



TENNESSEE DEPARTMENT OF HEALTH
HEALTHCARE-ASSOCIATED INFECTIONS AND ANTIMICROBIAL RESISTANCE PROGRAM
Surveillance Definitions
URINARY TRACT INFECTION (UTI)



(Last updated January 1, 2014)

Present on Admission (POA): Infections that are POA, as defined in the “Additional Information” checklist, are not considered HAIs and therefore are never reported to NHSN.

Healthcare-associated infections (HAI): All NHSN site specific information must first meet the HAI definition as defined in the “Additional Information” checklist before a site specific infection (e.g., CAUTI) can be reported to NHSN.

NOTE: Gap day:

Does “...criteria were first present together on or after the 3rd hospital day...” mean that all elements of an HAI criterion have to be present the same day to meet the criteria?

No. There can be a gap of up to one day between elements. However, to determine if a patient meets the HAI criterion, do not utilize elements that were present on day 1 or 2 but not present on day or after day 3.

Date of event: For a UTI the date of event is the date when the last element used to meet the UTI infection criterion occurred. Synonyms: infection date.

Indwelling catheter: 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). These devices are also called Foley catheters. Condom or straight in-and-out catheters are not included nor are nephrostomy tubes or suprapubic catheters unless a Foley catheter is also present. Indwelling urethral catheters that are used for intermittent or continuous irrigation are included in CAUTI surveillance.

Catheter-associated UTI (CAUTI): A UTI where

- An indwelling urinary catheter was in place for >2 calendar days on the date of event, with day of device placement being Day 1
AND
- An indwelling urinary catheter was in place on the date of event or the day before. If an indwelling urinary catheter was in place for >2 days and then removed, the UTI criteria must be fully met on the day of discontinuation or the next day.

EXAMPLE:

A patient has a Foley catheter inserted on an inpatient unit and the following morning the patient meets criteria for a UTI. Because the catheter has not been in place >2 calendar days when all elements of the infection criterion were first present together, this is not a CAUTI.

NOTE: SUTI 1b and 2b and other UTI (OUTI) as defined in the Surveillance Definitions chapter of the 2014 NHSN Patient Safety Component or the corresponding checklists cannot be catheter-associated.

Location of Attribution: The inpatient location where the patient was assigned on the date of the UTI event, which is further defined as the date when the last element used to meet the UTI criterion occurred (see exception below).

EXCEPTION TO LOCATION OF ATTRIBUTION:

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Transfer Rule: If all elements of a CAUTI are present within 2 calendar days of transfer from one inpatient location to another in the same facility or a new facility (i.e., on the day of transfer or the next day), the infection is attributed to the transferring location or facility. Receiving facilities should share information about such HAIs with the transferring facility to enable reporting. This is called the Transfer Rule and examples are shown below:

- Patient with a Foley catheter in place in the SICU is transferred to the surgical ward. On the next day, UTI criteria are met. This is reported to NHSN as a CAUTI for the SICU.
- Patient is transferred in the morning to the medical ward from the MSICU after having the Foley catheter removed. Later that night, UTI criteria are met. This is reported to NHSN as a CAUTI for the MSICU.
- On Monday, patient with a Foley catheter in place is transferred from the medical ward to the coronary care ICU (CCU). Wednesday in the CCU, UTI criteria are met. This is reported to NHSN as a CAUTI for the CCU, as the UTI event date is on the 3rd calendar day after transfer.
- Patient on the urology ward of Hospital A had the Foley catheter removed after it had been in place for 5 days and is discharged home a few hours later. The IP from Hospital B calls the next day to report that this patient has been admitted to Hospital B with a UTI. This CAUTI should be reported to NHSN for Hospital A and attributed to the urology ward.

NOTE: Example of multiple transfers within the transfer rule time-frame:

3/22	3/23	3/24
Patient in Unit A	Patient transferred from Unit A to Unit B Later that day, patient transferred from Unit B to Unit C. (day of transfer)	Patient transferred from Unit C to Unit D. Last element for CAUTI criteria met. CAUTI attributed to Unit A since A was the original unit initiating the transfer in the 2-day timeframe. (day of transfer)

EXCEPTION TO TRANSFER RULE:

Locations which do not house patients overnight (e.g., Emergency Department or Operating Room) will have no denominator data, i.e., patient days or catheter days. Therefore, CAUTIs cannot be attributed to these locations. Instead, the CAUTI must be attributed to the next inpatient location in which the patient stays.

