Trends functions
optionally available

The ZOLL Patient Management Network
Patient Management System

Quick Start Guide for Healthcare Professionals

Efficient review of patient data - possible anytime from anywhere

The ZOLL® Patient Management (ZPM) Network is the online patient management system that enables clinicians to access data collected and downloaded from the LifeVest® portable defibrillator. After patient data is downloaded from the LifeVest device, it is sent to a secure ZOLL Patient Management Network website where it is saved for evaluation and viewing. The data can be accessed at any time and from anywhere via the Internet.

This guide will give you a quick overview of everything you need to know in order to work with the ZOLL Patient Management Network.

The ZOLL Patient Management Network provides periodic patient information downloaded from the LifeVest monitor.

Information displayed on the ZOLL Patient Management Network is dependent upon successful download of patient information.

There are many internal and external factors that can hinder, delay, or prevent acquisition and delivery of patient information.

The ZOLL Patient Management Network is not a substitute for appropriate medical attention and is not intended for emergency use or real-time monitoring.

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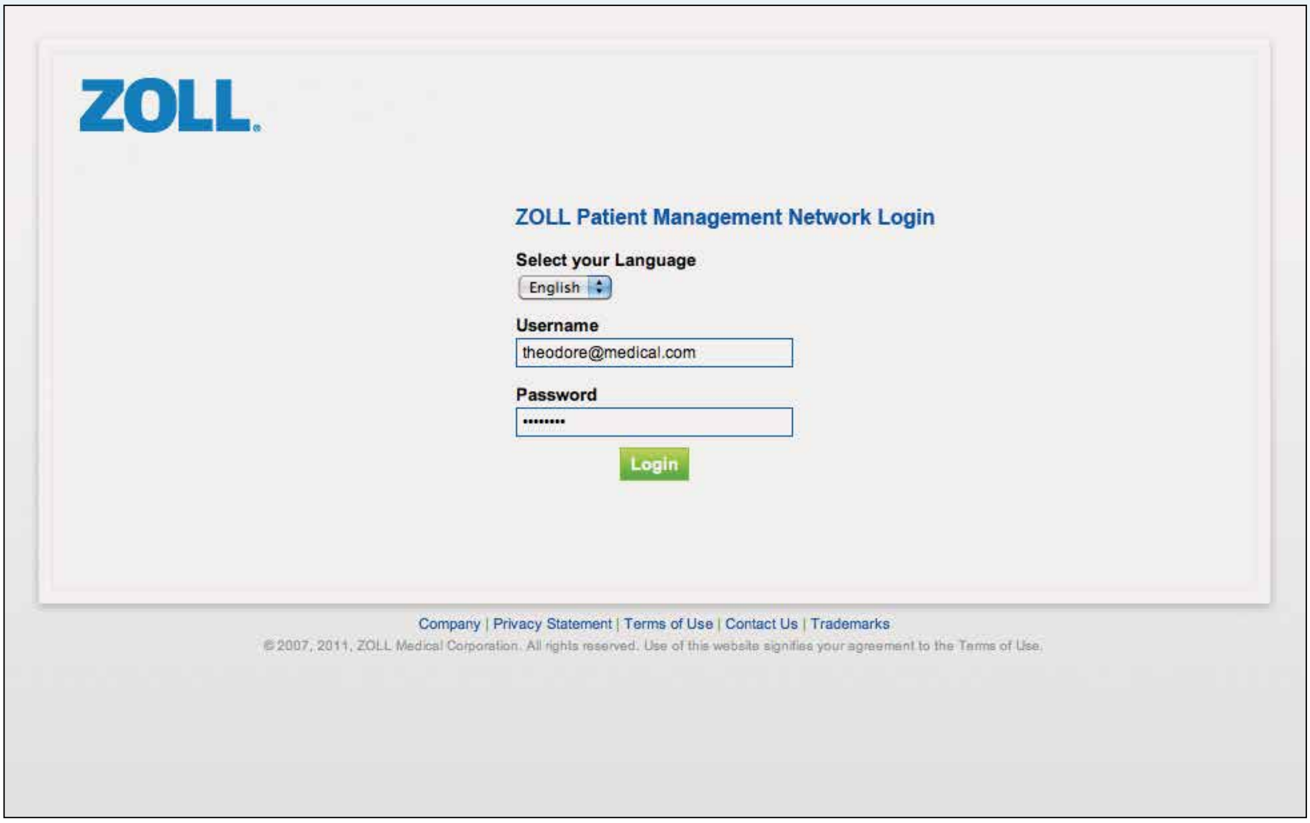


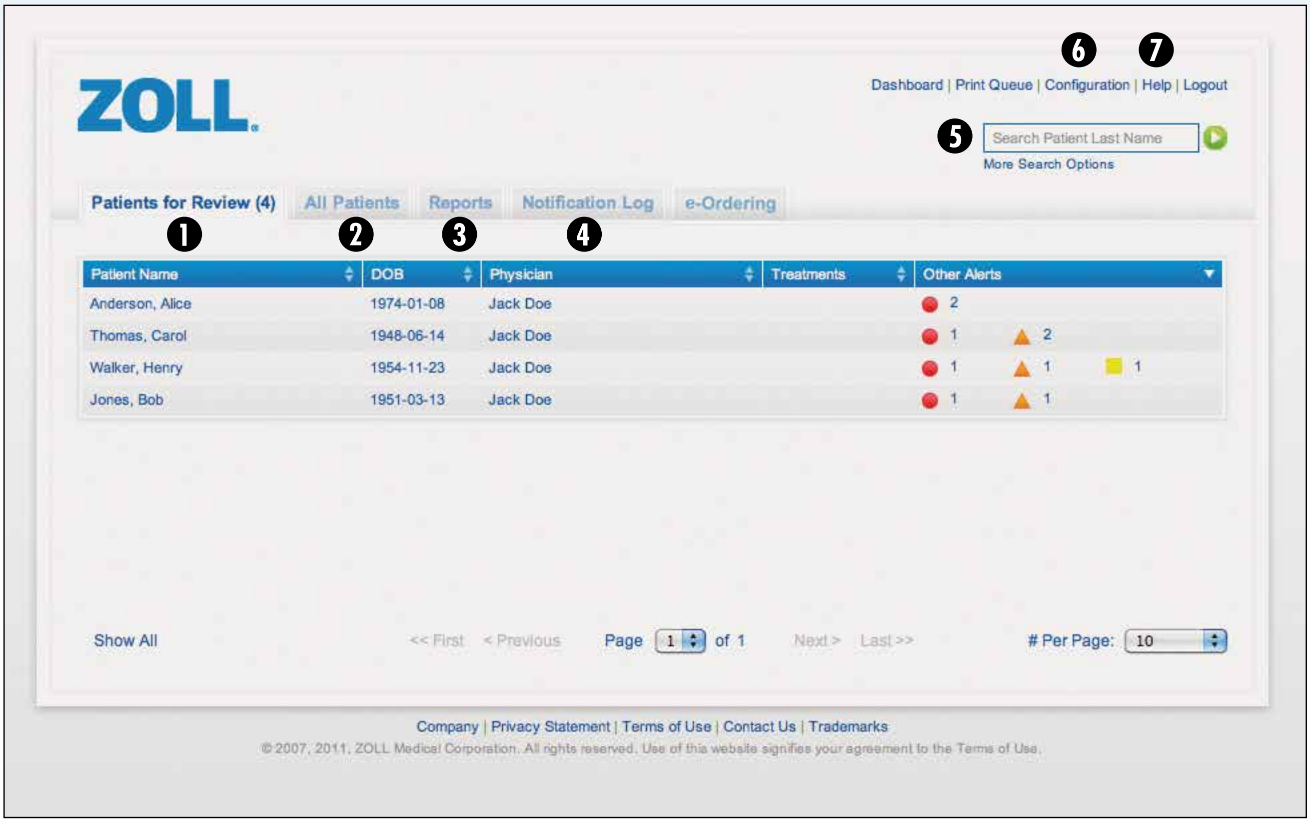
If you have a ZOLL Patient Management Network account, your email address is your username and you will receive a temporary password by email. During the first login to zpm.zoll.com, you will be asked to change your temporary password.

A key feature of the ZOLL Patient Management Network is that you can adapt it to the way you work and customize your needs by defining default settings for alarms and notifications. To get the most out of the full functionality of the ZOLL Patient Management Network, we recommend adjusting these settings during your first login. You can find more information on pages 22 to 24.

All patient data shown are fictitious and for informational purposes only.

Because we are continuously updating our products and systems, the appearance of some screens may vary in the ZOLL Patient Management Network portal. For any questions, contact your representative.

