


CAUTI Surveillance Data Validation Tool

PART I : CAUTI Surveillance Process (Catheter Associated Urinary Tract Infection)

#	Items	A: Staff Knowledge	Score	Comments
WHAT? (ICPs responsible for CLABSI Surveillance must be well trained about CLABSI Surveillance Protocols)	CDC - NHSN CAUTI Criteria (Numerator) SUTI 1a :	Assess if ICPs assigned for CAUTI surveillance are well familiarized with case definitions as per CDC-NHSN criteria & fully understand CAUTI surveillance process. Numerator: Symptomatic UTI (SUTI) SUTI 1a : Catheter associated Urinary Tract Infection (CAUTI) in any age patient A) Patient had an indwelling urinary catheter that had been in place for more than 2 consecutive days in an inpatient location on the date of event B) Patient has at least one of the following signs or symptoms: • Fever ($>38.0^{\circ}\text{C}$) • suprapubic tenderness* • costovertebral angle pain or tenderness* • urinary urgency ^ • urinary frequency ^ • dysuria ^ C) Patient has a urine culture with no more than two species of organisms identified, at least one of which is a bacterium of $\geq 10^5$ CFU/ml		
	SUTI 1b :	SUTI 1b : Non Catheter associated Urinary Tract Infection (Non-CAUTI) in any age patient : A) Patient had an indwelling urinary catheter, but it has/had not been in place for more than two consecutive days in an inpatient location on the date of event OR • Patient did not have an indwelling urinary catheter in place on the date of event nor the day before the date of event. B) Patient has at least one of the following signs or symptoms: • Fever ($>38.0^{\circ}\text{C}$) • suprapubic tenderness* • costovertebral angle pain or tenderness* • urinary urgency ^ • urinary frequency ^ • dysuria ^ C) Patient has a urine culture with no more than two species of organisms identified, at least one of which is a bacterium of $\geq 10^5$ CFU/ml		
	SUTI 2 :	SUTI 2: CAUTI or Non CAUTI in patients 1 year of age or less A) Patient is < 1 year of age (with or without an indwelling urinary catheter) B) Patient has at least one of the following signs or symptoms: • Fever ($>38.0^{\circ}\text{C}$) • hypothermia ($<36.0^{\circ}\text{C}$) • apnea^ • bradycardia^ • lethargy^ • vomiting^ • suprapubic tenderness* C) Patient has a urine culture with no more than two species of organisms identified, at least one of which is a bacterium of $\geq 10^5$ CFU/ml		

