Purpose:

This guide is designed to provide HealthEMS customers with instructions on how to import ECG data into HealthEMS MobileTouch from a monitor/defibrillator. Please refer to the HealthEMS ECG Reference Guide for an up-to-date list of requirements and support materials.

There are links provided to the monitor/defibrillator vendor instructions for how to setup data transmission connections. Instructions on how to program and configure the monitor/defibrillator for transmitting the ECG case files are not included in this document. Customers should consult with their monitor/defibrillator vendor and complete the data transmission setup process prior to using this document for importing the data into HealthEMS MobileTouch.

**IMPORTANT:** The following backend setup information is required for cloud and local integration.

![Philips HeartStart MRx](image1.png)  ![Physio-Control LIFEPAK 15](image2.png)  ![ZOLL X-Series for EMS](image3.png)
## Contents

**Overview** .................................................................................................................................................. 3
HealthEMS Manager ......................................................................................................................................... 3
ECG Devices (Step 1) ....................................................................................................................................... 3
Cloud Monitor Configuration (Step 2) .............................................................................................................. 3
MobileTouch Configuration (Step 3) ................................................................................................................ 3
HealthEMS MobileTouch ................................................................................................................................. 4
MobileTouch Dashboard (Step 4) .................................................................................................................... 4
MobileTouch ePCR (Step 5) ............................................................................................................................. 4

**Philips HeartStart MRx Setup** .................................................................................................................... 5
Cloud ................................................................................................................................................................. 5
HealthEMS Manager ........................................................................................................................................ 5
Local .................................................................................................................................................................. 5
HealthEMS Manager (Step 1) .......................................................................................................................... 5
Philips Data Transmission (Step 2) .................................................................................................................. 7
HealthEMS MobileTouch Local (Step 3) .......................................................................................................... 8
ECG Import (Step 4) ....................................................................................................................................... 8

**Physio-Control LIFEPAK Setup** ................................................................................................................ 11
Cloud ................................................................................................................................................................. 11
HealthEMS Manager (Step 1) .......................................................................................................................... 11
Physio-Control Data Transmissions (Step 2) ................................................................................................. 14
ECG Import (Step 3) ....................................................................................................................................... 14
Local ................................................................................................................................................................. 17
HealthEMS Manager (Step 1) .......................................................................................................................... 17
LIFEPAK Data Transmissions (Step 2) ............................................................................................................ 20
HealthEMS MobileTouch Local (Step 3) ........................................................................................................ 22
LIFEPAK Integration (Step 4) ......................................................................................................................... 22
ECG Import (Step 5) ....................................................................................................................................... 23

**ZOLL X-Series Setup** .................................................................................................................................. 30
Cloud ................................................................................................................................................................. 30
HealthEMS Manager (Step 1) .......................................................................................................................... 31
ZOLL Data Transmissions (Step 2) ........................................................................................................ 33
ECG Import (Step 3) ............................................................................................................................ 34
Local .................................................................................................................................................... 37
HealthEMS Manager ............................................................................................................................ 37
Appendix ............................................................................................................................................. 38
Conditional Validations ....................................................................................................................... 38
  Option 1 - ‘ECG: Require ECG Attachment’ ......................................................................................... 38
Features ............................................................................................................................................... 40
  Option 2 - ‘Enable Attachments’ .......................................................................................................... 40
  Option 3 - ‘Enable Editing Imported Vitals’ ........................................................................................ 41
Multi-ECG Import ................................................................................................................................. 42
Overview

This section is an overview of the specific monitor/defibrillator instructions that follow. The available options and requirements will vary depending on the monitor/defibrillator vendor hardware being used and the installation method chosen for MobileTouch.

HealthEMS Manager

*HealthEMS Manager* stores the setup information needed to configure MobileTouch.

