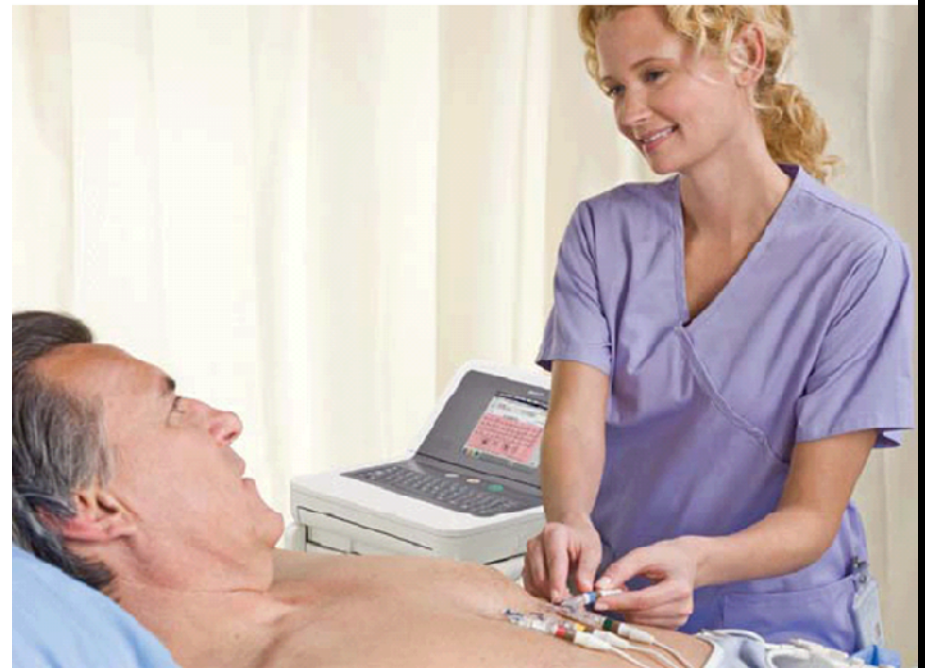


**PHILIPS® 12-Lead
ECG PageWriter TC70®
& TraceMasterVue®**



Module 3 – Provider ECG Read Workflow

Additional Help on Philips Learning Center

The screenshot shows the Philips Learning Center interface. The top navigation bar includes 'PHILIPS sense and simplicity' and 'Philips Learning Center'. Below this, a breadcrumb trail reads 'You are here: Home > Course Catalog > Course Finder'. The left sidebar contains various navigation options like 'Learning Center Home', 'About Online CME', 'CME News', 'Literature', 'Buy Group Education Account', 'Course Catalog', 'Course Finder', 'Alphabetical Course List', 'My Learning Activities', 'My Classrooms', 'My Account', 'Shopping Cart', 'Help', 'Contact', and 'LogOut'. The main content area displays 'Product' information for 'ECGVue Tutorial: Home Page > Course Information'. It includes a 'Product Description', 'Course Category Listing: Diagnostic ECG', and a 'Module Description' that states: 'This tutorial comprises several lessons to teach you the basics of working with the TraceMasterVue ECG viewing and editing application, ECGVue. Depending on the options available at your site and the permissions assigned to your user ID, using ECGVue, you will be able to: Search for ECGs to review, Overread ECGs, Edit measurements, demographics, and/or interpretive statements, Confirm ECGs, Reconcile ECGs with orders. You may also be able to review PDF reports stored from other devices, including stress systems, other cardiographs, IntelliVue monitors, and defibrillators, to name a few. **The tutorial is intended to be used together with the application. It is available as a zip file download from InCenter. If running the tutorial together with ECGVue is not possible, you can print out the pages that have Try It! exercises on them and work through those exercises when you have access to the application. Demonstration ECGs are provided in the TraceMasterVue system for training purposes.** Author: ADRIENNE ESZTERGAR, About the author: Philips Healthcare, Diagnostic ECG'. A 'LIVE CHAT OFFLINE' button is visible in the bottom left corner.

