Reducing CLABSI and CAUTI using Interdisciplinary Rounds: Focusing on Patient Safety in the Continuum of Care

Chad Becnel, Leland Chan, Paul Minetos, Bryce Christensen - Tulane School of Medicine
Brandon Mauldin MD, Joyce Roberson RN BSN MSN CIC - Tulane Medical Center

Project Goal:
Implementation of a new Interdisciplinary Rounds checklist to foster an environment of uniform and thorough patient care timelines and actions. This project represents the beginning of IDR staff education and proper quality care measures in a multidisciplinary care team.

Introduction & Background
- Interdisciplinary rounds (IDR) are daily patient safety meetings involving various medical professionals on the care team.
- Nosocomial catheter-associated urinary tract infections (CAUTI) and central line-associated bloodstream infections (CLABSI) increase patient duration of stay, patient mortality rates, and healthcare costs.
- Reducing utilization-days of indwelling catheters and central line catheters may lead to improved patient outcomes and a decrease in healthcare costs.
- Tulane University Hospital experiences both CAUTI and CLABSI rates that are higher than the national average.
- IDR present an opportunity for multidisciplinary healthcare teams to monitor indwelling and central line catheters as a means of reducing CAUTI and CLABSI rates.

Aim
Reduce the Standardized Infection Rate and Standardized Usage Rate for central lines and indwelling catheters by 25% in 6 months.

Methods

Education Period
The "Reducing CLABSI and CAUTI" protocol was approved for implementation in Tulane University's Interdisciplinary Rounds beginning November 1, 2017. Nursing, physician, and other care delivery staff were educated on the policy changes prior to implementation date. Staff attending Interdisciplinary Rounds were given the new protocols and checklists.

Implementation Audit
Attending physicians and Infection Control staff conducting Interdisciplinary Rounds will audit to assess compliance to the "Reducing CLABSI and CAUTI" protocol.

Quarterly Data Collection
Medical student investigators will conduct quarterly data collection and analysis infection rates in the units utilizing the "Reducing CLABSI and CAUTI" protocols.

Review
Changes and recommendations may be implemented in the interest of patient safety or with recommendation of supporting literature.

Multidisciplinary Team
- Attending Physicians
- Resident Physicians
- Infection Control Team
- Nursing Staff
- Social Work and Case Management
- Medical Students
- Patients

Sustainability
- This CLABSI and CAUTI project is a high-priority project at Tulane because the risk-adjusted rates have been higher than goal. This project will serve as an example to each team regarding their responsibilities at IDR.
- The universal IDR Checklist will provide individual team members reminders about their specific role in patient safety.
- In the future, the data collected will be used to compare with other hospital units to encourage multidisciplinary rounding throughout Tulane Hospital.

CAUTI and CLABSI Data Prior to Protocol

Protocol Flowchart and Forms

Lessons Learned
One of the most difficult aspects to implementing these policies is changing the norm.
The current IDR culture is more about disposition; future meetings will focus discussion on patient safety first.
The infection control team at Tulane will champion changes in IDR protocol.
Each IDR team member is unique in their approach to patient care. Our change in IDR culture should empower each IDR care team member to promote patient safety.

CAUTI and CLABSI Data Prior to Protocol

Figure A (Top Left) and Figure B (Bottom Left): Monthly data on Standardized Infection Rate at Tulane Medical Center. Green line is the trend line for the first eight months of 2017. Red line is value of 1, the average or expected data point for the risk-adjusted standard.

Figure C (Above Center) and Figure D (Above Right): Standardized Usage Rate of Central Lines and Foley Catheters

References