BioDashboard

BioDashboard™ Instructions for Use

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Overview

- BioDashboard (the Device) is intended to display and visualize physiological and medical data and log assessments.

- The Device displays data and notifies healthcare professionals when physiological data fall outside clinician specified parameters.

- The data from the Device are intended as an aid to diagnosis, diseases management, and treatment.

- Healthcare professionals are the intended operators of this device.

- The Device is intended for use on patients who are 18 years of age or older.

- The Device is not intended for critical care.

- The Device has the ability to allow the clinician to configure the parameters for notifications.

Intended Use Statement

Please refer to the intended use for our BioIntelliSense Devices: **https://www.biointellisense.com/support**

IN CASE OF EMERGENCY, CALL 911 IMMEDIATELY
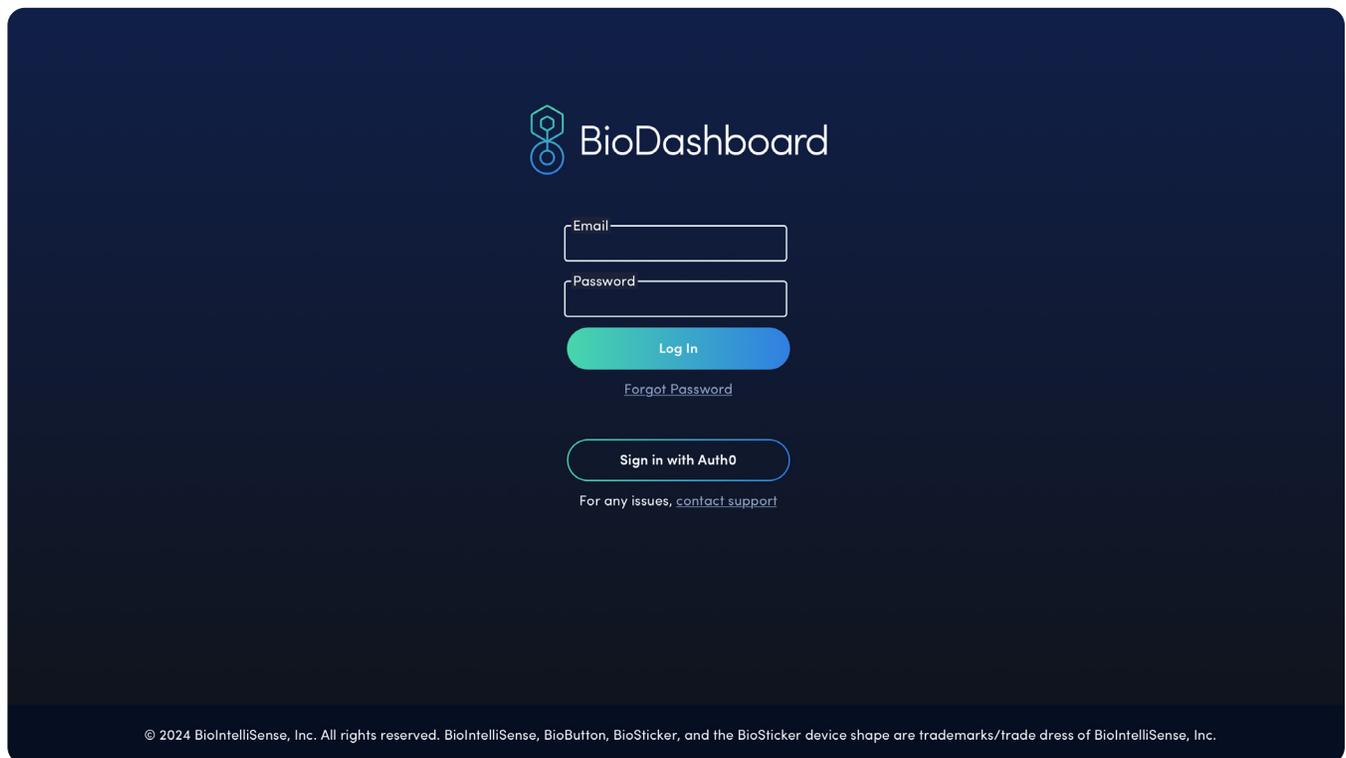Our support line is not for medical emergencies. If you believe you have an emergency, call 911.

Warnings and Precautions

- Recommendations provided by BioDashboard are adjunctive (supporting). Do not solely or primarily rely on the BioDashboard to prevent, diagnose, or treat a disease or condition.

- Do not use accessories, detachable parts or materials other than those described.

Use Instructions

LOGIN

1. To begin using the BioDashboard proceed to **https://biodashboard.net** which will display the login screen similar to that shown below.

LOGIN (CONTINUED)

2. Enter your username and password to login to BioDashboard. The following options are available:

    - **Email:** Provide your email/username for your BioDashboard account.

    - **Password:** Provide your password for your BioDashboard account.

    - **Log In Button:** After entering your username and password, click this button to login.

    - **Forgot Password Button:** If you have forgotten your password, you can click this button to reset your password.

    - **Sign in with Auth0:** Click this button to use Auth0 to log in.

    IMPORTANT NOTE: The options that are displayed on the login screen are dependent on your organization's configuration.

BioDashboard Login Form

MULTI-PATIENT VIEW

1. Once logged into BioDashboard, the Multi-Patient View is displayed similar to that shown below. Click the Census Button in the banner on the left side of the screen to access the Multi-Patient View at any time:

Census Button

2. The Multi-Patient View displays summary information for all patients within the selected unit(s). The following options are available:

PATIENT CELL

View summary information for an individual patient. Click a patient cell to display the Clinical View (described below) for that patient.

Patient Cell

- **Patient room number.**

- **Patient name.**

- **Last data.** Displays the time since the last data was received by a BioIntelliSense wearable monitoring device.

- **Patient Heart Rate.** Displays the most current resting heart rate for the patient from the BioIntelliSense wearable monitoring device. Yellow highlight indicates abnormally high level or low level. See Color Limits Tab in Help Menu for definitions.

- **Patient Respiratory Rate.** Displays the most current resting respiratory rate for the patient from the BioIntelliSense wearable monitoring device. Yellow highlight indicates abnormally high level or low level. See Color Limits Tab in Help Menu for definitions. See Color Limits Tab in Help Menu for definitions.

ICON	MEANING
Notes Button	Click this button to access the Clinical View to view patient specific notifications that need review, enter tower notes, and view notification history, as well as add new issues for assessment (described below). **IMPORTANT NOTE:** Notes and Notification Reviews must be enabled in the Multi-Patient View Settings to view this icon.
Wrench Icon	Indicates notification settings have been changed for the specific patient.
Active Clinical Notification Button	Indicates an active clinical notification. Click this button to view the Clinical View (described below).
Active Non-Clinical Notification Button	Indicates an active non-clinical notification. Click this button to view the Clinical View (described below).
Clinical Notification Review Button	Indicates a clinical notification for a specific patient that needs review. Click this button to access the Clinical View (described below) and enter an assessment for any notifications that need review. **IMPORTANT NOTE:** Notes and Notification Reviews must be enabled in the Multi-Patient View Settings to view this icon.

ICON	MEANING
Non-Clinical Notification Review Button	Indicates a non-clinical notification for a specific patient that needs review. Click this button to access the Clinical View (described below) and enter an assessment for any notifications that need review. **IMPORTANT NOTE:** Notes and Notification Reviews must be enabled in the *Multi-Patient View Settings* to view this icon.
Move Patient Button	Click this button to access a dropdown menu to move the selected patient to a new location/color within a care unit in the Multi-Patient View, based on the configuration of the user. The default options are Not Set, Monitor, Telemetry, Floor, Home, and SNF.
Patient Interactions Notification Button	Indicates there are no documented patient interactions for this patient. Click this button to access the Reimbursement View (described below). **IMPORTANT NOTE:** RPM Billing must be enabled in the Multi-Patient View Settings to view this icon.
Time Spent Notification Button	Indicates less than 20 minutes of time spent interacting with the patient. Click this button to access the Reimbursement View (described below). **IMPORTANT NOTE:** RPM Billing must be enabled in the Multi-Patient View Settings to view this icon.
16 Days of Vitals Data Notification Button	Indicates patient is not on pace for 16 days of vitals data. Click this button to access the Reimbursement View (described below). **IMPORTANT NOTE:** RPM Billing must be enabled in the Multi-Patient View Settings to view this icon.