Additional training on Philips TraceMasterVue is available free through Philips Learning Center
<https://www.theonlinelearningcenter.com/default.aspx>

How to Access the Trace MasterVue Application (cont'd)

- TraceMasterVue will open through web so you will notice web access being obtained with your web browser and pop up windows on your screen
- At the login Screen enter you MHS/NT username and password, then click login

Customizing TMV – Setting Defaults

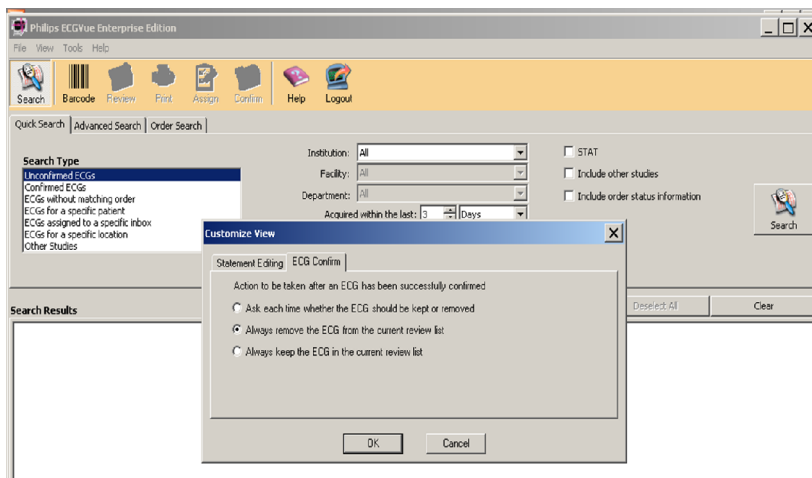
The screenshot shows the Philips ECGVue Enterprise Edition application window. The 'View' menu is open, with 'Show Statement Codes' and 'Show Statement RHS' highlighted. The main interface includes a search bar, dropdown menus for 'Institution: All', 'Facility: All', and 'Department: All', and a date range selector 'Acquired within the last: 3 Days'. There are also checkboxes for 'STAT', 'Include other studies', and 'Include order status information'. A 'Search' button is located at the bottom right. The 'View' menu is circled in red in the original image.

First you will need to set your default view for reading ECGs

- You will do this the first time you login to TraceMasterVue and you will not have to make any changes again unless you wish to change the screen colors. **Stmt view** will always be your default view.
- Click **View** (main menu) – top left of screen
- Click "**Show Statement Codes**" This will help you remember frequently used codes.
- Click "**Show Statement RHS**" This shows at the right of each statement the reason for the code (this is optional)

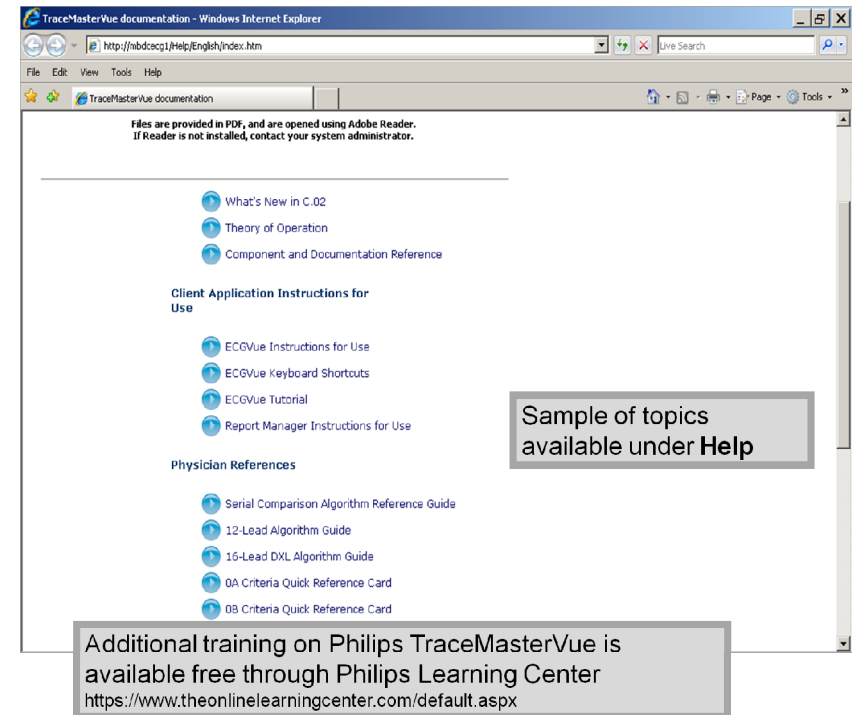
Customizing TMV – Setting Defaults (cont'd)

