MHA Lean Six Sigma Project Summary

INITIATIVE TITLE: Organizational Reduction of CLASBI to meet National Benchmark Standards and Reduce Monetary Waste

ORGANIZATION NAME: North Kansas City Hospital

ELECTRONIC MED RECORD: Cerner application

PARTICIPANT / CONTACT INFORMATION

Team Leader Name: Jenni Kent MBA, MSN, RN, CNML	Nursing Director CCDU/AAU/Discharge Team/Transfer Center/Inpatient Wound Care/Agency	Jenni.kent@nkch.org 816-691-5157
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DEFINE – Problem Statement & Goal

Currently, 42% of all required central line assessments and dressing changes are not completed and documented accurately. Organizationally, our goal is to increase complete and accurate required documentation for central lines to greater than 90%. Evidence based practice shows that CLABSI infections decrease with daily and shift monitoring of dressing and site.

Our goal is to increase accurate documentation of central line dressings every shift. 92% of our fall outs were due to missed documentation. 84% of those fall outs were due to not documenting blood return.

DEFINE –BIG Y

Number of complete dressing assessments/ total number of required dressing assessments. It is discrete. A defect is any missed documentation piece from our defined bundle as guided the Center for Disease Control. An opportunity is each bundle element being documented appropriately.

DEFINE - Initiative Scope

For patients arriving to our progressive care units, critical care units and our Oncology units with central lines in place or placed while on the unit have their lines assessed every shift and documented accurately with all bundle elements included per our policy.

MEASURE - Data Collection / MSA

Our method of data collection was chart audits. Together we audited 306 shift assessments for patients identified having a central line.
One specific aha moment was realizing the missed documentation was consistent throughout our organization, despite the level of training the nurses had.

ANALYZE - Critical Xs / Root Causes Identified

- Documentation for “does the line have blood return?”
- Documentation for “is the line flushable?”
- Documentation for “is the biopatch (antimicrobial patch) present?”

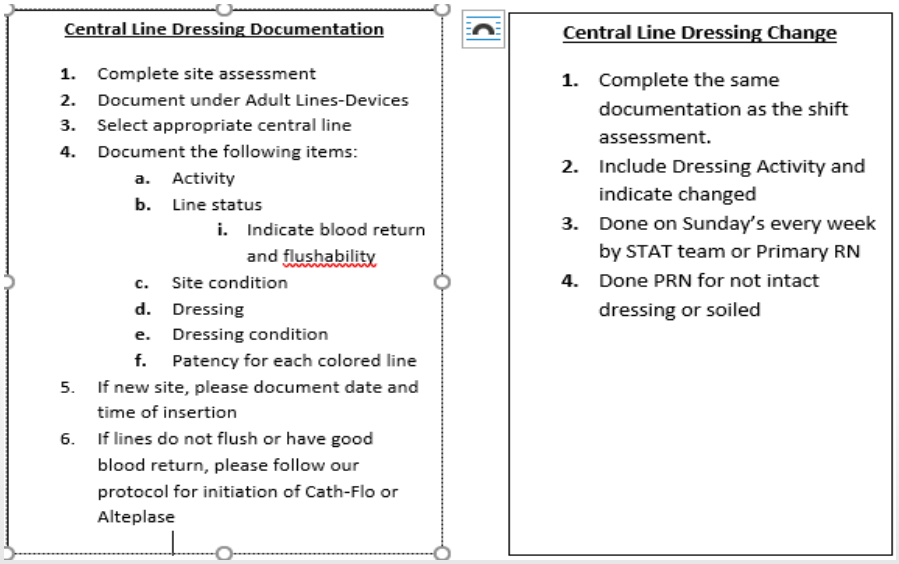
- Root causes identified for missed documentation:
  - Documentation for the bundle elements located at the bottom of the charting tab, whereas some of the charting located at the top of the charting tab.
  - High turnover rates of nurses
  - New graduates and new hires have little time learning documentation
  - Specially trained nurses are not familiar with the documentation as guided by the CDC

IMPROVE - What was Implemented

- We worked with our IT department, our CLABSI and CAUTI team members to enhance the documentation by bringing up the tabs associated with the “line status” to just under the patency option to be more visible for the staff when charting.
- We created a badge buddy for all new hires and will provide to all current nursing staff through distribution by their directors as a quick reference to documentation.
- We created a SOP that will be laminated and hung in all nursing stations, bathroom reading and breakrooms.
- A-Ha Moment – The utilization of ancillary departments and the “push back” that comes from new changes. The time it takes to get something approved.

IMPROVE – What was Implemented

Below is the badge buddy for all staff, new hires and GN’s. The next slide will present the SOP that will be displayed in breakrooms, bathroom’s and nurse's stations.



Central Line Dressing Documentation

1. Complete site assessment
2. Document under Adult Lines-Devices
3. Select appropriate central line
4. Document the following items:
   - a. Activity
   - b. Line status
     - i. Indicate blood return and flushability
   - c. Site condition
   - d. Dressing
   - e. Dressing condition
   - f. Patency for each colored line
5. If new site, please document date and time of insertion
6. If lines do not flush or have good blood return, please follow our protocol for initiation of Cath-Flo or Alteplase

Central Line Dressing Change

1. Complete the same documentation as the shift assessment.
2. Include Dressing Activity and indicate changed
3. Done on Sunday’s every week by STAT team or Primary RN
4. Done PRN for not intact dressing or soiled

IMPROVE – Results to Date

Baseline results
Process/timeline – enhanced Cerner to reflect ease of charting correct aspects – currently with IT awaiting update. Badge Buddies – currently in marketing department for processing. The SOP is with CAUTI/CLASBI team for final approval and distribution.