**ECG Devices (Step 1)**

Navigate to Setup -> Agency -> **ECG Devices**

- Specify ECG monitor/defibrillator devices for transmitting ECG data files to the cloud
- Required for Cloud-to-Cloud configuration

**Cloud Monitor Configuration (Step 2)**

Navigate to Setup -> Application Settings -> **Cloud Monitor Configuration**

- Specify snippet images for attachment (Cloud only)
- Map medications and treatments for import (Cloud only)
- Required for Cloud-to-Cloud configuration

**MobileTouch Configuration (Step 3)**

Navigate to Setup -> Application Settings -> **MobileTouch Configuration**

- Enable/Disable ECG-Cloud support
  - Required for Cloud-to-Cloud configuration
  - See Cloud Monitor Configuration
- Enable/Disable ECG-Local support
  - Specify snippet images for attachment (Local only)
  - Map medications and treatments for import (Local only)
  - Required for Local configuration
- Enable/Disable Conditional Validations and **Features**
  - Optional for Cloud-to-Cloud or Local configuration
HealthEMS MobileTouch

*HealthEMS MobileTouch* downloads the configurations and setup options from Manager.

**MobileTouch Dashboard (Step 4)**

Navigate to the Shift tab

- Specify ECG Device (Cloud only)
- Required for Cloud-to-Cloud configuration

Navigate to the Support tab

- Select ‘Update Config’ button to manually download configurations from HealthEMS Manager and apply updates to MobileTouch.
- Select ‘Refresh Reference Tables’ button to manually download setup tables from HealthEMS Manager and apply updates to MobileTouch.

**MobileTouch ePCR (Step 5)**

Navigate to the Import ECG button

- Select the ‘Direct’ button to import ECG files from the monitor/defibrillator. (Local only)
- Select the ‘Cloud’ button to import ECG data already transmitted by the monitor/defibrillator. (Cloud only)
- Select the ‘Unable to Import’ button to write an explanation why ECG data could not be imported and attached to the ePCR. (Requires conditional validation to be enabled)
  - When the *ECG: Require ECG Attachment* configuration option is enabled in HealthEMS Manager, an **Unable to Import** tab will be displayed on the Import ECG window, but only after specific Provider Impressions are selected.

Navigate to Actions button

- Select the ‘Attachments’ option to attach additional ECG case files that have been locally transmitted from the monitor/defibrillator to the MobileTouch device. (Requires the feature to be enabled)
  - When the *Enable Attachments* configuration option is enabled in HealthEMS Manager, an **Attachments** option will be displayed on the Actions window.

Navigate to Event Logs tab

- Select the Crew member who captured the vitals and add additional information to the vital event record. (Requires the feature to be enabled)
  - When the *Enable Editing Imported Vitals* configuration option is enabled in HealthEMS Manager, the imported vitals record can be edited.
Philips HeartStart MRx Setup

Cloud

NOTE: There currently is no support for Philips Cloud-to-Cloud

HealthEMS Manager

1. Navigate to Setup -> Application Settings -> Cloud Monitor Configuration.

2. Navigate to Setup -> Application Settings -> MobileTouch Configuration.

   NOTE: The MobileTouch Configuration page is currently not applicable for cloud-to-cloud settings.

   a. Select the icon and modify the Default Settings configuration.
   b. Scroll down to the EKG – Cloud section.

Local

HealthEMS Manager (Step 1)

Any changes made in HealthEMS Manager requires a MobileTouch config update. While this happens periodically, a manual update can be performed from MobileTouch -> Support page -> ‘Update Config’ button.

1. Navigate to Setup -> Application Settings -> MobileTouch Configuration.

   a. Select the icon and modify the Default Settings configuration.

