Floyd Medical Center:

New ERASE CAUTI® tray helps improve nursing practice, reduce cauti rates and improves patient care

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Hospital: Floyd Hospital

Location: Rome, GA

Size: 304 beds

Challenge: To significantly reduce catheter-associated urinary tract infections (CAUTI), a healthcare-acquired infection, thereby improving patient outcomes and reducing associated costs.

Results: Decreased CAUTI incidence by 85% from 2008 to 2011, demonstrating:

- Improved processes for catheter monitoring and removal
- 17% reduction in catheter utilization from 2010 to 2011
- Cost savings of up to $9,800 annually in catheter spend
- Reduced risk of patients developing a catheter-associated urinary tract infection (CAUTI)

Quality Improvement Goal

Floyd Medical Center continuously monitors for healthcare-acquired infections (HAIs), including catheter-associated urinary tract infection (CAUTI). Floyd has organized improvement teams to formulate a prevention plan that includes the reduction of CAUTI and other HAIs. After dropping the 2008 CAUTI rate by 43%, Floyd Medical Center was committed to dropping another 25% in 2009 by refocusing efforts, investigating the most up-to-date patient care bundles, and implementing best practices. By focusing on these areas and improving process performance, Floyd Medical Center was able to reduce CAUTI incidences, resulting in improved patient outcomes. In 2008, Centers for Medicare & Medicaid Services (CMS) instituted Value Based Purchasing. This program directly links a facility’s CMS reimbursements to patient outcomes and facility efficiency. This made it even more beneficial for Floyd Medical Center to continually strive for best quality and care outcomes.

Facility Demographics

Floyd Medical Center is a 304-bed non-profit teaching community hospital serving Northwest Georgia and Northeast Alabama since 1942.

In 2011, Floyd had 13,826 discharges and a total of 73,128 patient days.

Floyd Medical Center’s various services include:

- Bariatric Surgery
- Breast Center
- Emergency Care Center
- Family Birth Center
- Heyman Hospice Care
- Level II Trauma Center
- Neonatal Intensive Care Unit
- Oncology
- Sleep Disorders Center
- Surgical Services

The Joint Commission has certified Floyd Medical Center as a Primary Stroke Center. Floyd also hosts a realm of outpatient services, including operation of the Floyd County Clinic and an associated pharmacy for uninsured patients who cannot otherwise afford healthcare.

Our Challenge

Since 2007, Floyd Medical Center has closely followed patient care bundles and the use of evidence-based guidelines—such as the compendium “Strategies to Prevent Catheter-Associated Urinary Tract Infections in Acute Care Hospitals” (SHEA/IDSA, October, 2008)—to decrease
healthcare-associated infections (HAIs). Initiatives to reduce the incidence of HAIs are a priority for hospitals across the nation. As focus has intensified, hospitals have become the beneficiaries of focused research leading to widely accepted improvements. In 2007, Floyd attended VHA Georgia’s CEO Quality Summit, which focused in part on providing support to VHA members as they engaged their facility boards around quality metrics and initiatives. After attending this Quality Summit, we chose to pursue a goal of reducing HAIs. Our main goal was to reduce healthcare-acquired infections, to help improve nursing practice, patient outcomes and reduce costs. Specifically, our objective was to start by reducing catheter-associated urinary tract infections by 25% during calendar year 2009. Initial areas of improvements involved educational and surveillance efforts from infection preventionists; cooperative compliance from nursing staff; oversight by the Quality Improvement Department; and increased hand hygiene attention from all staff, visitors, and patients.

While developing this prevention plan, we identified challenges in our practices relating to education; guidelines and protocol for catheter use, insertion, maintenance, and removal; and our monitoring and reporting structure. These issues were related to:
- Need for proper documentation for insertion;
- Variance in how and which nurses were performing insertion;
- Product design limiting ability to maintain aseptic technique.

After identifying these challenges, Floyd Medical Center established the following goals:
- Enhance nurse education;
- Raise awareness of CAUTI prevention;
- Reduce catheter utilization;
- Reduce overall CAUTI rate.

The Solution
While we worked on identifying our reduction goals and how to achieve them to improve outcomes, we recognized that there were improvement opportunities in the catheter tray itself. Dr. Darrell Dean, our Medical Director for Clinical and Operational Performance Improvement, approached Medline, our medical supplier, about building a custom Foley tray. In turn, Medline asked Dr. Dean to participate in a focus group to help build a new standard “best practice” closed Foley catheter tray. Each focus group was supplied with the components of a catheter tray and asked to build their ideal. Once these ideals were created, each group gave a short presentation back to Medline detailing the reasons behind every change or suggestion.

In his assessment of the tray redesign, Dr. Dean delivered the Floyd Medical Center staff concerns and supplied key suggestions including: hand sanitizer gel for continued hand hygiene compliance during insertion, and exchanging the forceps and cotton balls for Betadine® swabs to limit cross-contamination when cleaning the patient.

Dr. Dean’s recommendations and those of nurses, doctors, technicians, and infection preventionists from other facilities were included in Medline’s innovative new one-layer Foley catheter tray. Specific considerations were given to:
1. Larger sterile barrier;
2. Stickers on the tray label that can be placed in a patient record and provide a checklist for both valid clinical reasons to insert a catheter and proper catheter insertion procedures;
3. Educational packaging with step-by-step pictorial instructions on the exterior of the kit increases efficiency and reduces contamination of the sterile field;
4. Disposable Betadine swabs for cleansing, rather than forceps and cotton balls, thereby limiting cross-contamination;
5. Hand sanitizer to encourage continued hand hygiene compliance during insertion.

