

Suggestions for Performance Evaluation with the LIFEPAK® 12 Defibrillator/Monitor

Noninvasive Pacing

Name: _____ Unit: _____

Reviewer: _____ Date: _____

This Performance Evaluation is a suggested assessment of one's ability to perform Noninvasive Pacing with the LIFEPAK 12 defibrillator/monitor series. This is a limited evaluation and does not cover all information and skills required to operate the device safely and effectively. This evaluation is based on default settings and is designed to be completed after viewing the appropriate inservice video or observing an equipment demonstration given by a qualified instructor. For complete information, review the LIFEPAK 12 defibrillator/monitor Operating Instructions. References to buttons are in **bold** and screen display messages are indicated in *italics*. Performance Evaluation requires a patient simulator with pacing simulation.

PERFORMANCE EVALUATION	COMPLETE	INCOMPLETE	COMMENTS
1. Identifies cardiac rhythms and patient symptoms that may require pacing			
2. Differentiates between demand and non-demand pacing modes			
3. Prepares patient: <ul style="list-style-type: none"> • Explains procedure • Considers sedation • Bares patient's chest • Clips excessive chest hair • Wipes all electrode sites clean and dry • Ensures that alcohol, benzoin, or an antiperspirant is not used on pacing electrode sites 			
4. Presses ON			
5. Applies ECG electrodes and connects to ECG cable, ensuring there is adequate space between the ECG electrodes and the therapy electrodes			
6. Selects ECG lead (I, II or III) with greatest QRS complex amplitude			
7. Applies QUIK-COMBO® therapy electrodes by smoothing from one end to the other firmly pressing to remove all air			
8. Describes or demonstrates anterior-posterior placement: <ul style="list-style-type: none"> • Anterior electrode on left precordium below the left nipple. Avoid placing on the nipple. • Posterior electrode below left scapula, lateral to spine at heart level • Avoids dressings, ECG electrodes, and wounds 			
9. Describes or demonstrates anterior-lateral placement: <ul style="list-style-type: none"> • Lateral (apex) electrode lateral to left nipple with the center of the electrode on the midaxillary line • Anterior electrode below the right clavicle lateral to sternum 			
10. Connects therapy electrodes to the therapy cable			
11. Presses PACER			
12. Observes monitor screen for ECG rhythm and sense marker (▼) on each QRS			
13. Adjusts ECG size for optimal QRS sensing or selects a different lead			
14. Presses RATE or rotates SELECTOR to select pacing rate			
15. Presses CURRENT or slowly rotates SELECTOR to increase pacing current until capture is noted			

PERFORMANCE EVALUATION	COMPLETE	INCOMPLETE	COMMENTS
16. Observes monitor and identifies electrical capture/mechanical capture by: <ul style="list-style-type: none"> • Palpating patient's pulse • Checking blood pressure • Observing capture on monitor • Observes pulse oximeter (pleth) waveform for adequate waveforms if pulse oximetry is available 			
17. Presses and holds PAUSE button to determine patient's underlying rhythm Note: decrease in pacing rate to 25% of set rate while pause button is pressed			
18. Describes pacing behavior when active ECG leads become disconnected during demand pacing: <ul style="list-style-type: none"> • Dashed line appears across screen • <i>Nondemand pacing</i> message appears on screen Note: re-establish nondemand pacing by reattaching ECG lead and replacing ECG electrode.			
19. Discontinues pacing by: <ul style="list-style-type: none"> • Pressing PACER • Reducing CURRENT to zero • Pressing CHARGE to initiate defibrillation 			
20. Presses CODE SUMMARY for documentation			
21. Presses ON to turn power off			
22. Describes proper care of ECG records			
23. Removes electrodes by slowly peeling at 180 degree angle while maintaining support on the skin			

Evaluation and Action Plan

Advanced Performance Scenarios

Identifies possible cause and corrective action for the following observations:

- Device does not function when **PACER** is pressed
- Pacer LED on, **CURRENT** (MA) >0, but pace markers absent (not pacing)
- Pacing stops spontaneously
- Monitor screen displays ECG distortion while pacing
- Capture does not occur with pacing stimulus
- **CONNECT ELECTRODES** message appears
- Pacing stops spontaneously and **PACER FAULT** message appears
- Intrinsic QRS complexes not sensed when pacing
- Set pacing rate (PPM) and ECG paced rate do not appear to match
- Improper sensing (e.g., sense marker is on T-waves)
- Difference between electrical capture and artifact



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