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هـيئـة الصحـــة العـامـــة
PUBLIC HEALTH AUTHORITY

CLABSI Surveillance Data Validation Tool

PART I : CLABSI Surveillance Process
(Catheter Associated Blood Stream Infection)

#	Items	A: Staff Knowledge	Score	Comments
WHAT? *(ICPs responsible for CLABSI Surveillance must be well trained about CLABSI Surveillance Protocols*	CDC - NHSN CLABSI Criteria (Numerator)	**Assess if ICPs assigned for CLABSI surveillance are well familarized with case definitions as per CDC-NHSN criertia & fullly understand CLABSI surveilance process.** Numerator: Laboratory Confirmed Bloodstream Infection (LCBIs) Hierarchy **LCBI-1:** **Patient of any age has a recognized bacterial or fungal pathogen, not included on the NHSN common commensal list.** A) Identified from one or more blood specimens obtained by a culture non-culture based microbiologic testing & B) Organism(s) identified in blood is not related to an infection at another site. **LCBI-2:** A) **Patient of any age** has at least one of the following signs or symptoms: fever (>38.0oC), chills,or hypotension **AND** B) Organism(s) identified in blood is not related to an infection at another site. **AND** C) Same NHSN common commensal is identified by culture from two or more blood specimens collected on separate occasions		
		LCBI-3: A) Patient ≤ 1 year of age has at least one of the following signs or symptoms: fever (>38.0oC), hypothermia (<36.), apnea OR bradycardia B) Organism(s) identified in blood is not related to an infection at another site. AND C) Same NHSN common commensal is identified by culture from two or more blood specimens collected on separate occasions		
	Denominator Data Collection Denominator data	Ask about denomintaor data colllection methodology?? Denominator/s: **Patinet Days: Number of patients housed in a facility inpatient location during the designated counting time each day and summed for a monthly denominator report.** **Central Line days: The number of days a central line is accessed to determine if an LCBI is a CLABSI.** NICU Denomintaor data collection: ***(Collect the denominator data as per birth weight categories because the risk of BSI varies by birth weight)*** **<750 gm 751-1000 gm** **1001-1500 gm 1501-2500 gm >2500 gm** ***NOTE: (patient days and device days) should be collected at the same time, every day, for each location performing surveillance to ensure that differing collection methods don't inadvertently result in device days being greater than patient days.***		
WHERE?	CLABSI Surveillance Location	***Ask where CLABSI surveillance should be conducted ??*** ***CLABSI Surveillance is conducted in all Adult Critical Care Units where denominator data can be collected - Patient days & Central Line days*** *1: Adult Critical Care Units* *2: Pediatric ICU (PICU)* *3: Neonatal ICU (NICU)* ***(NOTE: Currently only critcal care units are included in HAI surveillance data reporting via electronic platforms)***		

WHO?	Targeted Patients	1: Ask about targeted patients for CLABSI surveilalnce?? Any patient admitted in Adult ICU. PICU, NICU who is on Central Line is cadidate for CLABSI Surveillance. 2: What is CLABSI?? Central line-associated BSI (CLABSI): A laboratory confirmed bloodstream infection where an eligible BSIorganism is identified, and an eligible central line is present on the LCBI DOE or the day before. 3: What is eligible central line?? A CL that has been in place for more than two consecutive calendar days (on or after CL Day 3), following the first access of the central line, in an inpatient location, during the current admission. 4: What is an eligible organism?? Any organism that is eligible for use to meet LCBI 1,2 or 3 criteria. In other words, an organism that is not an excluded pathogen for use in meeting LCBI criteria. A common commensal identified in a single blood specimen is considered a contaminant. A single common commensal organism is not used to meet LCBI 2 or 3 criteria or secondary BSI attribution.		
HOW?	CLABSI Surveillance Data Collection	1: Ask how CLABSI Surveillance data is collected? ICPs must conduct active CLABSI surveillance from all surveillance locations included in Seha Platform. *(Collect data as per criteria using manual data collection sheet or electronic data source)* 2: Ask about Blood Specimen Collection protocols?"Two or more blood specimens drawn on separate occasions" criterion is met if there is blood collected from at least two separate blood draws on the same or consecutive calendar days. *2 sets must be collected -1 set for Aerobic Organisms & 1 set for anaerobic organisms (4 Bottles)* NOTE: Important points for Blood Specimen Collection : a: 1 Central Line & 1 Peripheral Line specimens are Acceptable for CLABSI determintaions b: 2 Peripheral Line specimens are Acceptable CLABSI determintaions c: Cather Tip Cultures are NOT Acceptable for CLABSI determintaions *Blood specimens drawn through central lines can have a higher rate of contamination than blood specimens collected through peripheral venipuncture.However, all positive blood specimens, regardless of the site from which they are drawn or the purpose for which they arecollected, must be included when conducting in-plan CLABSI surveillance*		
	Data Source for CLABSI	LCBI Criteria 1 : 1: Microbiology lab results for recognized pathogens (Refer to CDC list of pathogens) *https://www.cdc.gov/nhsn/xls/master-organism-com-commensals-lists.xlsx* *2: Patient medical records to rule out possibility of infection at other site e.g UTI* *LCBI Criteria 2:* 1: Microbiology lab results for common commensals (2 matching organisms) 2: Patient medical records / patient charts for Signs & Symptoms -- fever (>38.0°C), chills, or hypotension LCBI Criteria 3 : Patient ≤ 1 year of age 1: Microbiology lab results for common commensals (2 matching organisms) 2: Patient medical records / patient charts for Signs & Symptoms -- fever (>38.0oC), hypothermia (<36.0oC), apnea, or bradycardia		

