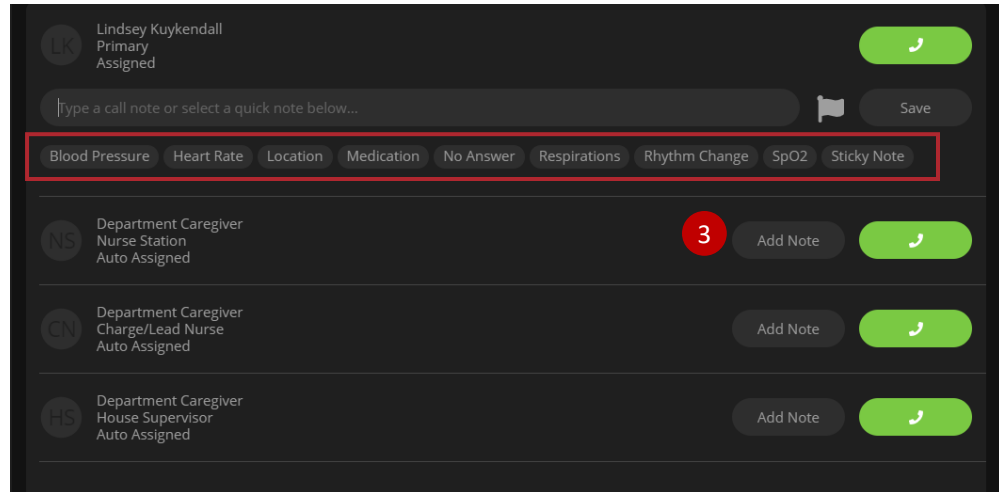
1. Select a Patient
2. Select Care Team Tab
3. Select Add Note

➤ Location Note

- Select the location tag
- Upon selecting the location and saving, your patient's location on the dashboard and overview tabs are updated.
- A caregiver can also update the patient's location via Bedside or Quick Links, located on the patient's Overview page.

➤ Communication Note

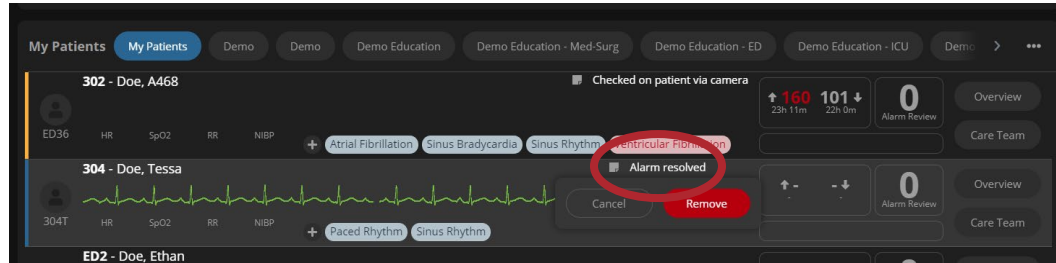
- Select any of the predetermined options such as Heart Rate, Medication, or No Answer to document communication with a caregiver