ADD PATIENT BUTTON

Click this button to access the Patient Registration Form (described below) to add a new patient to the current Unit. **IMPORTANT NOTE:** PHI display must be enabled in the *Multi-Patient View Settings* to view this button, and it will only be available if configured for your organization.

+ Add Patient

Add Patient Button

UNIT DROPDOWN MENU

Select the care unit(s) to display by selecting the corresponding checkbox(es). Click the "Apply" Button to show the selected censuses. Click the "Select All" Button to select all censuses. Click the "Clear" Button to clear selections.

FILTER DROPDOWN MENU

Select to display devices that have displayed data in the last 24 hours or 7 days, have notifications that need review, have modified alert settings, recently viewed patients (i.e. last 20 patients recently viewed), have active notification icons, have tower notes, have reimbursement icons, and/or have been flagged.

MULTI-PATIENT VIEW (CONTINUED)

ORDER BY DROPDOWN MENU

Choose to sort patients by notifications, patient last name, BioID, length of stay, patient age, room, and patient ID/MRN. **IMPORTANT NOTE:** Patients with active notifications and notifications that need review are always displayed at the top of multi-patient view. PHI display must be enabled in the Multi-Patient View Settings to sort by notifications that need review.

SEARCH TEXT BOX

Search for specific text to find patients. Use the optional search parameters to help narrow down the search. All or none of the parameters can be selected:

- Room Number
- Patient MRN
- Patient Name
- Bio ID
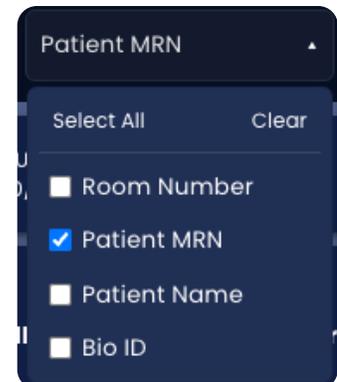
Search Parameters Dropdown

CENSUS BUTTON

Click this button in the banner on the left side of the screen to access the Multi-Patient View.

Census Menu Option

ABOUT MENU BUTTON

Click this button in the banner on the left side of the screen to display the BioDashboard version number and other software identification information, as well as provides access to the BioDashboard Instructions for Use.

About Menu Option

HELP MENU BUTTON

Click this button in the banner on the left side of the screen to access the Help Menu (described below).

Help Menu Option

SETTINGS BUTTON

Click this button in the banner on the left side of the screen to access the Multi-Patient View Settings Menu (described below).

Settings Menu Option

LOGOUT BUTTONS

Click either of these buttons to logout.

Log Out Menu Option / Log Out Option Under Email Address

MULTI-PATIENT VIEW (CONTINUED)

GROUP BY LOCATION SLIDER

Slide this toggle to enable or disable location features. Individual patients can be categorized by location in the Clinical View Settings Menu (described below).

Group by location slider

LOAD DISCHARGED PATIENTS SLIDER

Slide this toggle to show or hide discharged patients in the Muti-Patient View. Choose the number of past days of discharged patients to be displayed in the text box to the right of the slider.

Load Discharged Patients slider

LOCATION BUTTONS

Click a location button at the top of the Multi-Patient View screen to only show patients within that specific location. The default options are Not Set, Monitor, Telemetry, Floor, Home, and SNF.

LIST VIEW

Click the List View Button in the banner on the left side of the screen to access the List View similar at any time. Click on any row to navigate to the patient's Clinical View.

List View Button

LIST VIEW (CONTINUED)

The following options are available:

UNIT DROPDOWN MENU

Select the care unit(s) to display by selecting the corresponding checkbox(es). Click the "Apply" Button to show the selected censuses. Click the "Select All" Button to select all censuses. Click the "Clear" Button to clear selections.

FILTER DROPDOWN MENU

Select the patient(s) to display by selecting the desired checkboxes.

DEFAULT VIEW DROPDOWN MENU

Select a default view to display. The following options are available:

- **Monitoring**
- **Virtual Rounding**
- **Central Nursing Station**
- **Care Coordination**
- **Home Monitoring**
- **All**

PRINT BUTTON

Click this button to print the contents of List View.

Print Button

CONFIGURE COLUMNS BUTTON

Click this button to customize the columns in List View. Choose the column(s) to be displayed by toggling the slider(s) and the order they appear with the drag/drop icon(s).
Click the "Apply Changes" Button to display the new custom view. To save the custom view, click the Default Views Dropdown Menu (described above) after creating a new custom view and click the "Save Current View" Button.
This will prompt the user to choose a name for the custom view, which will then be made available for the user in the dropdown.

Configure Columns Button

LIST VIEW DATA

Click the arrow next to column to reverse the order the data are sorted by.

- **Patient Unit.** The unit the patient is located in.
- **Category.** The location/color the patient is assigned to in BioDashboard.
- **Room.** The room the patient is located in.
- **Patient Last Name.**
- **Patient First Name.**
- **Patient MRN.** Patient specific identifier.
- **Patient BioID.** Patient BioIntelliSense Device ID.
- **Duration.** Number of days a patient has been monitored.
- **Patient Config.** Purple wrench is displayed when patient configurations have been set.
- **Reimbursement.** Reimbursement icons are displayed when billing criteria has not yet been met.
- **BioButton Status.** The latest status of the patient and assigned device.
  - **Green:** HR and RR coming in
  - **Yellow:** HR or RR missing for 2 hours
  - **Orange:** HR or RR missing for 4 hours
  - **Purple:** New BioButton scanned in last 2 hours
- **HR. Current heart rate for patient.**
- **RR. Current respiratory rate for patient.**
- **% On Body.** The percentage of time the device was detected as worn in the past 24 hours, based on the available offloaded data:
  - **Green:** > 80%
  - **Yellow:** < 80%
- **Clinical Notifications (24 h).** The number of clinical notifications generated for a patient in the past 24 hours:
  - **Green:** None
  - **Yellow:** 1 notification
  - **Orange:** > 2 notifications
  - **Gray:** None and < 80% on body minutes available in the last 24 hours
  - **Note:** Hover over the row to view the timestamps and notification types.

- **Active Clinical Notifications.** The total number of active clinical notifications (excluding BOT notifications).

- **Active Non-Clinical Notifications.** The total number of active technical notifications.

- **Clinical Notification Reviews.** The total number of clinical notifications to be reviewed (excluding BOT notifications).

- **Non-Clinical Notification Reviews.** The total number of technical notifications to be reviewed.

- **Activity (24-48h).** The total number of medium and high activity minutes recorded between 24 and 48 hours ago:
  o **Green:** > 220 minutes
  o **Yellow:** 110–220 minutes
  o **Orange:** < 110 minutes
  o **Gray:** < 80% of activity minutes available between 24 and 48 hours ago.
  o **Note:** Hover over the row to view the breakdown of activity in low, medium and high minutes.

- **Activity (0-24h).** The total number of medium and high activity minutes recorded in the past 24 hours:
  o **Green:** > 220 minutes
  o **Yellow:** 110–220 minutes
  o **Orange:** < 110 minutes
  o **Gray:** < 80% of activity minutes available in the last 24 hours
  o **Note:** Hover over the row to view the breakdown of activity in low, medium and high minutes.

- **Active Minutes Change.** The difference in active minutes between the most recent 24 hours (0 – 24 hours) and the previous period (24 – 48 hours).
  o **Green:** Positive change
  o **Orange:** Negative change
  o **Grey:** Zero change or N/A

LIST VIEW (CONTINUED)

- **Clinical Impact.** Add or view care impact entries.

  o **Plus Button.** Click on this button within any of the patient rows to add a care impact. Select an entry category, associated notifications with the entry, and contextual information in the free text box. Select the flag patient checkbox for internal review. Then, select "Save Entry".

