

# IntelliSpace ECG Management System

ECG Anywhere Instructions For Use

Release B.02

PN 453564578601 March 2025

Revision K, applies to software version B.02.09 and higher.

Printed in the U.S.A.

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IntelliSpace ECG Management System is a software-only product. ECG Anywhere is a feature of the IntelliSpace ECG Management System.

The IntelliSpace ECG Management System complies with the requirements of the Medical Device Directive 93/42/EEC and carry the following mark accordingly:



#### Global Medical Device Nomenclature (GMDN)

Medical equipment clinical data interfacing software.

The 5-digit GMDN code adjacent to the symbol is defined in ISO 15225: Medical devices -- Quality management -- Medical device nomenclature data structure.

#### GMDN 57967

#### Compliance

IntelliSpace ECG Management System complies with all relevant international and national standards and laws. Information on compliance will be supplied on request by a local Philips Medical Systems representative, or by the manufacturer.

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- IEC 60601-1-6:2010 +A1:2013 +A2:2020
- IEC 60601-2-25:2011
- IEC 62304:2006 +A1:2015
- IEC 82304-1:2016
- IEC 62366-1:2015 +A1:2020

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#### **Training**

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#### **Trademarks**

Product and company names mentioned herein may be the trademarks or registered trademarks of their respective owners.

#### Conventions

The following conventions are used in this Instructions For Use:.

Typeface	Usage	Example
Bold	User interface items and system keys, internal software components and file names	Click Settings. Press CTRL+F.
Italic	Variables, document titles	<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>
URL	Website URLs	www.healthcare.philips.com

#### **Menu Selections**

Menu selections are displayed in the order in which each menu option is selected, separated by an arrow (>).

#### WARNING

Warning statements describe conditions or actions that can result in personal injury or loss of life.

#### Caution

Caution statements describe conditions or actions that can result in damage to the equipment or loss of data. Caution statements alert the user that the clinician has the responsibility of determining significance of results due to actions and varying factors present with each case.

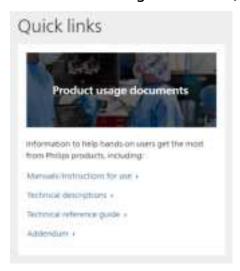
#### Note:

Notes contain additional information on using this product.

#### Obtaining a Paper Copy of the Instructions for Use

Paper copies of the *Instructions for Use* may be requested from the Philips Document Library (www.philips.com/IFU). To request a paper copy:

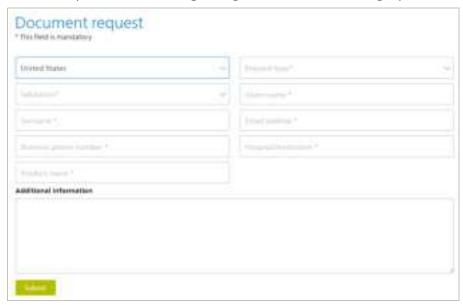
1. Under Product usage documents, select Manuals/Instructions for Use.



2. Scroll down to "Can't find what you're looking for? Want to order a paper copy of a Product manual or Instructions for Use? Click **Request documentation**.



3. Select your location and complete the remaining required fields. Be sure to enter the full product name (e.g., "PageWriter TC35 Cardiograph," not "TC35").

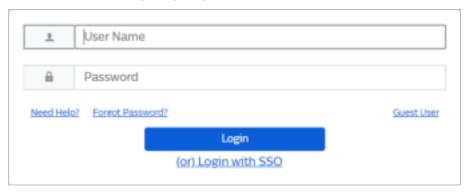


4. Under "Request type," select Paper.

#### **Using the Philips InCenter Site**

The Philips InCenter site provides frequent updates to all Philips Cardiac Systems service documentation, product software and firmware.

The Philips InCenter site requires an active registration and password. To register, go to the InCenter site at https://philips.mizecx.com.



If you have an existing InCenter account, enter your username and password, then click **Login**.

If you do not have an InCenter account, click on the **Need help?** link on the main page (located under the password field). On the following page, follow the directions under **For Externals** to receive a user name and password for the InCenter site.

#### **Explanation of Symbols**

The IntelliSpace ECG Management System software label, installation DVD and user documentation DVD labels, or user documentation may display one or more of the following symbols.

Symbol	Name	Standard/Reference
<b>(3)</b>	Refer to instruction manual/booklet. Symbol color is blue.	ISO 7010 Graphical Symbols - Safety colours and safety signs - Registered safety signs, M002
€ 0123	CE marking accompanied by the Notified Body number 0123	European Council Directive 93/42/EEC concerning medical devices as amended by 2007/47/EC, Annex XII

<sup>\*</sup> ISO 15223-1 Medical devices - Symbols to be used with medical device labels, labeling and information to be supplied - Part 1: General requirements

<sup>\*\*</sup> ISO 7000 / IEC 60417 Graphical symbols for use on equipment

Symbol	Name	Standard/Reference
EC REP	Indicates the Authorized representative in the European Community.	IEC 15223-1* 5.1.2
(Ii)	Indicates that the Instructions for Use is available in electronic format at www.philips.com/IFU.	ISO 7000** 3500
	Date of manufacture	ISO 15223-1* 5.1.3
***	Name and address of manufacturer	ISO 15223-1* 5.1.1
R <sub>c only</sub>	Prescription Use Only (US Federal Law)	21 CFR 801.109(b)(1) Prescription Devices
1	Quantity (indicated by number on symbol)	ISO 7000** 2794
REF	Catalog number	ISO 15223-1* 5.1.6
LOT	Batch number	ISO 15223-1* 5.1.5
MD	Medical Device	Medical Devices Regulation 2017/745/EU, Annex 1, chapter III, section 23.2, q.
UDI	Unique Device Identifier	Medical Devices Regulation 2017/745/EU, Annex 1, chapter III, section 23.2, h.
ОРТ	Configured options	_
SO	Sales Order	_
PO	Production Order	

<sup>\*</sup> ISO 15223-1 Medical devices - Symbols to be used with medical device labels, labeling and information to be supplied - Part 1: General requirements

<sup>\*\*</sup> ISO 7000 / IEC 60417 Graphical symbols for use on equipment

Symbol	Name	Standard/Reference
X	Dispose of in accordance with the requirements of your country.	Waste Electrical and Electronic Equipment Directive 2012/19/EU, Article 14.4

<sup>\*</sup> ISO 15223-1 Medical devices - Symbols to be used with medical device labels, labeling and information to be supplied - Part 1: General requirements

<sup>\*\*</sup> ISO 7000 / IEC 60417 Graphical symbols for use on equipment

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# About IntelliSpace ECG Anywhere

#### Overview

IntelliSpace ECG Anywhere allows you to review, edit, assign, verify and confirm reports from any internet-enabled device with an HTML5-enabled web browser, at a screen resolution of at least 1024 x 768. You don't need to be connected to your institution's network to access patient data. For access details, contact your IT administrator.

#### Note:

ECG Anywhere is designed for desktop or laptop viewing, and is not recommended for use on mobile devices. You may access ECG Anywhere using a tablet, but devices with small screens, such as cell phones, are not recommended.

IntelliSpace ECG Anywhere gives you easy access to patient ECGs, stress reports, and ambulatory ECG reports via the internet. It fits right into your review workflow, helping you quickly work through a set of records. In order to access patient data, you must be connected to your institution's network. For access details, contact your IT administrator.

Supported browsers include:

- PC/laptop browsers:
  - Safari
  - Firefox
  - Chrome
  - Microsoft Edge
- Mobile browsers:
  - Safari
  - Chrome for Android

With ECG Anywhere, you can:

1. Retrieve reports to work with

- 2. View a patient's current and previous resting ECGs on the same page, in the same format as viewing printed ECG reports
- 3. Review, assign, and verify ECGs, including resting and Al-based ECG reports
- 4. Review rhythm strips
- 5. Review, assign, and verify stress and ambulatory ECG studies and reports
- 6. Approve or unapprove ECGs
- 7. Edit patient demographics or report data
- 8. Optionally print or email reports

This guide provides information about using the IntelliSpace ECG Anywhere browser-based ECG reader. Access this guide at any time by accessing the application **Help** function.

For additional information about ECG reports, Critical Values, report formats, working with orders, and related functions, see the *IntelliSpace ECG Instructions for Use* and the *Philips 12- and 16-lead DXL Algorithm Physician Guides*. All of the available documentation is described in the *IntelliSpace ECG Components and Documentation Reference*, available through the application **Help** function.

For additional information about Philips stress reports, see the *Philips ST80i Stress Test System Instructions for Use*. For information about third-party stress reports, refer to the documentation provided by the supplier.

For additional information about Philip Holter reports, see the *Philips Holter Instructions for Use*. For information about third-party ambulatory ECG reports, refer to the documentation provided by the supplier.

## **Getting Started**

ECG Anywhere supports two authentication methods:

- Standard authentication, the default method, which requires that users type their user name and password to log in.
- Integrated (pass-through) Windows authentication, which does not require further log in. Users simply click through the login screens, leaving the user name and password fields blank, as they have already been "pre-authenticated."

ECG Anywhere can be configured for pass-through user authentication. For more information, see the *IntelliSpace ECG Management System Configuration Guide*.

Before you start, have available your login credentials (user name, password, and domain), if needed, as well as the link to the ECG Anywhere installation at your site. If you have questions or experience any issues, contact your system administrator.

#### Caution

Ensure that the computer you are using to access ECG Anywhere is on a protected network and domain. Accessing ECG Anywhere on a publicly shared computer is not recommended.

To access ECG Anywhere:

- 1. Point your web browser to the ECG Anywhere link provided to you by your system administrator.
  - You are either directed to a Login page, or, if your site uses a single Windows login, to the Worklist.
- 2. If prompted, enter your user name and password to log into the application.

  If you have a default Report search saved, the results of the default search criteria are displayed.

To log out of ECG Anywhere, select the **Logout** button at the top right of the Search window, and then close the browser.

## **Setting the Application Language**

By default, ECG Anywhere is displayed in the language specified in your browser settings. However, if you have specified a language in your IntelliSpace ECG user profile, ECG Anywhere will be displayed in that language when you log in using your ISECG credentials. For more information, see the *IntelliSpace ECG Management System Instructions for Use*.

In addition to English, ECG Anywhere is available in the following languages:

- Dutch
- Danish
- Finnish
- French
- German
- Italian
- Norwegian
- Spanish
- Swedish

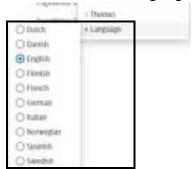
You can change the ECG Anywhere language, if desired.

To display ECG Anywhere in a different language:



- 1. After logging in, select the Settings icon.
- 2. Select Language.

3. Select the desired language.



Your selection will be saved to your ISECG user profile. The application will now be displayed in the selected language, and will be displayed in that language whenever you log in.

#### Note:

Interpretive statements are always displayed in the language in which the ECG was acquired.

## **Selecting the Viewing Theme**

To select a viewing theme:



- 1. After logging in, select the Settings icon.
- 2. Select **Themes**.
- 3. Select the desired theme.



Your selection will be applied each time you log in.

## **Study Review Settings**

In the Settings menu, the following options are used during review of studies:

#### **Statements**

Under this menu, you can configure the following settings:



- Show Statement Codes: enable to show the Statement Codes on the report.
- Show Statement RHS: enable to display Reasons on the printed report only; they will not appear on printed reports of confirmed ECGs.
- **Statement Codes**: a search setting. The statements that include the search input in the code will be retrieved.
- **Statement LHS**: a search setting. The statements that include the search input in the text will be retrieved.

#### Note:

At least one of the above search options (Statement Codes or Statement LHS) must be checked.

Your selections will be applied each time you log in. Settings will be retained until you make a change.

#### Measurements

Under this menu, you can configure:



- Show units of measure: enable to display units of measurement for ECGs.
- **Show Atrial HR**: enable to display the atrial heart rate in addition to the ventricular heart rate for ECGs.

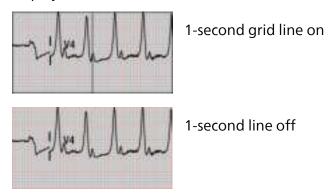
Your selections will be applied each time you log in. Settings will be retained until you make a change.

#### **Waveform View**

Under this menu, you can configure:



- Compact waveform view: when checked, displays ECG reports in the aspect ratio
  in which they were captured. This setting remains in place for all ECGs until you
  change it.
- Highlight 1-second grid view: When selected, ECGs will be displayed with a 1-second line in the ECG grid. When unchecked, the 1-second line will not be displayed.



Your selections will be applied each time you log in. Settings will be retained until you make a change.

## **Superimposed Beats**

This selection allows you to set the default display of Superimposed Beats to full screen (see "Superimposed Representative Beats" on page 40 for more information.



## **Arrange Prior ECGs**

This menu allows you to set the default arrangement when displaying two ECGs

simultaneously. Options are Single, Stacked or Side by Side.



Your selection will be applied each time you log in.

#### Note:

You can change the arrangement temporarily in the Review Screen, see "Displaying Two ECGs Simultaneously" on page 38.

## Edit oldest study first

When selected, this setting controls the sequence of ECG reports when confirming multiple ECGs for a patient. If checked, reports are opened by newest to oldest, but the focus is set on the oldest ECG report.

Your selections will be applied each time you log in.

## Import, Export and Delete Controls

ECG Anywhere allows you to import external studies into the IntelliSpace ECG (ISECG) database, or to export or delete studies from the ISECG database.

## **Importing Studies**

You can view or import PDF reports into ECG Anywhere from external media, such as a USB memory stick. Basically, the limiting factor is the media supported by your client PC.

#### Note:

The file must be under 25 MB in size. You can import a single file at a time.

To import a study:



1. Select the Settings icon.

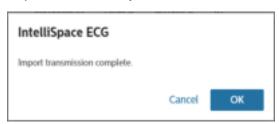
2. Select **Study Import**.



3. Navigate to the file to import, and double-click it. If you have selected a PDF file for import, the import setup window will appear.



- 4. Select the appropriate source from the drop-down list.
- 5. Enter the Patient ID, First Name, Middle Name (optional), and Last Name.
- 6. Adjust the Acquire time/date if necessary.
- Click **OK**.
- 8. If you are importing an XML file, the study will be imported.
- 9. Following import of XML or PDF, a window will appear reporting successful import of the study. Click OK to close the window.



10. After importing a report, retrieve it using the **Search** functions (as described in the following chapters). You can then work with the report as desired.

#### Note:

You cannot import the following file types using this method:

- Quinton Q-Stress PDFs
- ECGs from GE cardiographs

## **Exporting Studies**

If you have the appropriate permissions, ECG Anywhere allows you to export studies from the ISECG database on the Worklist screen. You can export one or more records at one time. If more than one records are exported, they will be compressed in a zip file. From Search, ECG studies are exported in XML or PDF format, Other study types are exported as PDFs.

To export a study:

- 1. Perform a search.
- 2. In the Results list, select the studies you want to export.



- 3. Select the Settings icon.
- 4. Select Study Export > Normal or Teaching.



#### Note:

When you select Teaching, exported reports are stripped of identifying patient information.

5. The export file will be written to your browser's download directory. From there, you can copy it to a USB memory stick or other location.

## **Deleting Studies**

If you have the appropriate permissions, ECG Anywhere allows you to delete studies from the ISECG database on the Worklist screen.

To delete a report:

1. Perform a search.

2. In the Results list, select the study you want to delete. You can select multiple studies, if desired.



- 3. Select the Settings icon.
- 4. Select Study Delete.



You are prompted to confirm the deletion.

5. Click OK.

The report is marked as deleted (the reports are then removed as part of a regularly scheduled automated cleanup task). This setting is configured by the administrator.

You can also delete a study from the review screen.

1. On the header, click the ellipse.



- 2. Select **Delete**. You are prompted to confirm the deletion.
- 3. Click OK.

The report is marked as deleted (the reports are then removed as part of a regularly scheduled automated cleanup task). This setting is configured by the administrator.

If you delete reports as described above, it may be possible to restore the deleted ECGs. See the *IntelliSpace ECG Management System Instruction for Use* for more details.

#### **Caution**

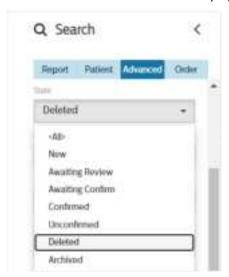
Before deleting a report, check with your system administrator to determine whether deleted reports can be restored.

## **Restoring Studies**

If you have the appropriate permissions, you can possibly restore previously deleted studies. "Possibly" because depending on when in the process you are trying to restore a study that has been marked as Deleted, it may no longer be in the IntelliSpace ECG database.

To restore the previously deleted studies:

Search for the previously deleted studies.
 See "Advanced Search" on page 23, with the State set to Deleted.