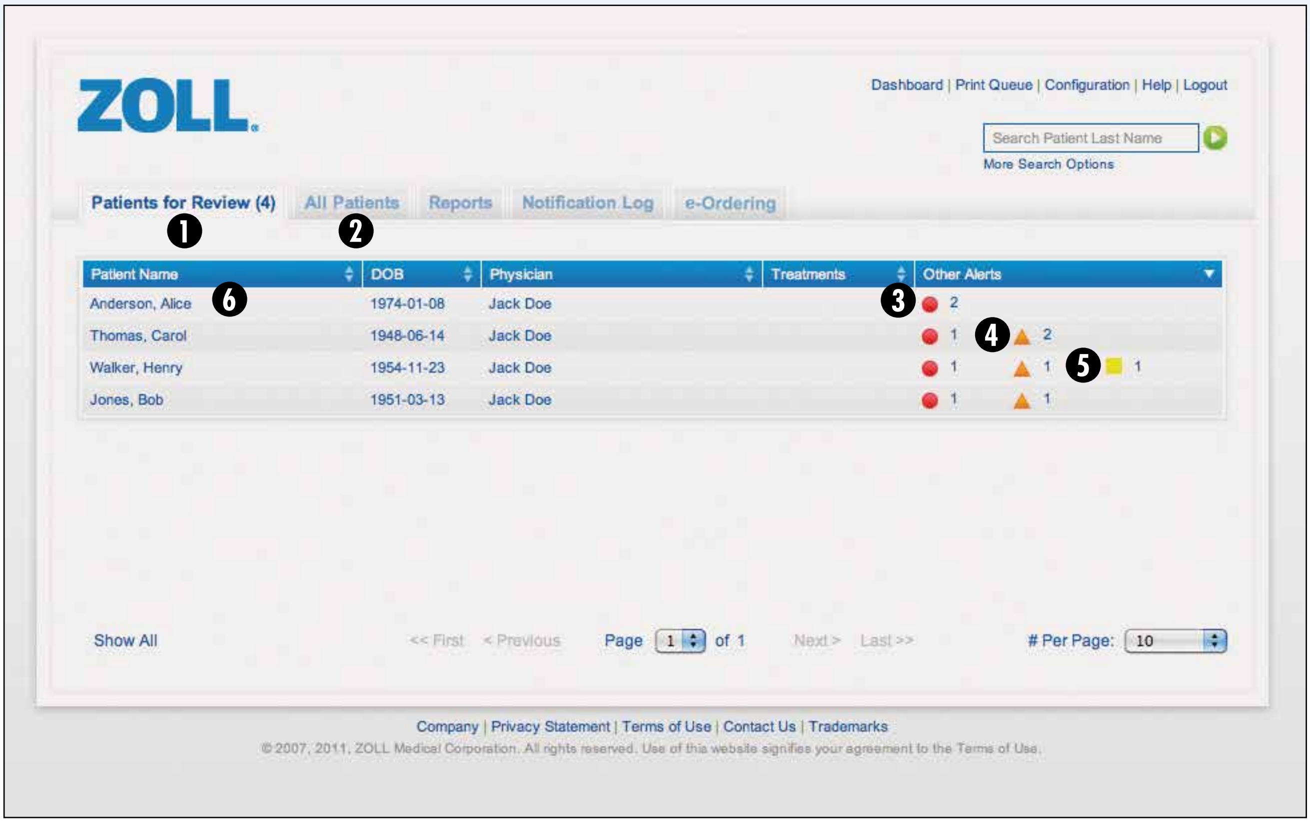
DASHBOARD OVERVIEW



Once you are logged in, the ZOLL Patient Management Network opens to the *Dashboard* page. The intuitive functionality on the *Dashboard* page allows you to efficiently select your LifeVest patients.

The *Dashboard* page has four main tabs: *Patients for Review, All Patients, Reports,* and *Notification Log*. Other areas include the *Patient Search* field, *Help* link, and *Configuration* link.

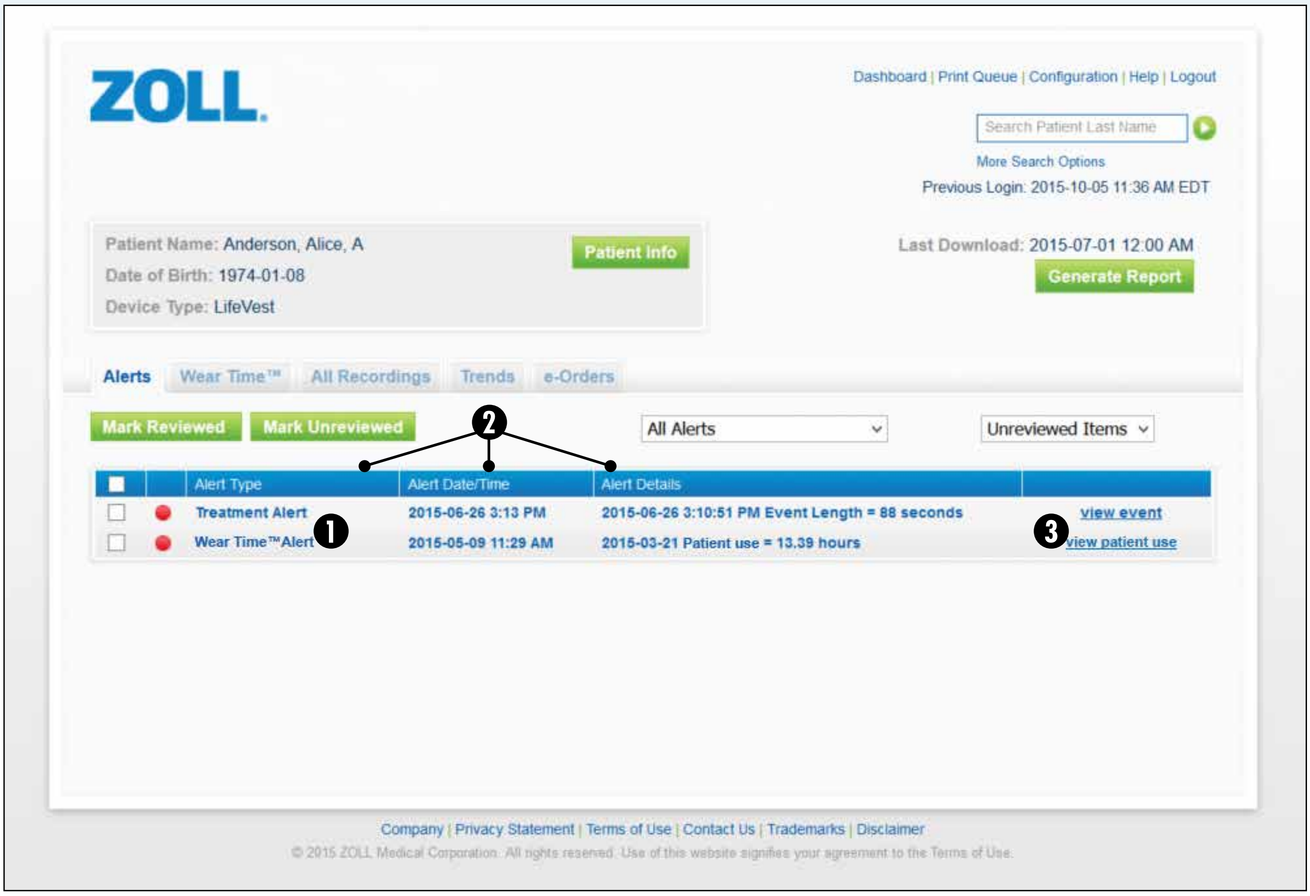
1. The *Patients for Review* tab displays only patients under your care who have an alert. The number displayed on the tab indicates the number of patients who have alerts to review.
2. The *All Patients* tab shows all active and inactive LifeVest patients under your care.
3. The *Reports* tab allows you to customize and print a variety of reports.
4. The *Notification Log* allows you to view a history of all notifications, including the date and time sent, and the method by which you were notified.
5. The *Patient Search* field provides a convenient way to find a specific patient.
6. The *Configuration* link allows you to customize alerts and notifications, change your password, and modify account settings.
7. The *Help* link is a reference that will aid you with any questions you may have.



On the *Dashboard* page, the *Patients for Review* tab shows all patients who have had an alert. There are three alert levels that you can assign to different patient events. The level of the alerts are represented by icons that are different in shape and color. The number beside the icon represents the number of alerts.

1. Patients who have had an alert will appear in the *Patients for Review* tab.
2. Patients who do not have any open alerts will appear under the *All Patients* tab.
3. High-level alerts are shown by a red circle and can trigger a notification.
4. Medium-level alerts are shown by an orange triangle and do not trigger notifications.
5. Low-level alerts are shown by a yellow box and do not trigger notifications.
6. To view more detailed information on an individual patient, click on any line containing a patient's name from either the *Patients for Review* tab or *All Patients* tab, which will then take you to that specific patient's *Alerts* page and reveal the additional Wear Time tab and *All Recordings* tab. *(Shown on next page)*

PATIENT DETAIL > VIEW EVENT



The *Patient Detail* page has three tabs: *Alerts* tab, Wear Time tab, and *All Recordings* tab.

❶ Each line shows an alert event and is listed in chronological order, with the most recent alert at the top.

❷ For each alert, you can see the alert type, date and time, and other details.

❸ To view additional details about an alert, click on the view event link and, in this instance, the ECG Recording can be viewed. *(Shown on next page)*

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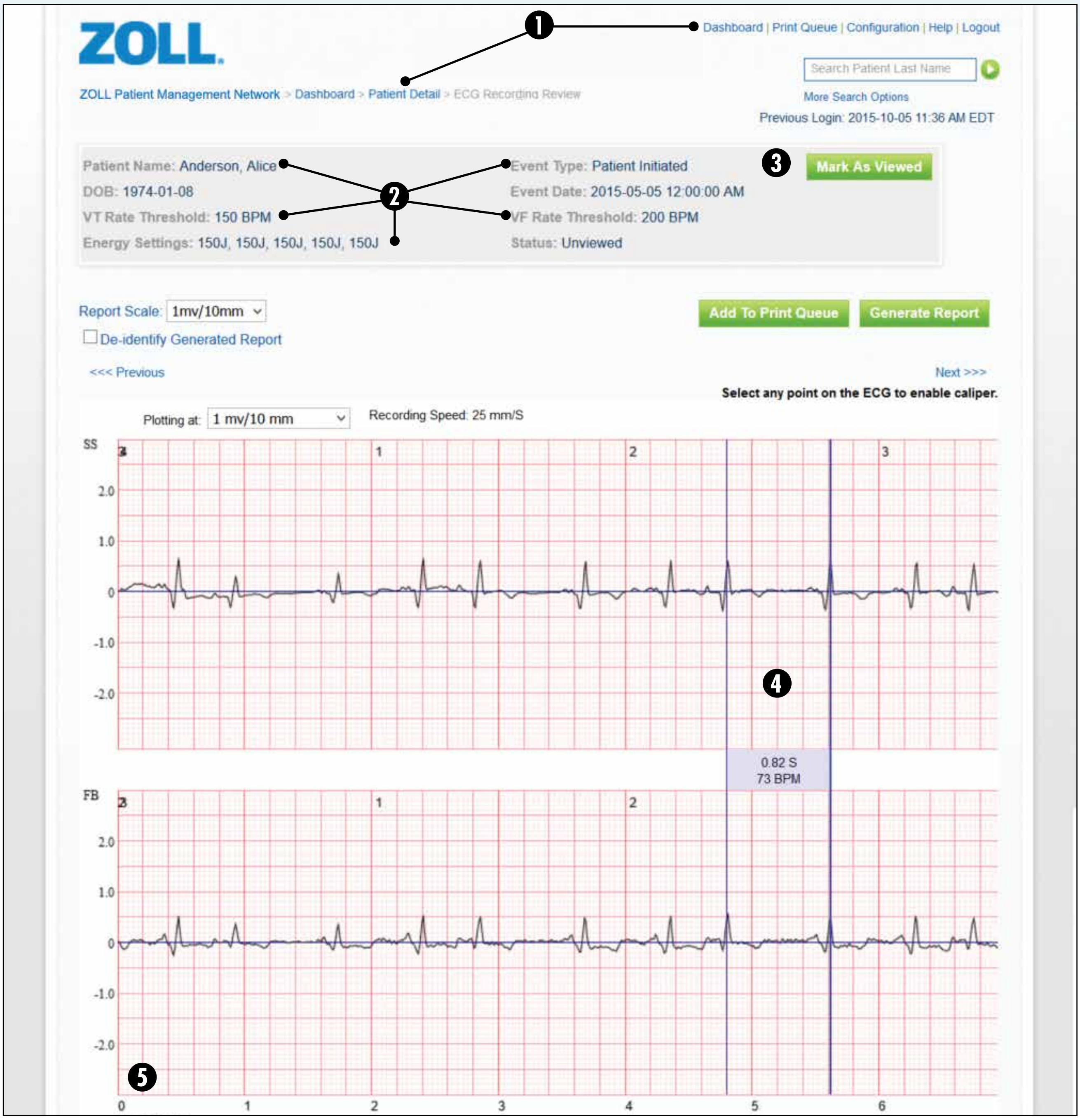