		<p>ABUTI : Asymptomatic Bacteremic Urinary Tract Infection</p> <p>A) Patient with* or without an indwelling urinary catheter has no signs or symptoms of SUTI 1 or 2 regardless of age. B) Patient has a urine culture with no more than two species of organisms identified, C) at least one of which is a bacterium of $\geq 10^5$ CFU/ml C) Patient has organism identified** from blood specimen with at least one matching bacterium to the $> 10^5$ CFU/ml bacterium identified in the urine specimen, or is eligible LCBI criterion 2 (without fever) and matching common commensal(s) in the urine. All elements of the ABUTI criterion must occur during the Infection Window Period.</p> <p>NOTE: 1: Mixed flora cannot be reported as a pathogen for a UTI even 2: Following excluded organisms cannot be used to meet the UTI definition: • Any yeast or yeast species • mold • dimorphic fungi • parasites 3: An acceptable urine specimen may include these excluded organisms if no more than one bacterium with $>100,000$ CFU/ml is also present</p>		
	Denominator Data Collection	<p>Ask about denominator data collection methodology??</p> <p>Denominator/s: Patient Days: Number of patients housed in a facility inpatient location during the designated counting time each day and summed for a monthly denominator report.</p> <p>Indwelling Urinary Catheter (IUC) days: Indwelling urinary catheter days, which are the number of patients with an indwelling urinary catheter device, are collected daily, at the same time each day.</p> <p>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.</p>		
WHERE?	CAUTI Surveillance Location	<p>Ask where CAUTI surveillance should be conducted ??</p> <p>CAUTI Surveillance is conducted in all Adult Critical Care Units where denominator data can be collected - Patient days & Central Line days</p> <p>1: Adult Critical Care Units 2: Pediatric ICU (PICU)</p> <p>NOTE: CAUTI Surveillance is NOT applicable for Neonatal locations (NICU)</p>		
WHO?	Targeted Patients	<p>1: Ask about targeted patients for CAUTI surveillance?? Any patient admitted in Adult ICU. PICU with indwelling Urinary Catheter is candidate for CAUTI Surveillance.</p> <p>2: What is CAUTI?? Catheter-associated UTI (CAUTI): A UTI where an indwelling urinary catheter (IUC) was in place for more than two consecutive days in an inpatient location on the date of event or the day before, with day of device placement being Day 1*</p> <p>3: What is Indwelling Urinary Catheter (IUC):?? A drainage tube that is inserted into the urinary bladder through the urethra, is left in place, and is connected to a drainage bag (including leg bags).</p>		
HOW?	CAUTI Surveillance Data Collection	<p>1: Ask how CAUTI Surveillance data is collected? ICPs must conduct active CAUTI surveillance from all surveillance locations included in Seha Platform. (Collect data as per criteria using manual data collection sheet or electronic data source)</p> <p>NOTE: Important points about UTI signs and symptoms documentation : a: <u>Suprapubic tenderness documentation</u> - whether elicited by palpation (tenderness-sign) or provided as a subjective complaint of suprapubic pain (pain symptom) - found in the medical record is acceptable to meet SUTI criterion if documented in the medical record during the Infection Window Period. b: <u>Lower abdominal pain or bladder or pelvic discomfort</u> are examples of symptoms that can be used as suprapubic tenderness. Generalized "abdominal pain" in the medical record is too general and not to be interpreted as suprapubic tenderness as there are many causes of abdominal pain. c: <u>Lower back pain (left, right, or bilateral) or flank pain</u> (left, right, or bilateral) are examples of symptoms that can be used as costovertebral angle pain or tenderness. Generalized "low back pain" is not to be interpreted as costovertebral angle pain or tenderness.</p>		
	Data Source for CAUTI	<p>1: Microbiology lab results (Urine Culture + Blood Culture) 2: Patient medical records / patient charts for Signs & Symptoms of UTI mentioned above</p>		

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 CAUTI in Adult ICUs & pediatric ICUs (PICU).		
		Internal validation done to review denominator data - 3 consecutive months		
		Possibility of Outbreak ruled out - No epidemiological link between cases reported from same location in same time frame.		
C: CAUTI Events Idetification & Reporting				
WHAT?	Data Analysis & Event reporting	Number of CAUTI Events correctly identified as per CDC-NHSN Criteria		
		Number of CAUTI events matching CDC criteria that were missed by ICP and were detected during visit.		
		Number of correctly idetified CAUTI Events reported Via seha platform in a timely mannner.		
		Number of CAUTI Events as per manual sheet are 100% matching with Seha Platform & Power BI dashboard		
D: CAUTI Surveillance Data Entry Via Seha Platform				
WHAT?	Electronic Platform	All patients admitted in critical care units are registered in Seha Platform with or without devices.		
		Urinary Catheter Device information is entered accurately for all patients having an indwelling urinary catheter and required urinary catheter bundle form is filled.		
		Number of patients currently admitted in Adult ICUs & PICUs is 100% matching with Seha platform on day of visit.		
E: HAI Outbreak Detection & Reporting (ESKAPE-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 detetcted during visit as per linelist (<i>Device associated (Central Line) or non device associated</i>)		
<div> F: CAUTI out of Nation Strategy (CAUTION)</div>				
WHAT?	CAUTION Tools (Knowledge & Practices)	Assess staff knowledge about Natioanal CAUTI out of Nation Strategy (CAUTION)		
		Ask about the NVRS prevention tools & their implementation (Adult Medical Surgcial ICUs)		
		Compare the actual complaiance data Vs data submitted each month - observe any discrepancy.		
PART II : On Site Visit - Validation Rounds (Adult ICU, PICU)				
WHAT?	IC Rounds	Conduct rounds in adult ICU, PICU & ensure care bundles & prevention tools are applied.		
		Assess staff knowledge about Urinary Catheter insertion & maintenance bundles & CAUTION prevention tools.		
PART III (Education & Training Session)				
WHAT?	CAUTI Surveillance Education & Training	External Validator conducted short concluding training & education session ????		
		CAUTI Surveillance Protocols based on CDC-NHSN Criteria Urinary Catheter Insertion Bundle Urinary Catheter Maintenance Bundle CAUTION Tools overview		
WHO?		Targeted Audience: Infection Control Team Nursing representatives from Adult ICUs, PICUs		