2. Select the studies to restore.

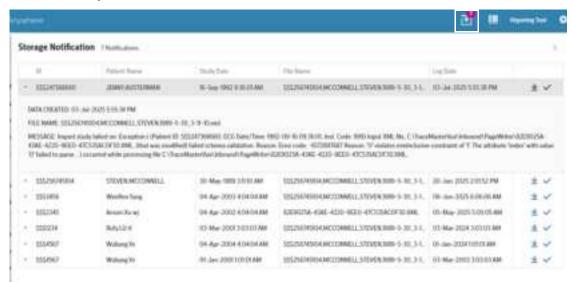


- 3. Select the Settings icon.
- 4. Select Restore.
- 5. When prompted, confirm that you wish to restore the report.

When an ECG identical to an ECG marked as **Deleted** is imported, the ECG in the database is permanently deleted and the incoming ECG is successfully imported with status **New**.

## **Storage Notifications**

If an administrator is logged into ECG Anywhere, a Storage Notification icon will appear on the toolbar. The number indicates the number of reports that could not be successfully transferred to ISECG.



To resolve storage notification errors:

1. Click the study to review the error message.



- 2. Click the Download icon to download the XML file to your default download location.
- 3. Open the XML file in a text editor (e.g., Notepad) and, if necessary, correct the file.
- 4. If the file has been corrected, you will need to re-import the study. See "Importing Studies" on page 7 for instructions. After you have re-imported the study, the notification should be cleared from the list.



5. If the storage notification message has not cleared or there is no issue with the study, click the check mark next to the study to remove the message from the queue.



6. Click the X in the top right corner to close the window.

## **Reporting Tool**

For the authorized users and administrators, reporting tool is provided to help you monitor ECG activity and track billing information. See *IntelliSpace ECG Web-Based Reports Manager Instructions for Use* for details.

## Learning about the User Account

You can view the user account information:

1. After logging in, select the User icon.



2. The user's identification and roles are shown in the window:



#### Note:

The user information are read-only. It is configured by the IntelliSpace ECG administrator.

3. Click anywhere on the screen to dismiss the user information window.

# The Worklist

For the Worklist, ECG Anywhere provides four search types and two Worklist view layouts.

Either before or after performing a search, you can display the search results in one of two layouts. Worklist layouts are:

- List: displays search results in a list which you can then filter and sort.
- Patient: displays search results sorted by patient, grouping each patient's studies under the patient's name.

You can toggle between List and Patient layouts at any time.

#### Search types are:

- Report Search allows you to search for ECG reports based on assignment, acquisition time period, and acquisition location (institution, facility, department).
- Patient Search allows you to search for reports for a specific patient.
- Advanced Search allows you to search for reports based on additional criteria.
- Order Search allows you to review orders that meet any combinations of the specified parameters, such as order number, date range, name, and so forth. You can also select and retrieve the ECGs that are associated with these orders.

You can also define sets of search criteria and save them as Favorites, which are then available every time you access the Worklist.

#### Note:

ECG Anywhere only shows the most recent 500 studies that match the parameters.

The search results statistics bar (4) at the top of the search results displays a count of ECGs in the results based on their status, such as STAT, Abnormal, Normal, Approved, Ambulatory, Stress or Other Studies.

#### Note:

If desired, the Ambulatory, Stress, and Other Studies modalities can be hidden from the search results statistics bar (4). Refer to Configuring IntelliSpace ECG for more information.

## **Worklist Views**

Figure 2-1 ECG Anywhere Report Worklist, List Layout

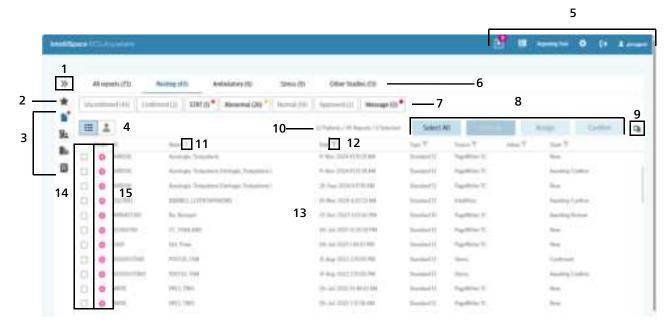


Figure 2-2 ECG Anywhere Report Worklist, Patient Layout

5 8 3 --- 11 12 ø No. of Concession, 13 SHOWING 15 14 T-164-1000-0111111111 Street State State SERVICE SHAPE of the little to the little 1 Open/close search menus 2 Favorites (see page 27) 3 Search types (see page 20)

4	View layout toggles (select List or Patient)		
5	Storage notifications (see page 12)		
	Scan barcodes (see page 28)		
	Access Settings (see page 2)		
	Log out		
	Reporting tool: opens web-based reports manager		
	Logged in user name		
6	Report type bar (see page 28)		
7	Report status bar (see page 28)		
8	Action buttons (see page 28)		
9	Column selector (see page 17)		
10	Total patients and reports selected		
11	Sort icon (see page 19)		
12	Filter icon (see page 18)		
13	Search results		
14	Study selection check boxes (see page 30)		
15	Order reconciliation status (see page 23)		

## **Column Selector**

When in List view, you can select which columns are displayed in the search results list. To select columns:



- ារ្ម 1. Click the column selector icon.
  - 2. To display a column, drag the desired column header to the search results list.



- 3. To change the order of the columns, drag a column header to the location where you want it to be displayed, then release.
- 4. To adjust the width of a column, hover over the right edge until the width adjustment cursor appears. Drag the cursor to the right to widen the column, or to the left to reduce the width.
  - 5. To hide a column, open the column selector and drag the column header from the search results list to the column selector window.

#### **Filter**

Some columns in List view allow you to filter the search results according to the information displayed in the column.

To filter results by column:



- 1. Click the Filter icon next to the column header you want to filter.
- 2. Select the parameter(s) by which you want to filter your search results, then click OK.



#### Note:

- Only columns with the Filter icon will allow you to filter results in this manner. If the icon does not appear, you cannot filter results using that column.
- You can select multiple parameters for filtering from one column, and also filter using multiple columns, so long as they allow filtering.

#### About the Date Filter

When you filter the Date column, you can specify not only the acquisition day (or multiple days), but also an acquisition time range (or multiple ranges).



1. Click the Filter icon for the Date column.

2. Scroll through the available selections and check the ones you want to use as filters, or click **Select All**.



3. When all your selections have been made, click **OK** to filter the search results.

#### Sort

Some columns in List view allow you to sort the search results in ascending or descending order.

To sort results by column, click the Sort icon next to the column header you want to sort. An up arrow will indicate ascending sort order. A down arrow will indicate descending sort order.

#### Note:

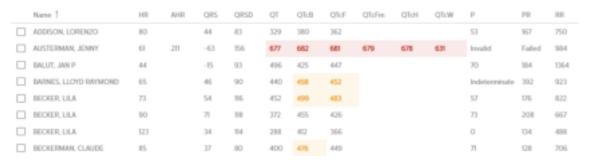
Only columns with the Sort icon will allow you to sort results. If the icon does not appear, you cannot sort results using that column.

## **Out of Range Measurements**

You can activate columns in List or Patient view that will display measurements using the column selector (see page 17).

When these columns are active, each study's values for the fields will be displayed, if available. For QT and QTc values, any value that is considered out of normal range

will be displayed in yellow. Any value that is considered critical will be displayed in red.



#### Note:

Out of range display is available only for QT and QTc values. QTc values include QTcB, QTcF, QTcFm, and QTcH. Other measurements can be displayed, but will not be marked as out of range.

Measurements available for display include:

- HR
- AHR
- QRS
- QRSD
- P
- PR
- RR
- T
- OT
- QTcB (Bazett's)
- QTcF (Fridericia)
- QTcFm (Framingham)
- QTcH (Hodges)

## **Searching for Patients**

## **Report Search**

ECG Anywhere uses the Report search by default.

To search for studies using Report Search:

1. Select the *Report* Search icon.



2. Specify one or more of the desired criteria.

Assigned to	Select the overreader assigned to the desired
J	reports, or select <i>Unassigned</i> to display reports
	that have not yet been assigned to an inbox.
	<b>Note</b> : You can select one or more Inboxes here.
Approved by	Select the overreader who approved the desired reports.
	<b>Note</b> : This selection needs to be configured in the system menu before it becomes available.
State	Select the report state from the drop-down list to search for confirmed or not yet confirmed reports.
	<b>Note</b> : The deleted and archived studies will not be retrieved here.
Location	Select the institution/facility/department associated with the desired reports.
Acquired within the last	Specify the time period in which the desired reports were acquired.
Include other studies	Check the box to include all study types.
	<b>Note</b> : When unchecked, results include Resting ECGs and ECG-AI studies only.
Studies without matching order	Check the box to include the studies that are not associated with any orders.
	<b>Note</b> : Once this box is checked, the Include order status information box is automatically checked.

Include order status information	Check the box to include the order reconciliation status information.
	The order reconciliation status is indicated by a pink X, a yellow ? or a green ✓.

3. Select **Search** to retrieve matching orders.

Matching studies that you have permission to view appear in the Search Results list.

The search results statistics bar at the top of the list shows the total number of reports retrieved, by category.

4. Click **Clear** to remove all the selections.

#### **Patient Search**

To search for studies using Patient Search:

1. Select the *Patient* Search icon.



2. Specify one or more of the desired criteria.

Location	Select the institution/facility/department associated with the desired reports.
MRN (medical record number)	Type the medical record number associated with the desired patient. All ECGs that exactly match the data entered are retrieved.
Last name, First name	Type the patient name. Use a * to retrieve partial matches.

Date of Birth	Click into the field to select the patient's date of birth using the calendar tool, or enter the date of birth manually (format is dd-mmm-yyyy).
	<b>Note</b> : mmm stands for the abbreviation of the month. If the date is entered incorrectly, an icon appears in the date field.
Include other studies	Check the box to include all study types.
	<b>Note:</b> When unchecked, results include Resting ECGs and ECG-AI studies only.
Include previous last names	Check the box to include the patient under a prior last name.
Studies without matching order	Check the box to include the studies that are not associated with any orders.
	<b>Note</b> : Once this box is checked, the Include order status information box is automatically checked.
Include order status information	Check the box to include the order reconciliation status information.
	The order reconciliation status is indicated by a pink X, a yellow ? or a green $\checkmark$ .

3. Select **Search** to retrieve matching orders.

Matching studies that you have permission to view appear in the Search Results list.

The search results statistics bar at the top of the list shows the total number of reports retrieved, by category.

4. Click **Clear** to remove all the selections.

#### **Advanced Search**

To search for studies using Advanced Search:





2. Specify one or more of the desired criteria.

Assigned to	Select the institution/facility associated with the desired reports.
MRN (medical record number)	Type the medical record number associated with the desired patient. All ECGs that exactly match the data entered are retrieved.
Last name, First name	Type the patient name. Use a * to retrieve partial matches.
Date of Birth	Click into the field to select the patient's date of birth using the calendar tool, or enter the date of birth manually (format is dd-mmm-yyyy).  Note: mmm stands for the abbreviation of the month. If the date is inputted incorrectly, an icon appears in the date field.
State	Select the report state from the drop-down list. Report states include New, Awaiting Review, Awaiting Confirm, Confirmed, Unconfirmed, Deleted, or Archived.
Confirmed by	Select the person who confirmed the report from the drop-down list.

Severity	Select the severity statement from the drop-down list. Severity statements include No Severity, Normal, Otherwise Normal, Borderline, Abnormal, or Defective.
Source	Select the type of device on which the study was generated.
Туре	Select the type of study (ECG, Ambulatory, Stress, Defibrillator, Other)
Start Date	Enter a start date for the search range.
End Date	Enter an end date for the search range.
User Fields 1 to 8	Enter some user customized contents.
Include previous last names	Check the box to include the patient under a prior last name.
With feedbacks only	Check the box to exclude studies that do not have feedback entered.
Studies without matching order	Check the box to include the studies that are not associated with any orders.
	<b>Note:</b> Once this box is checked, the Include order status information box is automatically checked.
Include order status information	Check the box to include the order reconciliation status information.
	The order reconciliation status is indicated by a pink X, a yellow ? or a green $\checkmark$ .

3. Select **Search** to retrieve matching orders.

Matching studies that you have permission to view appear in the Search Results list.

The search results statistics bar at the top of the list shows the total number of reports retrieved, by category.

4. Click **Clear** to remove all the selections.

#### **Order Search**

To search for studies using Order Search

1. Select the *Order* Search icon.



2. Specify one or more of the desired criteria.

MRN (medical record number)	Type the medical record number associated with the desired patient. All orders that match the data entered are retrieved.
Account #	Type the account number.
Last name, First name	Type the patient name. Use a * to retrieve partial matches.
Gender	Click into the field to select the patient's gender from the drop-down list. Gender includes All, Male, or Female.
DOB (date of birth)	Click into the field to select the patient's date of birth using the calendar tool, or enter the date of birth manually (format is dd-mmm-yyyy).  Note: mmm stands for the abbreviation of the month. If the date is inputted incorrectly, an icon appears in the date field.
Start Date	Enter a start date for the search range.
End Date	Enter an end date for the search range.
Outbox	Click into the field to select the outbox from the drop-down list.
Status	Select the order status from the drop-down list. Report statuses include Canceled, Completed, or New.

3. Select **Search** to retrieve matching orders.

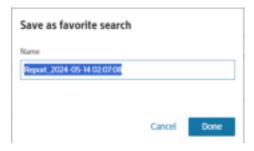
Matching studies that you have permission to view appear in the Search Results list.

The search results statistics bar at the top of the list shows the total number of reports retrieved, by category.

4. Click Clear to remove all the selections.

#### **Creating Favorite Searches**

5. To save your selections as a favorite search, click **Save as Favorite**. Enter a name for the search criteria.



#### Note:

If present as a search selection, "Include Other Studies" needs to be unchecked manually.



- 6. Click **Done** to save the search, or click **Cancel** to close the window without saving. After saving, the specified criteria will be available in **Favorites** when you access the Worklist.
- 7. Once you've saved a favorite, highlight the name and click the ellipse to perform the following:



- Save as default (favorite will be marked by a yellow star)
- Rename the favorite search
- Delete the favorite search

#### Retrieving ECGs by Barcode Scan

If your site supports bar code use, you can use a key wand or bar code scanner to read the bar code printed on an ECG report to retrieve that report.

To retrieve ECGs by barcode



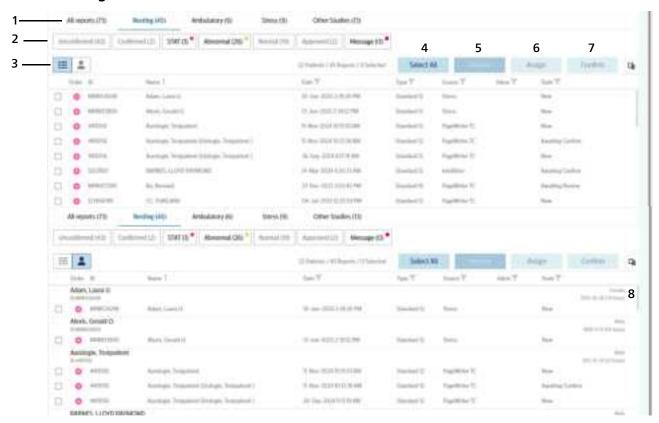
- 1. Select the Barcode icon. The Scan Barcodes box appears. As you scan bar codes, the encoded numbers appear in the read-only field. This is just for display purposes; do not type in this field.
- 2. Scan the barcode using either a key wand or scanner, as follows:
  - If using a key wand, hold the wand as you would a pencil and place the tip of the wand on the white space at the beginning of the bar code.

Press down lightly and move the wand smoothly across the entire bar code.

- If using a scanner, place the bar code no more than 4 inches away from the scanner, and pass the beam smoothly across the code.
- 3. When you are finished, click **Done**. The report retrieved appears in the Search Results list.

## **Using the Worklist**

Figure 2-3 Worklist Views and Functions



1 Report Type filter bar: All reports, Resting, Ambulatory, Stress, Other Studies. 2 Report Status filter bar: Unconfirmed, Confirmed, STAT, Abnormal, Normal, Approved Note: • Available Report Status controls depend upon the Report Type you have selected. Some statuses are not available for all report types (e.g., Ambulatory reports will only show Unconfirmed and Confirmed). If Asynchronous Confirm is enabled, there will be an additional Message filter bar. See "Asynchronous Confirm" on page 68 for more information. View layout toggles **Select All**: checks all report selection boxes (click again to unchecked all) 4 5 **Review**: opens the first selected report/patient in the Review screen (see page 32) Assign: allows you to assign all selected reports to an inbox (see page 31) 6 **Confirm**: allows you to confirm all selected reports simultaneously (see page 31) Patient's gender and age 8 If more than one study is displayed, this is the gender and age of the patient assigned when the most recent study occurred. **Note:** appears only in Patient view. To see these values in List view, you will need to display those columns.

You can filter the Worklist by selecting a specific report type and/or report status. You can also select one or more reports to confirm directly on the Worklist or to review in detail on the Review page.

The following information is provided when available: MRN, patient name, acquisition time, Type, Source, Inbox, State.