❶ Navigate back to either the *Patient Detail* page or the *Dashboard* anytime by clicking on the *Patient Detail* or *Dashboard* links located in the upper-left and upper-right corners of the screen.

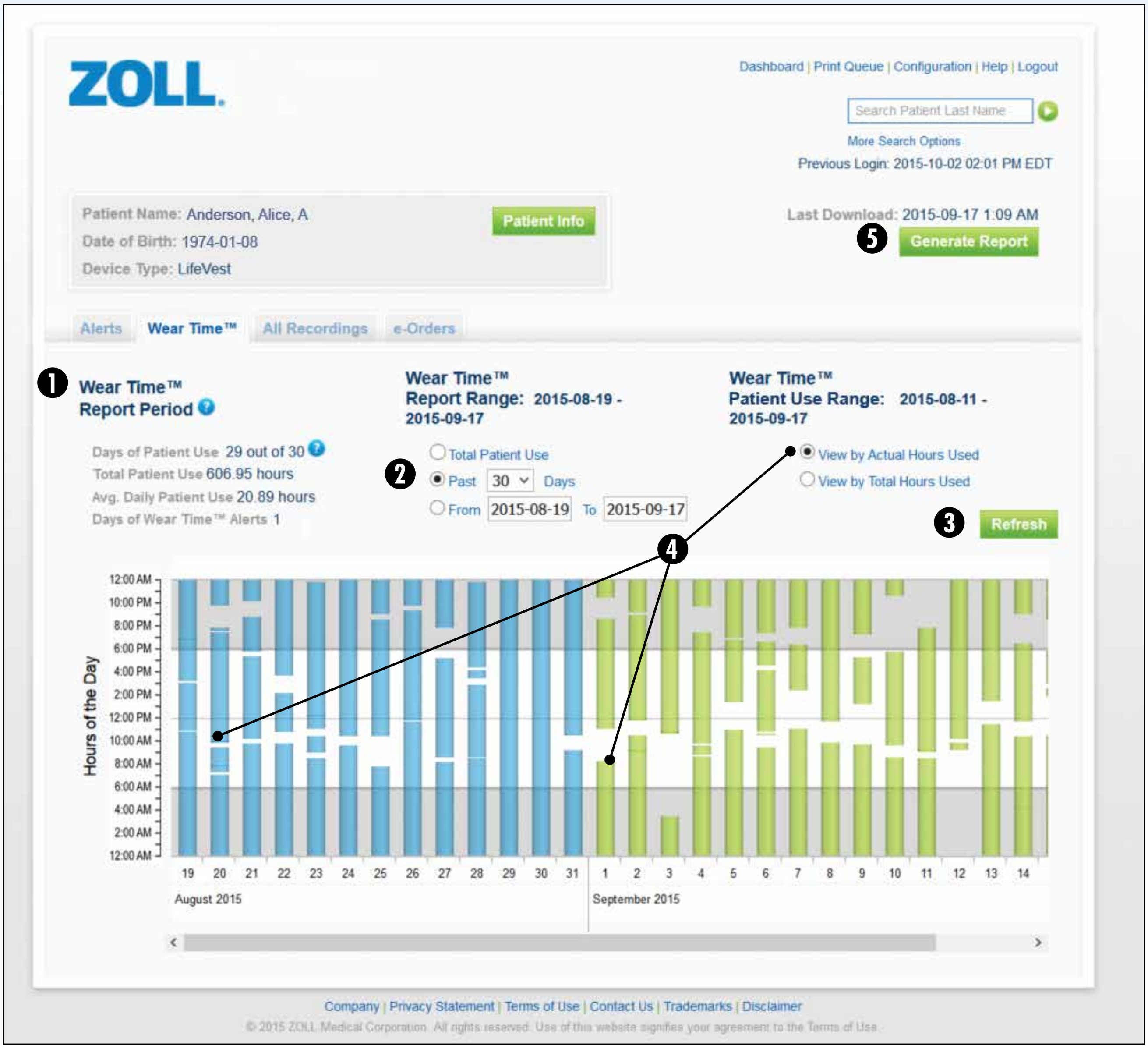
❷ The patient info section identifies the patient and provides other information, including *Energy Settings, Rate Threshold*, and *Event Type*.

❸ To mark the recording as viewed, click the *Mark as Viewed* button.

❹ To use the ECG Calipers, click once on the first point of the ECG, then move to the second point and click again. You will see the time displayed in seconds and beats per minute.

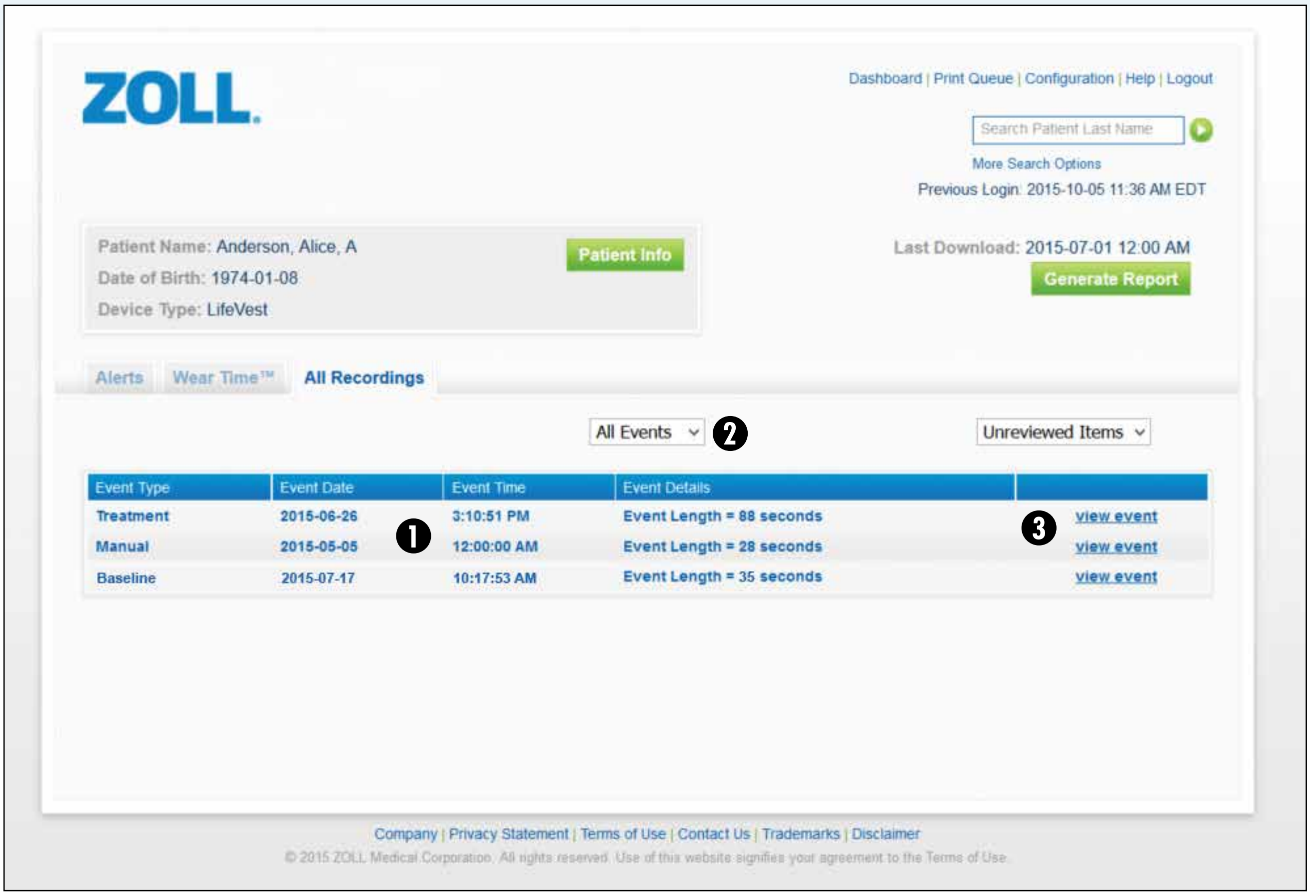
❺ To navigate through the recording, use the scroll bar along the bottom of the screen.

