# CLABSI Gap Analysis

**AHRQ Safety Program for HAI Prevention**

**Unit Assessment and CLABSI Prevention Practices**

The purpose of this assessment is to understand current central line-associated bloodstream infections (CLABSI) prevention practices, policies, and procedures on your unit in order to identify areas of strength and opportunities to focus team actions. This assessment can be repeated over time to monitor any changes and support continued actions. Changes that might initiate a repeat of the assessment include an increase in CLABSI events, reduced compliance with central line insertion or maintenance process measures would be events, or significant staff turnover.

This form should be completed by the individuals from your CUSP team (or unit patient safety team) who are or will be leading CLABSI prevention initiatives. This should include at least the physicians/advanced practice practitioner lead(s), nurse lead(s), and the infection preventionist assigned to the unit. This form will take approximately 60 minutes to complete.

Note: **Unless otherwise specified, questions are regarding planned central line placements only**, not lines placed in emergent situations.

# Current Infection Prevention Practices

For each question below, select the appropriate response.

## Insertion Equipment

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Yes** | **No** | **Don’t know** |
| 1. Is an all-inclusive central line insertion kit stocked in your unit?
 | O | O | O |
| 1. Are masks, caps, sterile gowns, and sterile gloves stocked in your unit?
 | O | O | O |
| 1. Are full-body sterile drapes, large enough to cover the whole patient and bed, stocked in your unit?
 | O | O | O |
| 1. Are 2% chlorhexidine antiseptic applicators stocked in your unit?
 | O | O | O |
| 1. Is ultrasound available for line placement in your unit?
 | O | O | O |
| 5a. If Yes to Q5, are sterile sleeves for the ultrasound probe and cable stocked in your unit? | O | O | O |
| 1. Are CHG or antimicrobial impregnated or coated central venous catheters stocked in your unit?
 | O | O | O |
| 1. Are chlorhexidine-impregnated dressings or patches/discs stocked in your unit?
 | O | O | O |
| 1. Are topical hemostatic products for excessive bleeding at the catheter insertion site stocked in your unit?
 | O | O | O |
| 1. Are sutureless venous catheter securement devices stocked in your unit?
 | O | O | O |
| 1. Is a central line cart or similar storage space with all necessary insertion equipment used in your unit?
 | O | O | O |
| 10a. If Yes to Q10, is there a clear process for assembling and restocking the central line cart? | O | O | O |

## Insertion Steps

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Yes** | **No** | **Don’t know** |
| 1. Is a checklist customized to your central line insertion protocol available at the point of care (e.g., paper form, form in the electronic health record)?
 | O | O | O |
| 1. Is the checklist used for every central line placement?
 | O | O | O |
| 1. Is completion of the checklist documented in the medical record?
 | O | O | O |
| 1. Is hand hygiene embedded as a step in your central line insertion checklist?
 | O | O | O |
| 1. Do you require that an observer be present to support the person inserting the central line for the entire procedure?
 | O | O | O |
| 15a. Do you empower the observer to stop the procedure if sterility is broken or the checklist is not followed? | O | O | O |
| 15b. When required, does the inserter listen to the observer and always stop the procedure?  | O | O | O |
| 1. Does the inserter always wear a sterile gown, mask, cap, and sterile gloves?
 | O | O | O |
| 1. Is a full-body drape always used to cover the patient for every central line placement?
 | O | O | O |
| 1. Are staff educated on proper skin prep technique?
 | O | O | O |
| 1. Unless contraindicated, is a 2% chlorhexidine antiseptic applicator used for skin prep and applied correctly before every central line placement?
 | O | O | O |
| 1. Are staff educated on appropriate drying times for skin prep for different insertion sites?
 | O | O | O |
| 1. Does sufficient drying time for skin prep occur prior to central line insertion in > 95% of cases?
 | O | O | O |
| 1. Is a sterile sleeve always placed on the ultrasound device?
 | O | O | O |
| 1. Is the sterile sleeve on the ultrasound device applied all the way down the cable and fastened appropriately?
 | O | O | O |
| 1. Do you have an algorithm for selecting the lowest risk site for central line placement (e.g., avoiding the femoral site)?
 | O | O | O |
| 1. Do you use topical hemostatic products for excessive bleeding at the catheter insertion site when needed?
 | O | O | O |
| 1. In emergent insertions such as during a cardiac arrest or during a rapid response activation, do you have intra-osseous technology and procedures in place to avoid emergent placement of central lines?
 | O | O | O |

## Maintenance Equipment

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Yes** | **No** | **Don’t know** |
| 1. Are central line dressing change kits stocked in your unit?
 | O | O | O |

