# **Hemodynamic Monitoring**



## **Course Description**

This course is designed for healthcare providers working with patients requiring hemodynamic monitoring. The course includes care of the patient with a pulmonary artery catheter and advanced less invasive hemodynamic monitoring. It includes accurate obtaining of readings, waveform analysis and interpretations. Case studies in hemodynamic monitoring will be reviewed.

## **Program Learning Outcomes**

This program prepares the learner to:

- Discuss the preparation and insertion of the pulmonary artery catheter.
- Describe the method to obtain an accurate reading from the hemodynamic waveform including the identifying of the A and V waves.
- Discuss the newer less invasive hemodynamic monitors and provide scenarios for using these monitors.
- Discuss case studies using patients requiring hemodynamic monitoring.

### Agenda

*Sign-in begins at 7:30 am.* Each day includes a one-hour lunch (on your own), as well as a morning and afternoon break of 15 minutes each. The order of lectures presented and break times may vary according to speaker preference.

### Day 1, 8:00 am to 3:30 pm

- 0800 **Hemodynamic Parameters** Cardiac Index: Preload, Afterload, Contractility, Heart Rate | What's Normal—What's Not | Factors that Affect Cardiac Index
- 1000 Break
- 1015 **Ensuring Accuracy** Patient Position: HOB and Side, Laying/Prone | Dynamic Response | Cardiac Output | Impact of Mechanical Ventilation
- 1130 Lunch

#### 1230 Waveform Analysis Valvular Dysfunction: Mitral, Aortic and Triscupid | Effects of Dysrhythmias on Waveforms | Volume Changes and Tamponade

- 1415 Break
- 1430 **Putting It All Together: Case Studies** Left Ventricular Failure | Cardiogenic Septic Shock | Post Open Heart Surgery
- 1530 Adjourn

### Day 2, 8:00 am to 3:30 pm

0800	Noninvasive Hemodynamic Monitoring Technique   Stroke Volume Determination   Clinical Applications: CHF Management
0945	Break
1000	Therapeutic Intervention Inotropic Drugs   Afterload Reducers   Preload Reducers   Which Drug to Choose
1145	Lunch
1245	<b>DO<sub>2</sub>/VO<sub>2</sub> Relationships</b> Definitions   Factors that Alter O <sub>2</sub> Delivery and Consumption   Anaphylactic Shock and Acute Abdomen
1345	Break
1400	<b>Putting It All Together: Case Studies</b> Congestive Heart Failure (Acute)   Cardiac Surgery   Acute MI, Cardiogenic Shock   Pneumonia   Multisystem Trauma
1530	Adjourn

## Accreditation

#### **RN/LPN/LVN/Other: 12 Contact Hours**

MED-ED, Inc is accredited as a provider of nursing continuing professional development by the American Nurses Credentialing Center's Commission on Accreditation.

MED-ED, Inc. is an approved provider by the following State Boards of Nursing: Florida/FBN 50-1286, Iowa/296, California #CEP10453.

If your profession is not listed, we suggest contacting your board to determine your continuing education requirements and ask about reciprocal approval. Many boards will approve this seminar based on the accreditation of the boards listed here.