Plus Button

  o **Note Button.** Click on this button in the Care Impact column to view previous entries that have been created.

Note Button

CLINICAL VIEW

When an individual patient cell, the Notes Button, Notification Review Button, or the Clinical View Tab are clicked in Multi-Patient View (described above), a Clinical View is displayed similar to that shown below.
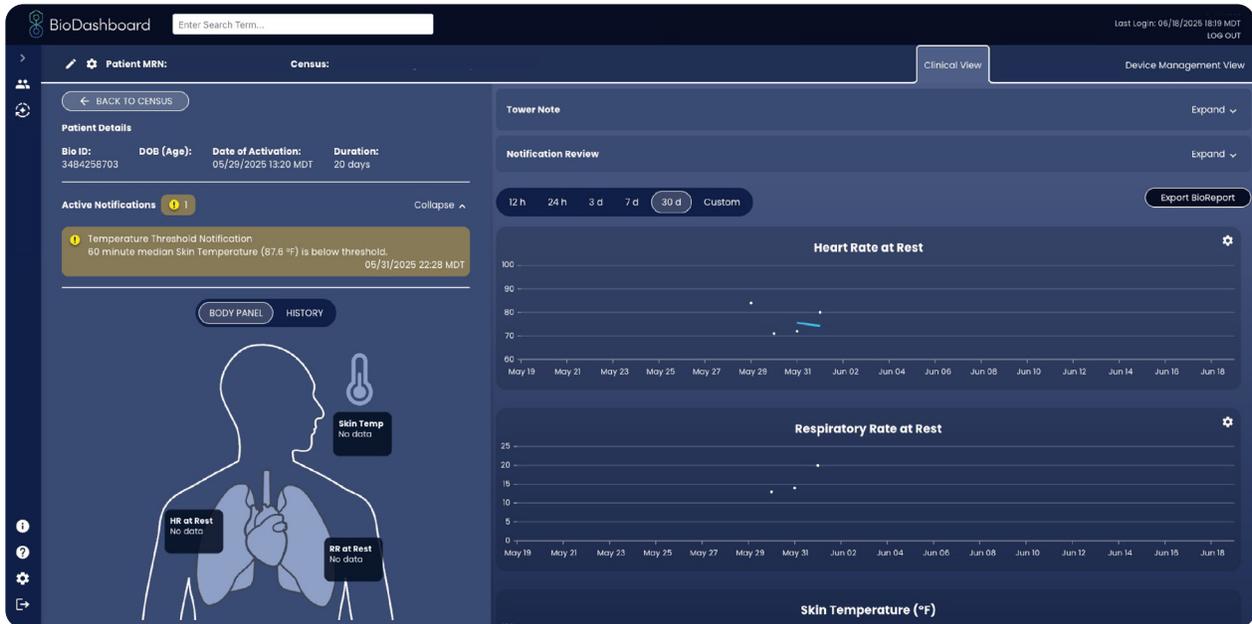
Clinical View displays detailed information for an individual patient and allows a user to view patient specific notifications that need review, enter tower notes, and view notification history, as well as add new issues for assessment. **IMPORTANT NOTE:** Notes and Notification Reviews must be enabled in the Multi-Patient View Settings to access Notification Review features. Notification Reviews features can also be hidden or displayed by using the collapse or expand buttons, respectively.

CLINICAL VIEW (CONTINUED)

The following options are available:

PATIENT NAME/NAVIGATION BAR

Located at the top of the Clinical View, the Patient Name/Navigation Bar displays the following options:

- **Patient Name.** Name of patient.

- **Patient ID/MRN.** Patient specific identifier.

- **Census.** The census the patient is located in.

- **Edit Patient Button.** Click this button to access the Edit Patient Registration Form (described below) to edit patient details. This form can be used to enter a new BioID to use a new BioButton with the selected patient and/or update other patient details.

  IMPORTANT NOTE: PHI display must be enabled in the Multi-Patient View Settings to view this button, and it will only be available if configured for your organization.

- **Settings Button.** Click this button to the left of the patient to access the Clinical View Settings Menu (described below).

- **Wrench Icon.** Indicates notification settings have been changed for the specific patient.

- **Clinical View Tab.** Click the Clinical View Tab to access the Clinical View.

- **Reimbursement View Tab.** Click the Reimbursement View Tab to access the Reimbursement View (described below).

  IMPORTANT NOTE: RPM Billing must be enabled in the Multi-Patient View Settings to view this icon.

- **Device Management View Tab.** Click the Device Management View Tab to access the Device Management View (described below).

- **Patient Encounters.** Displays date(s) of patient visit(s) and associated BioIDs for each visit. Click the dropdown to display all encounters (if applicable).

  - **In Facility Icon.** Indicates In Facility patient visit.

  - **At Home Icon.** Indicates At Home patient visit.

Edit Patient Button

Settings Button

Wrench Icon

Clinical View

Reimbursement View

Device Management View

In Facility Icon

At Home Icon

CLINICAL VIEW (CONTINUED)

PATIENT DETAILS

Displays the following details associated with the selected patient. Important Note: Some details may not be listed or different depending on your configuration.

- **Room.** The room the patient is located in.
- **BioID.** Patient BioIntelliSense Device ID.
- **Sex.** Patient Sex
- **Date of Birth (Age).** Patient date of birth and age.
- **Height.** Patient Height
- **Weight.** Patient Weight
- **Date of Activation.** Date of patient BioIntelliSense Device activation.
- **Duration.** Number of days a patient has been monitored.
- **Diagnosis.** Patient diagnosis.
- **Procedure.** Patient procedures.

ACTIVE NOTIFICATIONS

Active notifications are listed. Clinical notifications are indicated by a yellow icon with an exclamation mark and listed in yellow text. Non-clinical notifications are indicated by a black icon with an exclamation mark and listed in black text. Counts of the number of active clinical and non-clinical notifications are listed at the top of this section.

Clinical Notification

Non-Clinical Notification

BODY PANEL/HISTORY TOGGLE BUTTONS

Click Body Panel Button to display patient health data.
Click History Button to display the History List (described below).

BODY PANEL   HISTORY

Toggle Buttons

BODY PANEL

- **Patient Heart and Lung Icons.** The organs displayed in the image move at the rate of the patient's most current vital signs from BioIntelliSense device. Green color indicates normal level and yellow indicates abnormally low or high level. Blue color indicates no data are available. See Color Limits Tab in Help Menu for definitions.
- **Thermometer Icon.** The thermometer icon displays the current skin temperature for a specific patient. Green color indicates normal level and yellow indicates abnormally low or high level. Blue color indicates no data are available. See Color Limits Tab in Help Menu for definitions.

PATIENT VITAL SIGNS AND BIOMETRIC GRAPHS

Click a timescale button to display the following graphs over different timescales. The options are 12HR, 24HR, 3D, 7D, 30D, and Custom.

- **Heart Rate at Rest.** Line graph of resting heart rate over time in bpm.
- **Respiratory Rate at Rest.** Line graph of resting respiratory rate over time in bpm.

CLINICAL VIEW (CONTINUED)

- **Skin Temperature.** Line graph of skin temperature over time in degrees C.

- **Sleep.** Bar graph of sleep over time in minutes per hour.

- **Activity.** Bar graph of physical activity levels over time in minutes per hour, summarized as low, medium, and high activity.

- **Degree of Incline While Sleeping.** Bar graph showing the average degree of incline angle while sleeping each day.

- **Body Position.** Bar graph of time in different body positions in minutes per hour, summarized as supine, prone, upright, lying right, lying left, and unknown.

- **Steps.** Bar graph of steps over time, summarized as steps per hour.

- **Step Symmetry.** Dot plot of step symmetry over time, summarized each hour.

- **Step Strength.** Dot plot of step strength of right and left feet over time, summarized each hour.