## Filtering the Worklist

The Report Type and Report Status bars at the top of the Worklist (see Figure 2-3 on page 28) provide categories by which you can display the retrieved reports. Each category shows the number of reports retrieved that match the filter.

To filter the search results, select the desired filters to show only those reports that match. For example, to show only abnormal resting ECGs, click **Resting**, then click **Abnormal**. Or, to show all confirmed reports, click **All reports**, then click **Confirmed**.

A blue bar (a white bar in dark theme) is displayed under the selected report type setting, while a selected report status control is highlighted.



To display the full list, select **All reports** and deselect any report status filter you have selected.

# **Selecting Studies**

While the Worklist may show multiple entries for a single patient, you can select specific studies to edit or confirm.

To select studies to work with, do one or more of the following:

- To select one or more individual studies associated with a patient, select the check box to the left of the study to process.
- To select all of the studies associated with a patient, switch to the **Patient** view, click the patient's name to select all of the available studies for that patient.
- To select all of the studies in the search results, select the Select All button above the search results in either view. All of the studies are checked, and the Select All button changes to Deselect All.

All regreets (73) Beiling (45) Ambulatory (f) 3hess (9) Other Studies (13) University (64) Continued (V) Memage (0) \* = 40 Falsets / 21 Roserts / 21 Selected Desidect All 4 Barrier 1 GOMES! 09-Apr 2025-456-57 PM PageWriter TC Mic name Greatest D 807020W 01-Nov-2023 150-27 PM Pagewitten TC PIDOG2 07 Nov. 2018 8:00:25 AM ELECT Other Report No speed 27-Apr-2025 9:30 02:4M Halise MINISTALIA 10-Jun-2025-2:39-26-PM Standard C Adams Sanda SI Sinné 15-Jun-2025 2 3H-Q FM MENGTHSON Abert, Gerald G Standard 12 lines. SHOW 2024 RESISTAN Eup/Writer TC Standard 12 Pap/Witter TC 4411056 Aucorogie, Testpatient (Goologie, Testpattent ) S-Rev-2004 1015 1EAM Sheriday III 4411056 Assemge: Testputient (Urologie, Testputient ) 36-5ep-2024 037/19 AM Disabout. PageWriter TC 1097228 BARNES, LLOYE RWYNOND TH May 2008 4 20 33 AM Standard III

Figure 2-4 Selecting All Reports in List View

You can now assign, verify, confirm or review the selected studies, as described in the next section.

## **Assigning Studies from the Worklist**

You can manually assign unconfirmed reports to a specific inbox directly from the Worklist.

To assign studies directly from the Worklist:

- 1. Select the studies to assign.
- 2. Select the Assign button.
- 3. From the **Assign** dialog box, choose the desired inbox from the drop-down list, then click **OK**. The selected studies will be associated with the selected inbox.



If there is no inbox configured, the system prompts a cannot assign message. You should ask your administrator to configure the inboxes in the system menu.

# **Confirming Studies from the Worklist**

You can confirm one or more reports directly in the Worklist.

#### Note:

- The ability to batch confirm ECGs is enabled or disabled site-wide by your IntelliSpace ECG administrator. If you have the required permissions to batch confirm ECGs, but cannot confirm a set of ECGs on the Worklist, it is possible that this feature is disabled at your site. Contact your administrator to enable this feature.
- If re-authentication for confirmation is enabled at your site, you are prompted, once, to re-enter your user credentials to successfully confirm the batch of ECGs.
- PDF studies cannot be batch confirmed.

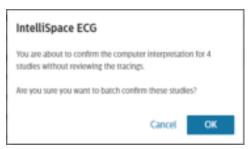
To confirm studies directly from the Worklist:

- 1. Select the studies to confirm.
- 2. Select the **Confirm** button to confirm the selected ECGs as a batch directly from this page, without viewing them first.

#### Note:

This action is appropriate if the ECGs have already been reviewed, but not confirmed.

3. The Confirm prompt will be displayed. Click **OK** to confirm the selected studies.



# **Selecting Studies to Review**

To review one or more reports:

- 1. Select the studies to review.
- 2. Select the **Review** button to load the selected studies onto the Review page.

#### Note:

When reviewing PDF studies on an iPad, only the first page of the report can be viewed.

# Working with ECGs

Patient records are loaded onto the Review page in alphabetical order, with ECGs for each patient organized in date-acquisition order, from left to right, starting with the most recent report on left.

#### Overview

The Review page displays a comprehensive overview of a patient's ECG data, including patient information and demographics, measurements, interpretive statements, and waveforms.

The Review page closely resembles the printed ECG report, with the addition of two toolbars. See Table 3-1 for an explanation of the icons on the toolbars, see Figure 3-1 ECG Anywhere Review Screen for the illustrated Review page.

This section highlights the different ways to work with ECGs and patient records. In addition to navigating your selected reports, it is also important to understand how to view details and make changes to the reports.

Table 3-1 ECG Anywhere ECG Review Toolbars

Icon	Description	lcon	Description
Primary Tooll	oar		
<	Search button (return to Worklist)	Fatt	Enable Edit mode
Assign	Assign the report to an inbox	verify	Verify the report data
Approve	Approve/Unapprove	Confirm	Confirm/Unconfirm ECG

Table 3-1 ECG Anywhere ECG Review Toolbars (Continued)

Icon	Description	lcon	Description
esea esea Arranged	Arrange the ECGs	Settings	Change report layout/leads, filters, and scale/speed of waveforms
-≁ ≡ Analyze	Perform algorithmic analysis	Company	Compare two serial ECGs
Share	Share report	Save	Save changes
<u>alil</u> Report	Display the report information in an extended view  Note: Read-only	Delete	Delete the record
Secondary To	polbar		
*	Collapse or expand the secondary toolbar	ChestScale	Toggle the chest scale between full and half (see page 58)
(25) Speed	Toggle the sweep speed between 25 and 50 (see page 58)	/ <del>\</del> + Simple	Create a simple caliper (see page 55)
^+ Complex	Create a complex caliper (see page 55)	Å+ Rhythm	Create a rhythm caliper (see page 55)
<b>Å</b> Clear	Clear all calipers (see page 55)	388	Click and drag to move the toolbar to a different location

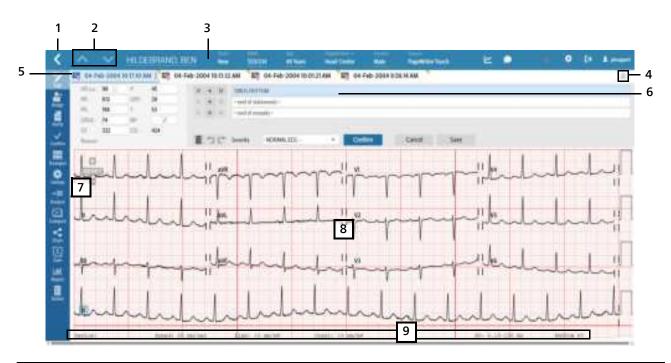
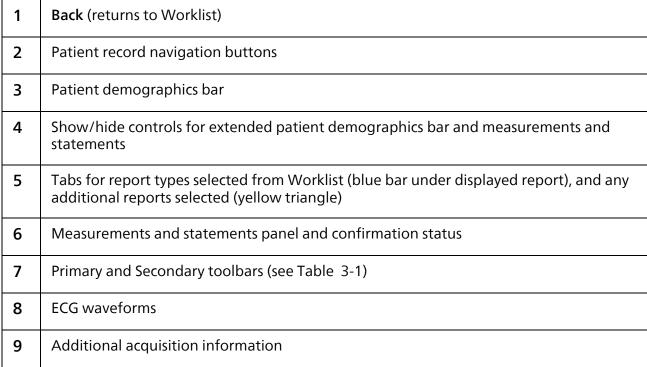


Figure 3-1 ECG Anywhere Review Screen



# **Displaying Patient Reports**

To view different reports for the selected patient, select the ECG header for the report to display. All available reports for the patient selected on the Worklist are listed.



The ECG headers provide access to the available ECGs for the selected patient, and show the date and time the associated ECG was acquired. Note the following:

- Tabs are organized in date-acquisition order, from left to right, starting with the most recent report on left.
- The blue header text and a bar under the header indicates the currently active report.
- A yellow triangle on the top right corner of the header indicates an unconfirmed report.

#### Note:

Only those ECGs specifically selected on the Worklist are editable. The rest of the ECGs loaded for the same patient are for reference purpose.

- Report type is indicated by an icon:
- Resting ECG
- 🥶 ECG-AI
- Stress
- Holter

To view reports for a different patient, select the patient navigation arrows (left side of the Patient Demographics bar) to cycle forward and backward, alphabetically, through the list of patient records.



### **Expanding/Collapsing Patient Demographics**

By default, only the essential patient demographics are displayed in the dark bar at the top of the page. The patient name, MRN, acquisition location, age, gender and state are always displayed, as well as the red STAT box, when appropriate.

The extended demographics bar shows the following information, when available: source, order number, room number, user fields, requesting physician, account number, cardiograph operator and any ICD code(s) assigned to the study.

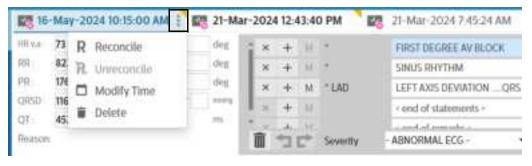
To expand/collapse the extended patient demographics bar, select the gray chevrons at the right edge of the dark bar to toggle the display between basic and extended demographics.



## **Updating the Acquisition Time**

Before a report has been confirmed, you can update the acquisition time.

1. Next to the displayed date/time, click the ellipse.



2. Select **Modify Time**. Update the date and/or time, or click **Today** to use the current date, then click **OK**.



3. The change will be reflected in the report header.



#### Note:

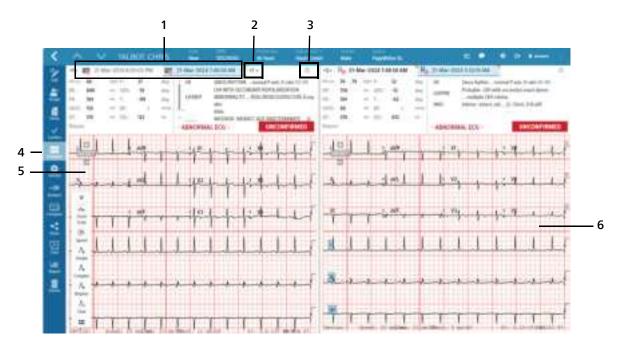
You can change the acquisition date and time only on unconfirmed reports. Once a report has been confirmed, you cannot change the acquisition date and time.

#### **Displaying Two ECGs Simultaneously**

You can view two ECGs for a patient simultaneously. The ECGs can be:

- stacked vertically, with the current reference ECG on top and the previous comparison ECG on the bottom.
- displayed horizontally side-by-side, with the current reference ECG on the left and the previous comparison ECG on the right.
- displayed horizontally, with the originally acquired ECG on the left, and the superimposed representative beats on the right.

Figure 3-2 Displaying two ECGs (side-by-side), illustrated



- 1 ECG headers (reference ECG is marked with blue, comparison ECG is marked with gray)
- **2** ECG selector.

Available when the space is not enough to display all headers. Click to select an ECG from the drop-down list.

3 | Show/hide measurements and statements

4	1	Arranged button
5	5	Reference ECG
6	5	Comparison ECG

To display two ECGs for review:

- 1. Open the patient's ECGs in the Review page.
- 2. Select **Arranged** in the toolbar page 33.
- 3. Select **Stack** or **Side by Side**.

The system splits the screen to show two ECGs:

- The top/left half of the page is the *reference* ECG, with the header text in blue and a blue bar under the header.
- The bottom/right half of the page is the *previous comparison* ECG, with the header text in black and a gray bar under the header.

In the **Stack** mode, the measurements and statements view is, by default, collapsed for the previous *comparison* ECG.

You can now do the following:

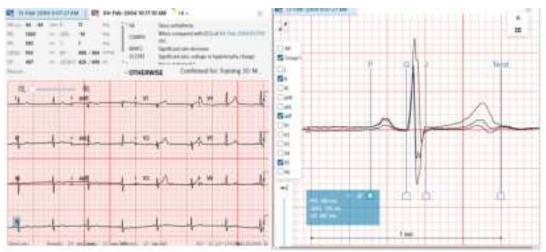
Task	See
Display a superimposed, representative beat from both ECGs	page 40
Drag one ECG over the other to compare morphology	page 44
Switch the reference/comparison ECG	page 45
Change display options for both ECGs	page 50
Show/hide the measurements and statements view of either ECG	page 50
Edit measurements and statements in the reference ECG	page 50
Review any of the waveforms in more detail for either ECG	page 54
Analyze the reference ECG	page 60
Approve or unapprove the reference ECG	page 66
Confirm the reference ECG	page 67
Share the report	page 69
Delete an ECG	page 70

## **Superimposed Representative Beats**

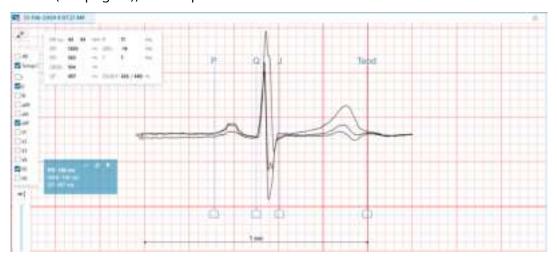
To show the superimposed representative beat view:

- 1. Select the ECG to display.
- 2. Select **Arranged** in the toolbar page 33.
- 3. Select **Superimposed**.

The superimposed representative beats may appear on the right:



If you have configured ECG Anywhere to display a superimposed beat in full screen (see page 6), it will open in that view.



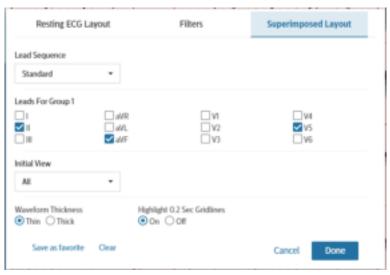
#### Note:

In both full and split screen, the representative beat display is shown in double standard resolution. That is, the vertical resolution is 50 uV/small box; the horizontal resolution is 40 msec/small box.

## **Superimposed View Configuration**

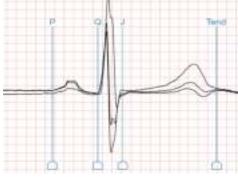
Default settings for the Superimposed Beat view can be configured under **Settings**.

1. Click Settings > Superimposed Layout.



- 2. Select settings as follows:
  - Lead Sequence: select Standard or Cabrera
  - Leads for Group 1: allows you to specify a group of leads that can be displayed as your initial view
  - Initial view: select All or Group 1
  - Waveform thickness: select Thin or Thick
  - Highlight 0.2 Sec Gridlines: select On or Off,





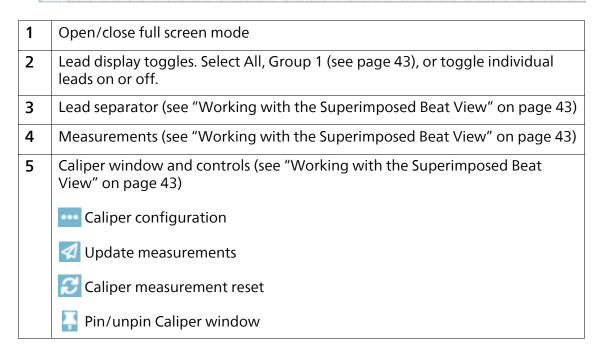
Gridlines on

- Gridlines off
- 3. When finished, you can click **Save as Favorite** to default to these settings each time you enter Superimposed view, or click **Clear** to default to factory settings and start over.
- 4. Click **Done** to apply the settings, or click **Cancel** to exit without saving.

#### **Superimposed View Controls**

The Superimposed Beats view has a number of controls you can use to measure and adjust the waveforms.

Figure 3-3 Superimposed View Controls



6 Caliper adjusters (see "Working with the Superimposed Beat View" on page 43)

## **Configuring the Superimposed Caliper**

To configure the caliper:

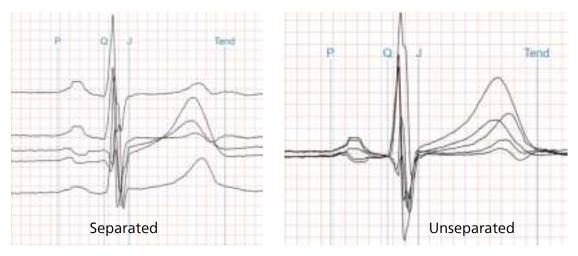
1. Click the ellipse to open the configuration screen.



- 2. Make the desired adjustments. You can:
  - Turn caliper lines on or off under **Show**
  - Turn measurements and unit display on or off under **Measure**
- 3. To save your selections as your defaults, click **Save as Default**.
- 4. Click **OK** to exit and apply your changes, or click **Cancel** to exit without saving.
- 5. You can revert your changes at any time by clicking **Restore factory defaults**.

# Working with the Superimposed Beat View

You can separate the leads in the Superimposed view by using the lead separator (see #3 in Figure 3-3). Move the separator toward the bottom of the screen to widen the separation, or move it up to reduce the separation.