B: Positive Culture Linelist & Internal Validation				
WHAT?	Line list Review	Is there any effective notification system between the IPC department, laboratory, and all departments in the hospital for any critical values (i.e MDROs, positive cultures & high-alert microorganisms).		
		Is there any updated linelist/logbook of all positive microbiological cultures that includes Patient information,Date of admission to hospital & unit, date of device insertion date of device removal , date of specimen collection, type of organism, sings & symptoms etc		
		Internal validation done to review data for candidate CLABSI in Adult, pediatric & Neonatal Locations.		
		Internal validation done to review denominator data - 3 consecutive months		
		Possiblity of Outbreak ruled out - No epidemiological link between cases reported from same location in same time frame.		
C: CLABSI Events Idetification & Reporting				
WHAT?	Data Analysis & Event reporting	Number of CLABSI Events correctly identified as per CDC-NHSN Criteria		
		Number of CLABSI events matching CDC criteria that were missied by ICP and were detected during visit.		
		Number of correctly idetified CLABSI Events reported Via seha platform in a timely mannner.		
		Number of CLABSI events as per manual sheet are 100% matching with *Seha Platform & Power BI dashboard*		

D: CLABSI Surveillance Data Entry Via Seha Platform				
WHAT?	Electronic Platforms	All patients admitted in critical care units are registered in Seha Platform with or without devices.		
		Central Line Device information is entered accurately for all patients on central Line and required central Line bundle form is filled.		
		Number of patients currently admitted in Adult ICUs, PICUs & NICUs is 100% matching with Seha platform on day of visit.		

E: HAI Outbreak Detection & Reporting (ESCKAPE-C)				
WHAT?	Outbreak Detetction Reporting	Outbreak was detected correctly as per latest GDIPC updates (version 7.2 Jan 2025)		
		Outbreak was reported in a timely manner via electronic Platform		
		An outbreak was missed which was detetced during visit as per linelist *(Device associated (Central Line) or non device associated)*		

F: Neonatal CLABSI Reduction Strategy Implementation (NCRS)				
WHAT?	NCRS Tools (Knowledge & Practices)	Assess staff knowledge about Natioanal VAE Reduction Strategy. (NVRS)		
		Ask about the NVRS prevention tools & their implementation (Adult & Ped VAE Location)		
		Compare the actual complaince data Vs data submitted each month - observe any discrepency.		

PART II : On Site Visit - Validation Rounds (Adult ICU, PICU, NICU)				
WHAT?	IC Rounds	Conduct rounds in adult ICU, PICU & NICU & ensure care bundles & prevention tools are applied.		
		Assess staff knowledge about central Line insertion & maintenance bundles.		
		Assess staff knowledge and awareness about NCRS prevention tools. (NICU)		

PART III (Education & Training Session)				
WHAT?	CLABSI Surveillance Education & Training	External Validator conducted short concluding training & education session ??		
		CLABSI Surveillance Protocols based on CDC-NHSN Central Line Insertion Bundle Central Line Maintenance Bundle NCRS Tools overview		
WHO?		Targeted Audience: Infection Control Team Nursing representatives /Staff from Adult ICUs, PICUs, NICUs		