12-Lead ECG Interpretation: Essential Skills for Clinical Practice

Course Description

This class is an introduction to 12-Lead ECG interpretation for acute and critical care nurses, advanced practice nurses and anyone who needs to be able to interpret an ECG in his or her clinical practice. Content includes anatomy of a 12-Lead ECG, how leads record electrical activity traveling through the heart, normal waveforms and intervals and how each lead should look on a normal ECG. Additional content includes an easy way to determine the QRS axis and its clinical implications; recognition of right and left bundle branch blocks; and ECG criteria for recognizing myocardial ischemia, injury and infarction.

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:
- Identify a normal 12-Lead ECG.
- Demonstrate the ability to calculate the QRS axis on selected ECGs.
- Identify right and left bundle branch block.
- Recognize ST-elevation myocardial infarction (STEMI) on the 12-Lead ECG.
- Recognize signs of ischemia and non-ST-elevation myocardial infarction (NSTEMI) on the 12-Lead ECG.

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.

8:00 am to 4:30 pm

Normal 12-Lead ECG, Waves and Intervals of the Cardiac Cycle
Anatomy of a 12-Lead | Which Leads Look Where | Normal Waves and Intervals | Steps in Reading Strips

Electrical Activity, QRS Complex and Calculating QRS Axis
Normal Ventricular Depolarization | Recording Electrical Activity | Definition of Axis | Origin of Hexaxial Reference System | Practice Axis Calculation

Right and Left Bundle Branch Block
Best Leads for Recognizing | Ventricular Depolarizing | Practice ECGs

Coronary Artery Blood Supply | Indicative and Reciprocal Changes | Recognizing STEMI
Coronary Artery Anatomy | Indicative Changes of Ischemia, Injury, Infarction | Reciprocal Changes | Progressive Changes and ECG Evolution | Anterior-Wall STEMI | Antero-Lateral Wall STEMI

Recognizing STEMI | Recording Posterior and Right Ventricular Leads
Inferior-Wall STEMI | Posterior-Wall MI | Right-Ventricular MI | Recording Right Ventricular and Posterior Leads

Signs of Unstable Angina and Non-ST Elevation MI
ECG Signs of Ischemia | Wellens' Warning | Practice ECGs: NSTEMI

Practice ECGs

Accreditation

RN/LPN/LVN/Other: 7 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.