PATIENT DETAIL > WEAR TIME TAB



To view patient use on any patient, click on the Wear Time tab from the *Patient Detail* page.

1. The *Report Period* defines what gets displayed on this screen.
2. The initial view of this page shows actual patient use over the past 30 days; however, you have the option of changing the *Report Range*.
3. After making changes to any of the settings on this page, click the *Refresh* button to update the display.
4. The initial view defaults to actual patient use, where each bar represents the time that the patient wore the LifeVest WCD. Breaks in each bar show when the device was removed. Hover over any bar and the total patient use for that day is displayed.
5. To generate the report as a PDF, click the *Generate Report* button and either view the PDF or add it to the *Print Queue* and print later.



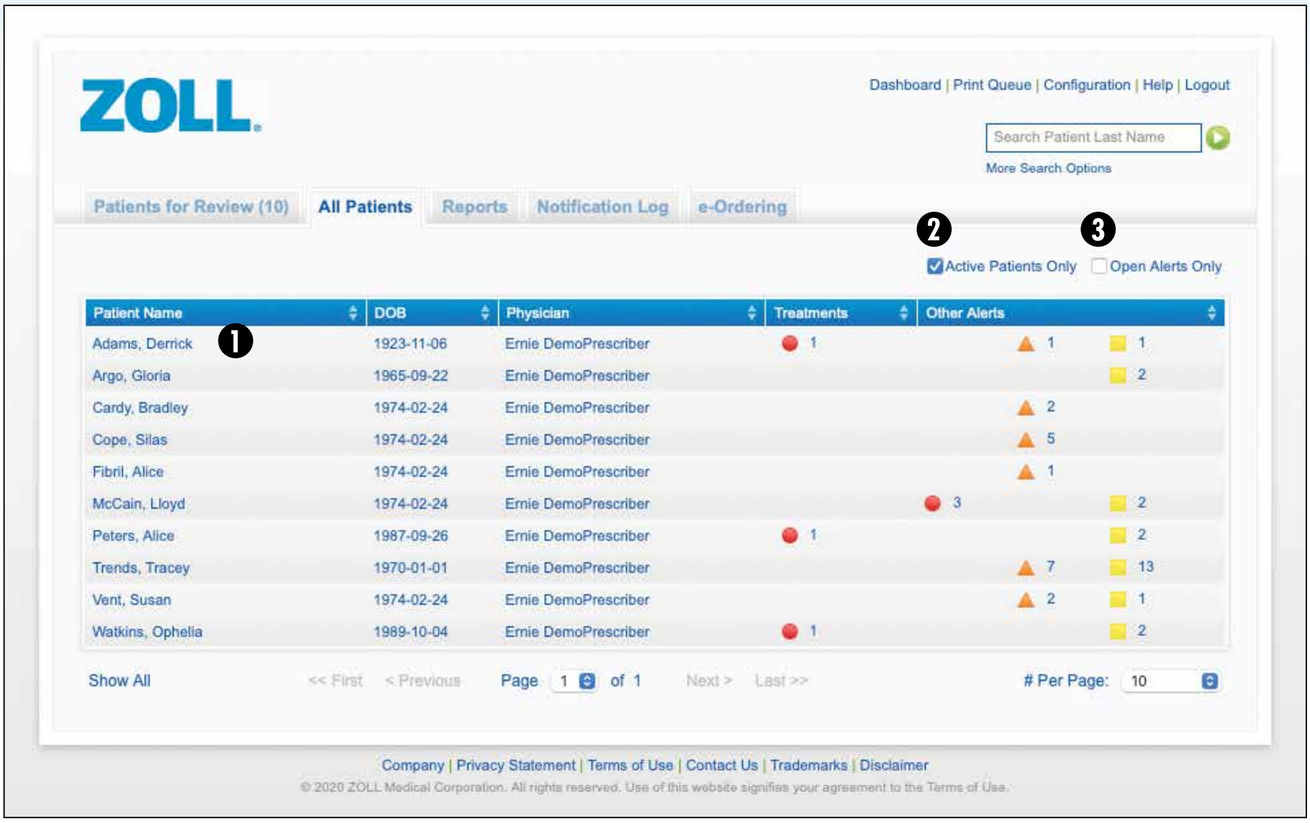
To view recordings on a patient, click on the *All Recordings* tab from the *Patient Detail* page.

❶ The page initially shows recordings for all events. Events are sorted in chronological order, with the most recent events at the top of the list.

❷ To narrow your selection to see only certain types of recordings, such as treatments, click on the *All Events* pull-down menu and select what type of events you want to see.

❸ You can also view the event by clicking on the *view event* link.

ALL PATIENTS TAB

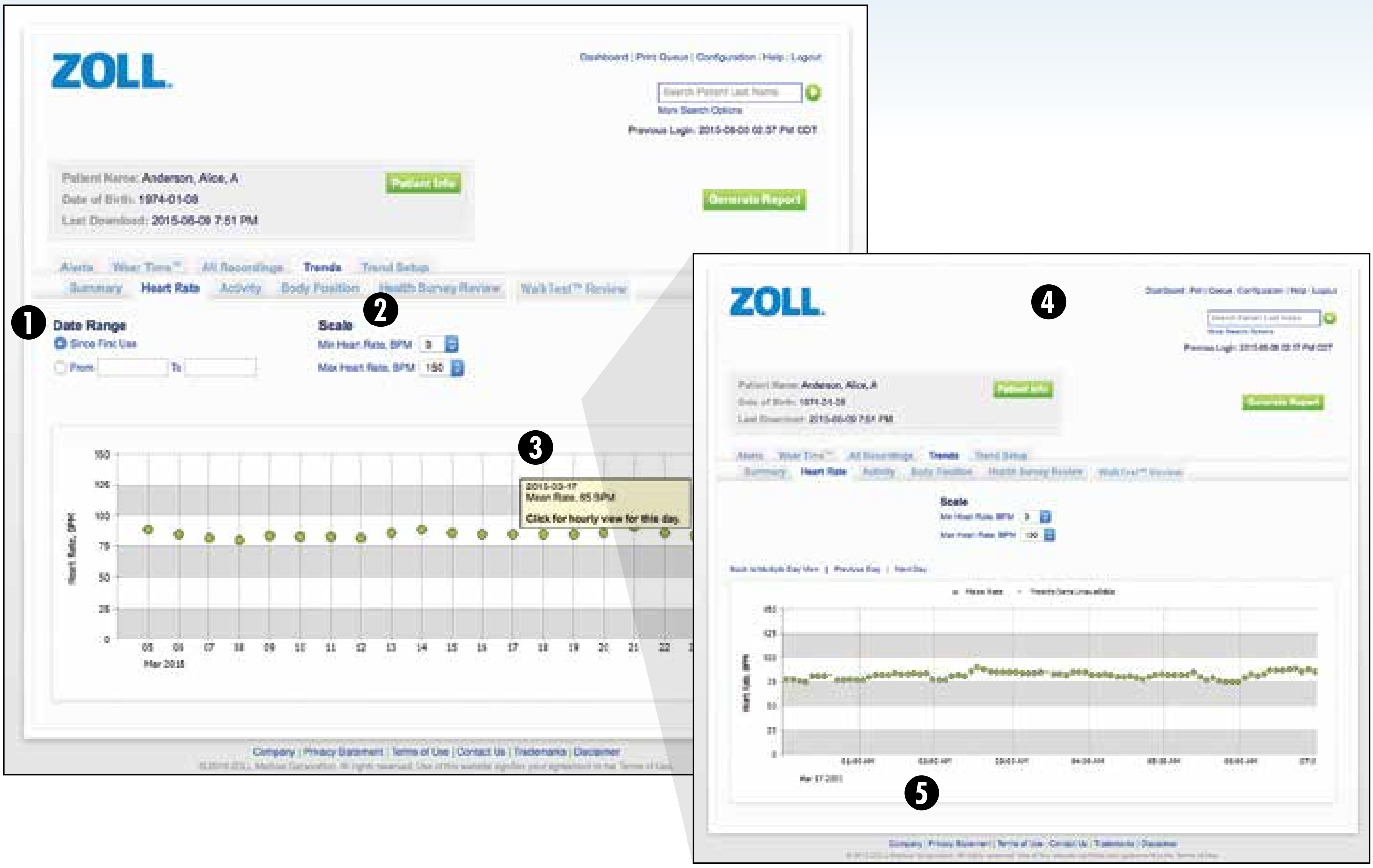


On the *Dashboard* page, the *All Patients* tab shows all active LifeVest patients under your care. This page initially shows only current patients using the LifeVest device. These patients are referred to as *Active Patients*.

1. To view more detailed information on an individual patient, click on any line containing a patient's name.
2. Initially, only *Active Patients* are shown on this page. To view all patients, uncheck the *Active Patients Only* checkbox.
3. Initially, all alerts, including alerts that have been closed (reviewed), are shown. To view only open (unreviewed) alerts, check the *Open Alerts Only* checkbox.

The *Trends* tab shows the patient data collected by the LifeVest WCD for heart rate, activity, and body position and displays the results of the health survey and Walk Test. After selecting the Trends tab, the overview is displayed first.

PATIENT DETAIL > TRENDS TAB > HEART RATE TAB



The LifeVest records the patient's heart rate and graphically displays the trend of average heart rate by day. The data is initially displayed as a heart rate range per day. You can also view the heart rate by hours within a day.

1. The page shows daily average heart rate information beginning with the day on which the patient first used the LifeVest WCD. You can specify a date range by clicking in the *Date Range* field and selecting a range in the displayed calendar.

2. You can adjust the scale shown in the heart rate diagram by selecting the minimum and maximum heart rate with the drop-down buttons.

3. Hover the mouse over a data point on the graph to display the average heart rate for the day.

4. Click on the particular day to display the detailed view of average heart rate in 5 minute increments for the entire day.