- **On/Off Body.** Bar graph of time wearing BioIntelliSense device in minutes per hour.
  IMPORTANT NOTE: Some of the graphs listed above may not be displayed depending on your configuration.

- **Notification Annotation Icon** ⚠️. Displayed with a vertical line overlaying the patient chart that annotates the time of each notification. Numbers listed after this icon denote more than one notification. Yellow icons indicate active notifications and opaque yellow icons indicate inactive notifications.

- **Heart Rate and Respiratory Rate Graph Settings.** Click the Gear Icon ⚙️ at the top right of the heart rate or repiratory rate graph panels to display the graph settings menu. The following options are available:

  - **Line Graph Slider.** Slide this toggle to turn on line graphs. When enabled, the data points will be connected with lines.

  - **Trend Line Slider.** Slide this toggle to turn on trend lines. When enabled, a trend line of the moving average will be displayed to smooth out fluctuations in data points and help identify trends.

  - By default, the trend line is enabled.

  IMPORTANT NOTE: Disabling both toggles will display a scatterplot. Some of the graphs listed above may not be displayed depending on your configuration.

- **Activity Graph Settings.** Click the Gear Icon ⚙️ at the top right of the activity graph panel to display the graph settings menu. The following options are available:

  - Routine Activity Slider. Slide this toggle to enable display of routine activity in the activity graph.

  - Exercise Slider. Slide this toggle to enable display of exercise activity in the activity graph.

  - At Rest Slider. Slide this toggle to enable display of at rest activity on the activity graph.

  - By default, display of exercise and routine activity is enabled and display of at rest activity is disabled.

CLINICAL VIEW (CONTINUED)

HISTORY LIST

The History List displays the patient history log. The following options are available to display from the Filters Dropdown:

Filters:	▾

Filters Dropdown

- **View All.** Select from the dropdown to view all items in the History List.
- **Tower Note Updates.** Select from the dropdown to view Tower Notes Updates in the History List.
- **Notifications.** Select from the dropdown to view Notifications in the History List.
- **Entries.** Select from the dropdown to view manual user entries in the History List.
- **Monitoring Status Updates.** Select from the dropdown to view Monitoring Status Updates in the History List.

CENSUS BACK BUTTON

Click this button to stop monitoring the patient for billing and navigate back to the Multi-Patient View.

← CENSUS

Census Back Button

TOWER NOTE TEXT BOX

Enter a tower note for the patient by entering text in the box and clicking the Save Note Button. This will also enter the tower note information in the History List on the right side of the screen. Click the Cancel Button Cancel to discard the current Tower Note.

Save Note

Save Note Button

NOTIFICATION REVIEW

Use the arrows ‹ 1/1 › to select a notification that requires review. Selecting a notification also changes the timescale of the charts to show the associated notification annotation if "Enable notifications navigation in patient charts" is toggled in Multi-Patient View Settings Menu (described below). The following options are available:

- **Assessment Dropdown.** Select an option from the dropdown menu to log the assessment for the current notification.
- **Assessment Details Text Box.** Add additional details about the assessment for the current notification.
- **Action Dropdown.** Select an option from the dropdown menu to log the action for the current notification.
- **Action Details Text Box.** Add additional details about actions for the current notification.
- **Reaction Dropdown.** Select an option from the dropdown menu to log the reaction for the current notification.
- **Reaction Details Text Box.** Add additional details about reactions for the current notification.
- **Save Assessment Button**. Click this button to save the current assessment for the notification review. This will also log the assessment in the History List on the left side of the screen, remove the notification from the Notification Review, and remove the Notification Review Icon 📝 / 📝 from the Multi-Patient View, unless other current notifications still require review.

Save Assessment

Save Assessment Button

- **Not a Problem Button**. Click this button to indicate that the current notification is not a problem. This will also log the assessment in the History List on the left side of the screen, remove the notification from the Notification Review, and remove the Notification Review Icon 📝 / 📝 from the Multi-Patient View, unless other current notifications still require review.

Not a Problem

Not a Problem Button

IMPORTANT NOTE: If the customer is configured to have BioIntelliSense dismiss notification reviews based on recent data, those dismissed notifications will still appear in the history. In these cases, the User will be listed as 'BioDashboard'.

ADD NEW ENTRY BUTTON

Click this button to view the New Entry Screen shown below. This option allows a user to enter a new, unlisted entry in the History List.

ADD NEW ENTRY

Add New Entry Button

New Entry   Close

Select Entry Category   ▼

New Entry Details

Notifications
No Notification Selected   ▼

☐ Flag patient   Save Entry

The following options are available:

- **Select Entry Category Dropdown.** Select an option from dropdown menu to categorize the new entry.
- **New Entry Details Text Box.** Add details about the new entry in the text box.
- **Notifications Dropdown.** Select a notification(s) to associate with the entry.
- **Flag Patient Checkbox.** Check this box to flag this entry to be displayed in the Clinical Impact Report.
- **Save Entry Button.** Click this Button to save the new entry. This will log the new entry in the History List on the left side of the screen.
- **Close Button**. Click this button to close the New Entry Screen and go back to the Notification Review.
- **Select Reaction/Patient Response.** Select the appropriate checkboxes and/or enter text to indicate the patient's reaction for the new issue.

Save Entry

Save Entry Button

CLOSE

Close Button

EXPORT BIOREPORT BUTTON

Click this button to generate a PDF report of the currently selected patient's vital signs and biometrics. Click "Save" in your web browser to download the report when prompted.
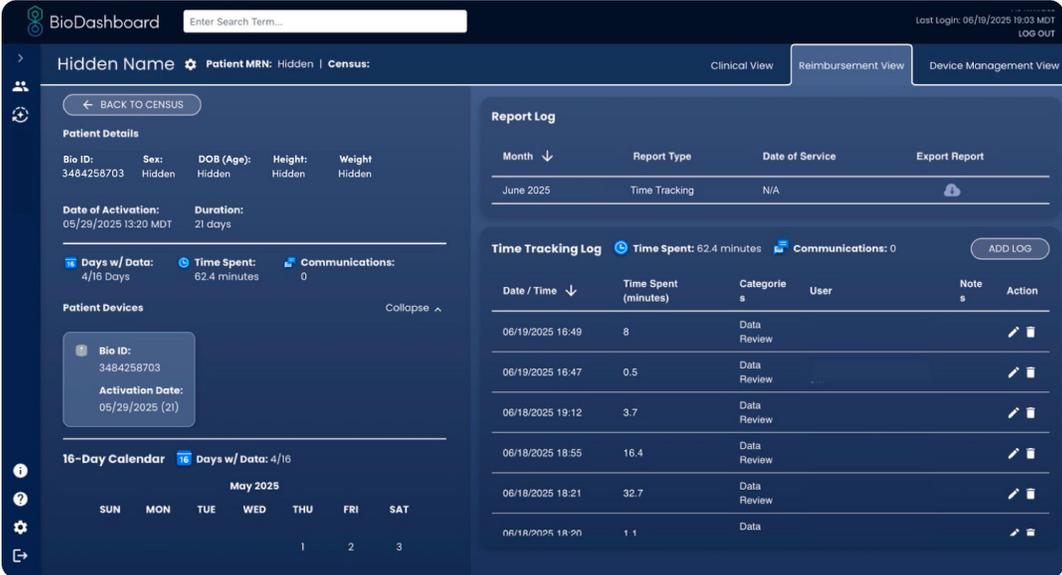
Export BioReport

Export BioReport Button

REIMBURSEMENT VIEW

When a user clicks a Reimbursement Icon 📑 / 🕐 / 16 in Multi-Patient View or the Reimbursement View Tab in Clinical View, a Reimbursement View is displayed similar to that shown below. Reimbursement View allows a user to review notifications and reports for Remote Patient Monitoring Reimbursement as well as review and edit time tracking logs.

IMPORTANT NOTE: RPM Billing must be enabled in the Multi-Patient View Settings to view this icon, and it will only be available if configured for your organization.