To move the caliper window:

- 1. Click the pin icon so that it appears horizontal ( ).
- 2. Click and drag the window to the desired location on the screen.



3. To retain the new position, click the pin icon again so that it appears vertical ( ).



To adjust a caliper position:

1. Click on the tab at the base of the caliper line you want to move (see #6 in Figure 3-3).



- 2. Once the tab is highlighted, use the mouse or the left/right arrows on the keyboard to move the line.
- 3. As the caliper line moves left or right, the relevant measurements will update in the caliper window (see #5 in Figure 3-3).
- 4. To update the report measurements, click the Update icon ( measurement will overwrite the original analysis.



#### Note:

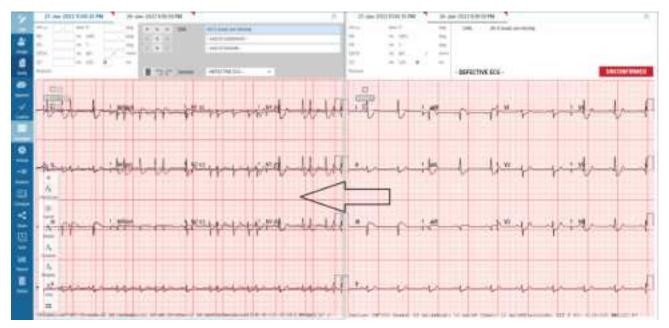
You can only update measurements on unconfirmed reports.

5. If you want to revert to the original measurements, click the Undo icon ( ). The original measurements will be restored, and the caliper(s) will return to the original position.

## **Comparing Morphology**

To compare the morphology of two ECGs:

- 1. Select the ECG to display.
- 2. Select **Arranged** in the toolbar page 33.
- 3. Select Stack or Side by Side.
- 4. Click and drag the comparison ECG (right side or bottom, depending on your arrangement) over the review ECG (left side or to), aligning the ECG waveforms.



5. When you are done, release the mouse button.

## Switching the Reference/Comparison ECG

You can change the reference ECG and the comparison ECG.

To change the reference ECG (top/left), in the top/left half of the page, select the ECG header of the ECG to use as the primary reference ECG.

The selected report is loaded into the top/left half of the page as the reference ECG, with the ECG header in blue text, and a blue bar under the header.

In addition, the next ECG in the list is automatically loaded as the comparison ECG into the bottom/right half of the page. The page shows a gray bar under the associated ECG header.

To change the previous comparison ECG (bottom/right), in the bottom half of the page, select the ECG header of the ECG to use as the previous comparison ECG.

The page shows a gray bar under the associated ECG header.

## **Setting Report Display Options**

The waveform display is configurable for each ECG using the Filter and Layout tools.

• Change format and/or lead configuration

- Change speed and/or scale
- Specify filters

#### Note:

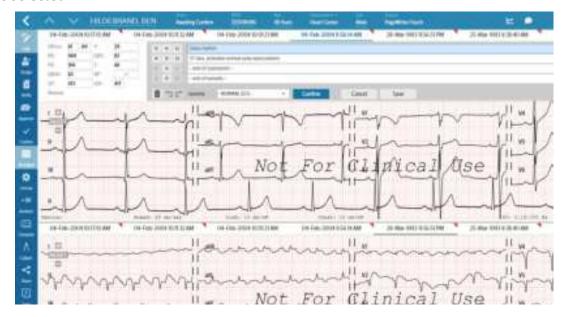
These settings apply only to the display of the ECG within the application. ECG reports are always printed using the settings configured on the acquiring device.

Detailed information about the clinical report components and formats is provided in the *Philips Algorithm Physician Guides*.

#### Selecting the ECG to Work with

If working with two ECGs on the display, touch/click anywhere in the waveform area to select the ECG report to work with.

A thin blue line appears around the report. In this example, the reference ECG on top is selected.



# **Trending**

If a patient has multiple studies, you can display trending for that patient. To display trending for the patient,

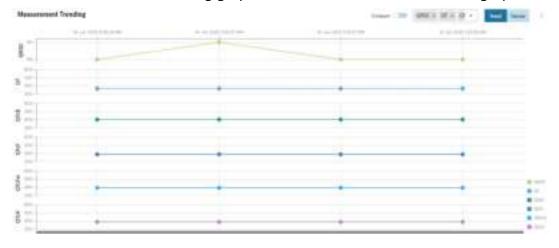


1. Click the Trending icon at the top of the screen.

2. Select the values to be trended.



3. Trending for all of the patient's reports will be displayed. ECG report dates and times included in the trending graphs are listed at the bottom of each graph.



#### Note:

Baseline values will be displayed in the trend chart view by a dotted line representing the baseline value for each measurement. However, in cases where a baseline value falls outside the Y-axis range of the chart, the baseline setting will not be included in the chart display.

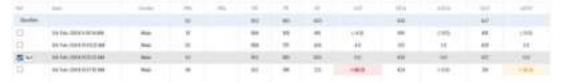


4. Hovering over a dot on the graph will display specific information for that point.

- 5. Clicking the corresponding dot on any graph will open the ECG report in side by side mode so that it can be compared to the ECG you are reviewing.
- 6. You can also view the trending in **Tabular** format.



7. In the tabular view, you can select one of the displayed reports to be your baseline reference, to which the others are compared. When you select a baseline, the delta for all QTc values will also be displayed. Delta will change depending on which line(s) you select as reference.



Selecting multiple references will result in average values being displayed for the baseline.

Values that exceed the configured warning limit are displayed in yellow; values which exceed the critical limit are displayed in red.



8. Selecting the Export icon on the top right of the chart will export all displayed values to a CSV file for further review or analysis

Column widths can be set in the same way as columns in the Worklist (see page 17)

9. Click **Close** to return to the ECG display.

You can set a baseline set of values by selecting one or more rows to be the default baseline for a specific patient. Once a baseline is set for the patient, it will be referenced whenever that patient's studies are reviewed, until a new baseline is selected.

1. In tabular view, select Set Baseline.'



2. Select one or more rows to be used as the patient's default baseline, then click **Save**.



## **Quality Comments**

You can add comments about the quality of an ECG to an ECG study, related to one of the following subjects:

- Algorithm results
- ECG quality
- MD Message
- !!Attention!!
- Other

#### To add a comment:



- 1. Click the Comment icon at the top of the screen.
- 2. The Case Number field is created automatically and is presented for your reference.



- 3. Select a subject from the Related To drop-down list.
- 4. Enter your comments in the Description field.
- 5. Click **OK** to submit.

The comment becomes part of a quality report that can be generated by the department management.

# **Working with Measurements and Statements**

By default, the report measurements and statements are displayed. This section of the report shows global measurements, statements and codes, severity, and reason for acquiring ECG, as well as the confirmation status.

To show/hide the measurements and statements bar, select the gray chevrons at the right edge of the light gray bar to toggle the display between showing and hiding measurements and statements.



## **Editing Demographics, Measurements and Statements**

You can edit patient demographics fields, measurement values, change the severity, and also add, edit, or remove statements.

Figure 3-4 Editing Measurements/Statements

1 2 3 4 5 6

Assume the second of the seco

1	Editable measurement fields
2	Delete statement (X)
3	Add statement above row (+)
4	Start dictation ( <b>D</b> ), either by voice or text entry
5	Add modifier ( <b>M</b> )
6	Statements
7	Delete, Undo/Redo
8	Severity

To edit measurements and statements:

- 1. Ensure the measurements and statements are displayed, click the control at the right end of the bar.
- 2. Select **Edit** in the toolbar page 33.

  The measurements are now shown in editable fields and editing tools are displayed in the statement block.



#### 3. Edit fields as follows:

Edit a measurement  Click/touch the field and change When a keyword is entered in the statements whose code and on the setting in Statement Sea drop-down list, with the keywoon Note: You can also update meaning the statement of	the statement field, all d/or LHS (depending erch) will appear in the ord in red text.  asurements using the ic Caliper" on page 55.
caliper. See "Using the Electroni	of the statement to
Delete a statement Select the X button to the left of delete.	
Add a statement  Select the + button to add a statement typing, or select from one of the	
<ul> <li>List: displays all preconfigur statements;</li> </ul>	red diagnostic
<ul> <li>Institution: displays all diag configured for your institution</li> </ul>	
Recent: displays your 20 mc diagnostic statements.	ost recently used
As you type a code or text, the solicy displays matching entries. Select Note: ECG Anywhere attempts the preconfigured statement list called "fuzzy search." You can doby holding CTRL+ALT+SHIFT+F to search function. This will allow you statements directly without have To reactivate the list function, here	ct a match at any time.  by default to match  its using a function  leactivate fuzzy search  to deactivate the fuzzy  you to type or dictate  ring to select from a list.
Start dictation  Select the <b>D</b> button to insert a l dictation or to type an entry.  Note: Modifiers cannot be addestatements.	
Add a modifier Select the <b>M</b> button to add a m statement.	odifier to the
Change the severity Select the desired entry from the list.	ne Severity drop-down
Undo an action Select [13] (Undo) to undo the la modifier action.	ast delete/add/
Redo an action Select (Redo) to cancel the and reinstate the change.	last Undo operation
Delete all statements Select 🔟 (Delete all) to delete	all the statements.

View trending	Select .
Add a study comment	Select

- 4. Select the **Save** button under the statement area to save the changes to the statement, or select **Cancel** to ignore the changes.
- 5. To edit patient demographics, click on the demographics bar to expand it, or click the control at the right end of the bar.
- 6. Select the **Edit** button, fields that can be edited are underscored.



7. Click on one of the editable fields and enter new data, or change existing data. You can collapse the bar when finished by clicking on it, or clicking the control at the right end of the bar.



- 8. Select the **Save** button in the toolbar to save the changes to the report.
- 9. Exit editing mode by selecting the **Edit** button in the toolbar again.

## **Using Speech Recognition**

Beginning in version B.02.06, you can use Windows Speech Recognition to dictate statements into your ECG report.

#### Note:

- Speech Recognition is available with Windows 10 and higher.
- Refer to Configuring ISECG to configure your computer for Speech Recognition.

To dictate a statement:

1. Ensure that Speech Recognition is enabled and listening



- 2. Click + to add a statement and begin dictating.
- 3. When finished, say "Insert." Your statement will appear in the window.

4. Continue to add statements as desired.

Continue to add statements as desired. After you have completed all statements, click **Save** to record the changes.

#### Note:

ECG Anywhere attempts by default to match the preconfigured statement lists using a function called "fuzzy search." You can deactivate fuzzy search by holding CTRL+ALT+SHIFT+F to deactivate the fuzzy search function. This will allow you to type or dictate statements directly without having to select from a list. To reactivate the list function, hold CTRL+ALT+F.

## **Reviewing Waveform Details**

You can zoom into the display to view any portion of the waveform, or the caliper, in detail. The display changes magnification in preset increments, up to three levels of zoom after which it returns to the full waveform view.

To zoom into/out of the waveforms:

- 1. Select the waveform to work with if needed page 38.
- 2. Move the cursor to the place that you want to magnify, rotate the mouse wheel forward to enlarge the waveform to the next level. There are three levels. Rotate the wheel backward to reduce the waveform.
  - When the waveform is enlarged, you can click and drag the waveform to the portion where you want to view.
- 3. When reviewing the waveforms, use the zoom tool in the top left corner of the ECG waveform area. Touch (zoom in) to enlarge the waveform to the next level, or touch the (zoom out) to reduce the waveform to the next level. To reset the waveform to the original view, move the slider all the way to the left.



4. When in **Stacked** or **Side by Side** display (see page 38), an additional icon will appear with the zoom controls.



You can zoom each report independently, or you can force both reports to zoom equally by clicking the lock icon so that it is closed.

When the zoom lock is on (lock is closed), as you zoom in or out on one report, the same setting is applied to the other report simultaneously. To return to independent zooming, click the icon again (lock is open).





5. You can easily change a rhythm lead by clicking on the label and selecting a different lead from the pop-up list.



# **Using the Electronic Caliper**

There are three types of caliper: Single, Complex and Rhythm.

#### Note:

- To ensure accuracy, all measurements of the online waveforms must be made using the electronic calipers supplied within ECG Anywhere.
- When displaying stacked or side by side ECGs, the caliper will appear on both ECGs simultaneously. Each caliper can then be adjusted separately.
- Calipers can be applied when zoomed in on a waveform.

The simple caliper can be applied to waveform data in order to make a predefined set of measurements. To create a simple caliper:



1. Click **Simple**. The caliper will appear at the top left corner of the ECG.



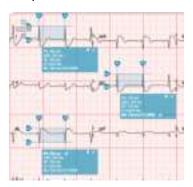
- 2. Click into the shaded area on the waveform and drag the caliper to the desired lead.
- 3. Adjust the height and width of the caliper by clicking and dragging the borders of the shaded area. The measurements will change as you adjust the caliper.



- 4. To update a measurement reported on the ECG, click the **Send** icon next to the measurement. The new measurement will automatically update the editable measurement field above the waveform.
- 5. You can also use the following hot keys to send measurements:
  - r: sends the RR interval
  - **q**: sends the QT interval
  - s: sends the QRS interval
  - **p**: sends the PR interval



- 6. To move the measurement box separately from the caliper, click the pushpin. You can then drag the box to a different location on the screen. Clicking the pushpin again will restore the box to its default position.
- 7. To add additional calipers, click **Simple** again. Move and adjust each additional caliper as desired.



8. To delete a particular caliper, click the X in the measurement box.



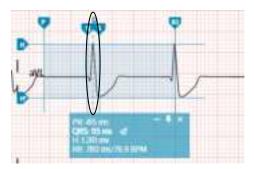
9. To delete all calipers, click **Clear**.



A complex caliper can be applied to waveform data in order to make a predefined set of measurements, but you can determine which measurements are displayed.



1. Click Complex. The caliper will appear at the top left corner of the ECG.



- 2. Click into the shaded area on the waveform and drag the caliper to the desired lead. Align the R line (dotted vertical line circled above) with the R wave of a beat on the lead you selected.
- 3. Adjust the height and width of the caliper by clicking and dragging the borders of the shaded area. The measurements will change as you adjust the caliper.
- 4. To select the measurements to be displayed by the caliper, click the ellipse (...). The caliper configuration window will open, allowing you to customize the caliper display.



5. To save your settings as the defaults, click **Save as default**. To restore the factory settings, click **Restore factory defaults**.



6. To update a measurement reported on the ECG, click the **Send** icon next to the measurement. The new measurement will automatically update the editable measurement field above the waveform.



- 7. To move the measurement box separately from the caliper, click the pushpin. You can then drag the box to a different location on the screen. Clicking the pushpin again will restore the box to its default position.
- 8. To add additional calipers, click **Complex** again. Move and adjust each additional caliper as desired.
- 9. To delete a particular caliper, click the X in the measurement box.



10. To delete all calipers, click Clear.

The rhythm caliper is designed to check if the beat-to-beat measurement is consistent across the whole strip.

To display the rhythm caliper:



1. Click **Rhythm**. The caliper will appear at the top left corner of the ECG.



- 2. Click into the shaded area on the waveform and drag the caliper to the first T-wave of the ECG waveform. The following lines should match with all other T waves.
- 3. By default, there are five lines in a rhythm caliper. You can include the entire ECG by clicking the 📮 button or return to the default by clicking the 🔤 button.
- 4. To delete the rhythym caliper, click the X in the measurement box, or click **Clear**.

#### Note:

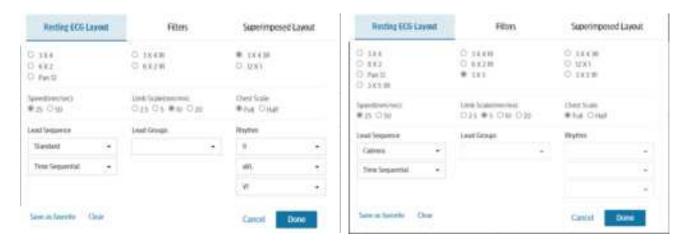
Only one rhythm caliper can be displayed at a time.

## Setting Waveform Layout, Filter, Scale, and Speed Options

For details about leads, filters, scale, and speed settings, refer to the *Philips Algorithm Physician Guides*.

To set the waveform layout, lead configurations, scale, and or speed options:

Select the ECG to change and select **Settings** in the toolbar page 33.
 The Layout dialog box appears. Depending on whether the ECG is a 12-lead, 15-lead or 16-lead, several different options may be available.



**12-Lead Layout Options** 

15/16-Lead Layout Options

2. Choose the desired options and select **Done**.

Lead configuration	The available lead configurations depend on the ECG being displayed.		
Lead sequence	Options are Standard or Cabrera, Time sequential or simultaneous.		
Lead groups	Options are:		
	• II, aVF, V5	•	aVF, V2, V5
	• 1, 11, 111	•	V3R, V4R, V7 (15- or 16-lead)
	aVR, aVL, aVF	•	V4R, V3R, V1 (15- or 16-lead)
	• V1, V2, V3	•	V6, V7, V8 (16-lead only)
	• V4, V5, V6		
Rhythm lead	If using a layout with one or each one.	more rhyt	hm strips, choose the lead for
Speed (mm/sec)	Options are 25, 50		
Limb Scale (mm/mv)	Options are 2.5, 5, 10, 20		
Chest Scale	Options are Full, Half		

The changes are applied immediately.

