

2019 CAUTI Medical Record Abstraction Tool Instructions

Fill in demographic section and then complete the Question 2, screening questions (S1, S2, and S3). Fill in Tables 1-Positive Urine Cultures, 2a-Locations, 2b-Urinary Catheters, 2c-Positive Blood Cultures, and 3-Symptoms to document information needed to answer questions 4-8. Complete the Outcome section for each targeted UTI.

1. **IDENTIFIERS AND ABSTRACTED DATA:** Complete the section using patient identifier information from medical record and ADT data.
2. **SCREENING QUESTIONS:**

S1: Screening for Present on Admission: If all cultures were collected on or before facility day two (2), record as **Outcome (a)**, Not a candidate VL CAUTI, on page 4 of the MRAT.

S2: Screening for appropriate discharge surveillance: If answered no culture taken, record as **Outcome (a)**, Not a candidate VL CAUTI on page 4 of the MRAT.

S3: Screening for catheter use: If a catheter was not in place greater than two (2) days for any Validation Location (VL), record as **Outcome (a)**, Not a candidate VL CAUTI on page 4 of the MRAT. If catheter was placed prior to admission, the day of physical admission to an inpatient location is urinary catheter Day 1.

The complete list of 2018 NHSN UTI pathogens and common commensals is located on the NHSN Data Validation webpage under 2018 Resources:
<https://www.cdc.gov/nhsn/validation/index.html>.

Positive urine culture has no more than two species of organisms identified, at least one of which is a bacterium of $\geq 10^5$ CFU/ml. DO NOT LIST cultures with more than 2 species or those classified as “mixed” flora, as these cannot be used to meet UTI criteria. Exclude urine cultures that are positive only for yeast, mold, dimorphic fungi, or parasites. Note: $10^5 = 100,000$

Table 1: Document ALL positive urine cultures (see above note) sequentially in Table 1. Using information from Table 2a Locations, indicate which were “VL urine cultures”, defined as those collected during VL stays, the day of departure from the VL, or the following three (3) calendar days. Note: These VL urine cultures should be evaluated for possible VL CAUTI. Non-VL urine cultures may also be important to establish prior onset of UTI Repeat Infection Timeframe (RIT) and another location of attribution. Using information from Table 2b Urinary Catheters, indicate if a urinary was in place on the date or day before the date of urine culture collection. Using information from Table 2c Positive Blood Cultures, indicate if matching organism(s) were isolated from blood; if patient had UTI symptoms in UTI Infection Window Period (IWP), circle NA.

Table 2a: Document all facility locations and dates for this episode of care chronologically, and indicate locations being validated for CAUTI by circling Yes or No for VL.

Table 2b: Document time periods with ANY urinary catheter in place for at least part of each day below (do NOT document individual catheters removed and replaced on same/consecutive days).

Table 2c: IF urine culture in Table 1 contains $\geq 10^5$ CFU/ml of a bacterium and patient is ASYMPTOMATIC, document any positive blood culture(s). This information is needed to document ABUTI, which requires a blood specimen with at least one matching bacterium to the bacterium identified in the urine specimen, or meets LCBI Criterion 2 (without fever) with matching common commensal(s) in the urine. At least one of the blood organisms must have been collected within the UTI IWP. If no positive blood cultures, indicate by checking the box.

3. **SYMPTOMS:*** Check one or more as required, noting date. *Symptoms are required to occur within the IWP for UTI classification.

4. URINARY TRACT INFECTION (UTI) CRITERIA

Starting with Candidate UTI #1, determine which type of UTI criteria [ABUTI, SUTI1a, SUTI1b, and SUTI2] was met (if any). **All elements listed in a column are required within the infection window period (IWP).**