5. To navigate through the data, use the scroll bar along the bottom of the screen.

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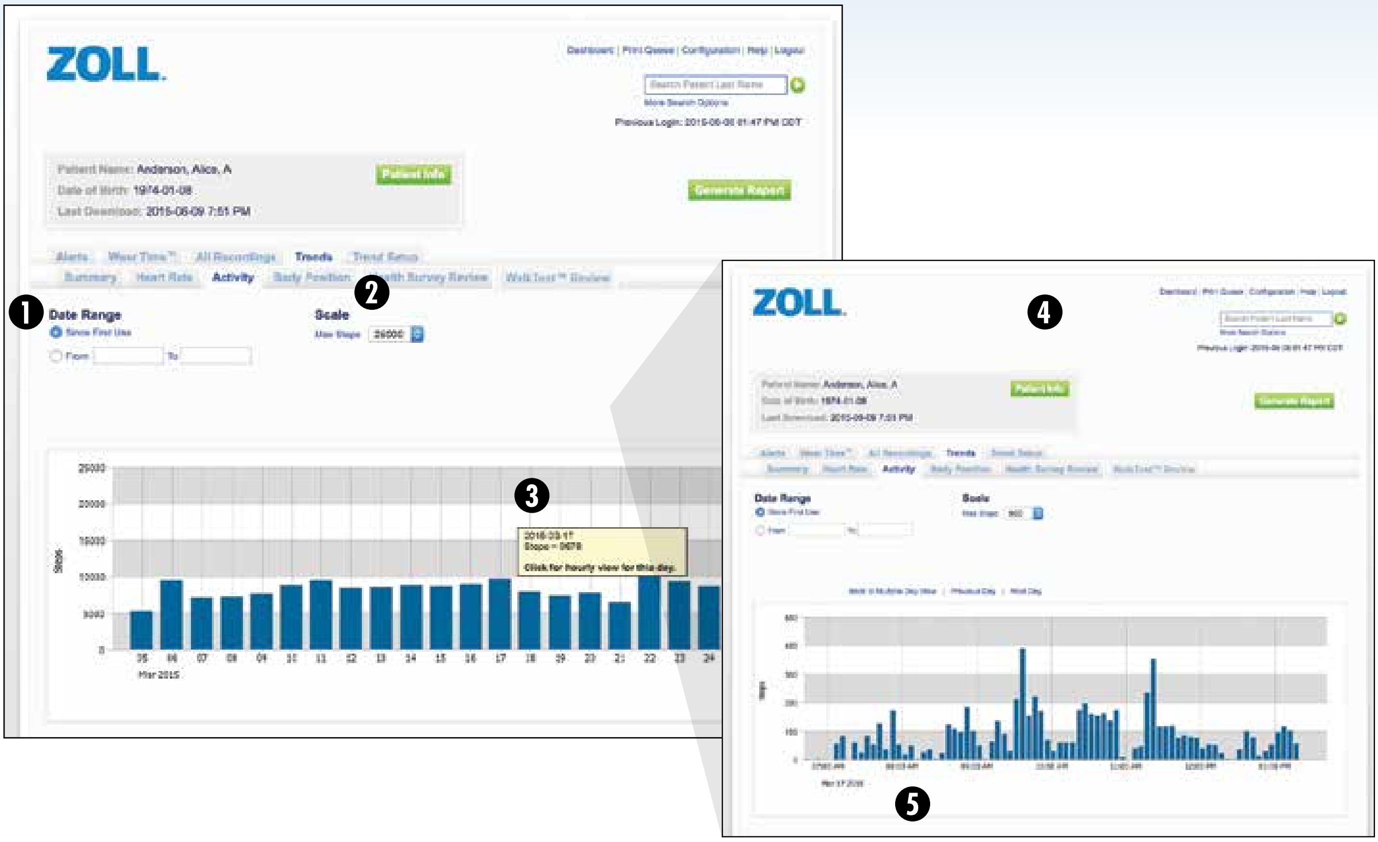


The LifeVest enables you to track trends in patient activity based on patient movement. An accelerometer located in the electrode belt of the LifeVest WCD determines the patient's step count, similar to commercially available pedometers. The data is initially displayed as hours of activity per day. To be counted as an hour of activity, the patient's activity must exceed 120 steps per hour. You can also view the activity by steps.

1. This page shows the patient activity for the last 30 days while the patient was using the LifeVest WCD. A user-defined date range can be chosen by selecting it in the *Date Range* field.
2. You can adjust the scale shown in the activity graph by selecting the maximum number of steps to be displayed.
3. Hover the mouse over the bar for a patient activity summary for the day.
4. Click on the particular day to display the detailed view of steps in 5 minute increments for the entire day.
5. To navigate through the data, use the scroll bar along the bottom of the screen.

PATIENT DETAIL > TRENDS TAB > BODY POSITION TAB

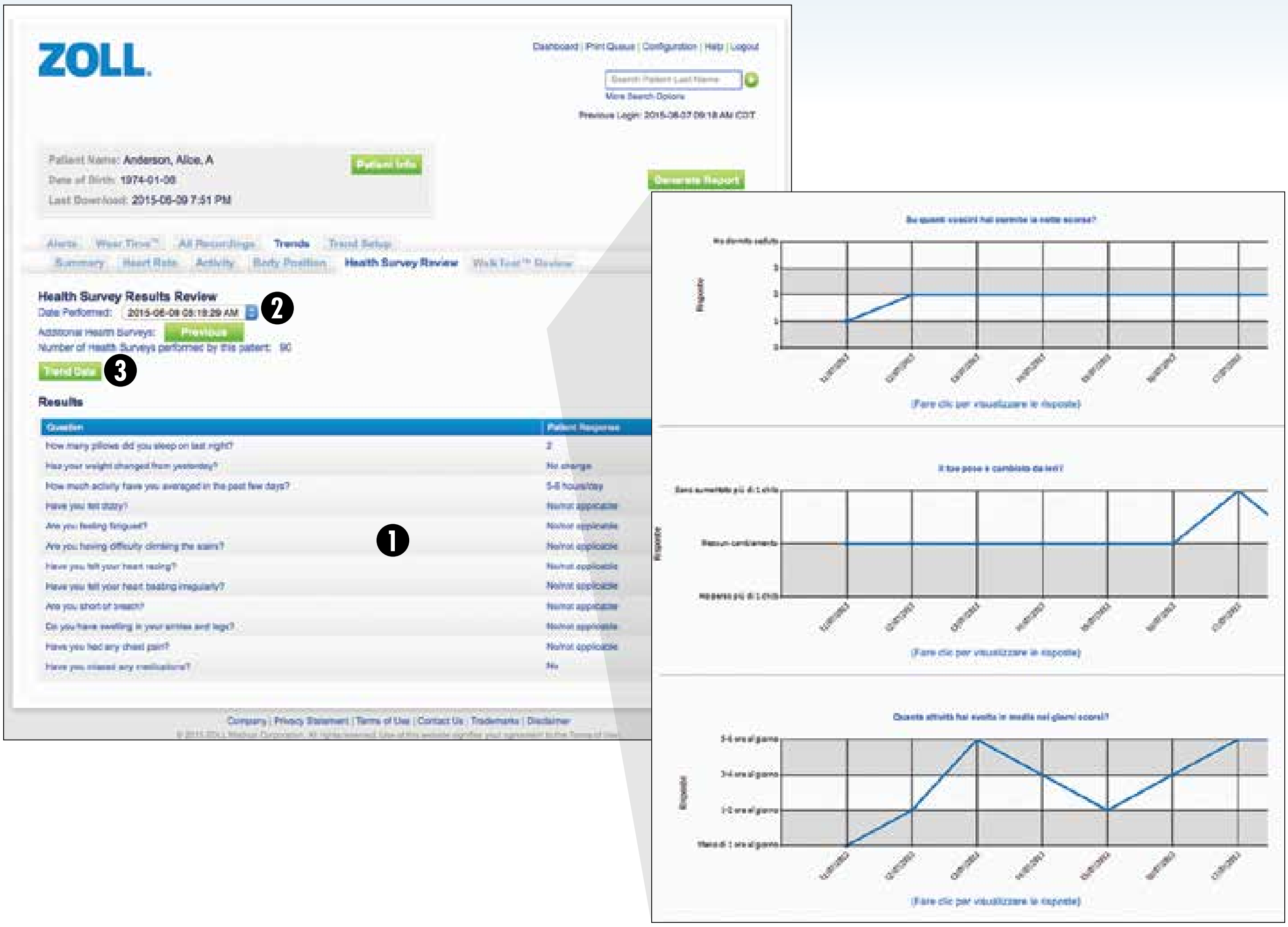
❶ The LifeVest has an accelerometer in the electrode belt that records the patient's body position. The body position can be defined as upright (angle of 60–90 degrees), reclined (angle of 30–60 degrees), lying (0–30 degrees), and movement (switching between positions or walking).

❷ This page shows body position information beginning with the day on which the patient first used the LifeVest WCD. You can specify a date range by clicking in the *Date Range* field and selecting a range in the displayed calendar.

❸ Hover the mouse over the graphs for a patient body position summary for any day.

❹ Click on the particular day to display the detailed view of body position in 5 minute increments for the entire day.

❺ To navigate through the data, use the scroll bar along the bottom of the screen.



The Health Survey feature allows you to prescribe a device-controlled health survey for your patients to complete on a daily or weekly basis. This is similar to the survey that is regularly carried out via telephone by the hospital staff. Through the touchscreen interface on the LifeVest monitor, the patient is guided through a number of questions chosen by you and can enter the answers directly via the monitor. If you wish to have the health survey activated, please let your ZOLL territory manager know, and it will be activated during the fitting process.In the ZOLL Patient Management Network, the *Health Survey Review* tab shows the results of the most recently downloaded patient survey.

❶ The questions and patient responses for the most recently conducted survey are displayed on this page.

❷ The date the survey was completed is displayed in the *Date Performed* window. If multiple surveys are available, you can select a different date through the drop-down in the *Date Performed* window or use the *Previous* button to navigate to the previous survey results.

