

AHRQ Safety Program for Intensive Care Units: Preventing CLABSI and CAUTI

PREVENT
HAIs
Healthcare-
Associated
Infections

Making It Work Tip Sheet Overcoming the “Just in Case” Mindset

The "Making It Work" tip sheet provides additional information to help intensive care unit (ICU) team leaders implement effective strategies and achieve goals to reduce central line-associated bloodstream infections (CLABSI) and catheter-associated urinary tract infections (CAUTI) and improve safety culture at the unit level.

Issue

A key strategy for the successful reduction of catheter-associated infections involves use of alternatives and early removal of the device. This can be impeded by a unit’s culture and clinicians who believe that it is safer for the patient to have the catheter “*just in case*” the patient takes a turn for the worse. An engaged culture is critical in creating an environment where clinicians understand the risk of increased catheter duration and have practical tools and resources to overcome the mindset of just in case the patient needs it.

Barriers

- Lack of awareness by physicians that a catheter is in place.
- Lack of nurse and physician champions to help educate or overcome fears related to appropriate removal of catheters.
- Limited monitoring/evaluation by staff and leadership after implementation of policy and procedures to determine if use is appropriate—especially in units with a high turnover rate or increased use of travel nurses.
- Perceived increase in nursing workload.
- Vague indications for removal within the protocol leading to staff confusion.
- Lack of real-time data on catheter utilization and related infections.
- Lack of appropriate equipment and personal resources for ultrasound-guided peripheral intravenous lines (IVs), bladder scanners, and urinary alternatives.

Suggested Strategies

Addressing Culture, Education, and Auditing

- Consider using the Michigan Appropriateness Guide for Intravenous Catheters (MAGIC) guidelines and Ann Arbor Indwelling catheter criteria to create greater specificity of catheter removal criteria. (See references)
- Conduct a real-time “learn from defects” examination of each catheter-associated infection while the patient is still in the ICU to link the harm to a specific patient versus global unit data.



- Incorporate meaningful prompts in rounds or huddles to link the catheter's indication with patient need and provide coaching for early removal if appropriate.
- Perform periodic audits to determine if a catheter meets policy criteria for indication.
- Provide education using case studies that incorporate catheter indications and strategies for early removal for medical and nursing orientations and existing staff education.
- Evaluate the environment for effective peripheral catheter placement resources, including vein visualizers or ultrasound, midline placement process, IV start kits, and securement devices.
- Ensure bladder scanner and male and female external catheters are available in each practice area.

Electronic Health Record (EHR) Opportunities (Bring Forth to Leadership)

- Display an icon representing a urinary and central catheter present on the patient master list for rounding and evaluation ease.
- Consider a best practice alert when criteria are no longer met with a reminder of how many days the catheter has been in place.
- Prominently display catheter day. For example, “**catheter day 7.**”
- Ensure clear and easy identification, visualization, and access to catheter data for clinicians during daily rounds.

Conversation Starters

Using the Situation, Background, Assessment, and Recommendation (SBAR) approach to bring awareness to the ICU team.

Situation: We have implemented and monitored our insertion and maintenance bundles to reduce CLABSIs. We had 100 percent compliance with the insertion bundle but only 60 percent compliance on the maintenance bundle. When we examined the data, we determined that the central line catheters remained in place when they no longer met the criteria for indication. We have heard from some physicians and nurses that they need the catheter just in case the patient goes back on vasoactive drugs or require an extra line for medication.

Background: We had a significant challenge with our CLABSI rates and catheter utilization. It was above the national average for our type of unit. Those five additional CLABSIs had an average line length of 10 days, and four out of the five patients died related to the secondary sepsis. The team got together to look at the risk factors and discussed the need to remove the catheter sooner if possible.

Assessment: It appears that the current strategy of determining appropriateness was a people-dependent process and broke down as soon as a stressor in the environment occurred. For many clinicians, the harm is not visible, but the perceived impact of not having that line in case of an emergency affects patient safety. We evaluated multidisciplinary rounds to determine if need was being discussed in rounds by asking the team, “Do they still need the line?” versus “Does the patient meet any indication for having the line remain in place?” We realized the indications and data in regard to line duration were not readily accessible in the EHR for clinicians to access during handoff, huddle, or various

rounds. It was also identified that the ICU did not have a vein finder or ultrasound equipment to aid the clinician with the placement of useful peripheral IVs.

Recommendation: The group made several recommendations for the implementation after evaluating the information.

- Provide education and use patient case studies with all healthcare providers to address the potential harm of leaving a catheter in place that no longer meets indications.
- Institute a real-time “learn from defects” examination of each catheter-associated infection while the patient is still on the unit to link the harm to a specific patient versus global unit data.
- Work with the medical director and unit practice committee to revise the questions asked in rounds about catheter necessity.
- Examine how changes in the EHR can help make the data more visible for communication during rounds, handoffs, and huddles. Determine if the EHR can be modified so that reminders can be launched after a certain amount of time the central line is in place.
- Acquire and train staff to use IV ultrasound for insertion of all peripheral IVs.

Case Studies, Tools, and Resources

- [Learn From Defects Tool Worksheet: CAUTI](#)
- [Learn From Defects Tool Worksheet: CLABSI](#)
- [Making It Work Tip Sheet – Empowering Nurses To Implement Nurse-Driven Protocols for Reducing CAUTI in the ICU Setting](#)

References

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