3. If you want to save your settings as your default, click **Save as Favorite**. These settings will then be applied every time you log in.

To change the filter settings:



1. Select **Settings** in the toolbar page 33, then select the Filter tab. The Filter dialog box appears.

2. Select the desired filter settings, and select **Done**. The changes are applied immediately.

# Analyzing ECGs using the DXL Algorithm

IntelliSpace ECG supports performing analysis of an ECG directly on the system using the latest Philips DXL algorithm. If enabled on the system, users with the appropriate permissions can select the **Analyze** option. The system analyzes the ECG and displays the results. You can review the results, and if they are acceptable, save them with the ECG.

This is an option that is controlled by the ISECG administrator, together with parameters that determine how the analysis is performed. If you have questions about the options set at your facility, contact your administrator.

For details about the algorithm, see the *Philips DXL Algorithm Physician's Guide*, provided through the **Help** menu.

### Note:

- ECGs to be analyzed must have 10 seconds of 500 Hz waveform data.
- If the Analyze button is not available, you do not have the appropriate permissions to use the function or the ECG does not have 10 seconds of 500Hz waveform data. Contact your ISECG administrator.
- You cannot undo an analysis once the results are saved with the ECG to the database.
- The interpreted ECG with measurements and interpretive statements is offered to the clinician on an advisory basis only. It is to be used in conjunction with the clinician's knowledge of the patient, the results of the physical examination, the ECG tracings, and other clinical findings. A qualified physician is asked to over read and validate (or change) the computer generated EGG interpretation.

To perform an analysis on an ECG:

- 1. Select and display the ECG to analyze.
- 2. Select **Analyze**. IntelliSpace ECG analyzes the ECG using the DXL Algorithm and displays the results in the Interpretive Statements window.
- 3. You can make additional edits to the ECG.
- 4. To save the changes and incorporate the statements into the ECG record, select **Save**. If you do not select **Save**, the interpretation is not saved with the ECG.

# **Analyzing ECGs using AI Algorithms**

### **Caution**

ONLY use AI algorithms in the intended population. Incorrect use can lead to higher rates of false positive or false negative analysis.

To analyze an ECG using an AI algorithm:

- 1. Locate the study and open it in ECG Anywhere.
- 2. An Al analysis study will have a different identifying icon than a resting ECG report.



3. The AI algorithm will analyze the ECG waveforms and present the findings.



### Note:

Results of the analysis cannot be edited. Only patient demographics can be edited.

4. You can then use the available controls to work with the ECG-AI report:

	Assign the report to an inhor
Assign	Assign the report to an inbox
Verify	Verify the report data
Confirm	Confirm/Unconfirm ECG-AI report
eses eses Arranged	Review the ECG-AI report with another report: Stacked or Side by Side
Settings	Change report layout/leads, filters, and scale/speed of waveforms
A	Note: Currently not in use.
Serve	Save patient demographics changes
[ilil] Report	Display the ECG-AI report in PDF form. Printing is also possible from this display.
Delete	Delete the record

# **Comparing ECGs**

You can perform a comparison between the current ECG and the most recent ECG that meets the configured criteria. IntelliSpace ECG can also be configured to

automatically perform serial comparison when a certain action takes place, for example, specific ECGs enter the system. For details, contact your system administrator.

### **Caution**

Please review the *Serial Comparison Algorithm Reference Guide*, included on the User Documentation DVD, to ensure that results are interpreted correctly.

To perform a manual serial comparison between two ECGs:

- Search for and display the ECG to compare for a specific patient.
   This is the ECG that IntelliSpace ECG will compare to the most recent previous ECG (that meets the comparison criteria) for this patient.
- 2. Select Compare.

IntelliSpace ECG searches for the most recent previous ECG that matches the configured criteria.

If the ECG was successfully serially compared and the serial comparison results were saved, the button label changes to Uncompare. You can undo the comparison, if necessary, as described in the next section.

3. To save the serial comparison results, select **Save**.

There may be occasions when you wish to recompare an ECG that has already been serially compared. For example, the ECG to which it was compared by have been invalid, or not the ECG you wanted to compare to, or a more recent, more representative ECG was acquired that you wish to compare to.

The **Compare** button in the Action bar changes to **Uncompare** when an ECG is selected that was serially compared.

### Note:

If the **Uncompare** button is not available, you do not have the necessary user permissions required to undo a serial comparison.

When undoing a comparison, the system removes any serial comparison statements and serial comparison quality statements, restores the ECG to the original severity, and removes any edits that were made to the statements after serial comparison was performed. That is, the ECG is returned to the state it was in immediately prior to comparison. After saving the changes, you can perform a new serial comparison on the ECG, if desired.

To undo a serial comparison:

- 1. Display the ECG to uncompare.
- 2. Select **Uncompare** in the toolbar page 33.

The application reverts to the interpretive statements that were present prior to the serial comparison, and makes the ECG available for recomparison.

3. To save the changes to the ECG to the database, select **Save**.

The **Compare** button should now be enabled in the toolbar. You can perform another serial comparison on the ECG, if desired.

# **Extended Reports**

The **Report** button allows you to display, print and export several extended ECG report formats:

Standard 12 Lead	Displays the same layout as the selected layout in the Review screen.	
H1-H2	A three-page report. The first two pages display a 6x2 format at 50 mm/s format, and the third page displays a 6x2 lead format at 50 mm/s on the left and 6 rhythm leads on the right at 12.5 mm/s	
Superimposed Beats	Displays a representative beat for each lead, organized in a 2x6 format, as well as a superimposed representative beats view.  Note: The superimposed representative beat view is always shown in 50 mm/sec.	
Representative Beats	Displays the representative beat from each of the 12 leads, organized in a 3 x 4 format.	
Morphology Analysis	A complete listing of the measurements made to derive an ECG interpretation	
Rhythm Analysis	A complete listing of the measurements made to derive a rhythm interpretation	

For more detailed information on these report formats, see the *IntelliSpace ECG Management System Instructions for Use*.

To display an extended report:

- 1. Click Report.
- 2. Select the desired format from the list.
- 3. When the report is displayed, click the **Print** icon () in the upper right corner to print, or click the **Download** icon () to save the report as a PDF to your browser's default download folder.

# **Assigning ECGs**

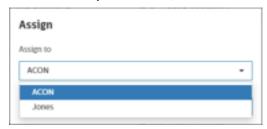
While viewing an unconfirmed ECG, you can assign it to an inbox from the Review screen.

### Note:

You cannot assign an approved ECG.

To assign an ECG:

- 1. Select the **Assign** button. The **Assign** dialog opens.
- 2. From the drop-down list, select the desired inbox and click **OK**.



3. To remove the ECG from an inbox, select **Unassign**, then click **OK**.



# **Verifying ECGs**

You can verify an ECG from the Review page.

To verify an ECG:

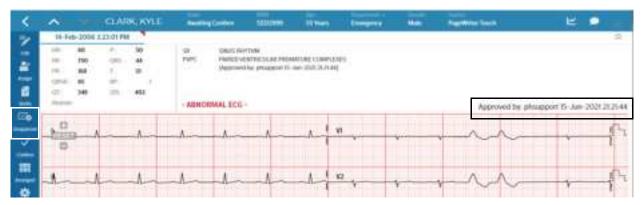
- 1. On the Review page, verify the demographic information, making any necessary changes.
- 2. Select **Save** to save the changes.
- 3. Select **Verify** to mark the report as verified and update the status to **Awaiting Confirmation**.

# **Approving and Unapproving ECGs**

You can approve an ECG from the Review page.

To approve an ECG:

- 1. On the Review page, select **Approve**.
- 2. After a short delay, the Approved by status will appear, followed by the user name of the approver, and the date and time on which the ECG report was approved. The **Approve** button will change to **Unapprove**.



To unapprove an approved ECG:

- 1. Select **Unapprove**.
- 2. You will be prompted to enter a reason. Enter your comments and select **OK**, or select **Cancel** to abort the operation.



3. The Approved status will revert to the original status, and the **Unapprove** button will revert to **Approve**.



4. Comments may be reviewed by selecting .....

### Note:

If the **Unapprove** button is not available, you do not have the necessary user permissions required to undo an approval.

# Confirming an ECG on the Review Page

You can confirm an ECG directly from the Review page.

To confirm an ECG on the Review page:

- 1. Open the ECG to the Review page.
- Select Confirm in the toolbar page 33 or under the statement area.
   Depending on the configuration at your site, you may be prompted to enter your password.
- 3. If prompted, type your password and select **OK**.
- 4. After a short delay, the Confirmed by status will appear, followed by the user name of the confirmer, and the date and time on which the ECG report was confirmed. The **Confirm** button will change to **Unconfirm**.

### To unconfirm an ECG:

- 1. Open the ECG to the Review page.
- 2. Select **Unconfirm**.If prompted, type your password and select **OK**.
- 3. After a short delay, the status will revert to Unconfirmed. The **Unconfirm** button will change to **Confirm**.

### Note:

If the **Unconfirm** button is not available, you do not have the necessary user permissions required to undo a confirmation.

# **Asynchronous Confirm**

If the **Asynchronous Confirm** option is checked in the system configuration menu, you can click the **Confirm** button and then continue with other operations. The system confirms the ECGs in the background. Once the confirmation procedure is complete, the ECG header background lights up in green if it has been successfully confirmed. The background lights up in red if confirmation failed.



At the same time, a **Message** filter bar appears on the **Worklist Screen**, listing all the ECGs that are failed to confirm.



You can review, assign or confirm them again.

Move the cursor over the purple escalation mark on the right of the ECG to read the message. You can click on the escalation mark to clear it. In the prompted dialog box, select **Accept and clean**. This ECG will be cleared from this filter bar.



# **Sharing an ECG Report**

### Note:

The ability to share (email, print, export and/or duplicate) a report is configured by your system administrator.

### To email a report:

1. Select **Share** in the toolbar page 33.

The Share dialog box appears.

2. Select the Email button.

The system displays an email message, with prefilled text.

- 3. Specify the recipient(s) and add or change text.
- 4. Select **Attach Report** to attach the ECG report to the message.
- 5. Select **Send** to send the email.

The report is sent.

To print a report:

1. Select **Share** in the toolbar page 33.

The Share dialog box appears.

2. Select the **Print** button.

The Select Report dialog box appears.

- 3. Select a report mode:
  - Normal: the report includes all data, including patient name and ID
  - Teaching: the report strips out the patient name and ID
- 4. Select a report type, then click **OK**.

The system displays a preview of the report on a browser Printer page with your system's settings.

- 5. Specify the printer and settings, as needed.
- 6. Select **Print**.

The report is printed.

To export a report:

1. Select **Share** in the toolbar page 33.

The Share dialog box appears.

2. Select the **Export > Normal** or **Teaching** mode **> XML** or **PDF** format.

3. The export file will be written to your browser's download directory. From there, you can copy it to a USB memory stick or other location.

To duplicate a report for teaching:

- Select Share in the toolbar page 33.
   The Share dialog box appears.
- 2. Select the **Duplicate** > **With Statements** or **Without Statements**.
- 3. The report is duplicated in the teaching location. This report has been stripped out the patient name and ID for teaching purpose.

# **Deleting an ECG**

To delete an ECG, select **Delete** in the toolbar. Click **OK** to confirm deleting the ECG, or click **Cancel** to exit.

# **Conducting a New Search**

To return to the Worklist, select **Search** in the toolbar. The Worklist is displayed, with the default search criteria already loaded, as well as any studies that match the default criteria.

# Working with Stress Reports

ECG Anywhere allows you to view and edit Philips and third party Stress reports in your browser. The screens and tools are similar to those provided with the Philips ST80i Stress Test System. You can refer to the ST80i Stress Test System Instructions for Use for detailed information.

# **Searching for Stress Studies**

To search for Stress studies:

- 1. In *Report* or *Patient* search, be sure to click **Include other studies**, or, to narrow your search results to include only stress reports, select the *Advanced Search* tab.
- 2. From the **Type** drop-down list, select **Stress**.
- 3. Set other parameters as desired.
- 4. Select **Search** to retrieve matching studies.

Matching Stress reports that you have permission to view appear in the Search Results list. You can select a single or multiple reports, just as you would with ECGs.

When you open a Stress report, you have a subset of the Edit tools that appear when you open an ECG. These controls perform the same functions as with ECGs (see Chapter 3, "Working with ECGs").

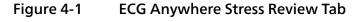




Table 4-1 ECG Anywhere Stress Review Toolbar

Icon	Description	lcon	Description
<	Back (return to Worklist)	10 8	Print the report data
Fat	Enable Edit mode	Verify	Verify the report data
Save	Save changes to the report	Confirm	Confirm/Unconfirm
Assign	Assign the report to an inbox	Delete	Delete the record
Export	Export the report in XML format to a location you specify		

### Note:

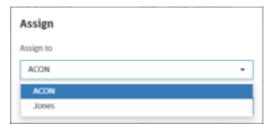
You cannot edit, assign or verify confirmed Stress reports. Confirmed reports are available for viewing only. You must be able to unconfirm a confirmed report in order to edit.

# **Assigning a Stress Report**

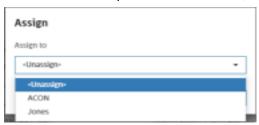
While viewing an unconfirmed Stress report, you can assign it to an inbox from the Review screen.

To assign a Stress report:

- 1. Click the **Assign** button. The **Assign** dialog opens.
- 2. From the drop-down list, select the desired inbox and click **OK**.



3. To remove the report from an inbox, select **Unassign**, then click **OK**.



# **Verifying a Stress Report**

You can verify a Stress report from the Review page.

To verify a Stress report:

- 1. On the Edit screen (see "Editing a Philips Stress Report" on page 73), verify the demographic information, making any necessary changes.
- 2. Select **Save** to save the changes.
- 3. Close the Edit screen to return to the Review page.
- 4. Select **Verify** to mark the report as verified and update the status to **Awaiting Confirmation**.

# **Editing a Philips Stress Report**

### Caution

You must save all changes to the Stress report in the Review screen in order to update the information in ECG Anywhere and ISECG. If you do not click *Save* before closing the Review screen, the information will not be updated, and your changes will be lost.

To edit the Stress report, click **Edit**. The report will open in a second browser tab displaying the **Summary** tab.

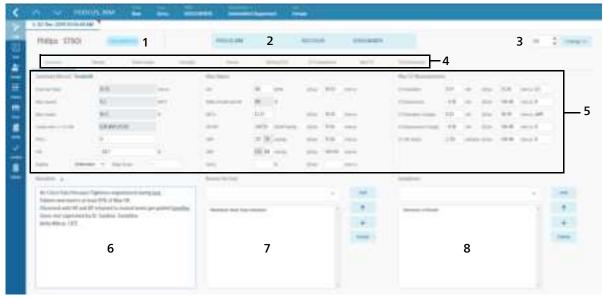


Figure 4-2 ECG Anywhere Stress Edit Tab

1	Report status (confirmed/unconfirmed)
2	Patient ID information
3	J+ value editor
4	Navigation tabs
5	Summary and measurement information
6	Narrative section
7	Reason for End section and controls
8	Symptoms section and controls

You can browse through the various sections of the report and review the ECG waveforms captured during the patient's stress test using the Navigation tabs (4).

To change the J+ value, use the tool provided at the top of the edit window (3).

### Note:

If you have selected multiple stress studies for review, you must close the Review screen of the active study in order to review each additional study you selected.

# **Patient Demographics**

To edit patient demographics for the study, click the Patient ID information bar (2). The Patient Demographics window will open.



On the Patient Demographics window, you can edit the following:

- Patient Information;
- History;
- Medications/Dosages;
- Physician/Order;
- DICOM fields (for review only, cannot be edited);
- Custom fields.

Navigate through the tabs and make necessary changes or additions. Some fields are text fields, some have radio buttons from which to make your selections, and some are note fields, where you simply type the desired information.

To add an entry in a text field:

- 1. Click into the field (e.g., Indications).
- 2. Type the information you want to enter.
- 3. Click **Add**. The entry will appear below the text field.



To delete an entry, click the **X** next to the text you want to delete.

To add an entry for a radio button field, click the radio button next to the appropriate response.



To add an entry in a note field, click into the field and type your information, or you can dictate a note using Speech Recognition.



### **Summary**

The **Summary** tab includes:

- Study information including test protocol and exercise time;
- Clinical information including, for example, the reason for the test and the
  reason to end the test, the number of PVCs, Risk scores, free-text entry of
  narrative summary notes, and Max values for BP, ST, and METs HR.You can
  override the clinical values presented. When you change the values, they appear
  dark red and italic.

On the **Summary** tab, you can include your comments about the test, along with the Reason for End and Symptoms. All values included are based on data captured during each stage of the exercise stress test.

