NHA CAUTI/CLABSI Improvement Tools

NEBRASKA HOSPITALS

CAUTI TOOLS

As part of the CAUTI/CLABSI Cohort, subject matter expert, Kathleen Vollman, MSN, RN, CCNS, FCCM, FCNS, FAAN, Clinical Nurse Specialist/Consultant, visited several Nebraska hospitals. Here are the top tips collected during her visits.

CAUTI Reduction Pathway	
Decrease Catheter Use	Completed
1. Require documented reason for placement (If provider order states catheter needed for hourly urine question "Will the course of treatment change from hour to hour?" If answer is no, advocate for an alternative collection device. - Each order for catheter insertion must have specific indications for placement with a hard stop requirement to address.	
2. Stock supplies and education on alternatives to catheter placement **Weighing Pads** *Pad Weighing for Reduction of Indwelling Urinary Use and Catheter-Associated Urinary Tract Infection* **External Catheter Devices** **Male** Liberty 2.0 distributed by Medline Primo fit—Sage Quick change **Female** Purewick-Bard Prima fit -- Sage Uricap	
3. Urinary Catheter Insertion Criteria: - ED policy should indicate that all foley's to be placed in a more controlled setting, except in emergent cases. Perioperative Foley Insertion	
Prompt Catheter Removal	Completed
1. Conduct **daily** review and documentation of catheter continuing to meet order indications. - If indication is still pertinent, what is the plan for getting rid of it? - Report number of catheters and days catheter has been in place during shift huddle.	
2. Nurse driven removal protocols, assess and address reasons nursing is not following removal protocol.	

- Address provider noncompliance immediately to ensure a culture of safety. - Catheter DC Protocol - CAUTI Prevention (ANA)	
3. If a catheter is removed – have a protocol for reinsertion. - A catheter should not be reinserted for at least 24 hours - The protocol in place should also address urine volume for reinsertion (>= 400 mL), frequency of bladder scanning, straight catheterization schedule. - Include parameters for leaving the catheter out. - Acute Urinary Retention Algorithm	
Aseptic Technique	Completed
1. Have necessary protocols	
2. Require skills competency for both nursing staff and aides on a regularly occurring basis and audit practices.	
3. Have a 2-person insertion – especially for female foley insertion.	
Catheter Maintenance	Completed
1. Be aware of process for collecting samples and interruption of a closed system – protect the specimen port.	
2. Secure the drainage tube.	
3. Label foley bag with date of insertion.	
4. Bathing – eliminate basins on all units, follow CHG bathing protocols Chlorhexidine-Based Decolonization to Reduce Healthcare-Associated Infections and Multidrug-Resistant Organisms (MDROs): Who, What, Where, When, and Why? Differential Effects of Chlorhexidine Skin Cleansing Methods on Residual Chlorhexidine Skin Concentrations and Bacterial Recovery Effect of Body Surface Decolonization on Bacteriuria and Candiduria in Intensive Care Units: An Analysis of a Cluster-Randomized Trial Effect of Daily Chlorhexidine Bathing on Hospital-Acquired Infection	
5. Peri-Care: have a standard protocol – Daily peri-care unless stool or vaginal discharge is present. - Do not put tension on foley tubing while cleaning – creates a retraction that can introduce micro-organisms. - Cleaning with tap water can introduce bacteria – use CHG wipes – not labeled but studies have found that it is safe to use 2% CHG wipes in perinium - Use a wick-away chuck to clean up most of the stool then use disposable wipes. - Don't put a brief on if patient is in bed – just use a wick-away chuck	

Breathable Products: Prevalon® Turn & Position Systems (TAP) Hovermatt® Single-Patient Use Air Transfer Mattress Not Breathable Products: Molnlycke Tortoise Turning and Positioning	
6. Require documentation of indication for foley per shift.	
Urine Cultures	Completed
1. Stop reflex culture orders – unless the lab is tying a reflex order to a sign/symptom with provider – This ultimately leads to less resistance. - Make signs and symptoms required for a culture order – *cloudy and smelly urine is not criteria for cultures.* - Partner with Antibiotic Stewardship Team (pharmacist/ID provider) to push decreased culture orders. - Use a preservative tube to collect cultures instead of urine cup - this decreases false positives and contamination. - Change catheter before cultures are drawn. New evidence states that biofilm occurs 3-5 days after insertion; APIC recommendation is 2 weeks. Clinical Practice Guideline for the Management of Asymptomatic Bacteriuria: 2019 Update by the Infectious Diseases Society of America Promoting Appropriate Urine Culture Management to Improve Health Care Outcomes and the Accuracy of Catheter-Associated Urinary Tract Infections	
Share Data	Completed
1. Posting number of infections or number of days since an infection has the greatest impact for staff.	
2. Track catheter days – set infection goals and usage goals.	
3. Track early infection v. late infection – infection within 5 days indicates infection related to insertion. Infection after 5 days indicates infection related to maintenance.	
Create a Culture of Safety and Advocacy	Completed
1. What is your culture? How does your staff feel if an infection occurs? Do they see a hospital acquired infection as a patient harm?	
2. Learn from Defect Tool: as soon as a potential HAI is being investigated, begin huddles with staff to understand when/where the infection may have been introduced.	
3. Conduct bedside daily huddles while discussing the HAI so it is REAL to the staff.	
4. Let staff know as soon as a culture report is returned so that the issues can be discussed more real time.	