SUTI – Symptomatic Urinary Tract Infection

DEFINITION: A symptomatic urinary tract infection must meet at least **ONE** ☐ of the following criteria:

☐ **Criterion 1a:** (Last updated January 1, 2014)

- Patient had **BOTH** ☐ the following:

- ☐ an indwelling urinary catheter in place for >2 calendar days, with day of device placement being Day 1

- ☐ catheter was in place on the date of event

AND

- Patient has at least **ONE** ☐ of the following signs or symptoms: (* *with no other recognized cause*)

- ☐ fever (>38°C)

- ☐ suprapubic tenderness*

- ☐ costovertebral angle pain or tenderness*

AND

- Patient had a positive urine culture of $\geq 10^5$ colony-forming units (CFU)/ml with no more than 2 species of microorganisms

NOTE: Elements of the criterion must occur within a timeframe that does not exceed a gap of 1 calendar day between two adjacent elements.

OR

- Patient had **BOTH** ☐ the following:

- ☐ an indwelling urinary catheter in place for >2 calendar days

- ☐ had catheter removed the day of or the day before the date of event

AND

- Patient had at least **ONE** ☐ of the following signs or symptoms: (* *with no other recognized cause*)

- ☐ fever (>38°C)

- ☐ urgency*

- ☐ frequency*

- ☐ dysuria*

- ☐ suprapubic tenderness*

- ☐ costovertebral angle pain or tenderness*

AND



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- Patient had a positive urine culture of $\geq 10^5$ CFU/ml with no more than 2 species of microorganisms

NOTE: Elements of the criterion must occur within a timeframe that does not exceed a gap of 1 calendar day between two adjacent elements.

□ Criterion 1b: *(Last updated January 1, 2014)*

- Patient had **BOTH** Δ the following:
 - Δ did not have an indwelling urinary catheter that had been in place for >2 calendar days
 - Δ did not have catheter in place at the time of or the day before the date of event

AND
- Patient had at least **ONE** Δ of the following signs or symptoms: *(* with no other recognized cause)*
 - Δ fever ($>38^{\circ}\text{C}$) in a patient that is ≤ 65 years of age
 - Δ urgency*
 - Δ frequency*
 - Δ dysuria*
 - Δ suprapubic tenderness*
 - Δ costovertebral angle pain or tenderness*

AND
- Patient had a positive urine culture of $\geq 10^5$ CFU/ml with no more than 2 species of microorganisms

NOTE: Elements of the criterion must occur within a timeframe that does not exceed a gap of 1 calendar day between two adjacent elements.

□ Criterion 2a: *(Last updated January 1, 2014)*

- Patient had **BOTH** Δ the following:
 - Δ had an indwelling urinary catheter in place for >2 calendar days, with day of device placement being Day 1
 - Δ had catheter in place on the date of event

AND
- Patient had at least **ONE** Δ of the following signs or symptoms: *(* with no other recognized cause)*
 - Δ fever ($>38^{\circ}\text{C}$)

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- △ suprapubic tenderness*
- △ costovertebral angle pain or tenderness*

AND

- Patient has at least **ONE** △ of the following findings:
 - △ positive dipstick for at least **ONE** □ of the following:
 - leukocyte esterase
 - nitrite
 - △ pyuria (urine specimen with ≥ 10 white blood cells [WBC]/mm³ of unspun urine or >5 WBC/high power field of spun urine)
 - △ microorganisms seen on Gram's stain of unspun urine
- AND**
- Patient had a positive urine culture of $\geq 10^3$ and $< 10^5$ CFU/ml with no more than 2 species of microorganisms

NOTE: Elements of the criterion must occur within a timeframe that does not exceed a gap of 1 calendar day between two adjacent elements.

