

CDPH Central Line Insertion Practices (CLIP) Adherence Monitoring Tool Instructions for Tool Use

The attached tool is being provided to assist with the implementation of mechanisms for reporting requirements in conjunction with requirements of SB 739. Data collection for NHSN was never intended to be the sole responsibility of infection prevention and control professionals. It is hoped that your facility will take the opportunity to use this tool to put into place the processes so as to enable effective data collection for when reporting of these or similar measures become mandated by the California Department of Public Health (CDPH). These sheets are for collection of data only; no data entry into NHSN or reporting to CDPH is required until after formal notification from CDPH. For questions on this or any other issue related to SB 739, please contact Sue Chen @ Sue.Chen@cdph.ca.gov or (510) 620-3434.

Introduction:

Central line-associated bloodstream infections (CLABSIs) can be prevented through proper management of the central line. The CDC's Healthcare Infection Control Practices Advisory Committee (CDC/HICPAC) *Guidelines for the Prevention of Intravascular Catheter-Related Infections* recommend evidence-based central line insertion practices known to reduce the risk of subsequent central line-associated bloodstream infection. These include use of maximal sterile barriers during insertion, proper use of a skin antiseptic prior to insertion, avoiding the femoral insertion site whenever possible, and avoiding guidewire exchange when a central line-associated infection is suspected. Despite the scientific evidence supporting these measures, several reports suggest that adherence to these practices remains low in US hospitals.

This tool is designed to monitor processes performed at the time of central line insertion. Feedback of adherence data has been a component of multifaceted interventions that have successfully reduced CLABSI rates. This data should enable your facility to:

- a. Monitor central line insertion practices in individual patient care units and facilities and to provide aggregate adherence data for all participating facilities. Facilities have the option of recording inserter-specific adherence data.
- b. Link gaps in recommended practice with the clinical outcome (i.e., CLABSI)
- c. Facilitate quality improvement by identifying specific gaps in adherence to recommended prevention practices, thereby helping to target intervention strategies for reducing central line-associated bloodstream infection rates.

Settings:

Surveillance may occur in any type of patient care location where central lines are inserted.

Requirements:

Surveillance for central line insertion practices in at least one location in the healthcare institution for at least one calendar month. Your facility may perform surveillance for insertion practices during a month when concomitant CLABSI surveillance is being conducted, or may collect insertion practice data during a month when no CLABSI surveillance is being conducted or in locations where CLABSI are not monitored (e.g., emergency department, operating room,

etc.). If your program wishes to produce reports that link insertion practices to outcomes (i.e., CLABSI), surveillance for insertion practices and CLABSI must be done concomitantly.

Methods:

The attached *Central Line Insertion Practices Adherence Monitoring Form* is used to collect and report central line insertion practices for every central line insertion occurring during the month selected for surveillance. The *Instructions for Completion of the Central Line Insertion Practices Adherence Monitoring Form* (Table) contains directions for collection and entry of each data element on the form. The form can be completed at or near the time of insertion either by the inserter or an observer present at the insertion (e.g., nurse assisting with the catheter insertion), or the form can be completed from documentation in the patient chart (e.g., if the elements of the monitoring form have been incorporated into standard central-line insertion procedure notes). The *Central Line Insertion Practices Adherence Monitoring form* is completed for every central line insertion that occurs during the month chosen for surveillance. The form includes information pertaining to demographics of the patient, information pertaining to the inserter, information on maximal sterile barriers used, the reasons for central line insertion, skin antisepsis, hand hygiene practice before insertion, type of central line and insertion site, and use of a guidewire. These data will be used to calculate adherence to recommended catheter insertion practices.

Data Analyses:

Adherence rates for specific insertion practices will be calculated by dividing the number central line insertions during which the recommended practice was followed by the total number of central line insertions and multiplying the result by 100. This calculation will be performed separately for different types of locations in the institution. Participants have the option of calculating inserter-specific adherence rates. An additional option for analysis is to generate a line list of patients in whom a central line was inserted, the insertion practices followed during the insertion, and information on any subsequent CLABSI associated with that central line.

