# M E D · E D Since 1983

# **Everything Cardiac**

# **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.

# **Program Learning Outcomes**

This program prepares the learner to:

- Apply physiological concepts to your understanding of cardiovascular drug therapy.
- Utilize physical assessment skills to evaluate a patient's cardiovascular status.
- Utilize the 12-Lead ECG to evaluate patients with chest pain and acute coronary syndrome.
- Utilize the bedside cardiac monitor to evaluate arrhythmias and to assess the ST segment and the QT interval.
- Discuss management of patients with heart failure, acute coronary syndromes and atrial fibrillation.

# **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

## 0800 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

#### 0845 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

#### 0945 **Break**

## 1000 Cardiovascular Pharmacology

Manipulating Determinants of Cardiac Output | Balancing Myocardial  $O_2$  Supply and Demand | Altering the Renin-Angiotensin-Aldosterone System | ACE Inhibitors | Beta Blockers | Calcium Channel Blockers | Antiplatelets and Anticoagulants | Vasoactive Drugs

#### 1200 Lunch

#### 1300 Essentials of 12-Lead ECG Interpretation

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

#### 1430 **Break**

(continued)

#### (continued)

1445 Acute Coronary Syndromes

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

1630 Adjourn

# **Agenda**

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

0800 Understanding Heart Failure

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

- 1000 Break
- 1015 Atrial Fibrillation: Risks and Management

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

- 1200 Lunch
- 1300 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
- 1430 **Break**
- 1445 Cardiac Monitoring: Using the Bedside Monitor and 12-Lead ECG for Rhythm Identification (cont.)
  Supraventricular Tachycardias | Ventricular Tachycardias | Mechanisms of Aberrant Conduction |
  Differential Diagnosis of Wide QRS Tachycardias
- 1630 Adjourn

## Accreditation

RN/LPN/LVN/Other: 14 Contact Hours CRNA: 14 Class A CE Credit Hours

#### Includes 4 Pharmacology Contact Hours

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

MED-ED, Inc., is approved by the American Association of Nurse Anesthetists (AANA).

MED-ED, Inc. is an approved provider by the following State Boards of Nursing: Florida/FBN 50-1286, lowa/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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