

From the Office of Health Informatics Cerner Millennium Bedside Medical Device Interface (BMDI)

October 16, 2024

Bedside Medical Device Interface (BMDI) allows vital signs and ventilator data to be pulled into the electronic health record (EHR). To ensure vital signs, ventilator data, and dialysis information are captured and recorded for the correct patient, it is imperative that Monitor Association is performed at the time of admission and verified at the beginning of each shift. Monitors must also be disassociated at patient transfer/ discharge. Ventilators must be dissociated when no longer being used. Refer to hospital or unit policies for site specific expectations.

# <u>NOTE</u>: BMDI cannot be used on Loaner or Transport devices. If new monitors or ventilators are acquired, they need to be set up by IS before BMDI will work on them.

## **Connectivity Check**

- Ensure the CCE (Cerner Connectivity Engine) has the correct date and time.
  - Click the **Home** button to view the date and time on the top center of the screen.
  - Ensure there is a green checkmark on the device in the top left of the screen.
- <u>NOTE</u>: If the time does not match the PC time, reboot the CCE to resync it. If the device icon does not have a green checkmark, the reboot may also fix this.

### **Reboot Instructions**

- **<u>STEP 1</u>**: Look for where the power cord plugs into the bottom right of the device.
- **<u>STEP 2</u>**: Search for the power button, press and hold the button until the screen goes dark.
- **<u>STEP 3</u>**: Wait a few seconds, then press the power button again to turn the device back on.

## Associating the Monitor or Ventilator

- **<u>STEP 1</u>**: Open the patient's electronic health record in Millennium (PowerChart or FirstNet).
- **<u>STEP 2</u>**: Go to **Interactive View and I&O**.
- **<u>STEP 3</u>**: Click the **Associate Monitor** button <sup>10</sup> in the toolbar in the upper left corner of the display window.





# From the Office of Health Informatics Bedside Monitor Device Interface (BMDI) October 16, 2024 Page 2 of 4

- The Associate Monitor window opens. If blank, place a checkmark in the box next to Show all Locations/Monitors.
- STEP 4:Highlight the correct room and bed in the<br/>Associate Monitor window.
- **STEP 5:** Match the monitor to the patient's bedside and/or match the patient to the vent number matching the ventilator in the room.
- **<u>STEP 6</u>**: Click the **Association** button.
- **<u>STEP 7</u>**: A **Warning** will pop-up to remind you to confirm prior to making the association. Click **Yes**.





<u>NOTE</u>: To associate a patient with a monitor and/or vent, the patient's name in the chart and the one on the monitor screen must be the same. Review current patients associated to the devices. A patient can be associated to multiple devices (Monitor, Ventilator, and Dialysis) or multiple monitors. If the patient is associated to multiple monitors, disassociate any monitor(s) they should not be associated with.

## **Changing the Association Time**

The time of the association can be changed if the monitor and or ventilator were placed on the patient prior to associating the devices to the patient.

- **<u>STEP 1</u>**: Select the device the patient is to be associated with.
- STEP 2:Click View Acquired Data and change the AssociationDate/Time to the time the patient was placed on the monitor<br/>or ventilator.

View Acquired Data	Disassociate	Associate	Close
Sel 09	ect Association Dat	e/Time:	EDT

**<u>STEP 3</u>**: Click **Associate**. The association time is updated.

## Pulling Vital Signs and Ventilator Data into the Chart

**STEP 1:** To **add vitals** or **ventilator data** from the bedside device, place the cursor over the dark blue band in the appropriate time column and double-click. Multiple columns may be checked to improve efficiency. It is important to only open one section at a time to view all data.



- **<u>STEP 2</u>**: **Preview** the results before signing.
  - If there are incorrect results, e.g., heart rate equal to zero (0), be sure to correct or clear the values prior to signing.
    - **Correcting a result**: Right-click the result and select **Different Acquired Result**. A window opens, displaying other available results for the selected measure. Click to highlight the appropriate result and then click **OK** to close the pop-up window. The result replaces the preliminary result.
    - **Clearing a result**: Right-click the result and select **Clear**.
- **STEP 3:** The information from the device is displayed in purple font. Once the data is validated, the information is saved to the patient's chart by clicking the **green checkmark** ✓.
- **NOTE:** To see other recently captured results from the monitor and/or ventilator, right click the purple text and Select Different Acquired Result. A window with recent values will open to select from.

## Ventilator Data to be Charted Manually



Certain parameters need to be documented manually if the ventilator is being used in specific modes or for noninvasive ventilation.

- ➢ Hamilton C-1
  - Non-Invasive ventilation data to be documented manually.
- Servo I (All Modes)
  - Ventilator Settings to be documented manually:
    - Flow Trigger Sensitivity
  - Ventilator Alarm Settings to be documented manually:
    - High PEEP Alarm
- Servo I (APRV Mode)
  - Ventilator Settings to be documented manually:
    - Flow Trigger Sensitivity
    - APRV Pressure Low

From the Office of Health Informatics Bedside Monitor Device Interface (BMDI) October 16, 2024 Page 4 of 4

- Servo U (APRV Mode)
  - Ventilator Settings to be documented manually:
    - APRV Pressure Low
    - APRV Pressure High
- Servo U (Volume Support Mode)
  - Clear Vent Tidal Volume when it pulls in via BMDI and document those numbers manually in Volume Support.
- Drager Vent (PC/AC-VG Mode)
  - **Measurements/Assessments** to be documented manually:
    - Vent Minute Volume
- Phillips V-60 NIV
  - All data for this ventilator needs to be documented manually.

### **Disassociating the Monitor or Ventilator**

Patients must be disassociated from the monitor and/or ventilator when transferred to another room and/or when discharged. This ensures vital signs, ventilator, or dialysis information is not collected on a new patient and attributed to the first patient in error, resulting in a potential patient safety concern. A new patient cannot be associated to the monitor/device until this occurs.

- **<u>STEP 1</u>**: Open the patient's electronic health record.
- **<u>STEP 2</u>**: Go to **Interactive View and I&O**.
- **<u>STEP 3</u>**: Click the **Associate Monitor** button <sup>®</sup> in the toolbar in the upper left corner of the display window. The window opens.
- **<u>STEP 4</u>**: Click to highlight the device to disassociate in the top section that lists the patients associated devices.

Monitor-ID	Nurse-Unit	Reem	Bed	Date/Time	
				05/22/2023 11:47 EDT	
MCH-ICU-08	icu	ICUS	01	05/22/2023 11:46 EDT	
Nevice List:					
Monitor-ID	Nurse-Unit	Room	Bed	Person Name	Date/Tin -
MCH-PACU-05	MC OR PACU	05	A		
MCH-PACU-09	MC OR PACU	09	A		
MCH-PACU-10	MC OR PACU	10	A		
MCH-PACU-11	MC OR PACU	11	A		
MCH-PRE-01	MC OR PreOp	01	A		
MCH-PRE-04	MC OR PreOp	04	A		
NACH DOC OF	Mar on Burge				
MCH-VENT-01	OMCEET	FLMC11	61	TESTING PALLIATIVE	05/22/20
C	MACIT				2

- **<u>NOTE</u>**: This action also highlights the room and patient in the Device List below.
- **<u>STEP 5</u>**: Click the **Disassociate** button.
- **<u>STEP 6</u>**: Discharge patient from the monitor per organization protocol.

For questions regarding process and/or policies, please contact your unit's Clinical Educator or Health Informaticist. For any other questions please contact the Customer Support Center at: 207-973-7728 or 1-888-827-7728.