mindray™
NORTH AMERICA

VS 9 VITAL SIGNS MONITOR

CLINICAL REFERENCE GUIDELINE

This document is a guideline only to be used as an aid to comprehensive in-service training.

NAME: _____

_____

FACILITY: _____

	Date	Initials
A. General Structure and Operation		
1. Locate power button and demonstrate how to power on, enter Standby mode, and power off		
2. Locate network communication port		
3. Locate indicators for battery status and power		
4. Load recorder paper and identify how to start a recording		
5. Locate NIBP and SpO2 connector ports		
6. Discuss the capacitive touchscreen function		

7. Review Quick Keys
    a. Which quick keys always remain on the monitor display?
    b. Describe how to access the second row of quick keys.		

8. Locate on the main display
    a. Workflow Area
    b. Time
    c. Patient Category
    d. Battery and Network Status		

9. Demonstrate two ways to close a menu and return to the main screen		
10. Set Screen Lock Duration for 20 seconds and activate. Discuss how to unlock the screen prior to countdown completion.		
11. Discuss how to clean the monitor		

	Date	Initials
B. Basic Parameter Functions		

1. Admit an Adult patient and enter patient information using one of the following:
    a. Barcode Scanner
    b. Patient List (Local Patient List or ADT Database*)
    c. On-Screen Keyboard		

2. Attach NIBP cuff and SpO2 probe		
3. Switch to a different workflow		

4. SpO$_2$
    a. Discuss sensor application for reusable and disposable sensors
    b. Explain the difference between the SpO2 Desat and SpO$_2$ Low Limit alarms
    c. Discuss the NIBP Simul (Simultaneous) feature
    d. Locate Pulse Rate (PR) display and identify PR sources
    e. Adjust Pulse Volume		

5. NON-INVASIVE BLOOD PRESSURE
    a. Discuss proper cuff size and application
    b. Start NIBP reading
    c. Stop NIBP reading
    d. Set BP interval for every 10 minutes
    e. Set the following NIBP Sequence:
        i. Every 5 minutes for 15 minutes
        ii. Every 15 minutes for 1 hour
        iii. 30 minutes for 1 hour
    f. View Tabular Trends from the Parameter List
    g. Perform Blood Pressure Averaging Measurements
    h. Perform Orthostatic Blood Pressure Measurement Program
    i. Discuss the oscillometric method of measuring NIBP
    j. Describe the NIBP oscillometric inflation algorithm *		

6. RESPIRATION
    a. Locate Respiratory Rate display
    b. Identify Respiratory Rate source*
    c. Manually input Respiratory Rate		

7. TEMPERATURE
    a. Obtain a temperature measurement
    b. Manually input temperature result*		

8. ALARMS (Continuous Monitoring Mode)
    a. Change high HR limit to 130 bpm
    b. Change SpO2 Desat limit to 87%
    c. Discuss the difference between alarm pause, audio pause and alarm reset, including differences in alarm status symbols
    d. Discuss technical alarms (Spot Check and Continuous Monitoring Modes)		

9. SAVE
    a. Save vital sign measurements
    b. Discuss sending to the electronic medical record*		

	Date	Initials
10. REVIEW		
a. Access Tabular Trends and print Spot Check Record		
b. Access Scoring Review		
c. Access Events in Continuous Monitoring Mode		
11. Discharge the patient from the monitor		
C. Advanced Functions		
1. **CO_2***		
a. Discuss CO_2 setup, CO_2 adapter and sample line		
b. Change the CO_2 scale to 0 to 60		
c. Adjust the sweep speed to 12.5 mm/s		
d. Input O2 compensation of 36% (4L FiO2)		
e. Discuss placing CO_2 module into standby		
2. **Manual Inputs***		
a. Enter I/O Fluid		
b. Enter O_2 Flow Rate		
3. **CAA***		
a. Calculate and print a MEWS score on a patient		
b. Calculate and print GCS on a patient		
c. Enter a pain score for the patient		