The following options are available:

PATIENT DETAILS

Displays details associated with the selected patient, including the following reimbursement related information:

- **Days w/ Data.** Lists the number of days with at least one data point for the following vital signs when the patient is in the at home care setting:
  - Heart rate
  - Respiratory rate
- **Time Spent.** The total recorded "Time spent" (minutes and seconds) with the patient within a calendar month period.
- **Communications.** The number of recorded patient interactions for the patient within a calendar month period.

PATIENT DEVICES

Displays the device details associated with the selected patient.

16-DAY CALENDAR

Displays a count of the number of days vitals data has been collected within 30 calendar days.

REIMBURSEMENT VIEW (CONTINUED)

REPORT LOG

The Report Log displays the following details for applicable service reports:

- **Month.** Month and year of service.
- **Report Type.** Time tracking or RPM Vitals.
- **Date of Service.** Start date of service.
- **Export Report Button.** Click this button to preview and download a report locally.

Export Report Button

TIME TRACKING LOG

The Time Tracking Log displays the following details for each patient interaction:

- **Date/Time.** Date of interaction.
- **Time Spent (minutes).** Time spent during interaction.
- **Categories.** The category of interaction. The following options are available:
  - Data Review
  - Care Team Communication
  - Patient Communication
  - Care Planning
- **User.** The user that interacted with the patient.
- **Notes.** Optional notes about the interaction.
- **Action.** The following options are available:
  - **Edit Interaction Button.** Click this button to manually edit the interaction.
  - **Remove Interaction Button.** Click this button to remove the interaction.
- **Add Log Button.** Click this button to manually enter an interaction with the patient.

Edit Interaction Button

Remove Interaction Button

Add log

Add Log Button

DEVICE MANAGEMENT VIEW

When a user clicks the Device Management View Tab, a Device Management View is displayed similar to that shown below. Device Management View allows a user to add, replace, and discontinue BioIntelliSense devices. **IMPORTANT NOTE:** Display PHI must be enabled in the Multi-Patient View Settings to access these features. Some of the fields shown above may not be displayed or may be different depending on your configuration.

The following options are available:

ADD DEVICE BUTTON

Click this button to add a new device for the selected patient. Manually enter the BioID of the new BioIntelliSense Device in the box or follow the onscreen instructions to scan the device barcode.

Add Device Button

REPLACE BUTTONS

Select a device(s) using the checkbox and then click this button to replace the selected device(s). Manually enter the BioID of the new BioIntelliSense Device in the box or follow the onscreen instructions to scan the device barcode.

Replace Buttons

DISCONTINUE BUTTONS

Select a device(s) using the checkbox and then click this button to discontinue patient monitoring for the selected device(s). This will also move the patient to the Discharged Location. A reason for device discontinuation must be selected. Additional notes can also optionally be added in the box.

Discontinue Buttons

SETTINGS MENUS

1. **Multi-Patient View Settings Menu:** Clicking the Settings Button in the banner on the left side of the screen allows configuration of various options that apply to all patients in the Multi-Patient View and displays the settings menu shown below.

Settings Menu Option

The following options are available:

- **Theme Mode:** Choose to toggle "Dark mode" or "Light mode" display modes.
- **Show PHI Slider:** Slide this toggle to turn PHI display on or off.
- **Show Notes and Notification Review Slider:** Slide this toggle to allow access to Notification Review features in the Clinical View. This enables Notification Review, Enter Issue, Tower Notes, and Notes History features (described in Clinical View above).
- **Show RPM Billing Icons Slider:** Slide this toggle to allow access to Reimbursement View (described in Reimbursement View above).
- **Enable Patient Review Carousel Slider:** Slide this toggle to enable navigation to the next patient that has an outstanding notification review when currently viewing a patient clinical view. Click on "Next Patient" arrows to navigate to the next patient in the bottom center of the application. This menu only appears when hovered over with mouse cursor. The order of the patients in the carousel reflects the order of the patients in the multi-patient view, following the sort by and filters being applied. PHI and Notes and Notification Reviews must be enabled to use this feature.
- **Show notifications in patient charts:** Slide this toggle to view clinical notifications in the patient charts.
- **Enable notifications navigation in patient charts:** Slide this toggle to enable the automatic adjustment of patient chart views after clicking on an active notification or navigating to the next notification to be reviewed in the clinical view.
- **Temperature Unit:** Choose to toggle temperature display as Celsius or Fahrenheit.
- **Date Format Dropdown Menu:** Select the Date format from the dropdown menu.
- **Day/Month Format Dropdown Menu:** Select the Day/Month format from the dropdown menu.
- **Time Format Dropdown Menu:** Select the time format from the dropdown menu.
- **Advanced Settings:** Use the expand arrow to display the following advanced options:
  - **Enable Client Side Caching.** Helps improve performance by securely caching census data for up to two minutes.
  - **Improve Patient Graph Performance.** Helps improve performance by reducing datapoint update frequency while using the Patient Graphs.

SETTINGS MENUS (CONTINUED)

2. **Clinical View Settings Menu:** Clicking the Settings Button ⚙ near the patient name in Clinical View allows configuration of various options that apply only to an individual patient and displays a settings menu similar to that shown below. The following options are available:

- **Patient Location Dropdown Menu.** Use this dropdown menu to categorize the selected patient by location and color within a care unit in the Multi-Patient View, based on the configuration of the user. The default options are Not Set, Monitor, Telemetry, Floor, Home, and SNF. PHI must be enabled to use this feature.

- **Skin Temperature Slider.** Use the left slider and/or box to set the low limit and the right slider and/or box to set the high limit for skin temperature in degrees C for the selected patient before a notification is sent. On the slider, the green range indicates normal values and yellow ranges indicate abnormal values. (Low Default = 31°C) (High Default = 37 °C).

- **Heart Rate Slider.** Use the left slider and/or box to set the low limit and the right slider and/or box to set the high limit for resting heart rate in bpm for the selected patient before a notification is sent. On the slider, the green range indicates normal values and yellow ranges indicate abnormal values. (Low Default = 50 bpm) (High Default = 115 bpm).

- **Respiratory Rate Slider.** Use the left slider and/or box to set the low limit and the right slider and/or box to set the high limit for resting respiratory rate in bpm for the selected patient before a notification is sent. On the slider, the green range indicates normal values and yellow ranges indicate abnormal values. (Low Default = 8 bpm) (High Default = 28 bpm).

- **Reset to Default Button.** Click this button to reset all notification limits to their default.

- **Save Settings Button.** Click this button to save current notification limit settings.

RESET TO DEFAULT

Reset to Default Button

SAVE

Save Settings Button

NOTIFICATIONS

1. **Notification List:** Notifications and their associated icons that can appear on the Multi-Patient View or Clinical View are shown below.

IMPORTANT NOTE: Display PHI must be enabled in the Multi-Patient View Settings to access these features. Some of the fields shown above may not be displayed or may be different depending on your configuration.

NOTIFICATION TITLE	ICON	DESCRIPTION
Low Battery Notification	❗	Low battery detected
Device Last Seen Notification	❗	Most recent timestamp the device connected to a gateway
Off Body Notification	❗	Sensor not attached for longer than X hours (configurable)
Heart Rate Low Signal Quality Notification	❗	Heart rate at rest unavailable due to Low Signal Quality
Body Orientation Notification	⚠️	Patient turn is overdue, with a potential indication of a turn being undone.
Heart Rate Threshold Notification	⚠️	**High Heart Rate Threshold:** 60 minute median Heart Rate (X bpm) is above threshold. [Default Threshold: 115 bpm]. *Configurable for each patient in BioDashboard. Contact your BioIntelliSense Client Implementation Manager to configure globally by census, facility, and/or organization.*
	⚠️	**Low Heart Rate Threshold:** 60 minute median Heart Rate (X bpm) is below threshold. [Default Threshold: 50 bpm]. *Configurable for each patient in BioDashboard. Contact your BioIntelliSense Client Implementation Manager to configure globally by census, facility, and/or organization.*
Heart Rate Trending Notification	⚠️	**Heart Rate Increase Trending 30 min/2 h:** Heart rate at rest increased X % to X bpm. 30 minute notification after 2 hour baseline.
	⚠️	**Heart Rate Decrease Trending 30 min/2 h:** Heart rate at rest decreased X % to X bpm. 30 minute notification after 2 hour baseline.
	⚠️	**Heart Rate Increase Trending 1/4 h:** Heart rate at rest increased X % to X bpm. 1 hour notification after 4 hour baseline.