OR

- Patient had **BOTH** △ the following:
 - △ had an indwelling urinary catheter in place for >2 calendar days
 - △ removed the day of or the day before the date of event
- AND**
- Patient had at least **ONE** △ of the following signs or symptoms: (** with no other recognized cause*)
 - △ fever ($>38^{\circ}\text{C}$)
 - △ urgency*
 - △ frequency*
 - △ dysuria*
 - △ suprapubic tenderness*
 - △ costovertebral angle pain or tenderness*
- AND**
- Patient had at least **ONE** △ of the following findings:
 - △ positive dipstick for at least **ONE** □ of the following:
 - leukocyte esterase
 - nitrite

- △ pyuria (urine specimen with ≥ 10 white blood cells [WBC]/mm³ of unspun urine or >5 WBC/high power field of spun urine)
- △ microorganisms seen on Gram's stain of unspun urine

AND

- Patient has a positive urine culture of $\geq 10^3$ and $< 10^5$ CFU/ml with no more than 2 species of microorganisms (see comments section below)

NOTE: Elements of the criterion must occur within a timeframe that does not exceed a gap of 1 calendar day between two adjacent elements.

□ **Criterion 2b:** (Last updated January 1, 2014)

- Patient had **BOTH** △ the following:
 - △ did not have an indwelling urinary catheter that had been in place for >2 calendar days
 - △ did not have catheter in place at the time of or the day before the date of event

AND

- Patient had at least **ONE** △ of the following signs or symptoms: (* *with no other recognized cause*)
 - △ fever ($>38^{\circ}\text{C}$) in a patient that is ≤ 65 years of age
 - △ urgency*
 - △ frequency*
 - △ dysuria*
 - △ suprapubic tenderness*
 - △ costovertebral angle pain or tenderness*

AND

- Patient had at least **ONE** △ of the following findings:
 - △ positive dipstick for at least **ONE** □ of the following:
 - leukocyte esterase
 - nitrite
 - △ pyuria (urine specimen with ≥ 10 white blood cells [WBC]/mm³ of unspun urine or >5 WBC/high power field of spun urine)
 - △ microorganisms seen on Gram's stain of unspun urine

AND

- Patient had a positive urine culture of $\geq 10^3$ and $< 10^5$ CFU/ml with no more than 2 species of microorganisms

NOTE: Elements of the criterion must occur within a timeframe that does not exceed a gap of 1 calendar day between two adjacent elements.

□ Criterion 3: (Last updated January 1, 2014)

- Patient ≤ 1 year of age with or without an indwelling urinary catheter

AND

- Patient had at least **ONE** Δ of the following signs or symptoms: (* with no other recognized cause)

- Δ fever ($>38^\circ\text{C}$ core)
- Δ hypothermia ($<36^\circ\text{C}$ core)
- Δ apnea*
- Δ bradycardia*
- Δ dysuria*
- Δ lethargy*
- Δ vomiting*

AND

- Patient had a positive urine culture of $\geq 10^5$ CFU/ml with no more than 2 species of microorganisms

NOTE: Elements of the criterion must occur within a timeframe that does not exceed a gap of 1 calendar day between two adjacent elements.

□ Criterion 4: (Last updated January 1, 2014)

- Patient ≤ 1 year of age with or without an indwelling urinary catheter

AND

- Patient had at least **ONE** Δ of the following signs or symptoms: (* with no other recognized cause)

- Δ fever ($>38^\circ\text{C}$ core)
- Δ hypothermia ($<36^\circ\text{C}$ core)
- Δ apnea*
- Δ bradycardia*
- Δ dysuria*
- Δ lethargy*

△ vomiting*

AND

- Patient had at least **ONE** △ of the following findings:

△ positive dipstick for at least **ONE** □ of the following:

- leukocyte esterase
- nitrite

△ pyuria (urine specimen with ≥ 10 white blood cells [WBC]/mm³ of unspun urine or >5 WBC/high power field of spun urine)

△ microorganisms seen on Gram's stain of unspun urine

AND

- Patient had a positive urine culture of $\geq 10^5$ CFU/ml with no more than 2 species of microorganisms

NOTE: Elements of the criterion must occur within a timeframe that does not exceed a gap of 1 calendar day between two adjacent elements.