As you prepare the final report on the **Summary** screen, you can do the following:

- Add or update patient information;
- Review and edit final study data and make any necessary adjustments to the waveforms (for example, adjusting the J+ point);
- Prepare the patient's final stress report;
- Save the report and export it, if appropriate.

To edit stress measurements (5), click into the field you want to change. Click the X to delete the current value, then enter the value you want to report. You can also highlight the existing value and type over it. Fields that cannot be edited are grayed out.

The ST Measurement J+ Point is preconfigured in the user profile (Settings > User Profile: Algorithm > J-ST (msec)).

You can adjust the J+ Point value (3) to re-analyze the stress test using a different measurement point. Once the J+ms value is modified, all related values are recalculated, and the corresponding displays on the **Summary** screen are updated.

### Note:

If you change the J+ Point, all ST values are recalculated.

To modify the J+ Point setting and recalculate all ST values based on the new setting:

- 1. On the procedure bar, click into the J+ field, highlight the value, and type the desired value in milliseconds for J-ST.
- 2. Click Change J+ on the procedure bar.

3. Click **Save** to record the change.

### Note:

You can save your changes as you make them, or you can click **Save** at the end of your review to record all changes at once.

### **Narratives**

The Narrative section (6) allows you to select standard text blocks that have been configured in IntelliSpace ECG (for more information, see *Configuring IntelliSpace ECG*). To select a standard Narrative statement:

1. Click ↓. The Narrative window opens.



- 2. Click one of the categories presented (e.g., Adult/Pediatric Rhythms).
- 3. Select one of the narratives presented (e.g., Basic Cardiac).
- 4. Click Insert.

The selected narrative statement will be inserted into your report. Variables. such as %PatientName%, will be automatically populated with the appropriate data for the study you've selected.

# **Reason for End and Symptoms**

The **Reason for End** section (7) allows you to add, change or delete statements indicating why the stress test was terminated. You can select preconfigured statements (if available) from the drop-down list, or you can type your own.

To add a Reason for End statement:





2. Click Add. The statement will be added to the list.

To change the order in which statements appear, highlight a statement and click **h** or **i** to change its position.

To delete a statement, highlight it in the list and click **Delete**.

The **Symptoms** section (8) allows you to add, change or delete patient symptoms. You can select preconfigured statements (if available) from the drop-down list, or you can type your own.

To add a Symptom:

1. Click the drop-down list and select a symptom, or type your own entry.



2. Click **Add**. The symptom will be added to the list.

To change the order in which symptoms appear, highlight a statement and click **h** or **i** to change its position.

To delete a symptom, highlight it in the list and click **Delete**.

# **Using Speech Recognition**

If you have Speech Recognition set up on your computer, you can dictate into any text window. To dictate:

1. Ensure that Speech Recognition is enabled and listening



2. Click into the desired text window and begin dictating.

3. When finished, say "Insert." Your statements will appear in the Notes window. After you have completed all revisions, click **OK** to close the window. Click **Save** to record the changes.

### Note:

For information on configuring, training, and using Speech Recognition, refer to Configuring ISECG. The configuration guide provides instructions on setting up and training your computer's Speech Recognition module.

To delete a statement from the report, highlight it and hit **Delete** on the keyboard.

# **Navigating through the Report**

You can review other sections of the stress report by clicking on one of the tabs in the Navigation bar (3). Tabs include:

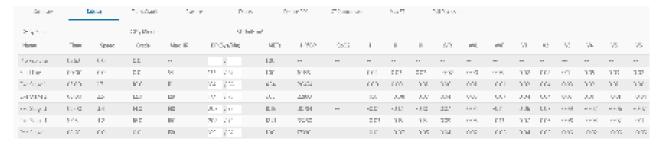
- Tabular
- Trend graph
- Averages
- Events
- Resting ECG
- ST Comparison
- Max ST
- Full Disclosure

### **Tabular**

The **Tabular** tab displays the following tabular data for the Pre Exercise phase, the Exercise phase, and the Recovery phase by stage or by minute:

- Time
- Speed/Power
- Grade
- Max HR
- BP (Sys/Dia)
- METs
- HR\*BP (Double Product)
- $SpO_2$
- ST values per lead

You can edit the patient's blood pressure measurements by clicking into the fields and entering the value you wish to display on the report.

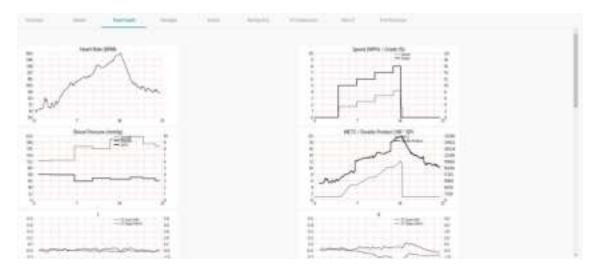


# **Trend Graph**

The **Trend Graph** tab displays the following graphs:

- Heart Rate;
- Blood Pressure (Systolic, Diastolic, and SpO<sub>2</sub>);
- Speed/Grade of the Treadmill (or data from the Ergometer);
- METS/Double Product (HR\*BP);
- Trends by lead for ST Level and ST Slope.

To review additional graphs, use the scroll bar on the right side of the screen.



### **Averages**





### **Events**

The **Events** tab displays snapshots of all events, captured arrhythmias, and RPE scale selections acquired during the stress test, including events manually captured during the stress test.



On the **Events** tab, you can do the following:

- check the printer box included in the final version of your report;
- check the delete box 💹 🗆 next to the desired event to select events, and then click the **Delete** button on the right of the screen to delete the selected events. You will be prompted to confirm the deletion. Click **Yes** or **No**.

To review additional events, use the scroll bar on the right side of the screen.

# **Resting ECG**

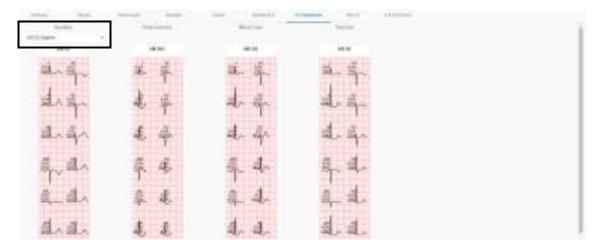
The **Resting ECG** tab shows reports of ECGs of Supine and Mason-Likar events. To review additional ECGs, use the scroll bar on the right side of the screen.



# **ST Comparison**

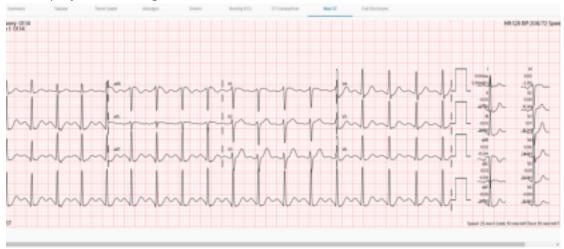
The **ST Comparison** tab displays the average ST values captured for all 12 leads at the following points in the test:

- Baseline Average beats for one baseline. By default, the baseline is the first
  event during the test. You can specify a different baseline from the drop-down
  list above the Baseline image. All events printed during the test are included in
  this menu.
- Peak Exercise Average beats at peak exercise, which is the point at which the test advances from Exercise phase to Recovery phase.
- Worst Case Average beats when maximum ST is reached. Maximum ST is the greatest ST elevation or ST depression measured during the test.
- Test End Average beats at the end of the Recovery phase.



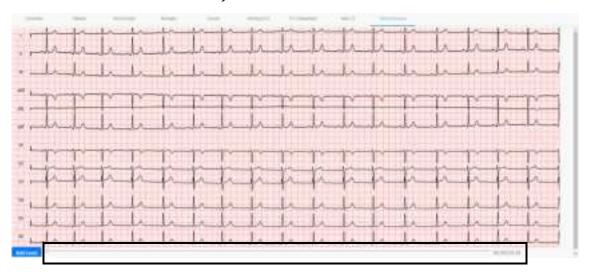
### **Max ST**

The **Max ST** tab displays the 5-second 12-lead ECG at the point in the test when the maximum ST elevation or ST depression was measured. Average beats for each lead are displayed to the right of the ECG.



### **Full Disclosure**





### Note:

Depending on the length of the stress test, loading and navigating through the Full Disclosure file may take some time.

The scrollbar at the bottom allows you to move forward and backward through the file. The total length of the study is displayed on the right. As you move through the file, the time at which an event occurred during the study is also displayed.

You can save new events in the Full Disclosure screen by scrolling to the point at which you want to save an event and clicking **Add Event**. Enter a label when prompted and click **OK**. The new event will be displayed in chronological order on the Events screen (see page 81).

When you have completed your review and made all desired changes, click **Save**. You can then choose to print your report or export it.

# **Editing a Third-Party Stress Report**

When reviewing a Stress report from a source other than Philips, you can edit only the cover page.



Figure 4-3 ECG Anywhere Third-Party Stress Review Screen

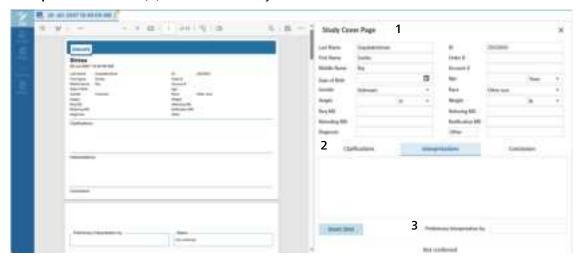
Table 4-2 ECG Anywhere Third-Party Stress Review Toolbars

Icon	Description	lcon	Description
Primary Tool	oar		
<	Search button (return to Worklist)	venily	Verify the report data
≡ <b>y</b> rdt	Enable Edit mode	Confirm	Confirm/Unconfirm

 Table 4-2
 ECG Anywhere Third-Party Stress Review Toolbars (Continued)

Icon	Description	lcon	Description
Assign	Assign the report to an inbox	Delete	Delete the record
Secondary To	polbar		
≔	PDF table of contents: displays pages in thumbnail view for easy navigation	₩ >	Highlight tool: click down arrow to select color and line thickness, then highlight selected text in the PDF
, S <sub>1</sub> Opere n	Draw tool: allows you to draw freehand on the PDF. Click down arrow to select color and line thickness	$\Diamond$	Erase: allows you to remove highlighting and drawn objects
T	Text tool: allows you to type and edit notes directly on the PDF	$\forall_{\mathscr{J}}$	Read aloud: not currently supported
- +	Zoom controls (increase/ decrease zoom level)	€→	Fit page: sets PDF to fill the entire page space. Click again to undo.
1 of 35	Page navigation/total pages: enter a page number and hit return to navigate to the specified page	(P)	Rotate: each click rotates the PDF report clockwise by 90 degrees
<b>(L)</b>	One/Two page view: click to select one-page or two-page (side by side) view	Q	Search: enter text to search for in the PDF
	Print (see page 86)	63	Save: downloads a copy of the PDF to your local Downloads folder
(\$)	<ul> <li>Pin toolbar: when checked, the secondary toolbar is displayed.</li> <li>Hide all annotations: when checked, Highlight, Draw, Erase and Text tools are disabled.</li> <li>View document properties: click to view properties of the PDF file</li> </ul>		

Click **Edit** to begin. You can update the patient demographics fields (1) by typing or selecting from the available drop-down lists. Complete the **Preliminary Interpretation** field (3) in the same way.



You can enter clarifications, interpretations and conclusions (2) by typing manually, or if Speech Recognition is enabled on your computer, by dictation (see page 78).

# **Printing the Report**



For Philips Stress studies, use the **Print** button on the procedure bar to print individual report sections or the final stress report. The Quick Print Settings window will open.

The types of individual reports that can be printed include:

- Patient ID
- Summary
- Trend Graphs
- Average QRS
- 12-Lead Resting ECGs
- Events (including manual ECG, manual event, stage report, RPE, arrhythmia, freeze)
- ST Comparison
- Max ST

When printing a stress report, you can choose which individual sections to include and the number of copies to print for each individual report. You can select whether to print a grid., and choose to print by stage, minute, or both. You can also print a complete final stress report. Regardless of settings, a patient ID report is always printed on the first page of a final stress report.



To print the ECG grid, click **Print Grid** so that the toggle slides to the right.

### WARNING

ECG signals printed on a laser printer should not be used to make time-sensitive measurements directly from the printed page.

To select printing by stage, minute, or both, make your desired selection from the drop-down list.

To specify the individual sections to include on the final report, and to specify the number of copies for each section, use the + and - buttons to increase or decrease the number of copies for each section. To exclude a section, set the quantity to 0.

When all selections are made, click **Print** at the bottom right corner of the Quick Print Settings window. After printing, close the tab to return to the review screen.

To print a third-party Stress report:



- 1. On the Review screen, click the **Print** icon. The system displays a preview of the report on a browser Printer page with your system's settings.
- 2. Specify the printer and settings, as needed.
- 3. Select **Print**. The report is printed.

# **Exporting the Report**

When you export a stress study from the Review screen, the data is exported in XML format. Remember to click **Save** before exporting.

To export a study, click **Export**. (see Figure 4-2 on page 74).

The export file will be written to your browser's download directory. From there, you can copy it to a USB memory stick or other location.

# **Confirming Stress Reports on the Review Page**

You can confirm a Stress report directly from the Review page.

To confirm report on the Review page:

- Select Confirm in the toolbar (see Figure 4-1 on page 71).
   Depending on the configuration at your site, you may be prompted to enter your password.
- 2. If prompted, type your password and select **OK**.
- 3. After a short delay, the Confirmed by status will appear, followed by the user name of the confirmer, and the date and time on which the report was confirmed. The **Confirm** button will change to **Unconfirm**.

To unconfirm a Stress report:

- 4. Select Unconfirm.If prompted, type your password and select OK.
- 5. After a short delay, the status will revert to Unconfirmed. The **Unconfirm** button will change to **Confirm**.

### Note:

If the Unconfirm button is not available, you do not have the necessary user permissions required to undo a confirmation.

# **Deleting a Stress Report**

You can delete a Stress report directly from the Review page.

To delete a report:

- 1. Select **Delete** in the toolbar (see page 72). You are prompted to confirm the deletion
- 2. Click **OK**. The report is deleted.

# **Conducting a New Search**

To return to the Worklist, select the **Search** button in the toolbar. The Worklist is displayed, with the default search criteria already loaded, as well as any studies that match the default criteria.

# Working with Ambulatory ECG Studies

Beginning with release B.02, ECG Anywhere allows you to view and edit Philips Holter and other ambulatory ECG reports in your browser. The screens and tools are similar to those provided with the Philips Holter System. You can refer to the *Philips Holter System Instructions for Use* for detailed information.

# **Searching for Ambulatory ECG Studies**

To search for ambulatory ECG studies:

- 1. In *Report* or *Patient* search, be sure to click **Include other studies**, or, to narrow your search results to include only ambulatory ECG reports, select the *Advanced Search* tab.
- 2. From the **Type** drop-down list, select **Ambulatory**.
- 3. Set other parameters as desired.
- 4. Select **Search** to retrieve matching studies.

Matching studies that you have permission to view appear in the Search Results list. You can select a single or multiple reports, just as you would with ECGs.

When you open a report, you have a subset of the Edit tools that appear when you open an ECG. These controls perform the same functions as with ECGs.



Figure 5-1 ECG Anywhere Ambulatory ECG Review Screen

Table 5-1 ECG Anywhere Ambulatory ECG Review Toolbars

Icon	Description	lcon	Description
Primary Toolk	oar		
<	Search button (return to Worklist)	Verify	Verify the report data
≡ <b>/</b> rdt	Enable Edit mode	Confirm	Confirm/Unconfirm
Accign	Assign the report to an inbox	Delete	Delete the record
Secondary Toolbar			
≔	PDF table of contents: displays pages in thumbnail view for easy navigation	∀ ~	Highlight tool: click down arrow to select color and line thickness, then highlight selected text in the PDF

Table 5-1 ECG Anywhere Ambulatory ECG Review Toolbars (Continued)

Icon	Description	lcon	Description
'Ş' Okano w	Draw tool: allows you to draw freehand on the PDF. Click down arrow to select color and line thickness	$\Diamond$	Erase: allows you to remove highlighting and drawn objects
T	Text tool: allows you to type and edit notes directly on the PDF	$\forall_{\nu}$	Read aloud: not currently supported
- +	Zoom controls (increase/ decrease zoom level)	€→	Fit page: sets PDF to fill the entire page space. Click again to undo.
1 of 35	Page navigation/total pages: enter a page number and hit return to navigate to the specified page	•	Rotate: each click rotates the PDF report clockwise by 90 degrees
	One/Two page view: click to select one-page or two-page (side by side) view	Q	Search: enter text to search for in the PDF
	Print (see page 99)		Save: downloads a copy of the PDF to your local Downloads folder
<b>₩</b>	<ul> <li>Settings:</li> <li>Pin toolbar: when checked, the secondary toolbar is displayed.</li> <li>Hide all annotations: when checked, Highlight, Draw, Erase and Text tools are disabled.</li> <li>View document properties: click to view properties of the PDF file</li> </ul>		

### Note:

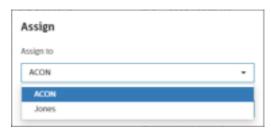
You cannot edit, assign or verify confirmed ambulatory ECG reports. Confirmed reports are available for viewing only. You must be able to unconfirm a confirmed report in order to edit.

