



Minutes Can Mean the
Difference Between
LIFE and **DEATH**



SIMSUITE[®]
MEDICAL SIMULATION CORPORATION

Treating ST-Elevation Myocardial Infarction (STEMI)

Course Objectives

Designed to reinforce and enhance the participant's performance of:

- Pre-procedure, intra-procedure, and post-procedure management of patients experiencing an ST-Elevation Myocardial Infarction (STEMI)
- Assessment and interpretation of appropriate diagnostic data
- Selection and proper utilization of equipment
- Determining medication and dosing administration
- Recognition of potential adverse events related to both specific patient risk factors and to the procedure itself
- Address post-procedure patient management
- Application of evidence-based guidelines to specific clinical situations

Simulation Features

- Patient Pre-brief:
 - ◆ Designed to review disease process, pathophysiology, clinical manifestations, and procedure overview
 - ◆ Patient presentation, history, and physical assessment
 - ◆ Formulation of patient diagnosis
 - ◆ Formulation of pre- and post-treatment plan
- C-arm manipulation with full range of gantry angles
- Real-time fluoroscopic images with cine and road-mapping capabilities
- 3-D patient anatomies
- Catheter manipulation with haptic (tactile) feedback
- Manifold with contrast injection capabilities
- Indeflator provided to perform all balloon and stent inflations
- Monorail techniques using exchangeable and reusable catheters
- Image acquisition
- Pharmacologic management
- Hemodynamics and patient responses including heart rate with 3-lead ECG, invasive and non-invasive blood pressure monitoring, and oxygen saturation in real time
- Adverse event management including hypoxia, hypotension, hypertension, arrhythmias, cardiac arrest, and others
- Over 500 standard data points captured for immediate performance feedback
- Patient outcomes determined by operator decisions and technical abilities

Benefits

- Courses customized based on participant's skill level
- Increased patient safety—ability to practice procedures in a risk-free environment
- Enhancing competence and confidence™
- American College of Cardiology (ACC) and American Heart Association (AHA) Guideline compliance
- Patient scenarios authored by national physician experts
- Train the entire cardiac catheterization lab team
- Integration into Quality Improvement Programs
- CME credits available

Clinical Applicability

Each year, more than a million people in the U.S. have a heart attack and about half (515,000) of them die.¹ Heart attacks, or Acute Myocardial Infarctions (AMIs) occur when the supply of blood and oxygen to an area of the heart muscle is blocked, typically by a clot in a coronary artery. Coronary artery disease is the number one killer in America. It's no wonder that management of AMIs has become a central focus for many hospitals across the country. The Joint Commission for Accreditation of Healthcare Organizations (JCAHO) and the Centers for Medicare and Medicaid Services (CMS) have both identified AMI as an important area for improvement in hospitals. Both organizations have included AMI as a diagnosis for which participating hospitals must collect and report data on quality measures.

AMIs may be categorized into two areas based on electrocardiographic (ECG) presentation: ST-elevation myocardial infarction (STEMI) and Non-ST-elevation myocardial infarction (NSTEMI). STEMI cases are often viewed as more serious given the higher mortality rate during hospitalization (14.5% versus 12.3% for NSTEMI).² Although the exact incidence is difficult to ascertain, researchers estimate 500,000 STEMI events per year in the U.S. Effective interventions for patients experiencing STEMI are extremely time sensitive. MSC's STEMI course places a special emphasis on length of time before a patient receives angioplasty, also known as "door-to-balloon" time.

References:

¹www.nih.gov

²Merritt, R. *Higher risk heart attack patients do not receive most aggressive care.* Press Release. www.dukemednews.org/news/article.php?id=6472. April, 2003.

To schedule a training session, contact your SimSuite Clinical Educator:

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