The revolutionary new tray design highlights proper techniques and encourages standardized practices for Foley catheters. The Foley InserTag® also plays an important part as a daily reminder to consider removal or to document a reason for continued catheterization. Finally, the new design assisted staff in following the updated guidelines and recommendations that were becoming standard recommended practice in the industry.
Execution
Floyd was proud to be one of the earliest adopters of Medline’s new ERASE CAUTI one-layer closed Foley catheter tray, and the tray was immediately rolled out hospital-wide to very positive feedback.

Education was the first portion of success realized by implementing these trays. Medline’s education raised awareness among our staff of the true mortality risks of CAUTI. This awareness helped remind clinicians why it was not always necessary or recommended to insert a catheter. The patient and family education card included in the tray—designed to look like a greeting card—was also well-received, not only by the patients and families, but also by the staff, who nominated the piece as one of their top five features of the ERASE CAUTI tray.

Floyd continues education by covering proper insertion guidelines and technique during new hire orientation, and further reviews these issues for all staff members during annual competencies. We plan to integrate Medline’s interactive ERASE CAUTI competency education—available on Medline University (www.medlineuniversity.com) to ERASE CAUTI program members—into our own e-learning provider in 2012. The checklist sticker located on the front of the tray and the Foley InserTag® contained within guide staff to adhere to a proper documentation process if they must insert a catheter, and provide timely reminders to remove the catheter. Clinicians value this quick, easy reminder provided by the InserTag, a faster reminder than searching each patient’s chart for catheter insertion date and time. These additions to the tray also best addressed our initially identified challenge of too many Foley catheters inserted, and too many left in longer than recommended or necessary.

We were most appreciative, however, of Medline’s invitation to members of our facility to give input on an ideal best practice tray, then actually designing a tray that met those needs. Knowing that our needs were not unique to our facility, it was encouraging to know that our input and the input of others would help the medical community realize similar positive outcomes.

Results
Floyd Medical Center was pleased with the results realized year over year in the partnership with Medline’s ERASE CAUTI closed Foley catheter trays. By the end of 2008, CAUTI rates had dropped 43%. Rates dropped again from 2008 to 2009—realizing a savings of $5,400—and the overall drop from 2008 to 2011 currently stands at 85%. Catheter utilization decreased as well, boasting a 17% reduction from 2010 to 2011, and a spend reduction of $9,800.

Floyd Medical Center continues to train staff members annually, believing that ongoing awareness is imperative to improving quality of care. As a result, CAUTI rates have remained low. In recognition of its accomplishments, Floyd earned first place in VHA Georgia’s 2010 Clinical Excellence award category, a peer reviewed award process focusing on operational, clinical, and supply chain excellence.
Summary of Clinical Outcomes

- Increased nurse/physician communication and documentation
- Increased overall awareness of proper indications for catheter usage
- 85% drop in CAUTI rates
- 37% drop in number of catheter days
- 17% reduction in catheter utilization from 2010 to 2011
- Significant cost savings for Floyd Medical Center

These outcomes were made possible by Medline’s innovative ERASE CAUTI one-layer closed Foley catheter tray. Combining the tray with continuous training and awareness has resulted in a reduction in variation of practice and outcomes that continually trend downward.

As a result, Floyd Medical Center has improved processes for catheter insertion, monitoring, and removal, thereby reducing the risk of CAUTI and presenting a better patient experience. Through the work of frontline nurses and therapists, continued training, and use of the ERASE CAUTI tray, Floyd has been able to bring our improvements to the patients’ bedside, enhance the culture of safety, and continue the quality initiatives that have made a difference in the lives of our patients and the community at large.

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About the Authors

Darrell Dean, DO, M.P.H., CHCQM, FAIHQ, is the Medical Director for Clinical and Operational Performance Improvement at Floyd Medical Center. He is also the CME Surveyor for ACCME accreditation of hospitals for the Medical Association of Georgia. Prior to his current position, Darrell was Internal Consultant for coding and documentation for Centrex Primary Care Network. He was also Associate Medical Director of Network Staff Physician, North Georgia Medical Associates and served as locum tenens for all 17 practice sites. He has also worked at the Georgia Department of Human Resources, Division of Public Health as the District Medical Director, Coosa Valley Health District. Darrell received his Master of Public Health degree, Health Policy and Administration Track from Emory University, Rollins School of Public Health.

Linda Huddleston, RN, MSN, MPHc, Director of Infection Prevention at Floyd Medical Center, has been a nurse for 34 years and an infection preventionist for three years. Linda is a past president of the APIC Greater Chattanooga chapter and the secretary for the Georgia Organization of Nurse Leaders. She leads many teams at Floyd, two of which continually work to decrease both CLABSIs and CAUTIs. As a result, Floyd won two VHA awards in 2011 related to decreasing CLABSIs and two awards in 2010 for decreasing CAUTIs. Linda remains on the cutting edge of moving teams forward with new guidelines and regulations.

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