

## Course Description

This program provides a clinically applicable review of cardiovascular physiology and pathophysiology, cardiac assessment, cardiovascular pharmacology and interventions based on current guidelines for the most common cardiac disorders seen in clinical practice. Content includes a review of cardiac physiology that can be applied in daily practice, the physiological basis for cardiovascular drug therapy and the pathophysiology, diagnosis and guideline-based treatment strategies for heart failure, acute coronary syndromes and atrial fibrillation. Clinically useful tips on noninvasive assessment techniques and 12-Lead ECG interpretation can be applied in any clinical setting where cardiac patients receive care. Evidence-based practice standards for bedside cardiac monitoring for arrhythmia identification, ST-segment monitoring and QT interval monitoring provide a foundation for the delivery of high-quality patient care in any monitored setting. Take your knowledge of cardiovascular patient care to a higher level and improve outcomes for your patients.

## Key Learning Outcome

- After completing the program, 80% of participants will report an increase in knowledge that will positively impact their practice.

## Program Objectives

*This program prepares the learner to:*

- Increase knowledge in the pathophysiology and current management guidelines for heart failure patients.
- Increase knowledge in the pathophysiology and current management guidelines for patients presenting with acute coronary syndromes.
- Increase knowledge in the pathophysiology and current management guidelines for patients with ECG abnormalities.

## 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 4:30 pm

#### Essential Cardiovascular Physiology

Normal Cardiac Valve Function | Coronary Artery Anatomy and Blood Supply to the Heart | Cardiac Conduction System | Origin of ECG Waves and Intervals | Determinants of Cardiac Output and Noninvasive Evaluation | Blood Pressure Regulation

#### Essential Assessment Skills

Blood Pressure Evaluation | Evaluating Neck Veins | Heart Sounds | Compensatory Mechanisms for Decreased Cardiac Output | Signs of Peripheral Hypoperfusion | Signs of Pulmonary Congestion

#### Cardiovascular Pharmacology

Manipulating Determinants of Cardiac Output | Balancing Myocardial O<sub>2</sub> Supply and Demand | Altering the Renin-Angiotensin-Aldosterone System | ACE Inhibitors | Beta Blockers | Calcium Channel Blockers | Antiplatelets and Anticoagulants | Vasoactive Drugs

#### Essentials of 12-Lead ECG Interpretation

Anatomy | Normal ECG Waves and Intervals | Easy Axis Determination | Bundle Branch Block

#### Acute Coronary Syndromes

Pathophysiology | Diagnosis | ECG Signs of Ischemia vs. Injury | Identifying Site of Infarction | 18-Lead ECG | Guide lines for Managing ST-Elevation MI and Non-ST Elevation MI

# Agenda

## Day 2, 8:00 am to 4:30 pm

### Understanding Heart Failure

Pathophysiology | Systolic vs. Diastolic | Signs and Symptoms | Classification Systems | Acute Decompensated HF | Drug Therapy | Biventricular Pacing | Ventricular Assist Devices

### Atrial Fibrillation: Risks and Management

Pathophysiology | Detrimental Effects | Determining Stroke Risk | Management | Anticoagulation Guidelines | Ablation and Surgical Management

### Cardiac Monitoring: Using the Bedside Monitor and 12-Lead ECG for Rhythm Identification

Advantages and Disadvantages | Proper Electrode Placement for 5-Wire Systems | Best Practice for Bedside Monitoring | Alternative Monitoring Leads | Best Leads for ST-Segment Monitoring | Technical Aspects of ST-Segment Monitoring | Supraventricular Tachycardias | Ventricular Tachycardias | Mechanisms of Aberrant Conduction | Differential Diagnosis of Wide QRS Tachycardias

## Accreditation

### RN/LPN/LVN/Other: 14 Contact Hours

#### *Includes 4 Pharmacology 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 (**ANCC**).

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.

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