Reducing Healthcare Associated Infections (HAIs) Through the Development and Implementation of a Piedmont Promise Package

Infection Prevention Breakout

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November 17, 2023

Piedmont Real change lives here



- Demonstrate understanding of a multidisciplinary teams comprised of nursing, physicians, infection prevention, and quality improvement with expertise in process improvement to develop and implement standard work.
- Define outcome and process metrics along with the reasoning of implementation of standard work.
- Assess the "Promise Package" structure and implementation methodology including performance tracking tools such as reports and dashboards.
- Share continuing performance improvement opportunities in HAI reduction including integration efforts and HAI Committee



Who is Piedmont Healthcare (PHC)?



What is our framework?



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Quality, Safety, & Process Improvement





Why Develop Standard Work?



- Operational consistency
 - Reduce variation across the system
- Best practices
 - Expedites employee training
- Allows for continuous improvement by providing a baseline
 - Objectively evaluate efforts
- Sustain improvements over time
 - Assessment of trends
- Provide best quality of care to patients
 - High quality, patient-centered care



Essential Components of Standard Work

Multidisciplinary team

- Employees that are doing the work are key players in developing the process
- Team lead, Nursing Champion, Physician Champion, Bedside Staff, Clinical Education, Business Intelligence, Informatics Specialist, Subject Matter Experts (SME) – Infection Prevention, Infectious Disease

Evidence-based resources – APIC, CDC (HICPAC), SHEA, IDSA, AHRQ, Dicon

Checklist items

- High impact, low risk
- Cost effective
- Time efficient

Performance tracking resources

- Dashboards
- Reports

Goals

- Outcome metrics
- Process metrics



Prior State Background

•Catheter Associated Urinary Tract Infection (CAUTI) Prevention System Team was formed in 2015

- Representation from physician and nursing leaders, Infection Prevention, Clinical Education, Information Technology, and Business Intelligence
- Discovered lack of complying with defined practices, various resources

•In Fiscal Year (FY) 2016, the six Piedmont Legacy Hospitals had:

- 42 CAUTI events with 64% of these occurring outside of the critical care units
- System CAUTI Standardized Infection Ratio (SIR) was 1.072
- •Team developed appropriate criteria for insertion and maintenance of Foleys that aligned with best practices
- Implementing these standards throughout the 6 facilities had not been successful





Contributing factors of CAUTI events at Piedmont Healthcare in FY2016





CAUTI Prevention Project

- Outcome Metric Goal
 - System-wide CAUTI SIR target set each year based on 25% below CMS

• Process Metrics Goals

- Foley catheter utilization $\leq 17\%$
- Insertion and Maintenance Bundle Compliance
 - Insertion: \geq 95%
 - Maintenance: ≥ 95%

Interventions included:

- Urinary Catheter Management Policy and Procedures Updates
- Urinary Catheter Management Dashboard Design
- Catheter Days (Foley) Patient List Reports
- Standardized Educational Resources
- Product and Supplies List (i.e. Purewick, Statlock, straight catheter kits)
- Subject Matter Expert (SME) Teams



Development and Implementation of a Piedmont Promise Package



Future State: Promise Package = One-Stop Shop



Promise Package Timeline







CAUTI Prevention Pilot:

- Study the effectiveness of performance tracking tools or other interventions released as part of Promise Package
- Incorporate feedback into the reporting tools and other Promise Package interventions



Process Metrics: Insertion





Process Metrics: Maintenance



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Implementation: Sep 2016









Post Implementation Improvement: Process Metrics FY 16-18





Post Implementation Improvement: Process Metrics FY 16-18





Post Implementation Improvement: Outcome Metrics FY16-18

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Post Implementation Improvements: Outcome Metrics FY16-18





Measuring Standard Work

 Tableau dashboards were built to easily communicate compliance to the process metrics

•All users have access to the dashboards and can view it anytime

 It drills down to the patient level detail to show which days were compliant and which were not



Where is the Promise Package located?