Note: as the purpose of this form is to allow you to field test reporting of central line insertion process measures within your facility, no external reporting of these results is required. Before the reporting of CLIP measures become mandated, you will receive the format and start date. Mandated reporting on this measure will occur only through NHSN. Instructions for completion are given with this in mind.

Table: Instructions for Completion of the Central Line Insertion Practices Adherence Monitoring Form

Data Field	Instructions for Form Completion
Facility ID	Ignore for this exercise
Event #	Ignore for this exercise
Patient ID	Required This is the patient identifier assigned by the facility and may consist of any combination of numbers and/or letters.
Social Security #	Optional. Enter patient’s Social Security Number

Data Field	Instructions for Form Completion
Secondary ID	Optional. Enter any other patient identifier assigned by the facility.
Patient name: Last, first, middle	Optional. Enter patient's last name, first name and middle name
Gender	Required This is the gender of the patient. Check male or female.
Date of Birth	Required Enter the patient's date of birth (MM/DD/YYYY).
Ethnicity (specify)	Optional. Enter the patient's ethnicity: Hispanic or Latino Not Hispanic or Not Latino
Race (specify)	Optional. Enter the patient's race: (select all that apply) American Indian or Alaska Native Asian Black or African American Native Hawaiian or Other Pacific Islander White
Event Type	Required Enter event type "CLIP".
Location	Required Enter the location of the patient at the time of the central line insertion
Insertion date	Required Enter the date of central line insertion (MM/DD/YYYY).
Person recording insertion practice data	Required Select inserter or observer.
Central line inserter ID	Optional. Enter the HCW ID# of the person inserting the central line.
Name, Last, First	Optional. Enter last name and first name of person inserting the central line.
Occupation of inserter	Required Check the occupational category of the person inserting the central line: Attending physician; Intern/Resident; Physician assistant; IV team; Fellow; Other medical staff; Medical student; Other student. If Other than these, please specify:
Reason for insertion	Required Check the primary reason for inserting the central line: New indication; Replace malfunctioning central line; Suspected central line-associated infection. If Other, please specify.
Inserter performed hand hygiene prior to central line insertion	Required Check Y (Yes) if the inserter appropriately performed hand hygiene prior to inserting central line; otherwise check N (No). Appropriate hand hygiene includes the use of alcohol-based hand rub or soap and water hand wash.
Maximal sterile barrier precautions used	Required Check each sterile barrier used during insertion: Mask/Eye shield; Sterile gown; Large sterile (full body) drape; Sterile gloves; Cap
Skin preparation	Required Check all that apply: Chlorhexidine gluconate; Povidone iodine; Alcohol
Was skin preparation agent completely dry at time of first skin puncture?	Required Check Y (Yes) if the skin prep agent was allowed to dry completely at the time of first skin puncture; otherwise select N (No).
Insertion site	Required Check the site of insertion of the central line: Jugular; Subclavian; Umbilical; Femoral; Upper extremity (PICC).
Antimicrobial coated catheter used	Optional. Check Y (Yes) if antimicrobial coated catheter was used; otherwise check N (No).

Data Field	Instructions for Form Completion
Central line catheter type	Required Check the type of central line inserted: Non-tunneled catheter (other than dialysis); Tunneled catheter (other than dialysis); Dialysis catheter non-tunneled; Dialysis catheter tunneled; Umbilical; PICC. If other, please specify.
Number of lumens	Optional. Circle the number of lumens in the device: 1, 2, 3 or ≥ 4 .
Central line exchanged over a guidewire	Required Check Y (Yes) if the central line was exchanged over a guidewire; otherwise Check N (No).
Antiseptic ointment applied to site*	Optional. Check Y (Yes) if antiseptic was applied to the insertion site following insertion but prior to application of the dressing; otherwise check N (No).
Comments	Optional. Enter any additional information on the central line insertion

* The presence of this field does not constitute a recommendation for antiseptic ointment.