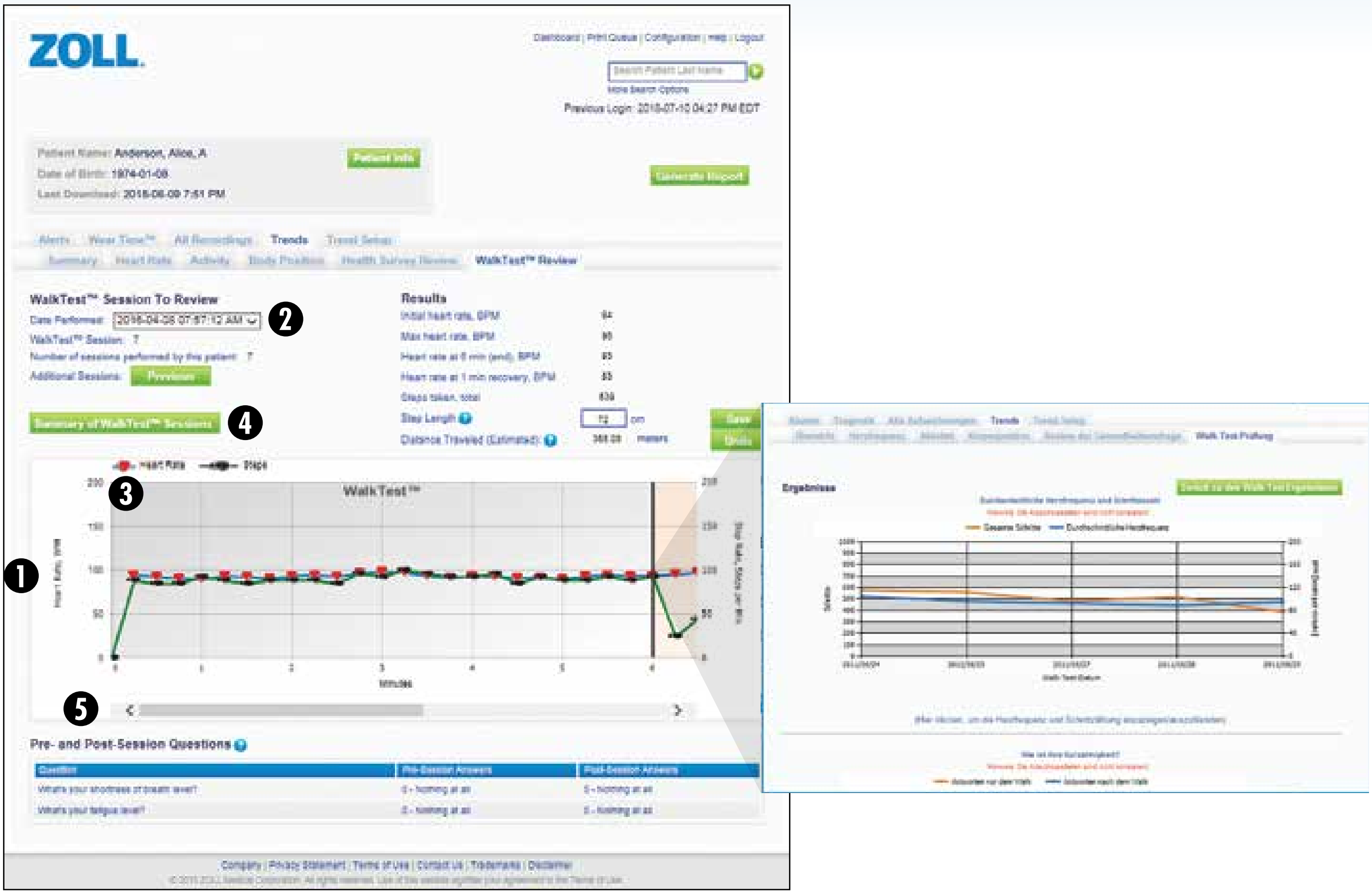
❸ To display trending data of patient survey responses for each question over time, click on the *Trend Data* button.

PATIENT DETAIL > TRENDS SETUP TAB > HEALTH SURVEY SETUP TAB

This function is activated by ZOLL staff during the fitting process. To allow this, please define which of the following questions are relevant for your patients. You also have the choice in which frequency the questions should be answered by the patient (daily/weekly).

Select questions to ask this patient:

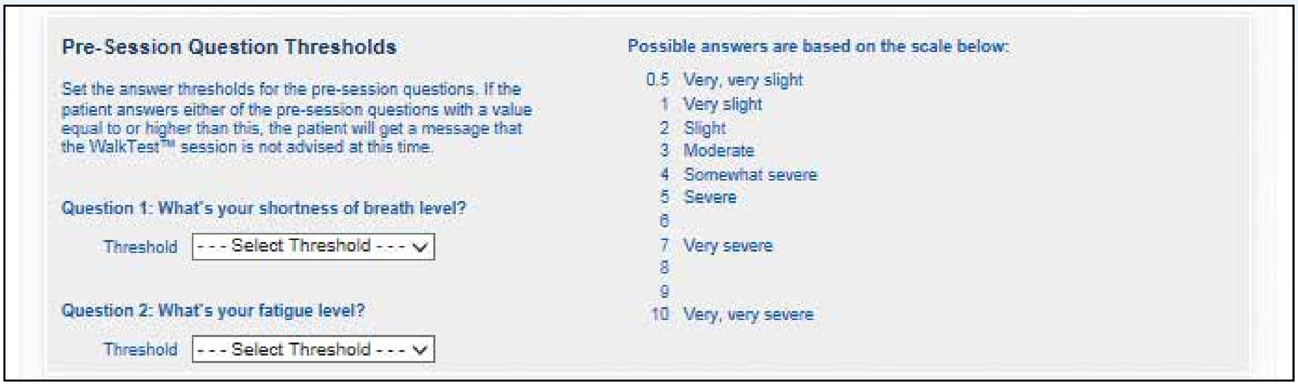
- [x] How many pillows did you sleep on last night?
- [x] Has your weight changed from yesterday?
- [x] How much activity have you averaged in the past few days?
- [x] Have you felt dizzy?
- [x] Are you feeling fatigued?
- [x] Are you having difficulty climbing the stairs?
- [x] Have you felt your heart racing?
- [x] Have you felt your heart beating irregularly?
- [x] Are you short of breath?
- [x] Do you have swelling in your ankles and legs?
- [x] Have you had any chest pain?
- [x] Have you missed any medications?



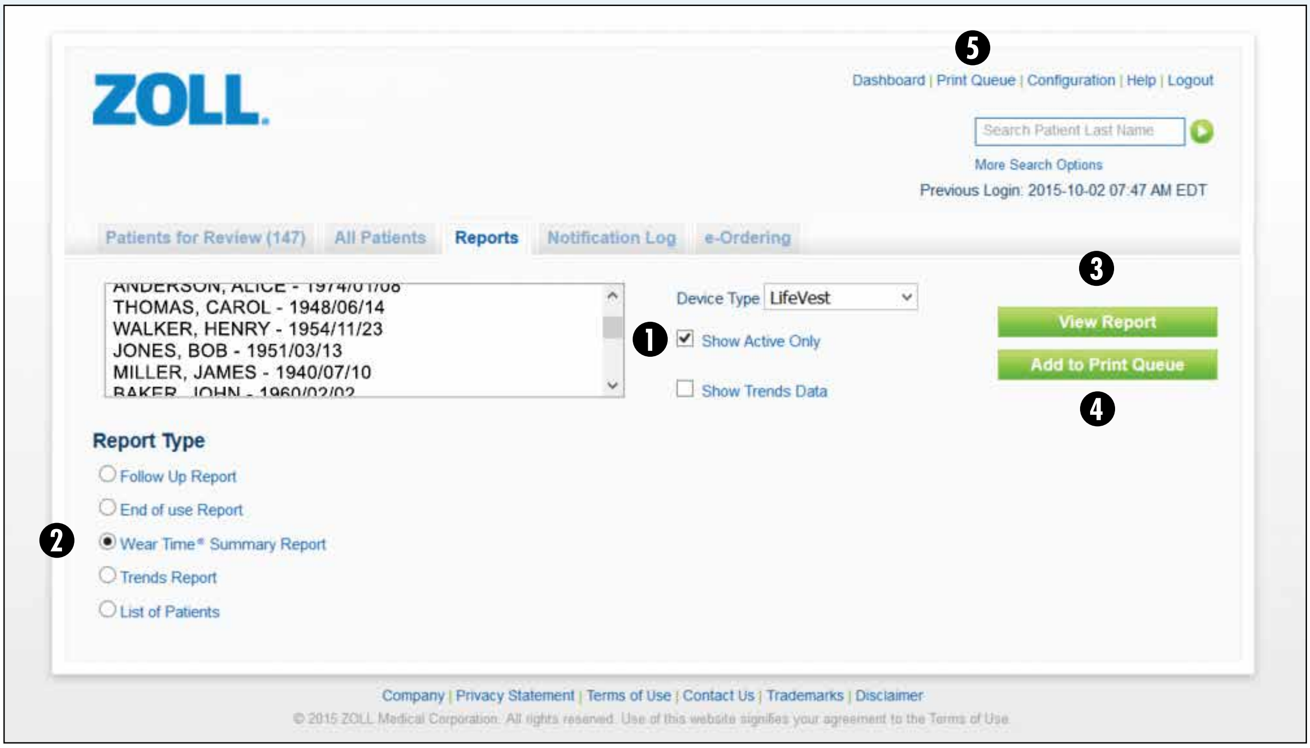
WalkTest allows you to prescribe an optional six minute test for your patients to perform. This is similar to an exercise test that is usually done in a clinical setting. The LifeVest touchscreen monitor will guide your patient through the test. These instructions include answering two pre-session and post-session questions on the touchscreen and following voice prompts to instruct your patient when to start and stop walking. If you wish to have the WalkTest activated, please let your ZOLL territory manager know, and it will be activated during the fitting process. In the ZOLL Patient Management Network, the WalkTest review tab displays the results after the data is downloaded.