## Maintenance Steps

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Yes** | **No** | **Don’t know** |
| 1. Is hand hygiene embedded in training materials for central line maintenance?
 | O | O | O |
| 1. Are central line dressings dated in > 95% of cases?
 | O | O | O |
| 1. Are central line dressings changed on schedule?
 | O | O | O |
| 1. Are central line dressings changed ahead of schedule when noted to be soiled, loose, or damp in > 95% of cases?
 | O | O | O |
| 1. Unless contraindicated, is a 2% chlorhexidine antiseptic applicator used for skin prep before every central line dressing change?
 | O | O | O |
| 1. Is appropriate port antisepsis performed prior to accessing the central line in > 95% of cases?
 | O | O | O |
| 1. Are there prompts at the point of care that specify the correct approach and timing for appropriate port antisepsis?
 | O | O | O |
| 1. Do you follow a standard protocol for central line tubing changes?
 | O | O | O |
| 1. Does your unit treat patients’ skin daily with chlorhexidine? (for all patients in the ICU setting and for patients with devices in non-ICU setting)
 | O | O | O |
| 1. Do you allow blood draws for labs from the central line?
 | O | O | O |
| 1. Do you allow blood draws for blood culturing from existing central lines?
 | O | O | O |
| 1. When adherence to aseptic technique cannot be ensured (e.g., catheters inserted during a medical emergency), is replacement of the catheter conducted within 48 hours?
 | O | O | O |

## Removal

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Yes** | **No** | **Don’t know** |
| 1. Do you have an algorithm available at the point of care to help personnel determine when a central line is clinically indicated?
 | O | O | O |
| 1. Do you have a standardized workflow for clinical teams to have a daily meaningful conversation about central line necessity?
 | O | O | O |

# Policies, Training, and Feedback

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Yes** | **No** | **Don’t know** |
| 1. Do you have a hospital policy (or policies) for central line insertion that outline roles, responsibilities, and requirements for central line placement?
 | O | O | O |
| 1. Do you have a hospital policy (or policies) for central line maintenance that outline roles, responsibilities, and requirements for central line maintenance?
 | O | O | O |
| 1. Do you have standardized training for healthcare personnel on inserting central lines?
 | O | O | O |
| 44a. If Yes to Q44, when is this training required? *Select all that apply* | * At orientation
* To gain insertion privileges
* Annually
* Other (please specify):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
 |
| 1. Do you have standardized training for healthcare personnel on maintaining central lines?
 | O | O | O |
| 45a. If Yes to Q45, when is this training required? *Select all that apply* | * At orientation
* Annually
* Other (please specify):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
 |
| 1. Do you have a comprehensive program to monitor hand hygiene that involves your unit?
 | O | O | O |
| 1. Do you have a comprehensive program to operationalize daily chlorhexidine treatment that involves your unit?
 | O | O | O |
| 1. Do you have a vascular access team for peripherally inserted central catheter (PICC) placement?
 | O | O | O |
| 1. Do you have a standardized workflow for a member of the infection prevention team and a unit member to observe and audit central line insertion regularly?
 | O | O | O |
| 1. When you have identified elevated CLABSI rates, do you implement standardized workflows for a member of the infection prevention team and a unit member to observe and audit central line insertion monthly?
 | O | O | O |
| 1. Do you have central line rounds at least monthly?
 | O | O | O |
| 1. Do you systematically review each CLABSI to determine gaps in evidence-based practice and opportunities for improvement?
 | O | O | O |
| 1. Does your team meet at least once a month to discuss progress towards CLABSI goals?
 | O | O | O |
| 1. Does your unit receive regular reports from the infection prevention and control program on your CLABSI rates?
 | O | O | O |
| 1. Does your unit receive regular reports from the infection prevention and control program on process measures related to CLABSI prevention (e.g., dressing dry and intact)?
 | O | O | O |
| 1. With whom do you share your CLABSI surveillance data? *Select all that apply.*
 | * Unit managers
* All unit nursing staff
* All physicians providing care to patients in the unit
* None of these
* Don’t know
 |
| 1. Does your unit receive data on blood culture contamination at least once per year?
 | O | O | O |
| 1. Do you have a program for blood culture stewardship that involves your unit?
 | O | O | O |
| 1. Are patient education handouts about CLABSI quality improvement efforts available in your unit (e.g., on paper or in EHR or another website readily available for download)?
 | O | O | O |
| 1. Is a safety climate survey completed at least annually by individual healthcare providers on your unit?
 | O | O | O |
| 1. In the past 30 days, has a senior leader/executive been present at a CUSP activity on your unit?
 | O | O | O |
| 1. Has your unit experienced > 25% nursing staff turnover in the past year?
 | O | O | O |
| 1. What is your unit’s usual registered nurse-to-patient ratio?
 | * 1:1
* 1:2
* 1:3
* 1:4 or greater
 |

***Self-Reported Change in HAI Rates and HAI Prevention Processes*** will be administered with the endline Gap Analysis. One unit lead and one infection preventionist will self-report change in HAI rates and HAI prevention processes per unit at the end of implementation.

* “Since the beginning of the implementation, have your units' HAI rates improved?"
* “Since the beginning of the implementation, have your units' HAI prevention processes improved?"

|  |
| --- |
| Public reporting burden for the collection of information is estimated to average 60 minutes per response, the estimated time required to complete this assessment. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to: AHRQ Reports Clearance Officer, Attention: PRA, Paperwork Reduction Project (0935-XXXX), AHRQ, 5600 Fishers Lane, MS 0741A, Rockville, MD 20857.The confidentiality of your responses is protected by Sections 944(c) and 308(d) of the Public Health Service Act [42 U.S.C. 299c-3(c) and 42 U.S.C. 242m(d)]. Information that could identify you will not be disclosed unless you have consented to that disclosure. |