2021 CLABSI Medical Record Abstraction Tool

Refer to associated 2021 MRAT instructions

1. IDENTIFIERS AND ABSTRACTED DATA: *Use Tables on page 1 to document information as needed to answer questions beginning on page 2.*			
State	Facility (NHSN) OrgID	(*circle*): ACH / LTACH / CancerH / Other/	Date of Audit ___/___/____
Patient ID		Patient DOB ___/___/____	Reviewer Initials
Review Start Time:		End Time:	Time spent reviewing this record (minutes):
FACILITY Admission Date: ___/___/____		FACILITY Discharge Date: ___/___/____	

2. SCREENING QUESTIONS	
2-1. Were any positive blood specimens collected on or after facility day 3 or was the date of event (DOE) the day of transfer or discharge, or the next day?	☐ Yes -> Continue to 2-2 ☐ No -> (i.e., ALL positive blood specimens were drawn before facility day 3) there was no HAI-CLABSI Event. STOP, record outcome (a) No candidate VL CLABSI
2-2. Were any positive blood specimens taken during ANY validation location (VL) stay, or on the day of or day after VL discharge?	☐ Yes -> Continue to 2-3 ☐ No -> STOP, record outcome (a) No candidate VL CLABSI
2-3. Was central line (CL) in place for >2 calendar days AND in place during a VL stay for any period of time?	☐ Yes -> Continue to 2-4 ☐ No -> STOP, record outcome (a) No candidate VL CLABSI
2-4. Did the positive blood specimens meet one of the following criteria? a. *Campylobacter* spp., *C. difficile*, Enteropathogenic *E. coli*, Enterohemorrhagic *E. coli*, *Vibrio* spp, *Salmonella* spp., *Shigella* spp., *Listeria* spp., *Yersinia* spp. (These organisms are excluded pathogens for LCBI. They may be secondary BSIs but will not be reported as the sole pathogen in a primary BSI.) b. *Blastomyces, Histoplasma, Coccidioides, Paracoccidioides, Cryptococcus, Pneumocystis* (These organisms are typically causes of community-associated infections and are rarely known to cause healthcare-associated infections, and therefore are excluded.) c. Companion common commensal organisms identified by culture. d. Negative culture within a range of two days before and day after a positive NCT with a recognized pathogen.	☐ No -> Continue ☐ Yes -> STOP, record outcome (a) No candidate VL CLABSI

Table 1a. List Positive Blood Specimens chronologically:

Positive BC*	Date BC Collection	Validation Location BC?	Optional: CL* on this date or day before?	Organism genus/species	P or CC*	Infection DOE*	RIT* End Date and RIT number
1	___/___/___	Y N	Y N			___/___/___	___/___/___
2	___/___/___	Y N	Y N			___/___/___	___/___/___
3	___/___/___	Y N	Y N			___/___/___	___/___/___

**BC=blood specimen, CL= Central Line, P=pathogen, CC=common commensal, DOE=Date of Event, RIT= Repeat Infection Timeframe. Add rows if needed.*

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Table 1b. Locations:						Table 1c. Central Lines:		
Facility Location Order	Physically Admit/ Transfer IN	Discharge/ Transfer OUT	Location Name (include ED)	Pt in VL?		CL inserted or accessed	CL removed without replacement	Location housed with CL
1	___/___/___	___/___/___		Y N				
2	___/___/___	___/___/___		Y N				
3	___/___/___	___/___/___		Y N		___/___/___	___/___/___	
4	___/___/___	___/___/___		Y N				
5	___/___/___	___/___/___		Y N		___/___/___	___/___/___	
6	___/___/___	___/___/___		Y N				
7	___/___/___	___/___/___		Y N		___/___/___	___/___/___	
8	___/___/___	___/___/___		Y N				
9	___/___/___	___/___/___		Y N		___/___/___	___/___/___	
Add rows if needed						*Add rows if needed*		

3. LABORATORY CONFIRMED BLOOD STREAM INFECTION (LCBI) CRITERIA

Evaluate all positive blood specimens in order as potential Laboratory Confirmed Bloodstream Infection (LCBI), using table columns in the MRAT Instructions; ***determine if there was an LCBI, and which type (LCBI 1, LCBI 2, or LCBI 3) was met, if any.***

4. Did Infection Episode Qualify as LCBI Event? *(begin loop)*

☐ No	*If LCBI definition was NOT met, record outcome (b)* No LCBI*, and reason (i.e., unmatched common commensal, asymptomatic matched common commensals, or alternative primary site infection with secondary BSI), and continue to next Infection Event.* ***If no more positive blood specimens, STOP***						
☐ Yes	*If Yes LCBI, document type of LCBI and Date of Event below.* *Note: there may be more than one LCBI during an episode of care.*						
	Type of LCBI (*circle one*):						Date of LCBI Event (date FIRST of required elements was met during the LCBI IWP):
First LCBI	LCBI 1	MBI LCBI 1	LCBI 2	MBI LCBI 2	LCBI 3	MBI LCBI 3	
Second LCBI	LCBI 1	MBI LCBI 1	LCBI 2	MBI LCBI 2	LCBI 3	MBI LCBI 3	
Third LCBI	LCBI 1	MBI LCBI 1	LCBI 2	MBI LCBI 2	LCBI 3	MBI LCBI 3	
Add rows if needed							