   b. Scroll down to the ‘EKG – Local’ section.
   c. Select Local = ‘ON’
Summary
d. Select the ‘Philips’ tab
e. Select ‘Attach Monitor File’ = ‘YES’
   i. Select ‘File Type’ = ‘EKG Data File’
f. Select ‘Attach ECG Snippets’ = ‘YES’
   i. Select ‘File Type’ = ‘ECG Image’
   ii. Select ‘ECG Events to create snippets’ and enter event names specific to the Philips HeartStart MRx monitor
g. Select ‘Attach 12 Lead Image’ = ‘YES’
   i. Select ‘File Type’ = ‘12 Lead Image’

h. Import Vitals
   i. Select ‘Import Vitals’ = ‘ON’
   ii. Select ‘Import Vitals – Frequency’ and enter ‘5’
   iii. Select ‘Import Vitals – Blood Pressure’ = ‘YES’
   iv. Select ‘Import Vitals – Pulse’ = ‘YES’
   v. Select ‘Import Vitals – SPO2’ = ‘YES’
   vi. Select ‘Import Vitals – CO2’ = ‘YES’

i. Import Treatments/Medications
   i. Select ‘Import Treatments/Medications’ = ‘YES’
   ii. Select ‘Add Medication’ button, then enter a Medication Mappings Description along with a selection from the dropdown list of available medications.
   iii. Select the ‘Save’ button to save a new Medication Mapping

NOTE: The monitor Philips Medication and HealthEMS Medication fields are now both required in the Medication Mappings section.

iv. Select ‘Add Treatment’ button, then enter a Treatment Mappings Description along with a selection from the dropdown list of available treatments.

v. Select the ‘Save’ button to save a new Treatment Mapping
NOTE: The monitor **Philips Treatment** and **HealthEMS Treatment** fields are now both required in the **Treatment Mappings** section.

j. **Import Vitals/Flows Employee**
   i. Select ‘Employee to set for all imported vitals/flows’, then select a matching name from the dropdown list. This is typically a generic name like ‘EKG, Monitor’.
   k. Select the ‘Save Configuration’ button to save all settings for this config.

A "0 - User Defined Medication" option has been added to the Medication Mappings drop-down list and a "0 - User Defined Treatment" option has been added to the Treatment Mappings drop-down list on the ECG - Local section of the Setup -> Application Settings -> MobileTouch Configuration page.

When an ECG event is mapped to these new options, MobileTouch will import the event/marker and allow the user to change it to the appropriate Treatment or Medication on the Event Log tab in MobileTouch.

**Philips Data Transmission (Step 2)**

All case files must be transmitted to ‘C:\ProgramData\Physio-Control\MobileTouch\rawdata’. Also, the HeartStart MRx monitor requires the Toshiba Bluetooth driver stack.

Instructions on how to program and configure the MRx for transmitting ECG case files via Bluetooth or WiFi are not included in this document. Please complete the data transmission setup between the MRx monitor and the Windows tablet device with Philip’s technical support prior to using this document for importing the data into HealthEMS MobileTouch.

**NOTE:** The Philips Data Messenger software is optional and not required to receive case files from the MRx monitor.
**HealthEMS MobileTouch Local (Step 3)**
Please refer to the most recent version of the *MobileTouch v6 Setup Guide* for instructions on how to install and setup MobileTouch Local.

**ECG Import (Step 4)**
Please refer to the most recent version of the *MobileTouch v6 User Guide* for additional information on imported data in the Event Log and data file attachments.

1. While editing an ePCR, select the button to open the popup window.

2. Select “Direct” for local import.
   a. Cloud is not supported for Philips
   b. Enter "Unable to Import" comment, if an ECG case file is not available for import.
3. Select the radio button that corresponds with the ECG case file, then select “Import”.

4. The Import ECG window will display “Loading ECG Data” status.

5. “Syncing attachments” will display the progress.
6. The case file Vitals, Treatments, Medications, and Attachments will default as selected. Click on the checkmark next to any items to un-select or re-select.

7. Select “Close” to close the “Import ECG” popup window.

8. The marked events will be listed in the ePCR Event Log page.

Optional: Select “Detach” to un-select the entire case file and events from importing or attaching to the ePCR.

9. Multi-ECG import is now supported.
Physio-Control LIFEPAK Setup

Cloud

HealthEMS Manager (Step 1)
Any changes made in HealthEMS Manager requires a MobileTouch config update. While this happens periodically, a manual update can be performed from MobileTouch -> Support page -> ‘Update Config’ button.

