



Manage Your Line



*Increase your team's competence and confidence[®]
in central line management.*



SIMSUITE[®]
MEDICAL SIMULATION CORPORATION

Central Line Management

Each year, an estimated 250,000 cases of central line-associated bloodstream infections (CLABSI) occur in hospitals in the United States. The SimSuite Central Line Management Program provides guidance on catheter insertion and management of best practices to help prevent central line bloodstream infections in hospitals. The Program is based on the Institute for Healthcare (IHI) Central Line Bundle recommendations and Center for Disease Control (CDC) guidelines. The Program is authored by Dr. S. Rob Todd, MD, FACS.

Web-based Course

The SimSuite Central Line Management Web Course is designed to educate participants on the evidence-based best practices for prevention of CLABSI. This course focuses on nursing care of the central line insertion site, based on the Institute for Healthcare Improvement's (IHI) Central Line Bundle. Additional content for providers highlights best practices in ultrasound-guided central line insertion techniques. This course may be completed on its own, and also prepares providers for the Central Line Management Simulation Workshop. 1.5 CE

Simulation Workshop

The SimSuite Central Line Management Simulation Workshop allows participants to put the IHI Central Line Bundle guidelines into practice in a safe and risk-free environment. Two realistic patient care scenarios presented on a human patient simulator highlight the management of patients with central lines and recognition of complications associated with central lines.

The skills component of the workshop includes a Central Line Insertion video tutorial, and allows participants to practice ultrasound-guided central line insertion techniques using SonoSite® ultrasound technology and an internal jugular/subclavian vein anatomical model. The skills component focuses on central line insertion techniques that may help minimize the incidence of infection. The skills practice does not provide certification to practitioners on central line insertion procedures and is not intended to replace proctored procedures. It is intended to provide an avenue through which clinicians can practice and hone their skills. *Approximate time for completion: 3 hours.*

Participants and Training Objectives

The goal of this program is to increase and reinforce the competence and confidence of all healthcare team members who administer or assist in central venous catheter insertion and those who care for patients with central venous catheters. Participants may include new and advanced ICU nurses, nurse practitioners, physician assistants, residents, and attending physicians.

Upon completion of the program, participants should be able to:

- List parameters for placement of a central line.
- Recall complications associated with central line-associated bloodstream infections.

- Recognize the financial implications and reimbursement concerns for acute care facilities related to central line-associated bloodstream infections.
- Select the five key components of the Central Line Bundle as defined by the IHI.
- Interrelate the key factors associated with the prevention of central line-associated bloodstream infections.
- Differentiate between the most commonly used central line catheters.
- Identify the key procedural steps related to the insertion of central venous catheters.
- Distinguish between signs and symptoms of central line-related complications.

Benefits

- Documentation of staff competence and compliance
- Consistent training across all staff
- Integration into Quality Improvement Programs
- Establishment of protocols
- Program based on guidelines, tools, and research from the CDC and IHI.

Clinical Applicability

Reducing rates of central line-associated bloodstream infections represents significant potential cost savings and improvement in patient safety for healthcare organizations.

- CLABSI is associated with an estimated attributable mortality of 12 to 25 percent, representing a marginal cost of approximately \$25,000 per episode.¹
- 48 percent of intensive care unit (ICU) patients have central venous catheters, accounting for about 15 million central-venous-catheter-days per year in ICUs.²
- Nosocomial bloodstream infections prolong hospitalization by an average of seven days.³

References:

¹www.cdc.gov

²www.ihl.org

³Soufir L, et al. "Attributable Morbidity and Mortality of Catheter-Related Septicemia in Critically Ill Patients: A Matched, Risk-Adjusted, Cohort Study." *Infect Control Hospital Epidemiology*. 1999 Jun; 20 (6):396-401.

This continuing nursing education activity was approved by the Association of periOperative Registered Nurses, Inc., an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation. AORN recognized this activity as continuing education for registered nurses. This recognition did not imply that AORN or the ANCC Commission on Accreditation approved or endorsed any product included in the presentation.

For more information, contact HealthcareGroup@medsimulation.com.



Experience Through Education®

Copyright © 2009 Medical Simulation Corporation
Rev. 1.5



Medical Simulation Corporation
4643 S. Ulster Street, Suite 650
Denver, Colorado 80237
t: 303.483.2800
www.medsimulation.com