NOTIFICATION TITLE	ICON	DESCRIPTION
Heart Rate Trending Notification	⚠️	**Heart Rate Decrease Trending 1/4 h:** Heart rate at rest decreased X % to X bpm. 1 hour notification after 4 hour baseline.
	⚠️	**Heart Rate Increase Trending 2/4 h:** Heart rate at rest increased X % to X bpm. 2 hour notification after 4 hour baseline.
	⚠️	**Heart Rate Decrease Trending 2/4 h:** Heart rate at rest decreased X % to X bpm. 2 hour notification after 4 hour baseline.
	⚠️	**Heart Rate Increase Trending 4/24 h:** Heart rate at rest increased X % to X bpm. 4 hour notification after 24 hour baseline.
	⚠️	**Heart Rate Decrease Trending 4/24 h:** Heart rate at rest decreased X % to X bpm. 4 hour notification after 24 hour baseline.
	⚠️	**Heart Rate Increase Trending 24/72 h:** Heart rate at rest increased X % to X bpm. 24 hour notification after 72 hour baseline.
	⚠️	**Heart Rate Decrease Trending 24/72h:** Heart rate at rest decreased X % to X bpm. 24 hour notification after 72 hour baseline.
Respiratory Rate Threshold Notification	⚠️	**High Respiratory Rate Threshold:** 60 minute median Respiratory Rate (X rpm) is above threshold. [Default Threshold: 28 bpm]. *Configurable for each patient in BioDashboard. Contact your BioIntelliSense Client Implementation Manager to configure globally by census, facility, and/or organization.*
	⚠️	**Low Respiratory Rate Threshold:** 60 minute median Respiratory Rate (X rpm) is below threshold. [Default Threshold: 8 bpm]. *Configurable for each patient in BioDashboard. Contact your BioIntelliSense Client Implementation Manager to configure globally by census, facility, and/or organization.*
Respiratory Rate Trending Notification	⚠️	**Respiratory Rate Increase Trending 30 min/2 h:** Respiratory rate at rest increased X % to X rpm. 30 minute notification after 2 hour baseline.
	⚠️	**Respiratory Rate Decrease Trending 30 min/2 h:** Respiratory rate at rest decreased X % to X rpm. 30 minute notification after 2 hour baseline.
	⚠️	**Respiratory Rate Increase Trending 1/4 h:** Respiratory rate at rest increased X % to X rpm. 1 hour notification after 4 hour baseline.

NOTIFICATION TITLE	ICON	DESCRIPTION
Respiratory Rate Trending Notification	⚠️	**Respiratory Rate Decrease Trending 1/4 h:** Respiratory rate at rest decreased X % to X rpm. 1 hour notification after 4 hour baseline.
	⚠️	**Respiratory Rate Increase Trending 2/4 h:** Respiratory rate at rest increased X % to X rpm. 2 hour notification after 4 hour baseline.
	⚠️	**Respiratory Rate Decrease Trending 2/4 h:** Respiratory rate at rest decreased X % to X rpm. 2 hour notification after 4 hour baseline.
	⚠️	**Respiratory Rate Increase Trending 4/24 h:** Respiratory rate at rest increased X % to X rpm. 4 hour notification after 24 hour baseline.
	⚠️	**Respiratory Rate Decrease Trending 4/24 h:** Respiratory rate at rest decreased X % to X rpm. 4 hour notification after 24 hour baseline.
	⚠️	**Respiratory Rate Increase Trending 24/72 h:** Respiratory rate at rest increased X % to X rpm. 24 hour notification after 72 hour baseline.
	⚠️	**Respiratory Rate Decrease Trending 24/72 h:** Respiratory rate at rest decreased X % to X rpm. 24 hour notification after 72 hour baseline.
Temperature Threshold Notification	⚠️	**High Skin Temperature Threshold:** 60 minute median Skin Temperature (X deg.) is above threshold. [Default Threshold: 37 deg.]. *Configurable for each patient in BioDashboard. Contact your BioIntelliSense Client Implementation Manager to configure globally by census, facility, and/or organization.*
	⚠️	**Low Skin Temperature Threshold:** 60 minute median Skin Temperature (X deg.) is above threshold. [Default Threshold: 31 deg.]. *Configurable for each patient in BioDashboard. Contact your BioIntelliSense Client Implementation Manager to configure globally by census, facility, and/or organization.*
Temperature Trending Notification	⚠️	The mean temperature for a 4 hour period was out of range compared to the previous 24 hour period.
Double High Threshold Notification	⚠️	60 minute median Heart Rate (X bpm) and Respiratory Rate (X bpm) are above double-high thresholds [Default Thresholds: HR = 100 bpm, RR = 24 bpm].
Triple High Threshold Notification	⚠️	60 minute median Heart Rate (X bpm), Respiratory Rate (X bpm), and Skin Temperature (X deg.) are above triple-high thresholds [Default Thresholds: HR = 100 bpm, RR = 24 bpm, Temp = 36 deg.].

NOTIFICATION TITLE	ICON	DESCRIPTION
N/A		All Tower Notes and Issues
N/A		**Clinical Notification Review Button (Multi-Patient View):** Clinical case needs review. *Notes and Notification Reviews must be enabled in the Multi-Patient View Settings to view this icon.*
N/A		**Non-Clinical Notification Review Button (Multi-Patient View):** Non-clinical case needs review. *Notes and Notification Reviews must be enabled in the Multi-Patient View Settings to view this icon.*
N/A		Patient configurations have been altered
N/A		No Documented patient interactions. RPM Billing must be enabled in the Multi-Patient View Settings to view this icon.
N/A		Less than 20 minutes of time spent. RPM Billing must be enabled in the Multi-Patient View Settings to view this icon.
N/A		Not on pace for 16 days of data. RPM Billing must be enabled in the Multi-Patient View Settings to view this icon.

2. **Notification Calculations:** The calculations for notifications are explained below:
   IMPORTANT NOTE: BioDashboard software does not calculate notifications directly.

NON-CLINICAL TECHNICAL NOTIFICATIONS

- **Low Battery Technical Notification.** The Low Battery Technical Notification generates a notification when a BioIntelliSense wearable monitoring device falls below 10% battery power remaining. The purpose of this notification is to allow clinicians to identify patients who need to recharge their BioIntelliSense wearable monitoring device battery.

- **Device Last Seen Technical Notification.** The Device Last Seen Technical Notification notifies clinicians of patients who may be having technical issues with their BioIntelliSense wearable monitoring device. A notification is triggered when a BioIntelliSense wearable monitoring device has not synchronized data to Bio Cloud for at least X hours (Default 4 h).

- **Heart Rate Low Signal Quality Technical Notification.** In certain situations, BioIntelliSense wearable monitoring device firmware may not be able to capture heart rate readings despite being worn on a patient's body and the patient being at rest. This occurs when the quality of the signal obtained from the accelerometer is not high enough to distinguish heartbeat pulses.
   The Heart Rate Low Signal Quality Notification identifies situations when all of the following criteria are met during an hour of a patient wearing BioIntelliSense wearable monitoring device and triggers a notification:
   - The patient was resting, as evidenced by low motion readings; and
   - No heart readings were obtained during the hour.

NOTIFICATIONS (CONTINUED)

- **Off-Body Technical Notification.** The outputs of the Off-Body Determination Algorithm are used to produce a technical notification to notify a clinician when a patient has not worn the BioIntelliSense wearable monitoring device for a configurable minimum length of (consecutive) time. By default, the notification is triggered when the device has been off-body for at least four (4) consecutive hours. A Random-Forest machine learning algorithm uses BioIntelliSense wearable monitoring device data to determine if the device is off body at any given minute.