Navigate to Setup -> Application Settings -> Cloud Monitor Configuration.
Summary

- Attach Monitor File (radio)
- Monitor File Attachment File type (dropdown list)
- Attach ECG snippets (radio)
- ECG Snippet File type (dropdown list)
- ECG Events to create snippets – enter comma-separated list of events (text)
- Snippet seconds before (text)
- Snippet seconds after (text)
- Attach 12 Lead Images (radio)
- 12 Lead image attach filetype (dropdown list)

Import Vitals

- Import Vitals (radio)
- Import Vitals – Frequency (text)
- Import Vitals – Blood Pressure (radio)
- Import Vitals – Pulse (radio)
- Import Vitals – SPO2 (radio)
- Import Vitals – CO2 (radio)

Import Treatments/Medications

- Import Treatments/Medications
  - Yes / No (radio)

A "0 - User Defined Medication" option has been added to the Medication Mappings drop-down list and a "0 - User Defined Treatment" option has been added to the Treatment Mappings drop-down list on the ECG - Local section of the Setup -> Application Settings -> MobileTouch Configuration page.

When an ECG event is mapped to these new options, MobileTouch will import the generic event/marker and allow the user to change it to the appropriate Treatment or Medication on the Event Log tab in MobileTouch.
**Medication Mappings**

- Physio Medication (text)
- HealthEMS Medication (dropdown list)
- Add New Medication Mapping (button)

A "0 - User Defined Medication" option has been added to the Medication Mappings drop-down list on the Cloud Monitor Configuration page.

When an ECG event is mapped to these new options, MobileTouch will import the Generic event/marker and allow the user to change it to the appropriate Medication on the Event Log tab in MobileTouch.

NOTE: The monitor *Physio Medication* and *HealthEMS Medication* fields are both required in the Medication Mappings section.

---

**Treatment Mappings**

- Physio Treatment (text)
- HealthEMS Treatment (dropdown list)
- Add New Treatment Mapping (button)

A "0 - User Defined Medication" option has been added to the Treatment Mappings drop-down list on the Cloud Monitor Configuration page.

When an ECG event is mapped to these new options, MobileTouch will import the Generic event/marker and allow the user to change it to the appropriate Treatment on the Event Log tab in MobileTouch.

NOTE: The monitor *Physio Treatment* and *HealthEMS Treatment* fields are both required in the Treatment Mappings section.

---

**Import Vitals/Flows Employee**

- Employee to set for all imported vitals/flows (dropdown list)
- Save (button)
Physio-Control Data Transmissions (Step 2)
For operating instructions on how to set up a connection between your device and the LIFEPAK 15, proceed to Chapter 8, Data Transmission of the instructions linked HERE.

NOTE: This will require LIFENET PC Gateway software.

Stryker also offers an optional Titan Wireless Gateway module, which connects the LIFEPAK 15 to the Stryker LIFENET System via a WiFi or Broadband connection.

ECG Import (Step 3)
Please refer to the most recent version of the MobileTouch v6 User Guide for additional information on imported data in the Event Log and data file attachments.

1. From the Dashboard select the “Shift” page, then “EKG Device”

2. Select the name of the ECG monitor being used to import case files sent to the Physio cloud.
   - This selection will filter the available case files to only the serial number/device name of the ECG monitor selected.
   - The ECG/EKG monitor device list is managed from a HealthEMS Manager Setup table and downloaded to a MobileTouch Reference table.

3. While editing an ePCR, select the button to open the popup window.

4. Select “Cloud” for online import.
   a. Direct is for local/offline import and will be reviewed in a section below.
   b. Enter Unable to Import comment, if an ECG case file is not available for import.
5. The device selected from the Shift menu will be used to search for matching patient case files within the agency.

6. The default EKG Device from the Shift page will display and filter any matching case files.
   a. If there are no matching cases found, a message in the popup window will display.
   b. Select “Close” at any time to cancel.