- Click "**Show Report Gridlines**". This will print the gridline for an ECG on plain paper if you need to print out an ECG.
- To use Favorite Statement Codes & set up a Favorites list – click on "Use Favorite Statements". This will allow you to build a preference list of frequently used interpretation codes. We will address this process later.
- Click "**Customize**"



- Click **Customize** under the **view** menu drop down
- In the pop-up window click **ECG Confirm**
- Select **Always remove the ECG from the current review list**
- Click **OK**

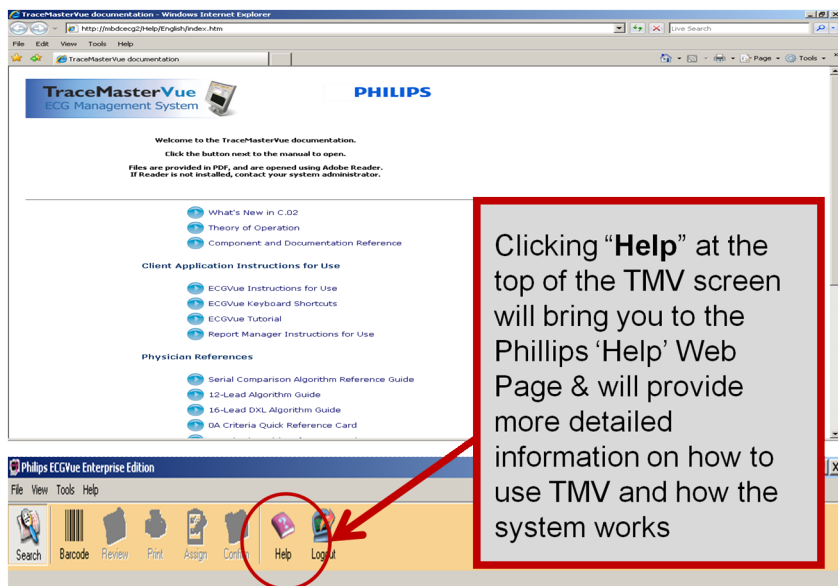
Additional Help



Help !

- You may click on the Help action icon at anytime and the Phillips help web page will open.
- There is much more detailed information on how to use TMV and how the system works