1. The results of the WalkTest are displayed as heart rate (beats per minute - left axis) and step rate (steps per minute - right axis) over 6 minutes.
2. The date on which the test was performed is displayed. If multiple tests are available, you can choose a different date from the drop-down list or use the previous button to navigate to the results of the previous test.
3. Move the mouse pointer over the heart rate or the step data points to get a summary of the display information.
4. To display trending data of multiple sessions, click on the *Summary of WalkTest Sessions* button.
5. To navigate through the data, use the scroll bar at the bottom of the screen.

PATIENT DETAIL > TRENDS TAB > WALKTEST HEALTH SURVEY SETUP TAB



The setup of the WalkTest is done by ZOLL staff during the fitting process. You have the option to determine the frequency (daily/weekly) and to ask questions about shortness of breath and fatigue in advance. Average values are preset for step length. These can be adjusted at any time during the evaluation depending on the actual step length.



On the *Dashboard* page, the *Reports* tab allows you to customize and print a variety of reports.

❶ Initially, the *Reports* page shows only active patients. To show all patients, uncheck the *Show Active Only* checkbox.

❷ There are four different *Report Types:*

With *Customize Report* you decide what information your report should contain.

The *End of Use Report* includes information accumulated from the first to last day (or most recent day) of LifeVest wearable defibrillator use. This report gives a complete summary of the events, patient use, and other details about the patient's history while using the LifeVest WCD.

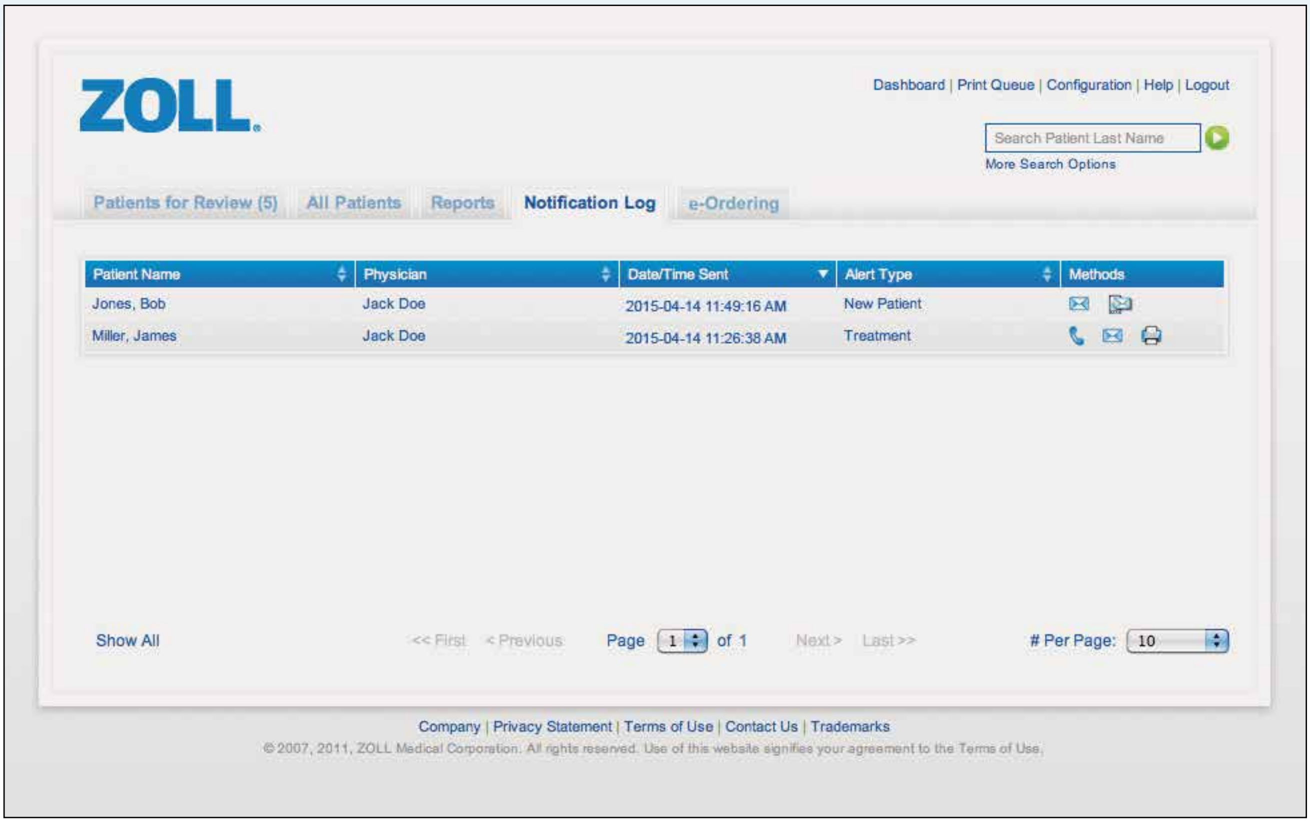
The Wear Time *Summary Report* shows the daily patient use over a specific time period that the LifeVest WCD has been used.

❸ To view a report, select the *Report Type* desired and click the *View Report* button. This generates a PDF for view purposes.

❹ To print a report, select the *Report Type* desired and click the *Add to Print Queue* button. This adds the report to the *Print Queue*.

❺ To view the reports sent to the queue, click the *Print Queue* link in the upper-right-hand corner.

NOTIFICATION LOG TAB



On the *Dashboard* page, the *Notification Log* tab allows you to view a history of all notifications, including the date and time sent, and the method by which you were notified.

This information is useful when multiple clinicians are reviewing the patient information. This ensures that clinicians have the ability to review alert notifications sent to other clinicians.

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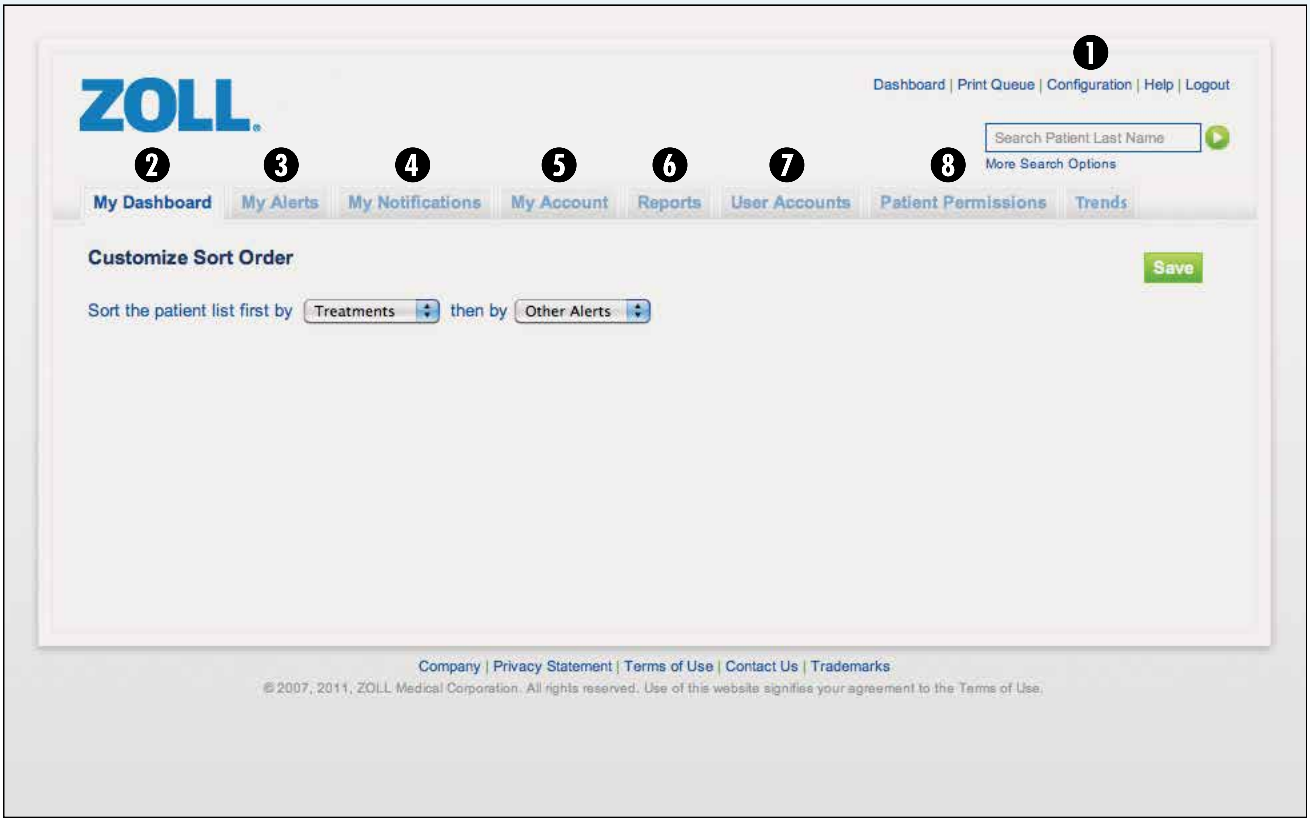
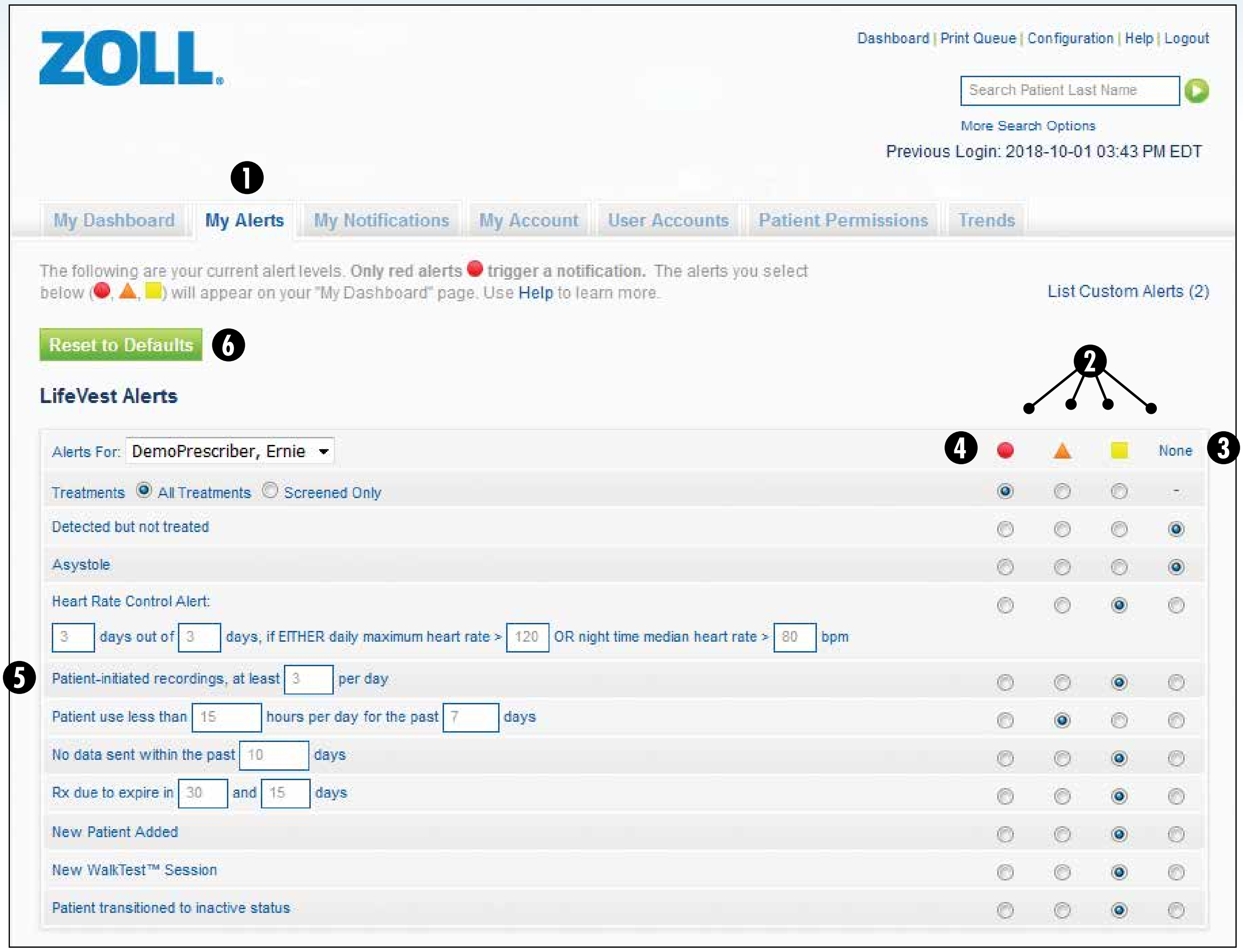