7. To change the ECG monitor, select a different EKG Device from the dropdown list

8. Choose the radio button that corresponds with the case file, then choose the Import button.
   - The service Date of the ePCR and the EKG Device selected on the Shift page are used to filter the available list of case files for import.
   - **IMPORTANT NOTE:** To search for case files for a different date, the Date of the PCR must be changed.
9. The “Loading ECG Data” status window will display the progress of “Downloading attachments”.

10. The details of the case file events will be displayed and check marked by default for import.
    - Unchecking an event will remove that event or attachment from inclusion in the ePCR.

11. The details of the case file events will be displayed and check marked by default for import. These attachments are blue.
    - Unchecking an attachment will remove that event or attachment from inclusion in the ePCR. These attachments are grey.
12. Selecting the 📸 icon will display the image attachment in a new window.
   - Select the ‘Close’ button when done viewing the image

13. Select the ‘Detach’ button to remove the entire case file, events, and attachments from inclusion in the ePCR.

14. **Multi-ECG import** is now supported.

---

**Local**

**HealthEMS Manager (Step 1)**

1. Navigate to Setup -> Application Settings -> MobileTouch Configuration.
   a. Select the icon and modify the Default Settings configuration.
   b. Scroll down to the ‘EKG – Local’ section.
   c. Select Local = ‘ON’
      - Default = ‘OFF’

**Summary**

   d. Select the ‘Physio-Control’ tab
   e. Select ‘Attach Monitor File’ = ‘YES’
      i. Select ‘File Type’ = ‘PCO File’
   f. Select ‘Attach ECG Snippets’ = ‘YES’
      i. Select ‘File Type’ = ‘ECG Image’
      ii. Select ‘ECG Events to create snippets’ and enter event names specific to the LIFEPAK monitor
   g. Select ‘Attach 12 Lead Image’ = ‘YES’
      i. Select ‘File Type’ = ‘12 Lead Image’
   h. Import Vitals
      i. Select ‘Import Vitals’ = ‘ON’
      ii. Select ‘Import Vitals – Frequency’ and enter ‘5’
      iii. Select ‘Import Vitals – Blood Pressure’ = ‘YES’
      iv. Select ‘Import Vitals – Pulse’ = ‘YES’
v. Select ‘Import Vitals – SPO2’ = ‘YES’
vi. Select ‘Import Vitals – CO2’ = ‘YES’

i. Import Treatments/Medications
   i. Select ‘Import Treatments/Medications’ = ‘YES’
   ii. Select ‘Add Medication’ button, then enter a Medication Mappings Description along with a selection from the dropdown list of available medications.
   iii. Select the ‘Save’ button to save a new Medication Mapping

**NOTE:** The monitor *Physio Medication* and *HealthEMS Medication* fields are now both required in the Medication Mappings section.

iv. Select ‘Add Treatment’ button, then enter a Treatment Mappings Description along with a selection from the dropdown list of available treatments.

v. Select the ‘Save’ button to save a new Treatment Mapping

**NOTE:** The monitor *Physio Treatment* and *HealthEMS Treatment* fields are now both required in the Treatment Mappings section.

j. Import Vitals/Flows Employee
   i. Select ‘Employee to set for all imported vitals/flows’, then select a matching name from the dropdown list. This is typically a generic name like ‘EKG, Monitor’.

k. Select the ‘Save Configuration’ button to save all settings for this config.
A "0 - User Defined Medication" option has been added to the Medication Mappings drop-down list and a "0 - User Defined Treatment" option has been added to the Treatment Mappings drop-down list on the ECG - Local section of the Setup -> Application Settings -> MobileTouch Configuration page.

When an ECG event is mapped to these new options, MobileTouch will import the event/marker and allow the user to change it to the appropriate Treatment or Medication on the Event Log tab in MobileTouch.