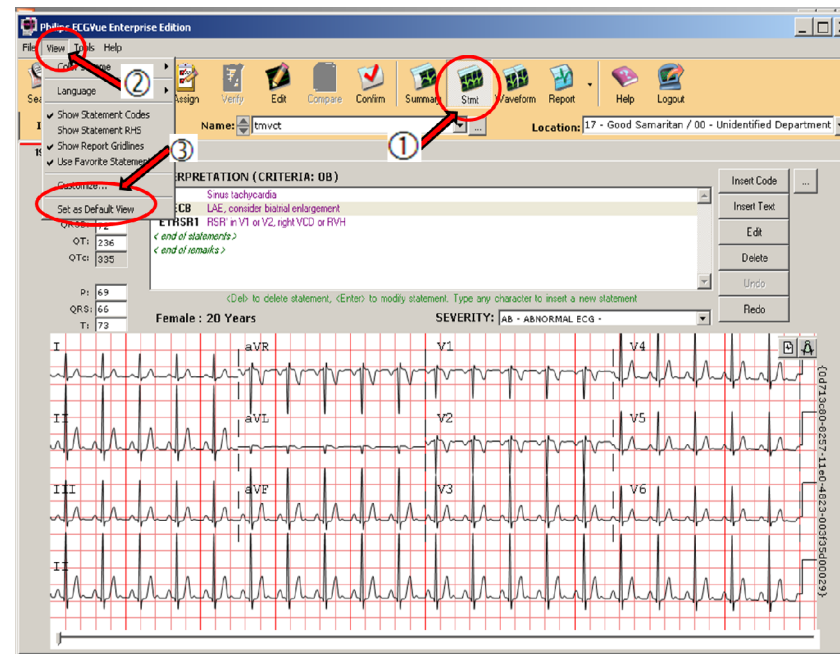
Additional Help



Help!

- You may click on the Help action icon at anytime and the Phillips help web page will open.
- There is much more detailed information on how to use TMV and how the system works

Customizing TMV – Setting Defaults (cont'd)



- The first time you login - set your default view to **Stmnt** (statement) view. This will only need to be done once.
- Thereafter, your default screen will be **Stmnt** (statement) view for reading ECGs.
- Click on "**Stmnt**" icon in the action icon across the top of the screen
- Click **View** in the main menu
- Click "**Set as Default View**" at the bottom of the drop down list. The next time you login and select an ECG to review you will see it in the Statement view
- This is the screen you will probably use to read most ECGs.

Initial Search

From the **Search Screen**, select:

- ECGs assigned to specific inbox**
 - Will bring up ECGs assigned to specific physician/group
- Click on down arrow in **Assigned To:** to bring up a list of inboxes
 - Select your inbox
- Click **Search**
 - A list of all ECGs for that inbox will be displayed

This is the default search screen where you will access the ECGs you are going to read

- Notice the "Search" Icon is highlighted (top left of screen)
- The "Quick Search" tab is auto selected. This is the first selection you will make to find your ECGs to be read
- You will click on "ECGs assigned to a specific inbox" That will make the "Assigned to" option available
- Next select your assigned inbox from the drop down list... if you are a TG ED physician you would select TG Emergency Department
- Then click the "Search" icon on the right side of the screen
- A list of all the ECGs in that inbox will appear in the bottom half of the screen

Setting Favorites List (cont'd)

1. Once the favorites list is set up - you can highlight on a line of the interpretation – right click - and your favorites list will appear in the drop list

Customizing TMV - Setting your preference list

- Once your favorites list is set up - you can highlight on a line of the interpretation – right click - and your favorites list will appear in the drop list

Setting Favorites List (cont'd)

1. Click on the box in front of the code(s) to add it on your favorites list.

2. Once you have made your list – click on the Save button

Customizing TMV

- This box may be expanded so you can see the complete description by placing the mouse over the side of the box, left click and drag the box side to make it bigger
- Click on the box in front of the code(s) to add a check mark and add it on your favorites list.
- Once you have made your list – click on the **Save** button
- You may add or remove statements from your list by placing a check mark by the statement or click to remove it.
- Remember to click **Save**
- Most physicians prefer to read from a less cluttered screen with where waveforms are more easily viewed

Initial Search (con't)

1. Click on the **Select All** button

2. Select the desired ECG

- The ECGs to be reviewed will have a checkmark in the box next to the ECG

3. Click **Review** icon near the top of the screen

- TMV will display the most recent ECG to be edited

On this screen you will select the ECGs you wish to read.

You may select an individual ECG for a certain patient but you will probably read all that is in the list (you can read them sequentially) In that case:

- You would click Select All (arrow 1 on slide)
 - If there are over 50 ECGs to be read another icon will appear that says "Select First 50"
 - You may only select 50 ECGs at a time to read
- You will notice that there will be a check mark beside each ECG when you click select all (arrow 2 on slide) or the first 50 if that was your option
- Click the "Review" icon (arrow 3 on slide) at the top of the screen. This will display the first ECG to be read.
 - If there is more than one ECG for the same patient the most recent ECG will be displayed first

Initial Search (cont'd)

This is the Statement (**Stmnt**) Page

1. Patient's MRN, Name, location the ECG was acquired, tab for each ECG, parameters of ECG, computer-generated interpretation, edit tools, gender, age, electronic interpreted severity of the ECG and waveforms are located here.
2. **Bold type** on the tab indicates that the ECG has been selected in your previous search.
3. The red line over the ECG tab date and time indicates ECG selected to view.