BODY ORIENTATION TRACKER CLINICAL NOTIFICATION

The Body Orientation Tracker (BOT, or the device) monitors the orientation and movements of bedridden patients. The device takes input from compatible Food and Drug Administration (FDA)-cleared medical devices and calculates the time since patient's last rotation as outputs. The device provides notifications when characteristics of a patient's position deviate from preset parameters. The notification is triggered when either of the following conditions are true:

- **Rotation Overdue Notification:** The patient has not been rotated at least X degrees (Default = 30 degrees) in X minutes (Default = 150 minutes) (i.e. the patient requires rotation).

- **Rotation Undone Notification:** The patient has reverted at least 20 degrees back to their original position within Y minutes (Default = 15 minutes) of being rotated (i.e. the patient reverted to their original position too quickly after being rotated). The user will receive a notification to rotate the patient for this condition only if the patient has also not been rotated in X minutes (Default = 150 minutes) as is configured above.

PERSONALIZED TRENDING CLINICAL NOTIFICATIONS

These clinical notifications are triggered when a clinically and statistically meaningful increase or decrease in a single vital sign (heart rate or respiratory rate) occurs over a defined period of time. The following criteria outlined in the description and table below must be met for each notification to be triggered.

- **Increase Notification is Triggered When Both Below Are True:**
  - Percentage Change >= Percentage Change Threshold
  - Cohen's D Threshold >= Cohen's D Threshold
- **Decrease Notification is Triggered When Both Below Are True:**
  - Percentage Change <= (-Percentage Change Threshold)
  - Cohen's D Threshold <= (-Cohen's D Threshold)

IMPORTANT NOTE: Cohen's D thresholding is not used for the 30 min vs. 2 h and 1 h vs. 4 h notifications.

THRESHOLD CLINICAL NOTIFICATIONS

- **High Heart Rate Threshold:** Heart rate 60 minute median is above 115 bpm for in facility patients and above 105 bpm for at home patients (configurable by patient).

- **Low Heart Rate Threshold:** Heart rate 60 minute median is below 50 bpm (configurable by patient).

- **High Respiratory Rate Threshold:** Respiratory rate 60 minute median is above 28 bpm for in facility patients and above 26 bpm for at home patients (configurable by patient).

NOTIFICATIONS (CONTINUED)

- **Low Respiratory Rate Threshold:** Respiratory rate 60 minute median is below 8 bpm (configurable by patient).
- **High Skin Temperature Threshold:** Temperature 60 minute median is above 37°C (98.6°F) (configurable by patient).
- **Low Skin Temperature Threshold:** Temperature 60 minute median is below 31°C (87.8°F) (configurable by patient).
- **Double High:** 60 minute median heart rate is above 100 bpm, and 60 minute median respiratory rate is above 24 bpm.
- **Triple High:** 60 minute median heart rate is above 100 bpm, and 60 minute median respiratory rate is above 24 bpm, and 60 minute median skin temp is above 36°C (96.8°F).

3. Notification Delays: The display of notifications in the user interface will be delayed by the processing of their signals. A summary of the delays associated with each signal processing step is shown in the table below:

SIGNAL PROCESSING STEP	DURATION OF DELAY
Vital Sign Calculation	60 seconds
Data Offloaded from BioIntelliSense wearable monitoring device to Gateway to BioCloud	20 minutes (average)
Data Received in BioCloud to Data Fully Decrypted and Processed	0.631 seconds (average)
Data Fully Processed to Algorithm Output Calculation	67.7 seconds (average personalized heart rate/respiratory rate notifications), 61.7 seconds (average personalized skin temperature notifications), and 68.7 seconds (average threshold notifications)
Notification Output Determination to Notification Delivery from BioCloud to Internal Messaging Service (i.e. Confluent)	0.52 seconds (average)
BioDashboard Receiving a New Notification Message from Internal Messaging Service (i.e. Confluent) to Displaying Notification Icon in User Interface	69.2 seconds (average)
Total Processing Time	**23.3 minutes**

PATIENT REGISTRATION

1. **BioDashboard Registration:** When the Add Patient Button is clicked in Multi-Patient View (described above), the following registration form is displayed. Enter the registration information for the new patient and click the "+Add Patient" button to register the patient. A BioID must be entered to begin collecting data with a BioIntelliSense device. A new patient cell will appear in the Multi-Patient View for this patient in a few moments.

+Add Patient

Add Patient Button

Patient

Patient ID/MRN*	First Name*	Last Name*	Sex*
			O M O F O U

Date of Birth*	Height(cm)	Weight(kg)	Admission Date*
25/06/2024			25/06/2024

Zone shift in charge phone number	Arabic Interpreter*	Patient Phone Number	
	O Yes O No		

Device

Wearable ID*	Date Applied*
	25/06/2024

BioIntellisense Care Coordinator

BioIntelliSense Coordinate First Name*	BioIntelliSense Coordinator Last Name*	Bio Coordinator Phone*

Next of Kin

Next of Kin First Name*	Next of Kin Last Name*	Next of Kin Contact Number*

Diagnosis

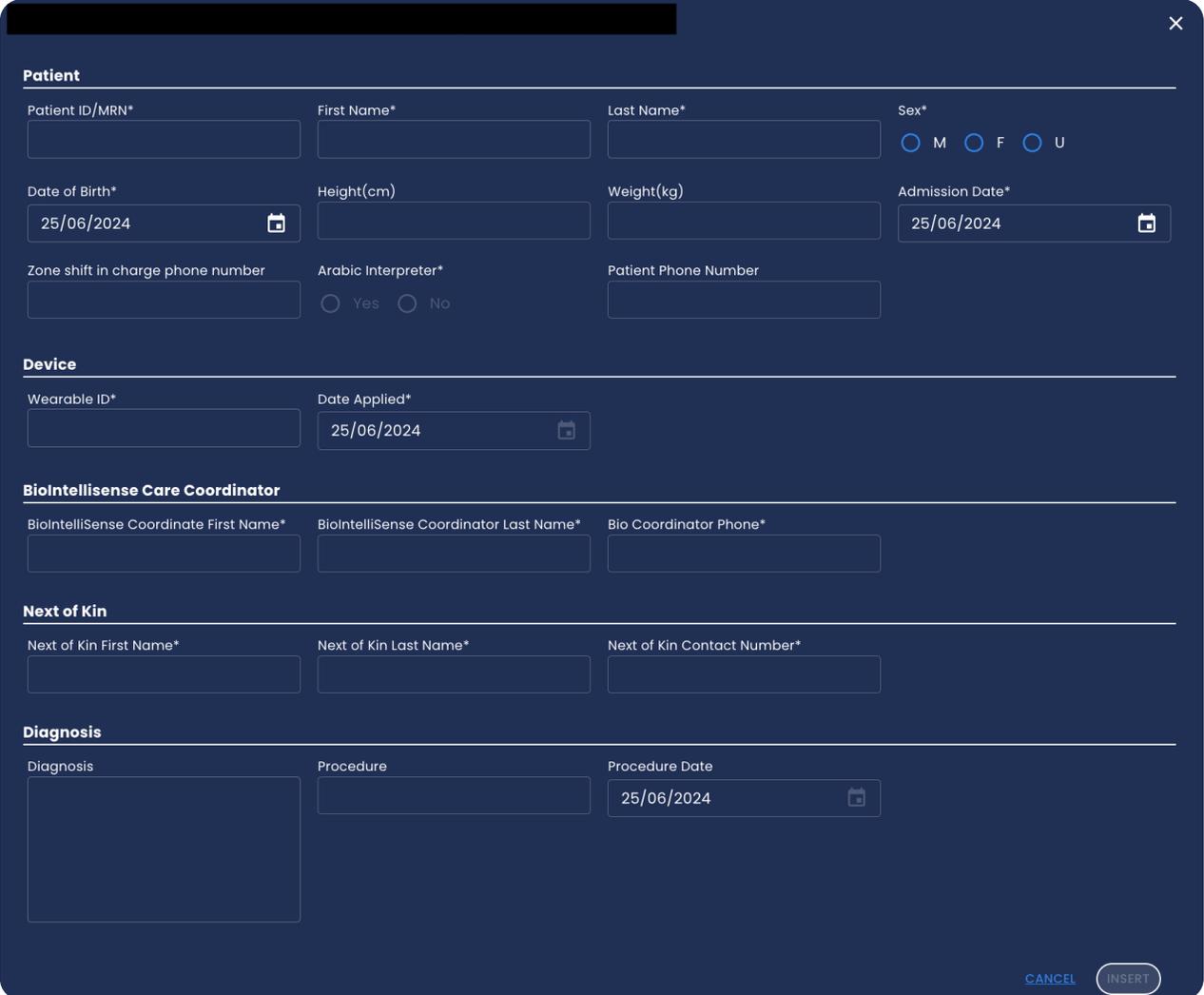| Diagnosis	Procedure	Procedure Date
		25/06/2024