- If it is deemed a secondary infection, have a near miss discussion.	
5. RCA - post the learn from defect tool results to address more organizational processes.	
6. Recruit frontline champions for “Do No Harm” Team	
7. Look at unintended consequences/innocuous harm of having a foley aside from potential infections: Pressure injury, decreased mobility, DVT’s, overall deconditioning, and safe patient handling	

Additional resources provided by Kathleen Vollman

Toolkit for Reducing CAUTI in Hospitals | Agency for Healthcare Research and Quality (ahrq.gov)

Guide to Preventing Catheter-Associated Urinary Tract Infections

Strategies to Prevent Catheter-Associated Urinary Tract Infections in Acute Care Hospitals

CLABSI TOOLS

CLABSI Reduction Pathway	
Insertion of Central Line	Completed
1. Who / How is the decision made for insertion of a line? - Use MAGIC Guidelines for appropriateness of line and indications. Interventions to Reduce Unnecessary Central Venous Catheter Use to Prevent Central-Line-Associated Bloodstream Infections in Adults: A Systematic Review 2. Defer to culture results and length of treatment before line choice is made. 3. Make sure provider documents infusate and length of treatment with order "peripherally incompatible infusate." Infusion Therapy Standards of Practice Vasopressor & Inotrope Infusions via Peripheral Intravenous Administration Intravascular Complications of Central Venous Catheterization by Insertion Site	
4. Consider use of ultrasound peripheral IV placement to reduce need for central lines. - Select the central line with the fewest number of lumens needed, minimizing the presence of unused lumens. - Subclavian has a decreased level of dressing disruption due to placement in comparison to IJ.	
5. Insertion should be standardized for each line type: - Create an insertion pack - All involved in insertion should use appropriate PPE – assisting nurse should watch for break in sterility and complete safe insertion checklist.	
Central Line Removal	Completed
1. Conduct daily review and include documentation of indications - If indication is still present, what is the plan for getting line removal?	
2. Report number of lines and days the line has been in place during daily huddle.	
Aseptic Techniques	Completed
1. Have necessary protocols – choose products that make it hard not to do the right thing.	
2. Require regularly occurring skills competency including use, lab draws, dressing changes and removal.	
3. Audit practices – do audits more frequently to identify unstable processes & identify CLABSIs (Do they occur in the first five days or after five days?) This will provide understanding if it's an insertion problem or a maintenance problem.	
4. Focus on hand hygiene and consistent bathing processes, starting at jawline, not collarbone. Use CHG products correctly – both rinse/no rinse products available.	

Central Line Maintenance	Completed
1. Line Dressing: - Know Dressing Availability: Biopatch dressing must have correct ring placement to be effective – sometimes difficult to place based on suture placement. - Always date the dressing. - Dressing Disruption – increases the chances of infection ▪ Frequent with IJ due to positioning. ▪ Measure dressing disruption as a quality project – anything loose, soiled, or no longer occlusive. ▪ Evidence shows that adding Mastisol with skin prep helps keep dressings in place. - When accessing the site – if the dressing lifts do not tape down – replace - Non-occlusive dressing creates increased infection risk: ▪ Dressings are less sticky than in the past because of skin damage that occurred on removal ▪ When placing a dressing have skin prep and skin adhesive available and easy to access – create kits 2. Frequency of Dressing changes: - Every 7 days or as needed with a dressing disruption. - Consider dressing change kits that have pockets to guide staff on appropriate steps to a successful dressing change.	
3. IV tubing should be changed every 7 days if continuous fluids are running - Differing for intermittent or lipids Effect of Infusion Set Replacement Intervals on Catheter-Related Bloodstream Infections (RSVP): A Randomized, Controlled, Equivalence (central venous access device)-Non-Inferiority (peripheral arterial catheter) Trial	
4. CHG bathing: - All ICU patients - All other patients that have a line Chlorhexidine-Based Decolonization to Reduce Healthcare-Associated Infections and Multidrug-Resistant Organisms (MDROs): Who, What, Where, When, and Why? Differential Effects of Chlorhexidine Skin Cleansing Methods on Residual Chlorhexidine Skin Concentrations and Bacterial Recovery Effect of Daily Chlorhexidine Bathing on Hospital-Acquired Infection	
5. Have good securement devices available and ensure that all staff know how to use them.	

Blood Cultures	Completed
1. Draw both culture specimens from peripheral if available. Second best option is one from peripheral and one from Central Line (label which was drawn from each). *If patient is moved to comfort care after cultures have been drawn – discontinue the order.	
Share Data with Med Staff Providers and Frontline Staff	Completed
1. Posting number of infections or number of days since an infection has the greatest impact.	
2. Track central line days – set infection and usage goals.	
3. Track early infection v. late infection – is the infection related to insertion or maintenance and focus on performance improvement.	
Create a Culture of Safety and Advocacy	Completed
1. What is your culture? How does your staff feel if an infection occurs? Do they see a hospital acquired infection as a patient harm?	
2. Learn from Defect Tool: as soon as a potential HAI is being investigated, begin huddles with staff to understand when/where the infection may have been introduced.	
3. Conduct daily bedside huddles while discussing the HAI so it is REAL to the staff	
4. Let staff know as soon as a culture report is returned so that the issues can be discussed more real time - If it is deemed a secondary infection, have a near miss discussion	
5. RCA - post the learn from defect tool results to address more organizational processes	
6. Recruit frontline champions for "Do No Harm" Team - Provider - Nurse - Aide	

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Toolkit for Reducing Central Line-Associated Blood Stream Infections | Agency for Healthcare Research and Quality (ahrq.gov)

Toolkit for Preventing CLABSI and CAUTI in ICUs | Agency for Healthcare Research and Quality (ahrq.gov)

Strategies to Prevent Central Line-Associated Bloodstream Infections in Acute-Care Hospitals: 2022 Update

Surviving Sepsis Campaign: International Guidelines for Management of Sepsis and Septic Shock 2021

Vasoactive Agent Management