You are now on the **Stmnt** (Statement) page

Just under the action icons in **Stmnt** view will see:

- Patient's ID which is the Medical Record Number
- Patient's name
- and the location the ECG was acquired

Setting Favorites List

Setting Favorites list:
After turning on “Use Favorite Statements...”

1. Click on a line in the interpretation
2. Click on box with 3 dots ...
3. Click on List
4. Click on Edit

Report View:

- Displays how ECG will look in EPIC or when printed out.

Customizing TMV - Setting your preference list

- You may edit and add to your Favorites list as you are reading ECGs or at one sitting if you prefer
- You must open an unconfirmed ECG to add or Edit your Favorites list
 - Click on a line in the interpretation
 - Click on box with 3 dots ...
 - Click on list
 - Click on Edit

Viewing ECGs (cont'd)

The screenshot shows the Philips ECG software interface. At the top, there is a toolbar with various icons. A red circle highlights the 'Summary' icon. Below the toolbar, patient information is displayed, including ID (2693120), Name (XBOBTMV, AH), and Location (17 - Good Samaritan / 06 - GSH Cardiac Care). The ECG date and time are 07-Apr-2011 2:29:29 PM. The ECG waveforms are displayed in the center, and an interpretation box is on the right. A text box overlay on the screen reads: 'In Summary view – All the patient information entered into the cart when the ECG was obtained will be displayed. Patient demographics Order information is found here'.

Summary view contains all the information that was entered on the cart when the ECG was acquired.

- This view is used to reconcile orders from Epic with the ECG in the TraceMasterVue application
- Reconciliation should be performed by system overseers before the ECGs are read (Respiratory Therapy Department)
- Most physicians prefer to read from a less cluttered screen with where waveforms are more easily viewed (ie: Stmt View)

Initial Search (cont'd)

- Under this line you will see tabs identifying each ECG the patient has had by its date and time acquired
 - Bold type on the tab indicates that the ECG has been selected in your previous search.
 - ECGs tabs that are not in bold type were not selected in your previous search
 - The red line over the date & time of the ECG indicates which ECG you are viewing
- Under the selected ECG tabs you will see the electronic interpretation and associated parameters for each segment of the ECG
- Below the interpretation box is the patient's gender, age and the severity that was electronically assigned to the ECG
- To the right of the Interpretation box is where the editing tools are located

Interpreting ECGs

Statement (Stmt) Page

- Zoom-in View
 - Left click on ECG screen to zoom in
 - Right click on ECG screen to zoom out

You may adjust the view of the ECG

- Left clicking on the wave form section to zoom in on the wave forms
- You may left click and hold to drag to a location to zoom in on a particular lead or wave form
- Right clicking will zoom out

Viewing ECG

Report view

- Displays how ECG will look in EPIC or when printed out.

Report View:

- Displays how ECG will look in EPIC or when printed out.

Viewing & Comparing ECGs

Waveform view

- Click to compare prior ECGs
- Will display the ECG selected on left and 1st previous on right
- Will display only ECG waveforms and statements

Side by side view of ECGs

- Click Waveform action icon to see two ECGs side by side. This is a good way to compare previous ECGs
- This will place the selected ECG (the one with the red line above the date & time) on the left and automatically place the first previous ECG on the right
- You may also compare a selected ECG with an older one by selecting an older ECG from the dropdown list above the ECG on the right
- Reminder - You will **not** be able to confirm or edit from this view so you will have to click on **Stmt** to confirm or edit

Interpreting ECGs (con't)