UTI type:	SUTI 1a (CAUTI) (Symptomatic, any age)	SUTI 1b (non-CAUTI) (Symptomatic, any age)	SUTI 2 (Symptomatic, ≤ 1 year of age only)	ABUTI (Asymptomatic, any age)
Urine culture element	<input type="checkbox"/> ≥ 10 ⁵ CFU/ml urine with no more than 2 species of organisms, at least one of which is a bacterium of ≥10 ⁵ CFU/ml	<input type="checkbox"/> ≥10 ⁵ CFU/ml urine with no more than 2 species of organisms, at least one of which is a bacterium of ≥10 ⁵ CFU/ml	<input type="checkbox"/> ≥ 10 ⁵ CFU/ml urine with no more than 2 species of organisms, at least one of which is a bacterium of ≥10 ⁵ CFU/ml	<input type="checkbox"/> ≥ 10 ⁵ CFU/ml urine with no more than 2 species of organisms, at least one of which is a bacterium of ≥10 ⁵ CFU/ml
Blood culture(s) element	↓	↓	↓	<input type="checkbox"/> Organism identified from blood specimen with at least one matching bacterium to a bacterium of ≥ 10 ⁵ CFU/ml in urine. If common commensal organism, must meet all LCBI 2 criteria: <ul style="list-style-type: none"> • Including chills and/or hypotension; excluding fever • All elements occur within the IWP
Age, Appropriate symptoms (*= no other recognized cause) and urinary catheter status elements	(Any age, Urinary catheter present) <input type="checkbox"/> At least ONE of the following: <ul style="list-style-type: none"> ○ Fever >38.0°C++ ○ Suprapubic tenderness* ○ Costovertebral angle pain or tenderness* ○ Urinary urgency+ ○ Urinary frequency+ ○ Dysuria+ AND <input type="checkbox"/> Urinary catheter for >2 days and <u>in place</u> on the date of event and was either present for any portion of the calendar day on the date of event or removed the day before the date of event.	<input type="checkbox"/> At least ONE of the following: <ul style="list-style-type: none"> ○ Fever (>38°C) in a patient that is ≤ 65 years of age ○ Suprapubic tenderness* ○ Costovertebral angle pain or tenderness* ○ Urinary frequency+ ○ Urinary urgency+ ○ Dysuria+ AND <input type="checkbox"/> Patient has/had an indwelling urinary catheter but it has/had not been in place for >2 calendar days on the date of event OR <input type="checkbox"/> Patient did not have a urinary catheter in place on the date of event nor the day before the date of event.	(With or without a Urinary catheter) <input type="checkbox"/> Age ≤1 year AND <input type="checkbox"/> At least ONE of <ul style="list-style-type: none"> ○ Fever >38.0°C ○ Hypothermia <36.0°C ○ Apnea* ○ Bradycardia* ○ Lethargy* ○ Vomiting* ○ Suprapubic tenderness* 	(With or without a Urinary catheter) (Any age) <input type="checkbox"/> No listed symptoms allowed within IWP Note: Patients > 65 years of age with a non-catheter-associated ABUTI may have a fever and still meet the ABUTI criterion.

*With no other recognized cause

+These symptoms cannot be used when a catheter is in place, but can be used if symptoms occur after urinary catheter removal, on the day of removal or day after removal

++To use fever in a patient > 65 years of age, the indwelling urinary catheter needs to be in place > 2 calendar days on date of event.



5. Did candidate UTI qualify as a UTI event, using criteria shown on CAUTI Instruction sheet? (Begin loop)

*Note: **UTI RIT** is a 14-day timeframe during which no new UTIs are reported. The UTI RIT applies to both POA and HAI determinations. The date of UTI event is Day 1 of the 14-day RIT. If date of event for UTI occurs within a previous 14 day UTI RIT, no new UTI is identified nor reported. Additional bacteria of $\geq 10^5$ CFU/ml from positive urine cultures during the UTI RIT are added to the event. Assign an RIT number to each occurrence*

*Note: **UTI Infection Window Period (IWP)** is defined as the 7-days during which all UTI criteria must be met. It includes the day the positive urine culture was obtained, the 3 calendar days before, and the 3 calendar days after.*

6. Was UTI Healthcare-Associated (HAI) or Present on Admission (POA)?

*Note: **Date of Event** is the date the first element used to meet an NHSN UTI criterion occurs for the first time within the 7-day infection window period (IWP). Acceptable documentation includes patient-reported signs or symptoms documented in the chart by a healthcare professional (e.g., patients states measured fever $> 38.0^\circ\text{C}$ or $> 100.4^\circ\text{F}$, nursing home documents fever prior to arrival to the hospital, patient complains of dysuria).*

7. Was this HAI-UTI a CAUTI?

*Was a Urinary catheter in place for > 2 days **in an inpatient location** (day of physical admission to an inpatient location is urinary catheter Day 1) on the date of event AND was either present for any portion of the calendar day on the date of event, OR removed the day before the date of event?*

8. Was VALIDATION LOCATION (VL) the Location of Attribution (LOA)?

*Work through question 8, parts a, b and c, to determine the location of attribution. Note: Transfer Rule: If the date of event is on the date of transfer or discharge, or the next day, the infection is attributed to the transferring/discharging location. This is called the Transfer Rule. If the patient was in multiple locations within the transfer rule time frame, attribute the infection to the **first** location in which the patient was housed the **day before** the infection's date of event.*

9. Document the outcome. Select the appropriate outcome of each candidate UTI. *Report those candidate UTIs which are outside previous UTI RITs. There may be multiple UTIs or multiple CAUTIs during a single episode of care. Provide a brief description/reason of misreported CAUTI

Assign outcome. For each candidate UTI select the **Case Determination A, B or C** (Correctly classified, Over-reported or Underreported), then the reason for misclassification using I-III.

Examples of definition misapplication:

Incorrect use of transfer rule when applied to the location of attribution (LOA).

Did not use the first element of criteria to meet an NHSN specific site infection to set the date of event. If the date of event is not identified correctly the LOA and RIT will not be correctly identified.

Examples of CAUTI criteria misapplied:

Not recognizing there were more than 2 organisms listed on the culture results. Urine cultures with more than 2 organism cannot be used to meet UTI criteria.

Incorrectly identifying the date the catheter was placed or discontinued

Examples of additional reasons:

Physician diagnosis can be accepted as evidence of an infection only when physician diagnosis is an element of the specific infection definition. For example, physician diagnosis is not an element of any UTI criteria; therefore, physician diagnosis of a UTI may not be used to satisfy POA status of a UTI.