• Empowered Intranet





Monitoring & Continuous Improvement

Post Implementation Support

- Collaborate with nursing/clinicians to continue providing elbow to elbow support to leaders post go-live
- Incorporate dashboards into front line leaders' daily workflow to monitor compliance to standard work

- Perform internal audits from time to time to assess improvements/status of staff knowledge
- Engage operational leaders in addressing gaps and opportunities for Improvement

Knowledge Assessments

Leadership Accountability

- Include quality metrics in organizational scorecards
- Hold operational leaders accountable to not only outcome but process metrics

- Acquire final sign-off from stakeholders on standard work implemented and transition from project team to operations
- Establish a governance structure to continue to monitor trends and protect the integrity of Promise Package

Operational Hand-Off



Leadership Monitoring & Accountability



Monthly Operating Report Scorecard

• Ensures accountability and progress towards achieving and maintaining goals





Leadership Engagement

CAUTI Event \rightarrow **Apparent Cause Analysis (ACA)**

• Ensures a review of cases to identify opportunities for improvement and is captured in safety reporting tool

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Continuous Performance Improvement

Patient Safety Check

 Enhancing the Electronic Medical Record (EMR) to support clinical work in real-time Staff Nurse: Required Documentation

Charge Nurse, Unit Manager: **Patient List**





Unit Manager, Nursing Director, CNO: Radar Dashboard





CAUTI Prevention Process Metrics FY21-24





CAUTI Event Outcomes FY16 - FY24



*Data taken from Hospital Infection Dashboard and NHSN *% Reductions compared to 2016



HAI Prevention Promise Packages

CAUTI Prevention

•CLABSI Prevention

•Clean 4 You (MRSA)

SSI Colon Prevention

•SSI Prevention

•C. Diff Prevention

•Patient Safety Check



PHC HAI Data FY16 to FY23



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Percent change compares FY16 data with FY23 YTD data

Data source: NHSN and Hospital Infection Dashboard, retrieved on 7/24/23

Promise Package Integration Approach

Current State Collection



Conduct Gemba interviews at hospitals to collect current state of HAI prevention practices Gap Assessment



Compliance Tracking & Monitoring



Promise Package Roll-out



Compare and prioritize legacy standard work to integrating hospital processes to identify variation in practices

Dashboard integration to allow for process and outcome measure tracking and monitoring Phased roll-out of promise package/ HAI prevention standard work components



HAI Prevention Promise Package Integration Roadmap





Integration Milestone Timeline





HAI Prevention Promise Package Governance





Subject Matter Expert (SME) Teams

Advisory Team

The goal of the HAI Prevention SME **Advisory Team** is to uphold the standard work of Piedmont's Promise Packages by:

- Communicating and being an advocate of standard work to peers
- Reviewing change requests (EMR, policy, standard work, dashboard, etc.)
- Acting as a governing body to deny or approve change requests
- Staying up-to-date on evidence-based best practices to determine if changes to the standard work are needed
- Responsible for policy revisions when they are due
- Representing Piedmont Healthcare at both the local and system level as operational leaders and system thinkers

Taskforce

The goal of the HAI Prevention SME **Taskforce** is to ensure prevention and reduction strategies are appropriate and in alignment with PHC's strategic goals. This may be done by:

- Standardization of clinical practices and protocols following current evidence-based guidelines
- Reviewing change requests to standard work that require further design
- Responsible for policy revisions when they are due
- Representing Piedmont Healthcare at both the local and system level as operational leaders and system thinkers



Dissolution Guidelines for SME Teams

HAI Advisory Team to Taskforce

- ✓ A change request requires further design
- Outcome metric control chart shows a statistically significant increase
- Standard Work Index shows a statistically significant change in the relationship between process and outcome metrics

Taskforce to Advisory

- A change request requiring further design has been completed or determined to be unnecessary or not needed
- ✓ Outcome metric control charts show no statistically significant increase
- Standard Work Index shows no statistically significant change in the relationship between process and outcome metrics
- ✓ It is determined that no new standard work or processes are indicated



Questions?



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