ABUTI – Asymptomatic Bacteremic Urinary Tract Infection

DEFINITION: Asymptomatic bacteremic urinary tract infection must meet the **FOLLOWING** □ criterion:

□ Criterion 1: (Last updated July 1, 2013)

- Patient ≤ 1 year of age with or without an indwelling urinary catheter

AND

- Patient had no symptoms (i.e., for any age patient, no fever [$>38^\circ\text{C}$], urgency, frequency, dysuria, suprapubic tenderness, or costovertebral angle pain or tenderness, OR for a patient ≤ 1 year of age, no fever [$>38^\circ\text{C}$ core], hypothermia [$<36^\circ\text{C}$ core], apnea, bradycardia, dysuria, lethargy, or vomiting)

AND

- Patient had a positive urine culture of $>10^5$ CFU/ml with no more than 2 species of uropathogen microorganisms** (see comments section below)

** Uropathogen microorganisms are: Gram-negative bacilli, *Staphylococcus spp.*, yeasts, beta-hemolytic *Streptococcus spp.*, *Enterococcus spp.*, *G. vaginalis*, *Aerococcus urinae*, and *Corynebacterium* (urease positive)*.

* Report *Corynebacterium* (urease positive) as either *Corynebacterium species unspecified* (COS) or as *C. urealyticum* (CORUR) if so speciated.

(See complete list of uropathogen microorganisms at <http://www.cdc.gov/nhsn/XLS/master-organism-Com-Commensals-Lists.xlsx>)



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AND

- Patient had a positive blood culture with **EITHER** **Δ**

Δ at least 1 matching uropathogen microorganism to the urine culture

OR

Δ at least 2 matching blood cultures drawn on separate occasions if the matching pathogen is a common skin commensal

NOTE: Elements of the criterion must occur within a timeframe that does not exceed a gap of 1 calendar day between two adjacent elements.

COMMENTS: *(Last updated January 1, 2014)*

- Laboratory cultures reported as “mixed flora” represent at least 2 species of organisms. Therefore an additional organism recovered from the same culture, would represent >2 species of microorganisms. Such a specimen cannot be used to meet the UTI criteria.
- Urinary catheter tips should not be cultured and are not acceptable for the diagnosis of a urinary tract infection.
- Urine cultures must be obtained using appropriate technique, such as clean catch collection or catheterization. Specimens from indwelling catheters should be aspirated through the disinfected sampling ports.
- In infants, urine cultures should be obtained by bladder catheterization or suprapubic aspiration; positive urine cultures from bag specimens are unreliable and should be confirmed by specimens aseptically obtained by catheterization or suprapubic aspiration.
- Urine specimens for culture should be processed as soon as possible, preferably within 1 to 2 hours. If urine specimens cannot be processed within 30 minutes of collection, they should be refrigerated, or inoculated into primary isolation medium before transport, or transported in an appropriate urine preservative. Refrigerated specimens should be cultured within 24 hours.
- Urine specimen labels should indicate whether or not the patient is symptomatic.
- Report only pathogens in both blood and urine specimens for ABUTI.
- Report *Corynebacterium* (urease positive) as either *Corynebacterium* species unspecified (COS) or, as *C. urealyticum* (CORUR) if so speciated.

**OUTI – Other Infections of the Urinary Tract
(Kidney, Ureter, Bladder, Urethra, or Tissue Surrounding
the Retroperitoneal or Perinephric Space)**

DEFINITION: Other infections of the urinary tract must meet at least **ONE** ☐ of the following criteria:

☐ Criterion 1: *(Last updated January 1, 2012)*

- Patient has microorganisms isolated from **ONE** ☐ of the following:
 - ☐ culture of fluid (other than urine) from affected site
 - ☐ tissue from affected site

☐ Criterion 2: *(Last updated January 1, 2013)*

- Patient has **ONE** ☐ of the following:
 - ☐ an abscess seen during **ONE** ☐ of the following:
 - ☐ direct examination
 - ☐ an invasive procedure
 - ☐ histopathologic examination
 - ☐ other evidence of infection seen during **ONE** ☐ of the following:
 - ☐ direct examination
 - ☐ an invasive procedure
 - ☐ histopathologic examination


☐ Criterion 3: *(Last updated January 1, 2013)*







- Patient has at least **TWO** ☐ of the following signs or symptoms: *(* with no other recognized cause)*
 - ☐ fever (>38°C)
 - ☐ localized pain*
 - ☐ localized tenderness at the involved site*

AND





- Patient has at least **ONE** ☐ of the following:
 - ☐ purulent drainage from affected site
 - ☐ microorganisms cultured from blood that are compatible with suspected site of infection
 - ☐ imaging test evidence of infection (e.g., abnormal ultrasound, CT scan, magnetic resonance imaging [MRI], or radiolabel scan [gallium, technetium])

Criterion 4: (Last updated January 1, 2013)

