# Demystifying X-Ray and Lab Findings: Are You Understanding the Clues?



## **Course Description**

No matter what your area of expertise, no field in medicine spends enough time training you for radiographic or lab interpretation. Join us as we demystify the interpretation of both X-rays and lab findings to help you gain the clues you need to provide better care to your patients. What we understand, we can then use to set up the plan of the day, to progress the patient towards good outcomes and to predict the next step in the treatment goal. Data collection and understanding are important steps in the development of critical thinking. Join us and hone those critical thinking skills in this one-day program.

# **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:

- Describe the intricacies of the CBC differential.
- Outline a three-part tool to facilitate the interpretation of ABGs.
- List five quick assessment tools to identify chest X-ray abnormalities.
- List abnormal lab findings, and their causes, that predict possible acute renal failure.
- Calculate the corrected calcium indicating need for intervention.
- Outline new lab findings that indicate high risk for severe sepsis.

# **Agenda**

Sign-in begins at 7:30 am. The 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 4:00 pm

#### Why are Labs So Important?

Findings and the Patient's Plan | Cost of Healthcare and Testing

#### **CBC**

Changes to WBC Counts | RBCs — Anemias and Polycythemia | H & H | Platelets | Critical Values for the CBC | The Differential — Now We're Looking for Clues! | Shift to the Left, Shift to the Right | Example of Shift to the Left

#### Coag Labs

The Coag Panel: APTT, PT, INR | The Clotting Cascade | Meds and the Coag Panel

#### **DIC Panels, Including D-Dimer**

Understanding DIC | Reading the DIC Panel | Treating DIC | Case Study

#### Cardiac Labs and ECG Changes

The Coronary Artery Tree | STEMI vs. NSTEMI | ECG Clues to Cardiac Muscles Ischemia and Infarct | Telling ACS from an Acute MI | Cardiac Panels | Troponin "Leaks"—Identifying Non-Cardiac Causes | Understanding the BNP | Case Study

#### **ABGs**

Understanding Compensatory Mechanisms | Normal Ranges | Abnormal ABG Findings and Common Causes | Three-Step Tool for Making Interpretation Fast and Easy | Practice Reading ABGs

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### Labs of Sepsis

SIRS, Sepsis, Severe Sepsis, Septic Shock and MODS | Identifying High Risk Populations | Lactate | Procalcitonin | Base Excess | WBCs and the "Shift" | Cultures and Sensitivities

## X-Ray Interpretation

Points of Normal Chest X-Ray | Clues on the Chest X-Ray for Pulmonary Reasons | Clues on the Chest X-Ray for Cardiac Reasons | Fractures and Healing | Other Points of Interest

## The CMP = BMP + LFTs

Understanding the Liver | Liver Function Tests | What are Abnormal Findings Telling Us? | Breaking the Total Biliru bin Down | Common Liver Failure Complications

## **Accreditation**

#### RN/LPN/LVN/Other: 6.5 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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