**NOTE: Only one User Defined option is supported. Please select one for Medication OR one for Treatment but not both at the same time.**
LIFEPAK Data Transmissions (Step 2)

HealthEMS MobileTouch Prerequisites:

- ECG case files must be transmitted to ‘C:\ProgramData\Physio-Control\MobileTouch\rawdata’
  - For details refer to Step 4 under CODE-STAT Configuration

- Windows Device Manager must have devices configured with supported drivers
  - Bluetooth
  - Infrared
  - Ports

- Windows 10 requires the LIFEPAK Bluetooth Connection Utility
  - For details refer to the HealthEMS ECG Reference Guide
LIFEPAK 12 or 15

For operating instructions on how to set up a connection between your device and the LIFEPAK 15, proceed to Chapter 8, Data Transmission of the operating instructions linked HERE.

Bluetooth Pairing:

1. From the Windows Systray, select the Bluetooth icon, then Open Settings
2. From the Settings menu, select the Options tab
3. Check “Allow Bluetooth devices to find this PC”
4. Uncheck “Alert me when a new Bluetooth device wants to connect”
5. From the COM Ports tab, Add an available COM port
   - Select Add, then OK
6. Choose Apply, then OK
7. (Because of Windows 10) the LIFEPAK Bluetooth Connection Utility needs to be installed and set to the COM port just added
   - For details refer to the HealthEMS ECG Reference Guide
8. Pair the LIFEPAK to the device
   - For details refer to the Using Bluetooth Wireless Communication section of the LIFEPAK 15 Operating Instructions
LIFEPAK 1000

For operating instructions on how to set up a connection between your device and the LIFEPAK 1000, proceed to Chapter 4, Data Management of the operating instructions linked HERE.

Infrared Adapter:

1. The IrDA (infrared adapter) may blink repeatedly searching for an available connection

2. Position IrDA adapters in line of sight to each other
   - For details refer to Figure 4-1 IrDA Connections of the LIFEPAK 1000 Operating Instructions

HealthEMS MobileTouch Local (Step 3)
Please refer to the most recent version of the MobileTouch Setup Guide for instructions on how to install and setup MobileTouch Local.

LIFEPAK Integration (Step 4)
Importing LIFEPAK case files locally/offline requires the LIFEPAK 10.1 SDK software.

Please refer to the most recent version of the LIFEPAK SDK Setup Guide for instructions on how to install and setup the LIFEPAK SDK.
**ECG Import (Step 5)**

Please refer to the most recent version of the *MobileTouch User Guide* for additional information on imported data in the Event Log and data file attachments.

1. If there are no matching cases found, a message in the popup window will display.
   - This means there are no .PCO case files found in the MobileTouch ‘rawdata’ folder.
   - Click “Close” to close the popup window.

2. Select the blue ‘Import Case from LIFEPAK Directly’ button
   - This will launch the CODE STAT 10.1 SDK interface
   - This provides local/offline support for importing
   - *NOTE:* Only choose “Cloud” when using the Online (cloud-to-cloud) HealthEMS Manager setup, which is integrated into Physio-Control LIFENET.

3. If no ports are found, check the SDK Configuration.
   - Select ‘Back’ to choose a device
   - Select ‘Cancel’ to start over
4. Choose LIFEPAK 12 or 15, then 'Next'

a. Then follow the instructions to transmit ECG case file(s)
5. Choose LIFEPAK 1000, then 'Next'

a. The device will automatically display when detected
b. If no device is detected, make sure the device is powered on and positioned correctly.
c. Select ‘Back’ and try again

6. Select the applicable patient record, then ‘Next’
7. The ECG record will transfer from the LIFEPAK

8. Select ‘Finish’ when the download is complete

   a. Cloud is for online import and will be reviewed in a section above.
   a. Enter Unable to Import comment, if an ECG case file is not available for import.
10. Choose the radio button that corresponds with the case file, then choose the 'Import' button.

11. The “Loading ECG Data” status window will display the progress of “Downloading attachments”.

12. The details of the case file events will be displayed and check marked by default for import.
Unchecking an event will remove that event or attachment from inclusion in the ePCR.

13. The details of the case file events will be displayed and check marked by default for import. These attachments are blue.

- Unchecking an attachment will remove that event or attachment from inclusion in the ePCR. These attachments are grey.