Configure Caliper

Show: P Q S T R2 HI

Measure: RR PR (P-Q) QR5 QT HI

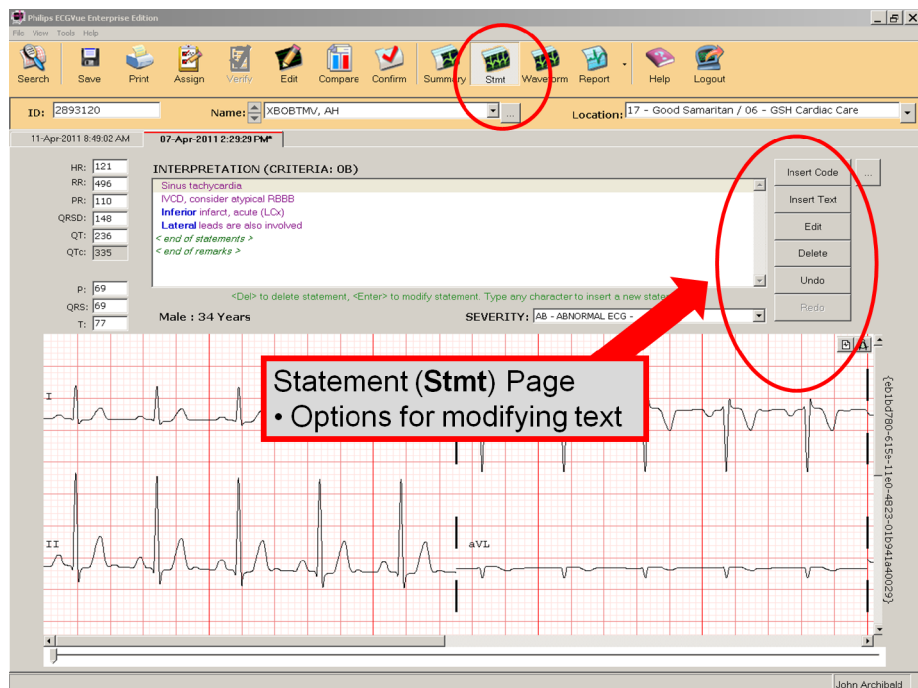
Show units:

Measurements: S mm, RR 496 ms/121 BPM

Other useful tools are the filters and calipers

- The small wave form icon next to the calipers at the top right of the waveforms will allow you to adjust filters and clean up messy waveforms
- The calipers will help you to measure waveforms on screen. The calipers may be used with the waveforms zoomed in for easier caliper placement.
 - Right click in the calipers opens the caliper configuration box to adjust your caliper use
 - Move and manipulate calipers by moving the mouse over the different segment lines of the calipers.
 - Set your calipers on a waveform by left click, hold and drag the base lines first
- Measurements are automatically calculated as you move the caliper lines

Interpreting ECGs (cont'd)



Editing the interpretation

- Once you click on a statement in the interpretation your editing tools become available. You may:
 - Insert a code
 - Insert text
 - Edit the statement
 - Delete it
 - Or... undo a change that you made

Interpreting ECGs (cont'd)

Reversing order of modifiers:

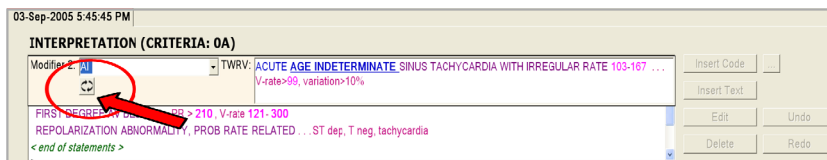
- 'Rotate Modifiers' button appears if there are 2 or more modifiers present within the interpretation.
 - Pressing the 'tab' key allows a user to navigate to all existing modifiers & allows the addition of a new modifier if desired.
- You may switch the order of your modifiers by using the little box with the circling arrows.
 - This will reverse their order

Confirming - Once you are satisfied with the interpretation

- Click the Confirm action icon at the top of the screen
 - This button will be grayed out if you do NOT have confirmation privileges