- Patient ≤1 year of age has at least **ONE**  of the following signs or symptoms: (* with no other recognized cause)

-  fever (>38°C core)
-  hypothermia (<36°C core)
-  apnea*
-  bradycardia*
-  lethargy*
-  vomiting*

AND

- Patient has at least **ONE**  of the following:
 -  purulent drainage from affected site
 -  microorganisms cultured from blood that are compatible with suspected site of infection
 -  imaging test evidence of infection (e.g. abnormal ultrasound, CT scan, magnetic resonance imaging [MRI], or radiolabel scan [gallium, technetium])

COMMENTS: (Last updated June, 2008)

- Report infections following circumcision in newborns as SST-CIRC.

Patient Safety Component Protocol FAQs: (Last updated October, 2013)

- **Irrigation:**
Should we include Foley catheters that are irrigated in our CAUTI surveillance?
Yes. Although irrigating indwelling catheters may increase the risk of UTI, these catheters are included in CAUTI surveillance.
- **Leg bags:**
My facility changes Foley catheters from bed bags to leg bags so that our patients can attend physical therapy. Or: my ICU opens catheter systems to replace catheter bags with urometers. Should these be included in CAUTI surveillance since the system is not "closed"?
Yes. Both of these practices may increase the risk of UTI, but neither excludes the patient from CAUTI surveillance.
- **U/A on admission:**
My facility routinely performs urinalysis (U/A) on patients admitted to identify urinary tract infections present or incubating on admission. When these are positive can subsequent infection be excluded from reporting to NHSN?
Not entirely. NHSN no longer utilizes the term "present or incubating" in its determination of healthcare-associated infection. Instead facilities must utilize the new definition of HAI (see

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below) to make this determination. Unless all elements of the criterion are present together in the 2 days before admission, the day of admission, and/or the day after admission, a subsequent infection is considered healthcare-associated. *HAI: An infection is considered an HAI if all elements of a CDC/NHSN site-specific infection criterion were first present together on or after the 3rd hospital day (day of hospital admission is day 1). For an HAI, an element of the infection criterion may be present during the first 2 hospital days as long as it is also present on or after day 3. All elements used to meet the infection criterion must occur within a timeframe that does not exceed a gap of 1 calendar day between adjacent elements.*

- **Spinal cord injury, heavily sedated, or ventilated patients:**

My location cares for patients who may not be able to verbalize or sense suprapubic tenderness or costovertebral angle pain or tenderness, e.g., patients with spinal cord injury, heavily sedated or ventilated patients. How can I report CAUTI in these patients?

Surveillance criteria may not be equally sensitive for all patient populations. The UTI criteria may not be as sensitive in patient populations such as spinal cord injury patients, those with brain injuries or the heavily sedated patient. NHSN definitions, as surveillance definitions, are aimed at patient populations (rather than for individual patients) and developed to gather information that can be used broadly. They also need to be constructed in such a way to balance sensitivity and specificity along with feasibility. A set of criteria that covered every subpopulation with high specificity and sensitivity would be so complicated that it would be very difficult to employ and next to impossible to do so consistently across different facilities.

NHSN recognizes that some of the populations mentioned above, may be at high risk of CAUTI and therefore has begun a targeted discussion of the CAUTI criteria and its application to various patient populations. There may be future changes to the criteria as a result, but it would be 2015 at the earliest, before any changes could be operationalized. If you have suggestions and/or are aware of research about valid indicators of UTI in certain populations, please feel free to forward it to NHSN@cdc.gov for our consideration.

- **Funguria:**

Why does NHSN consider patients with funguria in the urine as CAUTIs?

Candiduria is a recognized cause of CAUTI. Therefore, there is no exclusion of these organisms from the UTI criteria. However, a targeted discussion of the CAUTI criteria and its application to various patient populations has recently been implemented. There may be future changes to the criteria as a result, but it would be 2015 at the earliest, before any changes could be operationalized.

- **Gram stain:**

Do microorganisms seen as part of a urinalysis (UA) meet the component of symptomatic urinary tract infection (SUTI) criteria 1a and 2a, which states: "c. microorganisms seen on Gram stain of unspun urine"?

No, since the UA workup does not include gram stain of the specimen, this component of the criteria is not met.

- **Patient reported fever:**

Can I use patient reported fever to meet CDC/NHSN UTI criteria for present on admission?