Managing a Patient - Communication

Sticky Notes

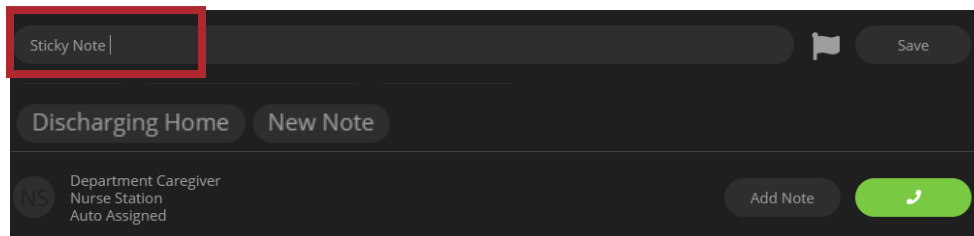
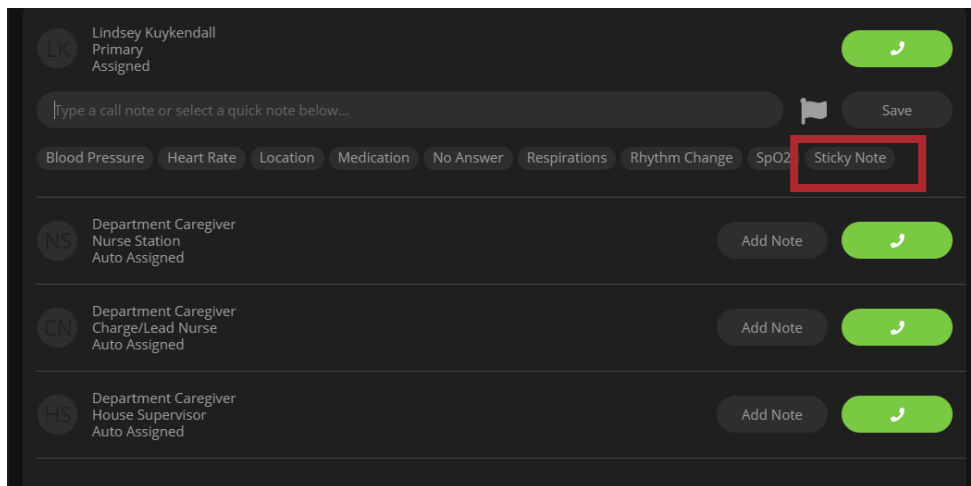
- Sticky Notes are a helpful feature, in providing extra information that is important to remember, although not part of the patient information.
- Examples include: **SpO2 Only** or **Discharging Home**.



Managing a Patient - Communication

Adding a Sticky Note

1. On the Caregiver communication module, select **+Add Note**.
2. Click **Sticky Note**.
3. Choose an appropriate note, then **Save**.



Managing a Patient

Timeline Tab

Retrospective view of patient monitoring events. This includes the following icons:



Identify previous calls and quick messages



Cardiac history icon: display of documented rhythm interpretations



Note manually documented for the specific patient



Change to the patient's status (DNR, SpO2, etc.)



Items that were manually red flagged from the Monitor Tech or Caregiver



Allows identification of staff assignments for a specific patient

The screenshot shows a patient profile for Bob Doe in ICU2. The patient's details include: 21 years, M; DOB: 07/14/00; PID1: 123456798; Admit Date/Time: 01/22/22 12:44; Physician: NA. The left sidebar lists navigation options: Overview, Waveforms, Saved Events, Alarms, Vitals, Live View, Care Team, Documents, Timeline (selected), and Details. The main area displays a search bar and a table of events.

Type	Date/Time	Event	User
♥	01/25/2022 12:12:44	Waveform Created	A015
🚫	01/21/2022 10:48:46	Unassigned caregiver Michele Long "" from patient.	A037
👤	01/21/2022 10:08:50	Assigned caregiver Michele Long "" to patient.	A037
🚫	01/21/2022 08:59:24	Unassigned caregiver Michele Long "" from patient.	A037
👤	01/20/2022 18:06:36	Assigned caregiver Michele Long "" to patient.	A037
🚫	01/20/2022 17:57:30	Unassigned caregiver Michele Long "" from patient.	A037
👤	01/20/2022 16:12:01	Assigned caregiver Michele Long "" to patient.	A037
🚫	01/20/2022 16:05:32	Unassigned caregiver Michele Long "" from patient.	A037
👤	01/20/2022 12:23:06	Assigned caregiver Michele Long "" to patient.	A037
🚫	01/19/2022 12:37:25	Unassigned caregiver Michele Long "" from patient.	A037

Contact Information

Technical Support: 1-800-522-7025 Available 24 hours a day and 7 days a week.

Field Service Engineer: _____

Clinical Education Consultant: _____

Sales Representative: _____