Timeline – Retrospective chart reviews to be performed by team beginning June 1st through September 1st to collect “after” data.

Improve—What was implemented

Central Line Standard Operating Procedure

What?

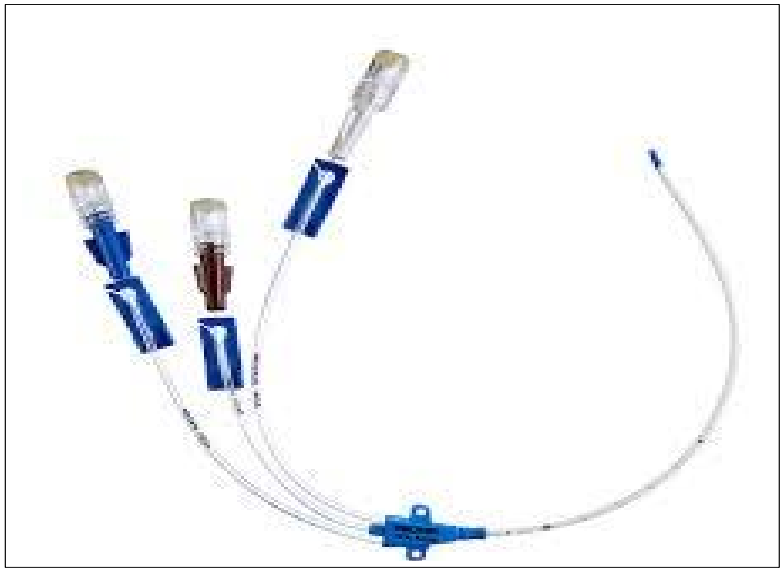
- Observe and evaluate
  - Is the dressing intact?
  - Observe the site for:
    i. Drainage?
    ii. Redness?
    iii. Swelling?
    iv. Tenderness
  - Is the antimicrobial dressing used?
  - Does the port flush?
  - Are you able to aspirate for positive blood return?

Why?

- To ensure the highest level of care and safety.
- To prevent potential infection with central lines.
- Accurate assessment and documentation aid in identifying possible problems and signs of infection

When?

- Dressing changes are completed every Sunday by the patient's RN
- Dressing change should be completed at anytime if there is drainage present, soiled or in intact



Difficulty – Easy

How Critical? Very critical

If done incorrectly or missed, may lead to line infection, blood clot and even death.

Reference – Title : Central Venous Catheter Insertion, Care & Maintenance

CONTROL – Next Steps

- We plan on implementing education on documentation in our new hire orientation and working with our Nursing Professional Department to send out quarterly reminders/updates on progress. We also will utilize charge nurses for follow up with nurses every shift. The CAUTI/CLABSI committee will be involved in monthly chart audits and following up with directors of nursing units for real time education for nurses. The badge buddies will be given out to all new hires during nursing orientation for a quick reference. The SOP's will be displayed for leisurely reading.
- By reducing our fall outs by 90% and of those 90%, we can prevent 4 CLASBI yearly, we can potentially save $180,000 with average cost of $45,000 for each CLASBI. The cost of contracting a CLASBI can be upwards of $90,000.
- The roll out plan consists of Cerner documentation changes, badge buddy distribution and SOP implementation by June 1st. We are awaiting the approved change in the EMR and final approval and printing from our Marketing department.
- We will be handing this off to CLASBI/CAUTI team by the end of September.
- A-HA moments: The collaboration of the team members it takes to get change implemented. The brainstorming and multiple meetings it takes to get the plan and buy-in in place. The pace everyone works at does not necessarily match your pace or timeline presented.

OVERALL LESSONS LEARNED

Findings learned about ourselves: Patience is definitely a virtue and sometimes deep breathing has to precede patience. Frustration is real. Change has seemed to become a "personal" vendetta. The process of explanation to highlight the necessary changes is cumbersome and exhausting.

Your organization: Multiple projects competing for time from necessary stakeholders; difficult to get change implemented

Process improvement or Lean Six Sigma in general, etc:
A more detailed process than expected or realized. It is easy to bring a topic to discussion; however, difficult to get input of what would work best for the team members using the process daily. Lean Six Sigma is a difficult program that dives into process improvement in a more in-depth way than expected.

Did anything surprise you? Organizational resources that were in current practice and despite our efforts of communication were unaware they existed. The lack of the resources and those actually wanting to help and provide information to help us move forward.

What would you do differently? Prior to the start of any project, meet with all stakeholders to get buy-in and resource availability.

NEXT PROJECT(S)

- Our organization would benefit from on-going LSS projects to help reduce unnecessary monetary waste while improving processes to enhance patient care and nurse autonomy.
- Our next project is appropriate tele placement and removal.

REWARD AND RECOGNITION

Sarah Oakley, CNO
Mike Graves, Sr. Director of Cardiac Services
Connie Green, Director of Inpatient Oncology Services and CAUTI/CLASBI chair
Michelle Sullivan, IT analyst helping with Cerner documentation changes