# **Assigning an Ambulatory ECG Report**

While viewing an unconfirmed report, you can assign it to an inbox from the Review screen.

To assign a report:

- 1. Select the **Assign** button. The **Assign** dialog opens.
- 2. From the drop-down list, select the desired inbox and click **OK**.



3. To remove the report from an inbox, select **Unassign**, then click **OK**.



# Verifying an Ambulatory ECG Report

You can verify a report from the Review page.

To verify a report:

- 1. On the Edit screen (see "Editing a Philips Holter Report" on page 93 and "Editing a Third-Party Ambulatory ECG Report" on page 96), verify the demographic information, making any necessary changes.
- 2. Select Save to save the changes.
- 3. Close the Edit screen to return to the Review page.
- 4. Select **Verify** to mark the report as verified and update the status to **Awaiting Confirmation**.

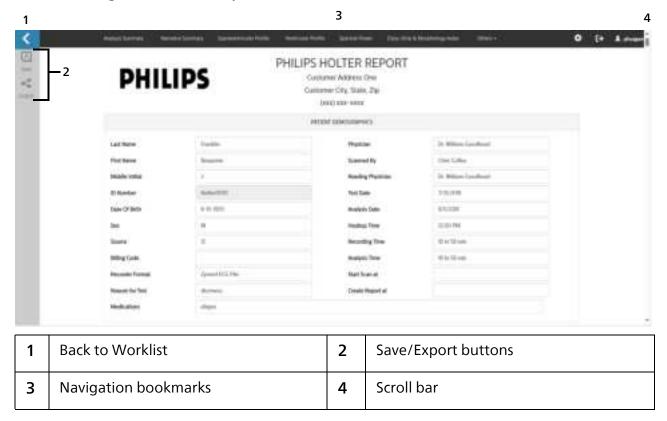
# **Editing a Philips Holter Report**

### Caution

You must save all changes to the report in the Review screen in order to update the information in ECG Anywhere and ISECG. If you do not click *Save* before closing the Review screen, the information will not be updated, and your changes will be lost.

You can edit To edit the report, click **Edit**. The report will open in a second browser tab displaying the **Analysis Summary** tab.

Figure 5-2 Philips Holter Edit Screen



Use the Navigation bookmarks (3) to jump to different report sections, or use the scroll bar (4) to scroll through the entire report.

# **Transcription Assistant**

In the **Interpretation** and **Narrative Summary** sections, you can bring up the Transcription Assistant by double-clicking in the window.



Click the Categories drop-down arrow to view the available categories of statements. When you select a category, you can then choose from a number of preconfigured statements related to the category. Highlight the statement you want to add, then click **Insert**. The statement will appear in the window. You can then make changes to the preconfigured statement, or insert additional statements from multiple categories.

If Speech Recognition is enabled on your computer, you can dictate into the **Interpretation** and **Narrative Summary** sections (see page 95).

To edit information in demographics or other fields, click into the field you want to revise, then type the information. If there is already information in a field that you need to change, highlight the existing data, then type over it. Fields that cannot be edited are grayed out.

When you have made all desired revisions, click **Save** (2). You will be prompted to enter a short comment describing the changes you made to the report. Enter your comments and click **OK** to save your changes. Your comment appears at the end of the Holter report in the **Report History** section. If you do not enter a comment, the change history will display "Report Saved" as the reason for change.



		Report Change History		
User ID	Date	Reason	Comment	
Administrator	7/4/2018	Created		
Administrator	7/4/2018	Scan Saved		
Administrator	7/4/2018	Report Saved		
phsupport	3/28/2019	Edited	Adjusted analysis time	
phsupport	3/28/2019	Report Saved		

# **Using Speech Recognition**

To dictate a clarification, interpretation, or conclusion:

1. Ensure that Speech Recognition is enabled and listening



- 2. Select the section you want to dictate (e.g., Narrative Summary).
- 3. Click into the edit window and begin dictating.
- 4. When finished, say "Insert." Your statements will appear in the edit window.

After you have completed all revision of the data, click **OK** to close the window. Click **Save** to record the changes.

## **Data Export**

To export the report, click **Export** (2). The entire contents of the report will be exported to a DAT file, which can be imported into other applications for additional analysis and reporting.



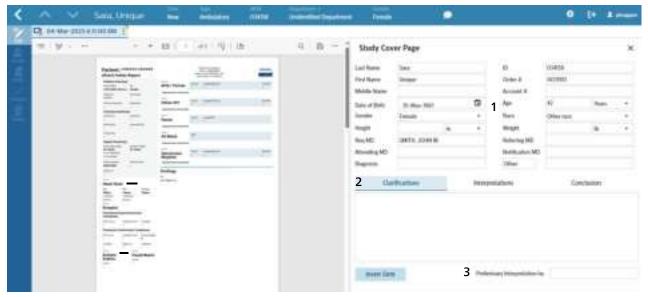
#### Note:

If you have selected multiple Holter studies for review, you must close the Review screen of the active study in order to review each additional study you selected.

# **Editing a Third-Party Ambulatory ECG Report**

When reviewing an ambulatory ECG report from a source other than Philips Holter, you can edit only the cover page.

Figure 5-3 ECG Anywhere Third-Party Ambulatory ECG Review Screen



Click **Edit** to begin. You can update the patient demographics fields (1) by typing or selecting from the available drop-down lists. Complete the **Preliminary Interpretation** field (3) in the same way.

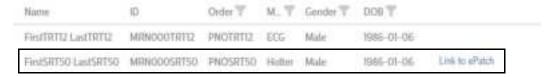
You can enter clarifications, interpretations and conclusions (2) by typing manually, using the **Transcription Assistant** (see page 94), or if Speech Recognition is enabled on your computer, by dictation (see page 95).

# **Reviewing Ambulatory Reports in Cardiologs**

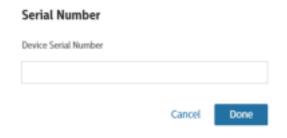
Beginning with version B.02.08, IntelliSpace ECG supports reviewing ambulatory ECGs acquired by Philips ePatch ambulatory monitors. After an order is linked to an ePatch device via its serial number, the data from the monitor can be imported into ISECG. Once imported to Cardiologs System, you will be able to scan, review and complete the ePatch report in the Cardiologs system. The final PDF report will be transmitted to ISECG and archived in the database.

The workflow is as follows:

1. In ECG Anywhere, locate the order for the ePatch ambulatory study.



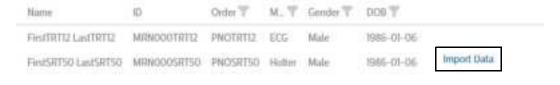
2. Click **Link to ePatch**. When ECG Anywhere prompts you for the serial number of the device that will be used for the ambulatory recording that matches the serial number indicated in the order. You can enter the serial number manually, or scan the device barcode.



#### Note:

The serial number you enter must match the serial number specified in the order. Otherwise, you will get an error and be prompted to enter the correct serial number in order to create the link.

3. Once the study is complete and the patient has returned the ePatch recorder, plug the recorder into your PC and locate the order that matches the serial number of the device. Click **Import Data**.



#### Note:

Depending on the length of the study, the import could take some time due to large file size.

ECG Anywhere will match the serial number of the device with the serial number of the order. If they do not match, the import will be aborted. ECG Anywhere will

prompt you to select the correct Cardiologs folder to which the report will be imported.



4. After you have selected a folder, click **Import Data**. The report will be transferred to the selected folder.



5. When the import of data is complete, click **Review in Cardiologs**. The Cardiologs platform will open in your browser, allowing you to review, edit and finalize the ambulatory report.



#### Note:

You may need to enter your credentials for Cardiologs in order to log in and access the study.

6. When you have marked the ambulatory report as **Completed** in Cardiologs, a PDF of the final report will be sent back to ECG Anywhere. You can then work with the report as you would any other third-party ambulatory ECG report in ECG Anywhere (see page 96).

# Confirming Reports on the Review Page

You can confirm an ambulatory ECG report directly from the Review page. To confirm report on the Review page:

- Select Confirm in the toolbar (see Figure 5-1 on page 90).
   Depending on the configuration at your site, you may be prompted to enter your password.
- 2. If prompted, type your password and select **OK**.
- 3. After a short delay, the Confirmed by status will appear, followed by the user name of the confirmer, and the date and time on which the report was confirmed. The **Confirm** button will change to **Unconfirm**.

To unconfirm a report:

1. Select **Unconfirm**.If prompted, type your password and select **OK**.

# **Printing an Ambulatory ECG Report**

You can print a report from the Review page.

To print a report:



- 1. On the Review screen, click the **Print** icon. The system displays a preview of the report on a browser Printer page with your system's settings.
- 2. Specify the printer and settings, as needed.
- 3. Select **Print**. The report is printed.

# **Deleting an Ambulatory ECG Report**

You can delete a report directly from the Review page.

To delete a report:

- Select **Delete** in the toolbar (see Figure 5-1 on page 90).
   You are prompted to confirm the deletion.
- 2. Click **OK**. The report is deleted.

# **Conducting a New Search**

To return to the Worklist, select the **Search** button in the toolbar. The Worklist is displayed, with the default search criteria already loaded, as well as any studies that match the default criteria.

# Reconciling Studies and Orders

Reconciling studies and orders ensures that every order that enters the system is filled (or canceled), the results are sent back to the HIS, and billing can occur.

### **About the Reconciliation Process**

Orders that enter the system through the HIS are stored in the Orders system database, which resides either on the IntelliSpace ECG Management (ISECG) server or on a server accessible to the ISECG system.

Devices access the Orders system database to search for and download the orders to be filled, and then transmit the acquired studies to the ISECG system.

For each study that comes into the ISECG database, ISECG performs a search of the Orders system database to determine whether there is an order that matches the incoming study. Specifically, the system is checking whether an order and an incoming study have the same unique order ID number. Once the system identifies an order/study match, it associates the two.

#### Note:

This is an internal number created by Orders system to uniquely identify each order in the system. The unique order ID is not visible to you when viewing or editing and study, and you cannot enter it into an order using ISECG. The unique order ID is used in the study-to-order matching process to ensure a given order matches only the study acquired with that order.

When you search for orders, the system goes through a more detailed matching process, and checks whether all of the primary fields (as designated for your site and described on page 10 of Working With Orders guide) match between the two. This allows the client application to indicate status upon order retrieval. As described on page 11 of Working With Orders guide, reconciliation status can be any of the following:

- Reconciled. All of the required primary fields match.
- *Not reconciled*. Not all of the primary fields match.

With IntelliSpace ECG Anywhere, you can only reconcile a single order/study pair. An order that is reconciled to a study cannot be selected to reconcile to another study in

IntelliSpace ECG Anywhere. If you have matched an incorrect order to an study, you can unreconcile the pair, and re-reconcile the order to another study. For details, see "Unreconciling an Order/Study Pair" on page 111.

# **Determining Reconciliation Status**

The ECG Anywhere application clearly indicates the reconciliation status of an study on the study header, as follows. For additional information, see Working With Orders guide:

- Pink X (one or more fields do not match, not reconciled)
- Yellow ? (partial match, not reconciled)
- Green ✓ (all fields match, reconciled)





To reconcile an unreconciled or partially reconciled order, select the header, then click on the ellipse on the right side. Click **Reconcile**. The Match Order window will open.

# **About the Match Order Window**

You use the Match Order window to manually reconcile studies and orders. You only need to manually reconcile those orders that were not matched automatically.

In most cases, when either data is entered correctly or all the required primary information is available at the time of study acquisition and order entry, orders and studies will reconcile automatically, as the primary fields will match.

#### Note:

Remember that the exact set of primary fields that are required depends on how order match settings are configured at your site. For a description of primary fields, see "How IntelliSpace ECG Defines an ECG/Order Match" of the Working With Orders guide. If you have questions about the required fields in your client application, contact your ISECG administrator.

However, situations arise where automatic order matching may not occur. For example, when an ECG is acquired in the Emergency room and is reviewed prior to

the order being entered into the system, or a patient's name is mistyped, or other similar situation. In these cases, you can manually match orders to studies using the Match Order window, available in the client application Summary view.

Once matched manually or automatically, the patient record is marked as **Completed**, and the system records the date and time of reconciliation. However, if, while the ECG remains unconfirmed, a change is made to the ECG or to the order, the client application clearly indicates that the ECG and order no longer match (as described in "About Reconciliation Status" in the Working With Orders guide). If the change is to a primary field, you must manually re-reconcile these studies before the results can be exported back to the HIS.

The reconciliation process comprises the following steps, in order:

- 1. Using the Match Order window, retrieve matching orders.
- 2. Locate and select the matching order, if listed.
- 3. Carefully review the data in the order and compare it to the order in the study.
- 4. Reconcile the study and order.

You can only reconcile a single order/study pair. An order that is reconciled to an study cannot be selected to reconcile to another study in IntelliSpace ECG Anywhere. If you have matched an incorrect order to an study, you can unreconcile the pair, and re-reconcile the order to another study. For details, see "Unreconciling an Order/ Study Pair" on page 111.

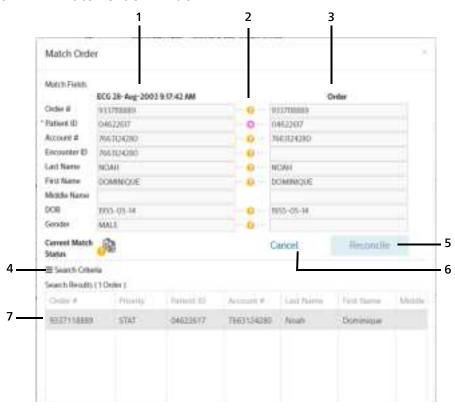


Figure 6-1 Match Order window

Table 6-1 Match Order window components

Field/Button		Description
1	Study fields	Displays the values in the listed fields for the currently selected study.
2	Order status	<ul> <li>Once an order is selected, the order status icon between the fields indicates whether the value in this field for the study matches the value in the same field for the order, as follows:</li> <li>Green ✓ indicates the fields match</li> <li>Pink X indicates a required primary field that does not match</li> <li>Yellow ? indicates a non-primary field that does not match or the Order ID does not match</li> <li>Caution: The Order ID is not an editable field. If you reconcile this order and study, the ID associated with the order will overwrite the order ID in the study.</li> </ul>
3	Order fields	Displays the values in the listed fields for the currently selected order in the Search Results list.
4	Search Criteria button	Displays search fields, allowing you to search for matching orders.
5	Reconcile button	Click to associate the selected order with the current study, and close the window.
		Caution: If you are reconciling an order and an study that do not match exactly in any field, the values specified in the order will overwrite those for the study!  For example, if the study differs from the order in the First Name field, by reconciling the order with the study, you will overwrite the first name in the study with that specified in the order.  The same thing occurs if you are reconciling an study without an associated order to an order; the order data will overwrite the comparable data on the study.  You are prompted to confirm this change before reconciliation is successful. Be sure to carefully read the information in the confirmation dialog box to ensure the order information is correct!  There are additional rules that apply to reconciling studies and orders. For details, see "About Reconciliation Rules" on page 108.

Field/Button		Description
6	Cancel button	Click to close the Match Order window and return to Summary view.
7	Search results list	Shows the orders that match the criteria specified in the Search section.  Each order entry displays detailed information about the order.
		Caution: When you first click the Match Order button in Summary view, the application automatically begins searching the Orders management system database for orders using the following search criteria:
		Order number     Patient ID
		Account number
		Last name: The first three letters of the study patient's last name, followed by the wild card % sign.
		First name
		Gender
		DOB (Date of Birth)
		Start Date
		End Date
		Outbox
		Status
		• STAT
		If the search yields no orders that match these criteria, change them as needed. For example, consider changing the start date (by default set to 3 days prior to today's date) and the last name values, or the status of the order to <all>.</all>
		Click an order to select it; this fills in the fields in the <b>Order</b> section at the top of the window.

# **Retrieving Matching Orders**

After selecting the study to reconcile, you use the Match Order window to retrieve the order. If an exact match is not found, the client displays the most likely matches. You can also initiate a search for a specific order from within the Match Order window.





To display the Match Order window, in the Patient Demographics bar, click the **Match Order** icon when it is yellow or pink. When the button is green, the order and study are reconciled.

The Match Order window appears, displaying key information for the current study. Primary fields are marked with asterisks (except for **Order #**, which is always a required field). The system automatically begins searching through the OrderVue database to retrieve the most likely matches.

If a single match is found (as shown in Figure 6-2 Automatic selection of single matching order on the following page), that order is automatically selected. If a not-exact match or multiple matches are found (Figures 6-3 and 6-4), the matching orders are listed in the Search Results list, but no order is selected.