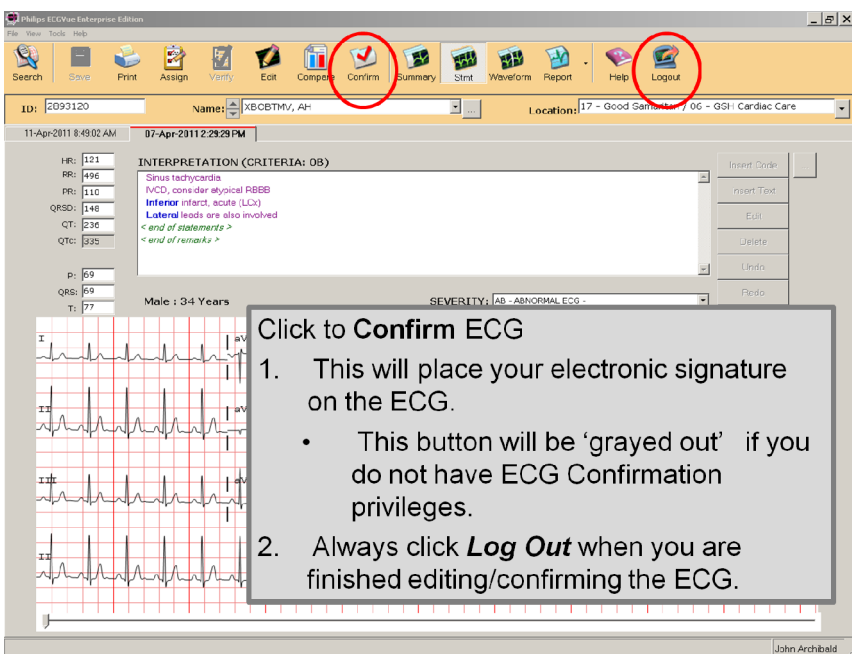
Always **LOG OUT** when you are finished editing/confirming the ECG

Interpreting ECGs (cont'd)



Reversing order of modifiers (Rotate Modifiers):

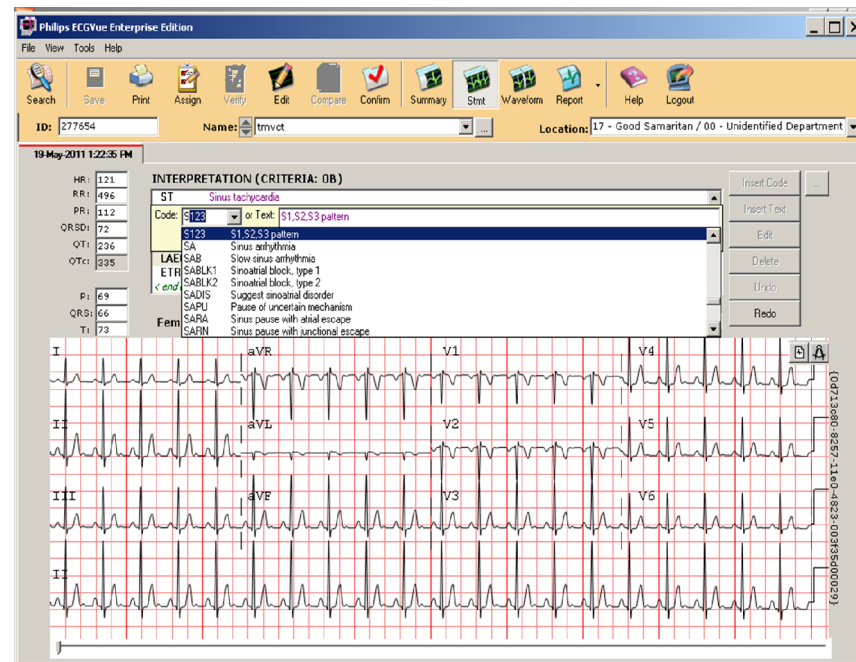
- You may switch the order of your modifiers by using the little box with the circling arrows.
 - This will reverse their order



Confirming - Once you are satisfied with the interpretation

- Click the Confirm action icon at the top of the screen
 - This button will be grayed out if you do NOT have confirmation privileges

Interpreting ECGs (cont'd)