14. Selecting the 📷 icon will display the image attachment in a new window.

- Select the 'Close' button when done viewing the image

15. Select the ‘Detach’ button to remove the entire case file, events, and attachments from inclusion in the ePCR.

16. Mult-ECG import is now supported.
ZOLL X-Series Setup

Cloud
Navigate to Setup -> Application Settings -> **Cloud Monitor Configuration**.

![Cloud Monitor Configuration](image-url)
**HealthEMS Manager (Step 1)**

Any changes made in HealthEMS Manager requires a MobileTouch update. While this happens periodically, a manual update can be performed from MobileTouch -> Support page -> ‘Update Config’ button.

**Cloud Configuration**
- Data Access Key (text)
  - 50 characters
- Password (text)
  - 50 characters

**Summary**
- Attach Monitor File (radio)
- Monitor File Attachment File type (dropdown list)
- Attach ECG snippets (radio)
- ECG Snippet File type (dropdown list)
- ECG Events to create snippets – enter comma-separated list of events (text)
- Snippet seconds before (text)
- Snippet seconds after (text)
- Attach 12 Lead Images (radio)
- 12 Lead image attach filetype (dropdown list)

**Import Vitals**
- Import Vitals (radio)
- Import Vitals – Frequency (text)
- Import Vitals – Blood Pressure (radio)
- Import Vitals – Pulse (radio)
- Import Vitals – SPO2 (radio)
- Import Vitals – CO2 (radio)
Import Treatments/Medications

- Import Treatments/Medications
  - Yes / No (radio)

Medication Mappings

- Zoll Medication (text)
- HealthEMS Medication (dropdown list)
- Add New Medication Mapping (button)

A “0 - User Defined Medication” option has been added to the Medication Mappings drop-down list on the Cloud Monitor Configuration page.

When an ECG event is mapped to these new options, MobileTouch will import the Generic event/marker and allow the user to change it to the appropriate Medication on the Event Log tab in MobileTouch.

NOTE: The monitor Zoll Medication and HealthEMS Medication fields are now both required in the Medication Mappings section.

Treatment Mappings

- Zoll Treatment (text)
- HealthEMS Treatment (dropdown list)
- Add New Treatment Mapping (button)

A “0 - User Defined Medication” option has been added to the Treatment Mappings drop-down list on the Cloud Monitor Configuration page.

When an ECG event is mapped to these new options, MobileTouch will import the Generic event/marker and allow the user to change it to the appropriate Treatment on the Event Log tab in MobileTouch.

NOTE: The monitor Zoll Treatment and HealthEMS Treatment fields are now both required in the Treatment Mappings section.

Import Vitals/Flows Employee

- Employee to set for all imported vitals/flows (dropdown list)
- Save (button)
ZOLL Data Transmissions (Step 2)

Click [HERE](#) to open ZOLL’s product webpage in your browser. Under the Product drop down list select “X Series Monitor”; then, select your Language. Under Search Results click on the “X Series Operators Guide” link to download the PDF file.

Navigate to Chapter 22 – Communications, page 251, for instructions on how to setup connections via WiFi and Bluetooth.

Click [HERE](#) for ZOLL’s Data Retriever support information.

Once Data Retriever is installed and configured, the Data Retriever Options needs to be configured to make the data available for MobileTouch to receive ECG data from the X-Series for import.

- **Destination Folder:**
  - Enter "C:\ProgramData\Physio-Control\MobileTouch\rawdata"
- **Select “OK” to save**
• Upload:
  - Choose the transfer method from the dropdown list, then select “Upload” to copy the ECG data file(s) for MobileTouch to import.

ECG Import (Step 3)
Please refer to the most recent version of the MobileTouch v6 User Guide for additional information on imported data in the Event Log and data file attachments.

1. From the Dashboard select the “Shift” page, then “EKG Device”

2. Select the name of the ECG monitor being used to import case files sent to the ZOLL cloud.
   - This selection will filter the available case files to only the serial number/device name of the ECG monitor selected.
   - The ECG/EKG monitor device list is managed from a HealthEMS Manager Setup table and downloaded to a MobileTouch Reference table.

