Enhancing the Effective Use of the Cardinal-Alaris Medley SMART IV Pump at John Dempsey Hospital

By

Anthony Angelo

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Abstract:
Medication errors are frighteningly frequent occurrences in hospitals today. These errors account for thousands of inpatient deaths annually, costing hospitals and patients billions of dollars. Today, smart infusion pumps exist that can help prevent unsafe dosages of medications from being delivered to patients as well as record potentially unsafe medication-related events. A drug library with preset limits for medications is installed in the pumps and will generate an alarm if an infusion is programmed outside those values. When used effectively, smart pump technology can greatly improve patient safety at the bedside as well as decrease preventable costs to hospitals.

The University of Connecticut Health Center has purchased Cardinal-Alaris’ Medley Smart Infusion Pump System with Guardrails CQI in an effort to reduce medication errors and improve patient safety throughout the hospital. Though this system has reduced the number of medication-related events since its inception in August 2005, the hospital has found that the utilization of the drug libraries and the Guardrails data can be used more effectively. Though the fabrication of a mobile maintenance cart, organizing a formal analysis of alert data and the completion of a Failure Modes and Effects Analysis (FMEA), John Dempsey Hospital can efficiently use data collected from the Cardinal-Alaris Smart pump system to improve patient safety.