Depending on your role, the *Configuration* link allows you to view and manage the ZOLL Patient Management Network settings. The *Configuration* link has seven tabs: *My Dashboard*, *My Alerts*, *My Notifications*, *My Accounts*, *Reports*, *User Accounts*, and *Patient Permissions*.

1. You can get to the *Configuration* page by clicking on the *Configuration* link from any page in the ZOLL Patient Management Network.
2. The *My Dashboard* tab allows you to customize the order of how patients will be displayed on the *Dashboard*.
3. The *My Alerts* tab allows you to customize alerts to correspond with certain patient conditions. Please see the *My Alerts* section on page 23.
4. The *My Notifications* tab allows you to set notification preferences. Please see the *My Notifications section* on page 24.
5. The *My Account* tab allows you to modify your information.
6. The *Reports* tab allows you to customize your report preferences.
7. The *User Accounts* tab is available only to certain user types. This tab allows you to assign roles, disable user accounts, or request additional user accounts.
8. The *Patient Permissions* tab is also available only to certain users. You can request to associate a patient with a particular clinician.



On the *Configuration* page, the *My Alerts* tab allows you to customize alert levels for different event types.

❶ The *My Alerts* tab lists event types on the left side of the screen.

❷ For each event type, you can choose from four alert levels:

- The red circle is a high-level alert
- The orange triangle represents a medium-level alert
- The yellow square is for a low-level alert
- *None* does not trigger an alert

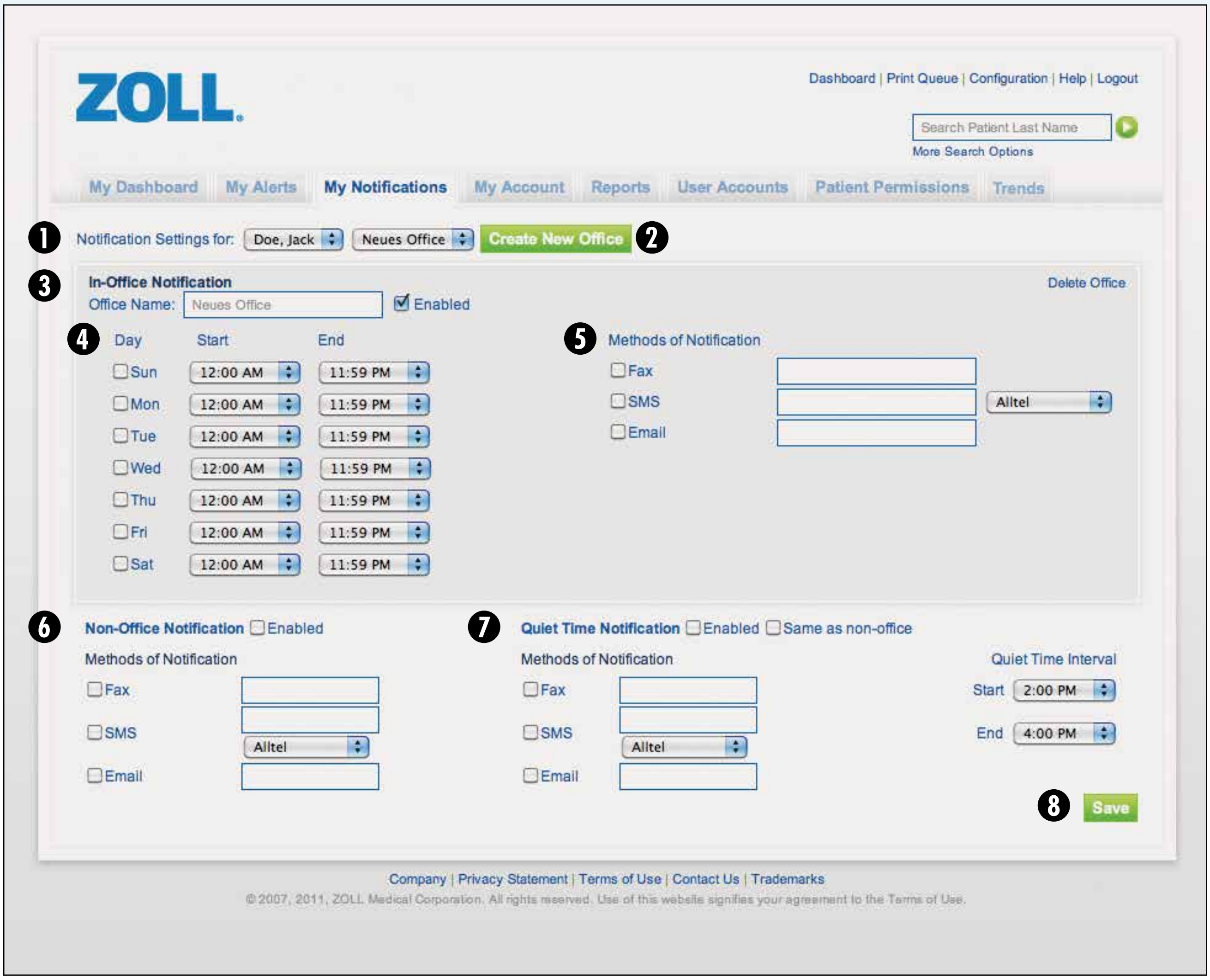
❸ Note that for *Treatments*, *None* cannot be selected.

❹ Select an alert level by choosing one of the three icons along the right side of the screen. All alerts with an icon selected will appear on the *Dashboard* and *Patient Detail* pages. Only red alerts will trigger a notification.

❺ For some alerts, you can choose the trigger point. For example, with *Patient-initiated recordings*, you can set the number of recordings that will trigger an alert.

❻ To reset all of the alerts to the ZOLL defaults, click the *Reset to ZOLL Defaults* button.

CONFIGURATION LINK > MY NOTIFICATIONS TAB



On the *Configuration* page, the *My Notifications* tab allows you to select how and when you are notified of a high-level (red) alert.

1. The *Notification Settings* section allows you to select who will receive these notifications. From the pull-down menus, select the person's name and office.
2. If you are setting up a new office, click the *Create New Office* button.
3. The *In-Office Notification* section allows you to identify the office being notified and to enable, or disable, notifications to this office.
4. For the selected office, the times and days on which notifications will be sent can be customized.
5. You can also choose the methods by which you can be notified while in the office.
6. The *Non-Office Notification* section allows you to set up different methods to be notified during non-office hours. The methods of notification in this section are completed in the same manner as the *In-Office Notification* section.
7. The *Quiet Time Notification* section allows you to set up yet another method to be notified during quiet time.
8. When finished, click the *Save* button.

The ZOLL Patient Management Network allows clinicians to remotely access patient information and efficiently monitor and prioritize their patients' needs.

Contact **ZOLL**

For LifeVest customer support and technical support please call **+41 44 551 42 96**

LifeVest medical orders and supporting documentation can be faxed to **+41 44 551 42 96**

For more LifeVest information, please visit **lifevest.zoll.com/de-CH** or e-mail **LifeVest-Swiss@zoll.com**

You can access the online patient management system at **zpm.zoll.com**

For a list of all risks associated with use of LifeVest, refer to the patient manual at lifevest.zoll.com/mdr.

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