CANCEL   INSERT

IMPORTANT NOTE: Display PHI must be enabled in the Multi-Patient View Settings to access these features. Some of the fields shown above may not be displayed or may be different depending on your configuration.

PATIENT REGISTRATION (CONTINUED)

2. **BioDashboard Edit Patient Registration:** When the Edit Patient Button ✏️ is clicked in the Clinical View (described above), the following registration form is displayed. Enter the updated information for the new patient and click the "Save" button to update the patient information. A new BioID may be entered to begin collecting data with a new BioIntelliSense device. The updated patient information will appear in the corresponding patient cell in the Multi-Patient View and Clinical View for this patient in a few moments after editing.

   IMPORTANT NOTE: Display PHI must be enabled in the Multi-Patient View Settings to access these features. Some information is unable to be updated with the update patient registration form and will appear in gray. Some of the fields shown above also may not be displayed or may be different depending on your configuration.

3. **Electronic Medical Record Patient Registration:** Patients can also be registered, transferred, or discharged through the electronic medical record (EMR), if applicable. Contact your hospital administrator for more information.

HELP MENU

When the Help Menu Icon is clicked in Multi-Patient View (described above), the following help menu is displayed. The following options are available:

- **Help:** Click tab to display the Help Pages. This lists the help options that are available and the BioIntelliSense Technical Support Email Address.

- **Color Limits:** Click this tab to display definitions of colors for vital signs in the Multi-Patient View and for body organs and other biometrics in the Clinical View.

- **Icons and Notifications:** Click this tab to display definitions of notifications and their associated icons.

- **Selected Census Dropdown:** Click this dropdown to view the different census configurations for color limits and notifications, based on the configuration available.
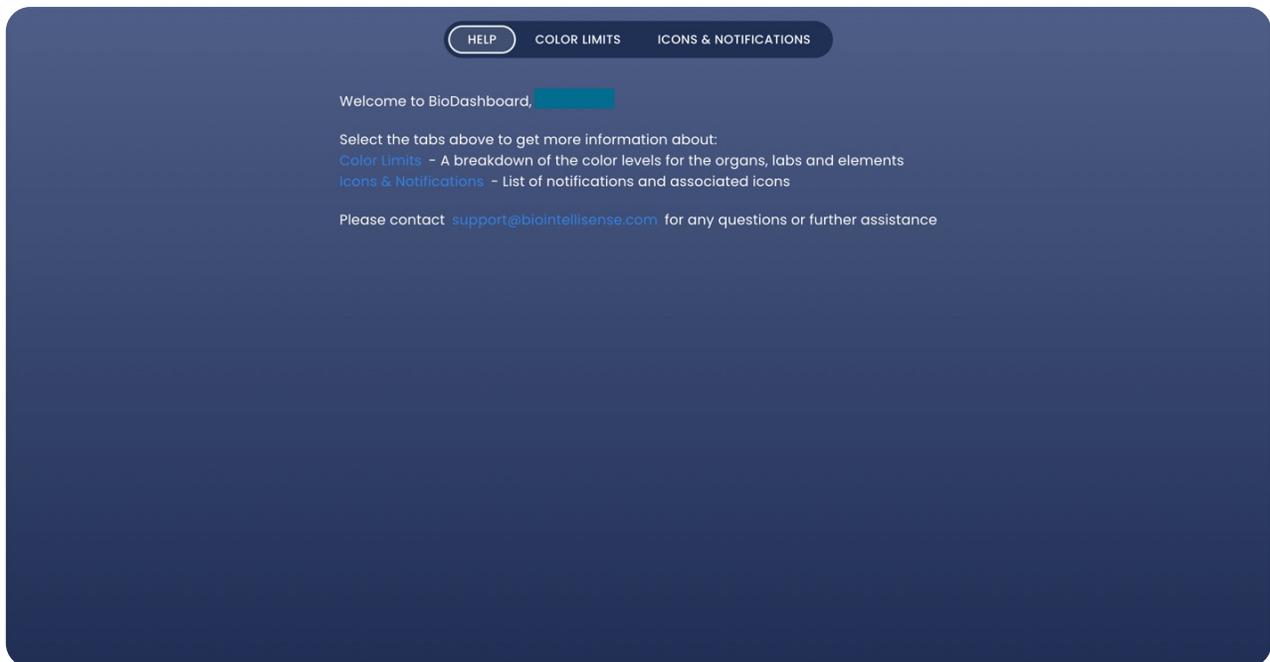
ABOUT MENU

Clicking the About Button in the banner on the left side of the screen displays the BioDashboard version number and other software identification information, as well as provides access to the BioDashboard Instructions for Use.

About Menu Option

BioIntelliSense, Inc.
About BioDashboard

This Platform and Product is operated by BioIntelliSense, Inc. All other feedback, comments, requests for technical support and other communications relating to the Platform and Product should be directed to support@biointellisense.com

For detailed instructions, reference the BioDashboard Instructions for Use document.

Model Number	SW-BDB
Part Number	SW-BDB-0002
UDI	(01) 00850005949466 (4326) 2026-01-25 (8012) 2.6

Troubleshooting and FAQs

If additional support is required, please call **888.908.8804 (US)** or email **support@biointellisense.com.**

IMPORTANT NOTE: Some features described in this document may not be functional on mobile devices.

Safety and Regulatory Information

Version Number: 0002
Model Number: SW-BDB
Product Name: BioDashboard V2
Part Number (PN): SW-BDB-0002
GTIN: 00850005949466

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

RESPONSIBLE PARTY:

BioIntelliSense, Inc.
570 El Camino Real #200
Redwood City, CA 94063

TERMS OF USE STATEMENT

NOTICE: Use of the BioIntelliSense Product(s) is subject to our:

- **Website and Product User Terms of Use** at
  www.biointellisense.com/website-and-product-user-terms-of-use

- **Website and Product Privacy Policy** at
  www.biointellisense.com/legal/privacy-policy

By using the Product(s), you indicate you have read these terms and policies and that you agree to them, including the limitations and disclaimers of liability. In particular, you understand and consent that use of the Product(s) measures and records personal information about you, including vital sign and other physiologic measurements. That information may include respiratory rate, heart rate, temperature, activity level, sleep duration, body position, step count, gait analysis, coughing, and other symptomatic or biometric data. You understand that the Product(s) do not render medical advice or diagnose or prevent any specific disease, including any communicable disease or virus. If you have any concerns about your health, including whether you have been exposed to or have contracted any disease or virus, immediately contact your healthcare provider.

SYMBOL LIBRARY

MD   Medical device

   Caution

Rx ONLY   For prescription use only

   Consult instructions for use

Technical Specifications

Product Name   BioDashboard V2
Version Number   0002

COMMUNICATIONS

Security   AES 128 bit encryption/TLS 1.2 for data transfer
AES 256 bit encryption for data at rest

Contact Us

For non-urgent support or questions about our product, please call **888.908.8804 (US)** or email **support@biointellisense.com**

MANUFACTURED BY

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Redwood City, CA 94063