3. While editing an ePCR, select the button to open the popup window.
4. Select “Cloud” for online import.
   a. Direct is for local/offline import and will be reviewed in a section below.
   b. Enter Unable to Import comment, if an ECG case file is not available for import.

5. The device selected from the Shift menu will be used to search for matching patient case files within the agency.

6. The default EKG Device from the Shift page will display and filter any matching case files.
   c. If there are no matching cases found, a message in the popup window will display.
   d. Select “Close” at any time to cancel.

7. To change the ECG monitor, select a different EKG Device from the dropdown list
8. Choose the radio button that corresponds with the case file, then choose the Import button.

- The service Date of the ePCR and the EKG Device selected on the Shift page are used to filter the available list of case files for import.

- **NOTE:** To search for case files for different date, the Date of the PCR must be changed.

- The ECG import function has been updated so that it searches for ECG events matching the **Date** (Date of Service) field on the MobileTouch form plus three hours after midnight of the following day.

9. The “Loading ECG Data” status window will display the progress of “Downloading attachments”.

10. The details of the case file events will be displayed and check marked by default for import.

- Unchecking an event will remove that event or attachment from inclusion in the ePCR.
Choose “Detach” to remove the entire case file, events, and attachments from inclusion in the ePCR.

11. **Multi-ECG import** is now supported.

**Local**

*NOTE: There currently is no support for ZOLL Local/Offline.*

**HealthEMS Manager**

1. Navigate to Setup -> Application Settings -> MobileTouch Configuration.
   
   a. Select the icon and modify the Default Settings configuration.

   b. Scroll down to the ‘EKG – Local’ section.
   c. Selection is ‘OFF’ by default
Appendix

Conditional Validations
Enable/Disable Conditional Validations (Cloud and Local)

Option 1 - ‘ECG: Require ECG Attachment’
When enabled an Unable to Import tab will be displayed on the Import ECG window.

Selecting this tab will display an Unable to Import ECG Comments field. This field is limited to 400 characters.
This configuration includes validation to require either ECG data to be imported or text to be entered in the **Unable to Import ECG Comments** field when any Provider Impression field (Primary, Secondary, Other 1, Other 2, Other 3) has any of the following values selected:

- Cardiac Arrest
- Cardiac Symptoms
- Chest Pain
- Respiratory Arrest
Features
Enable/Disable Features (Cloud and Local)

Option 2 - ‘Enable Attachments’
When enabled an Attachments option will be displayed on the Actions side panel window.

Selecting this option will display an Add Attachments button. Attachments are limited to a maximum total size of 10MB per ePCR. Setting the maximum total size is part of the Enable Attachments config option.
Option 3 - ‘Enable Editing Imported Vitals’
When enabled the imported Vital record in the Event Log can be edited.

When disabled a generic ‘EKG’ crew name displays and the vital event is greyed out and cannot be edited. This is the default setting.
Multi-ECG Import
The ability to attach and import data from multiple ECG files to a single PCR which will allow multiple events from a single monitor, or multiple monitors. All the data (treatments, meds, vitals, snippets, etc.) will be imported from all the attached events.

Click to Import ECG Monitor events as normal.
Click **Import additional ECG Case** on the Import screen to select another Case, then click **Import**.
All selected ECG Cases appear for import. Additional Cases can also be selected.
### Imported ECG Cases

Select a row to see case details

<table>
<thead>
<tr>
<th>CASE DATE/TIME</th>
<th>DEVICE</th>
<th>VTL</th>
<th>Tx</th>
<th>Mx</th>
<th>SNP</th>
<th>12L</th>
</tr>
</thead>
<tbody>
<tr>
<td>09/05/2019 15:54:38</td>
<td>LIFENET Cloud</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>09/05/2019 15:41:10</td>
<td>LIFENET Cloud</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

Import additional ECG Case