

Connex® VM 2.x Outline Train the Trainer

A. Intended Use

1. The Welch Allyn Connex® VM data management system is intended for the collection and review of patient data, and the communication of that data to an information system. It also provides:
 - a. the ability to enter data manually
 - b. notification when data deviates from set ranges, and
 - a. the ability to identify and manage patients



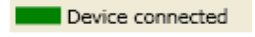
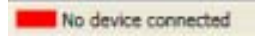




B. Interfaces

1. Connex® VM communicates using Health Level 7 (HL7) messaging to transfer patient vital signs to an electronic medical record, and imports patient demographics from the admit/discharge/transfer (ADT) system.

C. Computer Hardware

1. Connex® VM is a browser-based application, meaning it can run on a range of computer devices, e.g., mobile computers, desktop workstations and most Windows®-based networked computers. It also allows vital signs to be transferred via hardwired or wireless networks.

D. Software Symbols

Symbol	Name	Description
	Alert	Visual cue when abnormal value has occurred according to Connex® VM settings.
	Connex® VM Workstation	Click this icon to start Connex® VM program.
	Device connected	Displays when device is connected and communicating with Connex® VM software.
	No device connected	Displays when device is disconnected or not communicating with Connex® VM software.
	Print	Click this button to print contents of current view. Click Print's dropdown arrow; select a command.
	Refresh	Updates display to reflect recent changes.
	List	Allows user to display patient data in list format.
	Tile	Allows user to view patient data in tile format.

E. Safety Warning Review



WARNING: The Connex® VM system transfers data from a vital signs device only when a user initiates a transfer. Do not mistake the Welch Allyn Connex® VM data management system for a patient monitoring device.

WARNING: If the Connex® VM program or the computer running the program fails, take these steps:


- a) If a user attempted to capture or import data prior to the failure, verify that the system received the data.
- b) If the system did not receive the data and the user wants to import it when the system becomes operational, ensure that the device retains the data.

WARNING: When you transfer data into the Connex® VM system, you associate the data with a patient by selecting a patient name in the system. Verify that you have selected the correct name. If you select an incorrect name, you associate the data with a wrong patient.

WARNING: Whenever you enter data into the Connex® VM workstation, verify that the data is correct before you save it.






WARNING: When you initiate data import into the Connex® VM system from a vital signs device, select all data that needs to be retained. When the Connex® VM system imports data, all vital signs data (including nonselected data) is cleared from the device.

F. Using Connex® VM

1. To start Connex® VM, double click on  to enter your **User Name*** and **Password**, then click **Log on**. The **Home** page appears with a list of patients and their most recent readings with date and time. The list of the patients is determined by the Location(s) selected in the **Show** list. To return to the **Home** page at any time, click the **Home** tab.


NOTE: Clicking **Log off** from any screen logs the user out and returns to Log on screen.

*Some functions are not available to all users.

2. Other functions from the **Home** page include:
 - a. **Scan or type patient ID box:** Enter a patient ID by typing or bar code scanning the ID and then click **Go**. This opens the patient record for that ID, or the **Capture Vital signs** screen, depending upon your system configuration.
 - b. **Show list:** Select info you want to view. All systems come with the option to show **My locations**. To find information not listed, click on **Search** tab.
 - 1) **My locations:** Shows the patients admitted to your selected location(s) on the **Home** page. To find a patient not listed, click on **Search** tab. To reveal the **My locations** options, click on  on the upper right of window. To hide the locations option, click on .
 - 2) **My assignments:** Shows the patients that are assigned to you and listed on the **Home** page. To find a patient not listed, click on **Search** tab.
 - c. **List:** Displays patient data in a list format.
 - d. **Tile:** Displays patient data in a tile format.
 - e. **Refresh:** Updates displayed data to reflect recent changes.
 - f. **Print:** Click icon to print contents of current view. Click on  for other commands.
 - g. **Sorting:** Click a column heading to change the order of the information displayed.
 - h. **Action menus:** Click on  next to patient name to view options of: **Capture vital signs, Import data from a device, View patient record, Assign/Unassign, or Delete Patient**.
 - i. **Assign/Unassign:** Allows user to assign/unassign patients. Click on **Assign/Unassign**, select a clinician in upper right of window, then click on grey box next to patient name to select. Click on  to deselect a patient, then click **Save**.
3. The **Home** page also displays Patient ID, Room, DOB, Gender, NIBP, PR, SpO₂, Temp, Date and Time (of most recent vitals), Assigned Clinician, plus visual cues for:
 - a. **Alerts:** Abnormal readings (per Connex® VM settings) highlighted in **yellow**.

G. Transferring Vital Signs into Connex® VM

1. Capture Vital Signs for a Patient

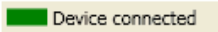
- a. **Capture vital signs** screen lets the user document all data on one screen. Automated measurements come over from the device as they are completed (e.g., pulse rate or SpO₂), and you can click on **Start** to obtain a blood pressure from an attached device. Other fields where data can be typed in at any time are Height, Weight, Pain, Respiration, Glucose, Modifiers and Comments.
- b. As device-generated measurements are completed on a connected device, the data automatically displays on the **Capture vital signs** screen. Data remains until the user clicks **Save**.
- c. To capture vitals from an attached device, log on and:
 - 1) From the **Home page**:
 - a) Ensure blinking cursor () is located in the **Scan or type patient ID** box. Hold the barcode scanner about 6 inches from the wristband and scan the patient ID, or type in patient ID. Click **Go**; or
 - b) Locate the patient name, click ▼ and select **Capture vital signs**.
 - 2) Confirm the patient identification at top of the window.
 - 3) Attach sensors and/or BP cuff to the patient. Click **Start** to begin a blood pressure measurement. (Temperature and pulse oximetry readings are automatically updated as soon as the probe/sensors are applied to the patient.)
 - 4) Select modifiers from lists, type values in the numerics boxes, and add a **Comment**, if desired.
 - 5) Manually enter or revise information by clicking on **Enter manually**. Type in values as needed.