5. Was LCBI Healthcare-Associated (HAI) or Present on Admission (POA)? *Did LCBI occur during the time period of 2 days before facility admission to the day after facility admission (POA)?*	
☐ Yes	*If Yes, LCBI was POA; document outcome (c) POA LCBI type and evaluate next positive blood specimen outside of the event LCBI RIT.* *If no more blood specimens, STOP*
☐ No	*If No, proceed to 6.*
6. HAI-LCBI vs CLABSI?	
6a Was this HAI-LCBI a CLABSI	
☐ Yes	*If Yes, HAI-LCBI is CLABSI; proceed to 6b.*
☐ No	*If No, document outcome (d) HAI-LCBI not CLABSI and evaluate next positive blood specimen with date of event outside the LCBI RIT.* *If no more blood specimens, STOP*
6b Was there medical documentation of the patient suspected or observed self-injecting into their vascular access device within the infection window period?	
☐ Yes	*If Yes, document outcome (d) HAI-LCBI not CLABSI and evaluate next positive blood specimen with date of event outside the LCBI RIT.* *If no more blood specimens, STOP*
☐ No	*If No, HAI-LCBI is CLABSI; proceed to 6c.*
6c Was there pus at the site of one of the following vascular access devices and a specimen collected from that site has at least one matching organism to an organism identified in blood	
☐ Yes	*If Yes, then disassociate the LCBI from the central line – document outcome (d) HAI-LCBI not CLABSI and evaluate next positive blood specimen with date of event outside of the LCBI RIT.*
☐ No	*If No, HAI-LCBI is CLABSI; proceed to 7.*

7. WAS VALIDATION LOCATION (VL) the Location of Attribution (LOA)?	
7a. Was patient in a VL on date of LCBI Event or day before Event?	
☐ Yes	*If Yes, proceed to b.*
☐ No	*If No, document outcome (e) CLABSI not VL attributable and evaluate next positive blood specimen with date of event outside the previous LCBI RIT.* *If no more blood specimens, STOP*
7b. Was patient transferred to VL from another bedded inpatient location, on date of LCBI Event or day before Event?	
☐ Yes	*If Yes, location of attribution was the transferring location. Proceed to c.*
☐ No	*If No, location of attribution was location at time of infection; STOP record outcome (f) VL CLABSI*
7c. Was the transferring location a validation location (VL)?	
☐ Yes	*If Yes, location of attribution (transferring location) WAS a validation location; STOP record outcome (f) VL CLABSI*
☐ No	*If No, location of attribution (transferring location) was NOT a validation location; record outcome (e) CLABSI not VL attributable and evaluate next positive blood specimen with date of event outside the previous LCBI RIT.* *If no more blood specimens, STOP*

8 Outcome Documentation

Positive Blood specimen Number	Outcome (a-f)	Detail for outcomes (b) through (f) (See key below)	Provide detail for Case Determination and reason (See key to below)
1			
2			
3			
4			
5			

(a) No candidate validation location (VL) CLABSI
(b) No LCBI
Reason (Select one):

- ☐ *Contaminant (unmatched CC)*
- ☐ *Matching CCs with no symptoms*
- ☐ *Alternative primary source of BSI (complete box):*

-Primary source of BSI _____
-Date of alternative primary event _____
-Attach NHSN checklist with elements abstracted
-Circle correct NHSN BSI Chapter, Appendix B criterion:

1. *At least one organism from the blood specimen matches an organism identified from the site-specific infection that is used as an element to meet the NHSN site-specific infection criterion AND the blood specimen is collected during the secondary BSI attribution period (infection window period + repeat infection time frame).*
2. *An organism identified in the blood specimen is an element that is used to meet the NHSN site-specific infection criterion, and therefore is collected during the site-specific infection window period.*

(c) POA LCBI
Type of LCBI, Select one: LCBI1 MBI-LCBI1 LCBI2 MBI-LCBI2 LCBI3 MBI-LCBI3
(d) HAI-LCBI not CLABSI
Type of LCBI, Select one: LCBI1 MBI-LCBI1 LCBI2 MBI-LCBI2 LCBI3 MBI-LCBI3
(e) CLABSI not VL attributable
Type of LCBI, Select one: LCBI1 MBI-LCBI1 LCBI2 MBI-LCBI2 LCBI3 MBI-LCBI3
(f) VL CLABSI;
Type of LCBI, Select one: LCBI1 MBI-LCBI1 LCBI2 MBI-LCBI2 LCBI3 MBI-LCBI3
Date of VL CLABSI_____
Location of attribution_____

*Note: Each infection episode should have an assigned outcome **a-f**. There may be multiple LCBIs, or multiple CLABSIs during a single episode of care.*

Case Determination **(A) Correctly Classified**	**(B) Over-reported HAI**	**(C) Underreported HAI**
If CLABSI was misclassified (over- or underreported) by facility, what was the reason?		
(I) General HAI definition misapplication (Ia) Incorrect location of attribution (Ib) Date of event incorrect (Ic) IWP set incorrectly (Id) RIT applied incorrectly (Ie) Did not identify elements present in IWP (If) POA/HAI applied incorrectly (Ih) Other _____ (III) Additional Reasons (IIIa) Missed case finding/failure to review positive specimen/culture (IIIb) Clinical over-rule (IIIc) Used outdated criteria (IIId) No positive blood specimen in chart (IIIe) Other _____	(II) CLABSI criteria misapplied (IIa) Central Line not in > 2 days in an inpatient location on date of event (IIb) Missed CLABSI due to central line removed day of or day before the date of event (IIc) Missed CLABSI due to location transfer/discharge day of or day before the date of event (IId) CLABSI incorrectly identified as secondary BSI (IIe) Secondary BSI incorrectly identified as a primary CLABSI (IIf) Other _____	

Don't forget to record the abstraction end time on page 1 Location of elements meeting criteria within Medical record:

_____