Match Order March Frage \$55.28 Aug 2003 9:51 42 AM Order # 933798000 937/790609 Patient D 7946.22627 Ô (5452)907 7667014300 F660 (10) December () 1760124281 Last Name MEDIAN G : First Name роминдия DOMESTIC Middle Name DOB 1655-05-14 1005-05-14 MALE G. Correct Match Cancel 25 Search Criteria Swarth Results (Tribute) OhitE ALZTI ISSUE BALLIET 7541734295

Figure 6-2 Automatic selection of single matching order

Figure 6-3 No exact match



Figure 6-4 Multiple matches found



Once orders are loaded, you are ready to locate and select the order to reconcile with this study, as described next.

# Locating and Selecting the Order to Match

In most cases, a single order will match and will be automatically selected. If this is not the case, locate the order as described here.

To locate and select the order to match

- 1. If orders are listed in the Search Results list, scroll through the list of retrieved orders to find the order to match to the study.
- 2. If you find the correct order, select it. If the correct order is not in the list, you can change the search parameters, as described in "To change the search parameters within the Match Order window" on page 107.
- 3. Proceed to "Reconciling the Study and Order" on page 108.

To change the search parameters within the Match Order window

Change the search parameters when the initial search does not return the desired order.

1. If the **Search** section of the Match Order window is hidden (collapsed), click **Search Criteria** to display it.



2. Enter the field values as needed, and click **Search**. Any matching orders are displayed in the Search Results list.

3. Locate and select the matching order, if retrieved, then continue from step 2, on page 107.

# **Reconciling the Study and Order**

After locating the order to match to the selected study, you can reconcile the two, which is a requirement before you can export the confirmed study and send the results back to the HIS to complete the order cycle.

#### Note:

The system administrator can define automated workflow rules that can be triggered by an automatic or manual reconciliation of an study and order, or by a manual unreconciliation of a matched study/order pair. A variety of actions are supported, including printing and exporting the study, sending an email notification to a designated person, and sending a message to the HIS that an study was unreconciled and does not have an associated order. Discuss the options with your administrator.

Studies and orders are matched according to the reconciliation rules described next.

## **About Reconciliation Rules**

Reconciliation is the process of matching an study to an order. It is important to proceed carefully to ensure that you are matching the correct study/order pair.

Data discrepancies between the order and the study are handled differently depending on whether the order ID matches, as described next.

 Case 1. The study either does not have an order ID (no associated order) or the order ID matches the order ID in the selected order.

In this situation, all order data except for empty field values overwrites the data in the same fields in the study. For example, if the **Last Name** is spelled "Jana" in the order, but is spelled "Jania" in the study, after reconciliation, the **Last Name** in the study record will reflect the spelling in the order, "Jana."

Fields in the order that have been left empty do not overwrite any data in the study. For example, if the **Operator ID** field in the order is empty, any value in the **Operator ID** field in the study record after reconciliation.

Upon reconciliation, a dialog box is displayed that shows all of the data that differs between the order and the study. This list is dynamic; only those field values that are different are displayed; the contents of this dialog box change with every study and order your reconcile. You are prompted to confirm that you wish to overwrite the study data with the order data presented.

#### **Caution**

It is particularly important to carefully review the contents of this dialog box. It is possible that clinically significant data, which could affect the interpretation generated by the Philips 12-Lead Algorithm upon acquisition, could be changed (for example, date of birth or gender). If there is any question about the accuracy of this data in the order, resolve the discrepancy before reconciling the study and order.



 Case 2. The order ID in the study does not match the order ID in the selected order.

In this situation, the assumption is that the study was previously reconciled to a different order. To avoid any possibility of retaining old incorrect order data upon reconciliation with a new order, all of the following fields in the study are first cleared:

- All patient demographic data
- All user field data and other information present in the Additional Data section of Summary view (except for Diagnosis, history, and medication codes, as described below)
- Physician information

Order information

The following information in the study is *NOT* cleared or modified in any way:

- Location information
- Information related to study analysis, including interpretation, measurements, and severity
- Diagnosis, history, and medication codes (DX, HX, RX, SX)

After the fields are cleared, the study is populated with data from the order. Fields that do not have corresponding values in the order are left blank.

For example, if the study has the values presented in column A (below), and the order has the values presented in column B, upon reconciliation, the study will have the data shown in column C.

Study Data (A)	New Order Data (B)	Reconciled Data (C)
Order #: 1234	<b>Order #:</b> 0987	<b>Order #:</b> 0987
Last name: Orbit	Last name: Orbet	Last name: Orbet
Institution: Hospital 1	Institution: Hospital 2	Institution: Hospital 1
Severity: Abnormal	Severity: Normal	Severity: Abnormal
RX: Drug 1	RX: Drug 2	RX: Drug 1
Operator ID: JSK	Operator ID:	Operator ID: JSK

Upon reconciliation, a Copy Order dialog box is displayed that shows which data in the study will be overwritten by new order data. You are prompted to confirm that you wish to overwrite the study data with the order data presented.

#### **Caution**

Review the data in the study and in the order to reconcile with very carefully to ensure that you are matching the correct study and order.

To reconcile the current study to an order

1. After locating the correct order, as described in the previous sections, click **Reconcile**.

After a brief period of time, the Copy Order Data dialog box appears. The wording of the dialog box depends on which reconciliation rules are in effect, as described in "About Reconciliation Rules" on page 108.

2. Carefully review the information presented, and if satisfied it is correct, click **Yes** to reconcile the study and order, and close the Match Order window.

#### **Caution**

If you notice that you inadvertently reconciled the study with the *wrong* order, DO NOT save these changes. Rather, redo the initial study search, and start the reconciliation process over again from the beginning.

3. Once back in Summary view, click **Save** in the Action bar to save these changes to the database.

#### **Important:**

Reconcile workflow actions are dependent upon the Save button being pressed.

# Unreconciling an Order/Study Pair

You can unreconcile an order/study pair so that you can re-reconcile the order with a different study.

You must first unreconcile the study, and then you can re-reconcile to the correct order.

To unreconcile a reconciled order, select the header, then click on the ellipse on the right side. Click **Unreconcile**.



You are prompted to confirm removing the link between the order and the study.

When unreconciled, all order-related fields are cleared from the study except the following:

- Leave as is: Patient ID

- Leave as is: Firstname, Middlename, Lastname

- Leave as is: Height

- Leave as is: Weight

Leave as is: Blood pressure

Leave as is: OperatorID

Leave as is: OperatorName

- Set: Sex = Unknown
- 4. Click **OK**, or to cancel the operation, click **Cancel**.
- 5. Once back in Summary view, click **Save** to save these changes to the database.

Once unreconciled, the process status of the order is changed back to *New*. The previously reconciled order information is included in the study XML.

You can now re-reconcile the study to the correct order.

# Peer Review

If your user account has the required privileges, you will be able to initiate peer reviews of up to 100 ECG reports on a one-time or recurring basis.

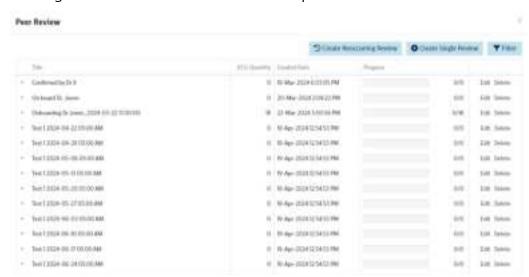
To initiate a peer review:



- 1. Select the Settings icon.
- 2. Select Peer Review.



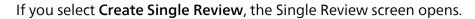
- 3. From the main Peer Review screen, select the type of review you want to create:
  - Recurring: can be scheduled for weekly or monthly intervals
  - Single: one-time review that does not repeat

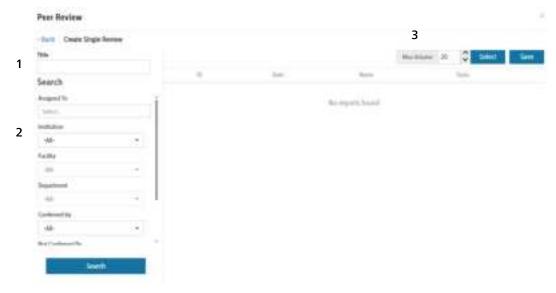




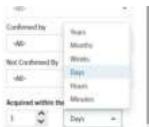
You can use the **Filter** button at the top to restrict the list. You can filter by title, start date, and/or end date.

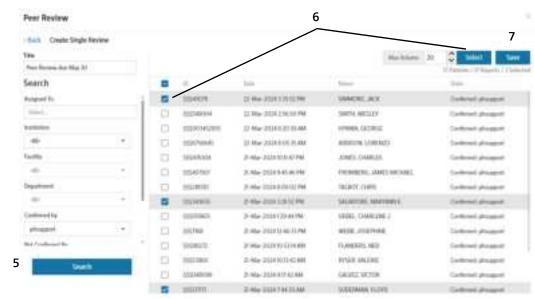
# Scheduling a Single Peer Review





- 1. Enter a title for the peer review.
- 2. Set your desired search criteria, which can include any or all of the following:
  - **Assigned to (specific inbox or unassigned)**
  - Institution
  - Facility
  - Department
  - Confirmed by
  - Not confirmed by
- 3. Set Max Volume of results to include (from 1 to 100 reports).
- 4. Set the search range for acquired ECGs:
  - Minutes - Hours - Days
  - Weeks
  - Months
  - Years





5. Click Search to bring up a list of available reports that match your search criteria.

#### Note:

Only confirmed studies are eligible for peer review.

- 6. Select individual reports, or click Select to include all search results.
- 7. Click **Save** to save the peer review. It will appear in the main Peer Review screen.
- 8. Click **Edit** next to an existing review to change any of the parameters, or click **Delete** to remove it.



# Scheduling a Recurring Peer Review

If you select **Create Recurring Review**, the Peer Review Schedules screen opens.



- 1. Click New Schedule.
- 2. On the scheduling screen, enter a title for the recurring review.



- 3. In **Filter Settings**, set your desired search criteria, which can include any or all of the following:
  - **Assigned to** (specific inbox or unassigned)
  - Institution
  - Facility
  - Department
  - Confirmed by
  - Not confirmed by
- 4. Set the search range for acquired ECGs:
  - Minutes
  - Hours
  - Days
  - Weeks
  - Months
  - Years
- 5. Set Max Volume of results to include (from 1 to 100 reports).
- 6. In **Schedule Settings**, check **Enable** to activate the peer review schedule.

#### Note:

• You can disable the review schedule by unchecking **Enable**, then start the review schedule at a later time by checking **Enable** again.

- All fields in Scheduling must be completed in order for the review to occur and to be displayed on the main screen.
- 7. Set the **Recurrence** (weekly or monthly).
- 8. If recurrence is set to **Weekly**, select the day or days of the week on which the review will occur, or check **Select All**.
- 9. If recurrence is set to **Monthly**, select the month or months of the year in which the review will occur, or check **Select All**.
- 10. Select the time of day at which the peer review schedule will start.
- 11. Select the **Start** and **End** dates for the review.

#### Note:

You can use the calendar tool to set the dates, or enter them manually in MM/DD/YYYY format.

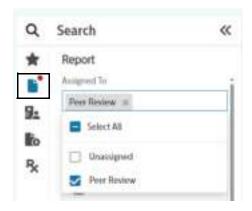
- 12. Click Save.
- 13. Click **Edit** next to an existing review to change any of the parameters, or click **Delete** to remove it.



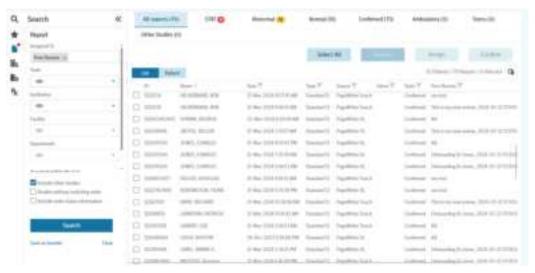
# Performing a Peer Review

To perform a peer review:

1. Select the Report Search icon.



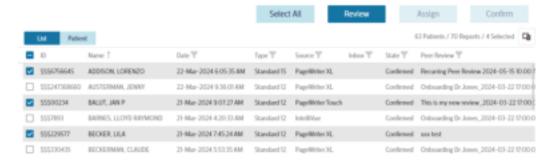
2. Under **Assigned to**, check **Peer Review**, then click **Search**. The studies included in the review will be displayed in the search results.

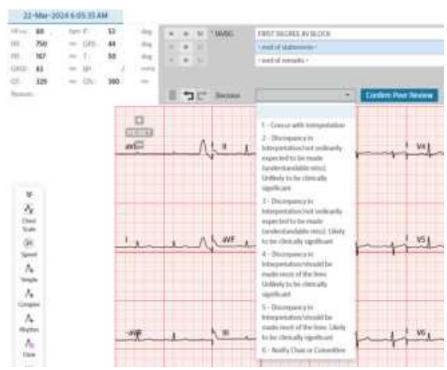


#### Note:

You can select either List or Patient view.

 You can select individual cases by checking the box next to them, or click Select All to check all of the studies at once. When you've selected your studies, click Review.



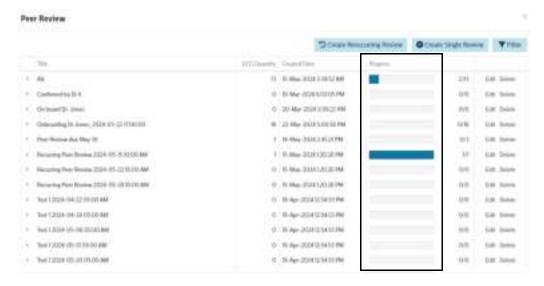


4. The first selected study will open. After reviewing the study and interpretation, select a statement from the **Decision** list.

5. When ready, click **Confirm Peer Review**. A prompt will appear: "**Confirm peer review for this ECG**?" Click **OK** to continue or click **Cancel** to return to the study.

If you have selected more than one study to review, the next study will open. Repeat the process in steps 4 and 5 until you have reviewed all selected studies. When you have finished the review, the search results screen will reappear.

As you work through the list of patients, the progress will update on the Peer Review screen.



#### Note:

If a study is assigned to more than one review, progress will be updated for those reviews simultaneously.

# ECG Anywhere Keyboard Shortcuts

This appendix describes the keyboard shortcuts available for IntelliSpace ECG Anywhere.

# **Keyboard Shortcuts**

Click anywhere on the application page, then press the desired key or key sequence.

Table A-1 Navigation & Function Keys

Shortcut Key	Description
Ctrl+1	Review the two ECGs in Stack mode
Ctrl+2	Review the two ECGs in Side-by-Side mode
Ctrl+3	Review the ECG with superimposed representative beats on the right
Ctrl+[	Add modifier to the left of the current modifiers
Ctrl+]	Add modifier to the right of the current modifiers
Ctrl+A	Select all
Ctrl+D	Insert a line for manual or voice dictation in ECG edit window
Ctrl+E	Start editing
Ctrl+K	Confirm the current study
Ctrl+R	Review all selected ECGs
Ctrl+S	Save changes to the current study
Ctrl+Y	Redo the last action

Table A-1 Navigation & Function Keys (continued)

Shortcut Key	Description
Ctrl+Z	Undo the last action
Page up	Zoom in the waveform
Page down	Zoom out the waveform

Table A-2 Keyboard Shortcuts for Statement Editing in Statement View

Keyboard Shortcut	Description
F5	Open the statement modifier dialog
Ctrl+Ins	Insert a new statement below the current selected line
Start typing or Ins	Insert a new statement above the currently selected line
Tab	Cycle forward through fields when adding or editing a statement or remark. Use the <i>Tab</i> key to skip a field, as needed. After finishing editing statements, the <i>Tab</i> key moves to the <i>Severity</i> field.
Shift+Tab	Cycle backward through fields (move the cursor to the previous field)
Esc	Cancel editing of the current statement and return to the Interpretation window
Arrow keys	Within the Interpretation window, use the <i>Up/Down</i> arrow keys to move up and down between statements and remarks.  Within a field/code drop-down list, use the <i>Up/Down</i> arrow keys to move up and down through the list to highlight the desired code or modifier. Press <i>Enter</i> to finalize the selection.

Table A-2 Keyboard Shortcuts for Statement Editing in Statement View (continued)

Keyboard Shortcut	Description
Ctrl+Left arrow ← Ctrl+Right arrow →	Within the Interpretation window (on Statement view and Waveform view), move between a patient's ECGs using the keyboard.  Ctrl- ← moves to the next ECG on the left; Ctrl → moves to the next ECG on the right. When you reach either end of the tab headers, use the opposite arrow to reverse direction.
Enter	Within a statement, accepts the specified values and adds the statement, or completes the editing process, and returns to the Interpretation window.  Within a field/code drop-down list, selects the highlighted entry and inserts it into the current statement.
Backspace or Delete	Clear the last character typed. Continue pressing the key to clear the field
Ctrl+Shift+Alt+F	Disables fuzzy searching in statement lists
Ctrl+Alt+F	Enables fuzzy searching in statement lists







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Printed in USA 453564578601, Revision K