To add a code or statement

- Click on the statement line you wish the statement to appear above
- Type the code or statement (for example, SA for sinus arrhythmia)
- A dropdown list will appear
- Select the statement you want and hit the enter key
- You may add an end statement by clicking on "end of statements" and type your code or statement
- End of remarks** is for adding a non-coded statement at the end of the interpretation

Interpreting ECGs (cont'd)

Philips ECGVue Enterprise Edition

File View Tools Help

Search Save Print Assign Verify Edit Compare Confirm Summary Stmt Waveform Report Help Logout

ID: 277654 Name: trmvt Location: 17 - Good Samaritan / 00 - Unidentified Department

19-May-2011 1:22:35 PM

HR: 121
RR: 496
PR: 112
QRSD: 72
QT: 236
QTc: 325

PI: 69
QRS: 66
TI: 73

Female : 20 Years

INTERPRETATION (CRITERIA: 0B)

ST Sinus tachycardia
LAECB LAE, consider bilateral enlargement
ETRSR1 RSR' in V1 or V2, right VCD or RVH
< end of statements >
< end of remarks >

Insert Codes

Codes	Description
LLAR	Low left atrial rhythm
LHLAR	High left atrial rhythm
LRAR	Low right atrial rhythm
HRAR	High right atrial rhythm
SR	Sinus rhythm
SB	Sinus bradycardia
ST	Sinus tachycardia
EAR	Ectopic atrial rhythm
EAB	Ectopic atrial bradycardia
EAT	Ectopic atrial tachycardia, unifocal
JER	Junctional rhythm
JRA	Accelerated junctional rhythm
JT	Junctional tachycardia
ST, T, and Repolarization Abnormalities	Sinus arrhythmia
WPACE	Wandering atrial pacemaker
AVDIS	AV dissociation
ETACH	Extreme tachycardia
SVT	Supraventricular tachycardia
TACHw	Wide QRS tachycardia
VTACH	Extreme tachycardia with wide complex, no T
AFB	Atrial fibrillation
AFLT	Atrial flutter

Categorized List

Another option for inserting codes or statement...

- Click the square box with 3 dotted lines to the right of insert code to open your preference list or find codes by **category**
- To find the category:
 - Double click the description you want (the box may be expanded so you can see the complete description by placing the mouse over the side of the box, left click and drag the box side to make it bigger)
 - Hit enter key
 - If no modifiers are needed hit the enter key again.
 - This will add the statement to the interpretation

Interpreting ECGs (cont'd)

Philips ECGVue Enterprise Edition

File View Tools Help

Search Save Print Assign Verify Edit Compare Confirm Summary Stmt Waveform Report Help Logout

ID: 2699999 Name: XBOBPHips, EKG ORDER Location: 17 - Good Samaritan / 30 - GSH Surgery Admssion L

26-Jan-2011 4:03:39 PM 26-Jan-2011 12:01:15 PM 29-Sep-2010 12:13:20 PM 03-Sep-2005 5:45:45 PM 06-Feb-2004 10:38:08 AM 29-Jan-2004 2:45:53 AM

HR: 30
RR: 2000
PR: 200
QRSO: 94
QT: 460
QTc: 325

P: 69
QRS: 69
T: 70

Male : 46 Years

INTERPRETATION (CRITERIA: 0A)

SINUS BRADYCARDIA

Modifier 1: ETRSR1 RSR' in V1 or V2, RIGHT VCD OR RVH

AC ACUTE
AI AIS INDETERMINATE
AL ANTERIOR
AL ANTEROLATERAL
AL ANTEROSEPTAL
BO BORDERLINE
SE CANNOT EXCLUDE
CO CONSIDER
CS CONSISTENT WITH

Statement (Stmt) Page

- Use the drop-down menus for inserting Modifiers

Modifiers (you may add up to three modifiers by using the tab key Modifiers 1, 2 & 3)

- Once you hit enter to add a statement the Modifier 1 will pop up (if none needed hit enter again)
- You may click the modifier you want from the dropdown list or type the first letter then click it
- Hit the tab key to add another modifier (Modifier 2) again you may click the modifier you want from the dropdown list or type the first letter then click it