NOTE: Selecting **Enter manually** suspends communication with the device. Clicking on **Capture from device** resumes communication with the device.
 - 6) After all information has been captured, click **Save**. The measurements are stored and the **Home page** displays.

2. Import Multiple Readings for One Patient

- a. Ensure the device is attached to the Connex® VM workstation and log on.
- b. From the **Home page**, click on ▼ next to a patient name and select **Import data from device**. The **Import Data from Device** window appears.
- c. Confirm the patient identification.
- d. Verify that the items with checkmarks (√) are the ones to import. To deselect a reading, click on the √ and that reading will not be imported.
- e. NOTE: You may edit data prior to importing. Double click on the reading you want to edit, then click on **Edit** located at bottom of screen. Revise values, modifiers, or comments as needed. Click **Save**.
- f. Click **Import** in lower right, and **Import complete** message appears.
- g. Click **Done** in lower right. Clicking **Done** clears the device, updates the **Patient Record** and returns the user to the **Home** page with the patient list.

3. Import Multiple Patients' Saved Readings

- a. Obtain multiple vital signs and save to the device.
- b. Attach the device to the Connex® VM Workstation, log on, and ensure the  is **green**.
- c. Click on **Devices** on toolbar, then **Import data from device**.
- d. The **Import Data from Device** window appears with the vitals to import.
- e. Verify that the items with checkmarks (√) are the ones to import. To deselect a reading, click on the √ and that reading will not be imported.

- f. NOTE: You may edit data prior to importing. Double click on the reading you want to edit, then click on **Edit** located at bottom of screen. Confirm the patient identification. Revise values, modifiers, or comments as needed. Click **Save**. Manually entered information is marked with an asterisk (*).
- g. Click **Import** in lower right, and **Import complete** message appears.
- h. Click **Done** in lower right. Clicking **Done** clears the device, updates the **Patient Record** and returns the user to the **Home** page with the patient list.


4. Wireless Workflow

- a. *To Capture Vitals:*
 - 1) Turn on the vital signs device.
 - 2) Touch the clinician area. Scan the clinician's ID. Touch **Select**.
 - 3) From **Home screen**, scan the patient's barcode OR touch **Patients, List** and then the patient. Touch **Select**.
 - 4) Capture the vital signs; in **Monitoring profile**, keep the SpO₂ sensor on in order to save the reading. In **Spot check profile**, remove the SpO₂ sensor in order to save the reading. If available, the SpHb (Total Hemoglobin) numeric value will automatically transfer in.
 - 5) Enter Height, Weight, Pain, and Respiration as needed. Touch **OK** when done.
 - 6) When readings are complete, press **Save**. NOTE: This will send your reading when autosend is enabled.
 - 7) For the next patient, start at Step 3.
- b. *To Send Readings Taken During Intervals:*
 - 1) Touch the **Review** tab.
 - 2) Touch the reading you want to send, then **Send**. Touch **OK** to confirm send.
 - 3) Depending upon configuration, once a reading is sent to Connex[®] VM, the memory on the device is cleared.

5. Push Data from a Device Workflow

- a. *To Capture Vitals:*
 - 1) Follow the steps listed in section 4a. above.
- b. *To Push Data from Device:*
 - 1) Attach the device to a PC with a USB cable.
 - 2) Touch the **Review** tab.
 - 3) Touch readings you want to send (a ✓ will appear next to selected items). Touch **Send** and then **OK** to confirm.
 - 4) Depending upon configuration, once a reading is sent to Connex[®] VM, the memory on the device is cleared.

H. To View Saved Vital Signs Information

1. From the **Home page**, click on ▼ next to a patient name and select **View patient record**. The **Vital Signs** page appears.
2. Click on ▼ next to the **Show list** window to specify a date range of information to display.
3. Click **OK**.
4. Select a view:
 - a. **Summary:** Displays all patient data for all parameters.
 - b. **Tabular view:** Shows all vital signs in a numeric table.
 - c. **Graph view:** Shows the trends for the selected vital signs listed when you click on ▼ .
5. To obtain printouts of patient information from a selected screen, click on . Click on ▼ next to the print icon for other print commands.

I. View or Edit a Patient Record

1. From the **Home page**, click on ▼ next to a patient name and select **View patient record**. The **Patient record** page appears.
 - a. To edit patient information, click on ▼ next to patient name and select **Patient details**. The **Patient Details** window appears.
 - b. Click **Edit**. Revise patient information as needed.

J. Update Unreconciled Data

1. To reconcile data imported from a device that does not match any patient record in the system, click on the **Search** tab, OR click on **View** on the toolbar in the upper left, then **Search**.
2. Click on **Unreconcilable data**. Enter your search criteria. Click on **Search**.
3. Select the record you want to assign to a patient ID.
4. Click **Edit**. The **Edit** window appears.
5. Type or scan the patient ID in the **Patient ID** field. Click **OK**.

K. Export a Patient List

1. From the **Home page**, click **Export to device**. The **Upload patient list to device** window appears.
2. Click on box next to selected patient(s) to add to export list. Click **Next**.
3. Verify selected patient names. Click **Confirm**. The Export complete message appears.
4. Click **Done**.

L. To Search for a Patient

1. Click the **Search** tab or click on **View** on the toolbar in the upper left of window.
2. Click on **Search**.
3. Click on **Patients**. Enter your search criteria. Click on **Search**.

M. To log out of the application, click **Log off**.