Patient reported signs and symptoms (e.g., fever) cannot be used as an element to meet CDC/NHSN site-specific criteria unless also observed and documented by a healthcare provider. For example, a patient is transferred from a nursing home and is afebrile upon

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admission to the hospital. The nursing home documentation indicates that the patient had a fever the morning of admission. If the nursing home documented or reported fever is included as part of the patient's admission/facility record, then it can be used as one of the elements to meet CDC/NHSN UTI criteria.

- **Gap day between elements:**

Could you please explain what you mean by a gap day between any two elements?

A gap day is a day without any of the infection elements. There can be no more than a one gap calendar day between any 2 adjacent elements (culture results, symptoms, fever, etc.). Adjacent elements are those that occur next to each other on a timeline. See example below:

Day 1 – Pt. admitted and Foley inserted; asymptomatic

Day 2 – Foley still in place; asymptomatic

Day 3 – Fever $>100.4^{\circ}$; no urine culture collected nor urinalysis (UA) performed

Day 4 – Afebrile and no other UTI symptoms; no culture or urinalysis collected – This is the “gap” day

Day 5 – Afebrile; (+) leukocyte esterase on UA;

Day 6 – (+) urine culture $>100,000$ CFU of *E. coli* – Meets criteria for a SUTI 2a here

If there were no symptoms or positive lab results on Day 5, you could not attribute the fever on day 3 to the culture because there would have been a 2-day gap (day 4 and day 5) between adjacent elements.

- **UTI present on admission or HAI:**

If a patient has a (+) urine culture $>100,000$ CFU/ml on day 2 and a fever on day 3 is this an HAI?

No, this would not meet criteria. You could not use any culture results or symptoms from day 1 or 2 to meet an HAI criteria unless they are present again on or after day 3.

Day 1 – Pt. admitted and Foley inserted

Day 2 – Foley still in place; Fever $>100.4^{\circ}$

Day 3 – Afebrile

Day 4 – (+) urine culture $>100,000$ CFU of *E. coli*; afebrile

Day 5 and day 6 – remain afebrile

The fever on day 2 cannot be used to meet an HAI criteria. The patient would have to have another fever or symptoms on day 3, 4, 5, or 6 for this to be a SUTI 1a.

- **Distinguishing serial reportable infections from single, unresolved infection:**

Is there a time period following the identification of an infection during which another of the same type of infection cannot be reported?

No. At present time NHSN does not have a set time period during which only 1 infection of the same event type may be reported for the same patient. (VAE and LabID Event reporting is the exception, for which there is a 14-day window [see individual protocols for VAE and LabID Events].) Following an infection which is either present on admission (POA) or a healthcare-associated infection (HAI), clinical information must be utilized to determine that the original infection had resolved, before reporting a second infection at the same site. Information which may be useful to consider determining

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if the infection has resolved includes signs and symptoms as well as completion of antimicrobial therapy. If the original infection had not resolved before subsequent positive cultures are collected from the same site, add the pathogens recovered from the subsequent cultures to those reported for the first infection, if it was an HAI. Discussions are underway regarding creating a minimum time period between infections at the same site, however no final decisions have been made and no changes would be made before 2015.

- **Removal and reinsertion of Foley catheter:**

How do I count calendar days when a Foley is removed and later reinserted?

If a Foley catheter is present for any part of a calendar day, then that day contributes to the minimum catheter day requirement for CAUTI. If a full calendar day passes without the Foley, then the day count begins again for urinary catheter days, once a Foley is reinserted.

- **Mixed flora:**

If a urine culture is positive for 1 organism >100,000 CFU/ml and also for mixed flora, does this meet one of the urine culture results required for UTI?

No. Because "mixed flora" means that at least 2 organisms are present in addition to the identified organism, such a urine culture does not meet the criteria for a positive urine culture with 2 organisms or less. Such a urine culture cannot be utilized to meet the UTI criteria.

- **UrC on NICU reporting summary:**

What does the UrC column mean on my NICU monthly reporting summary? Is this a required field?

This column is used by facilities performing off-plan monitoring for catheter-associated urinary tract infections in the neonatal intensive care unit. It is used to capture the number of indwelling urinary catheter days in the unit for the month. NOTE: Monthly reporting plans cannot include CAUTI surveillance in NICUs.

- **ABUTI and CMS:**

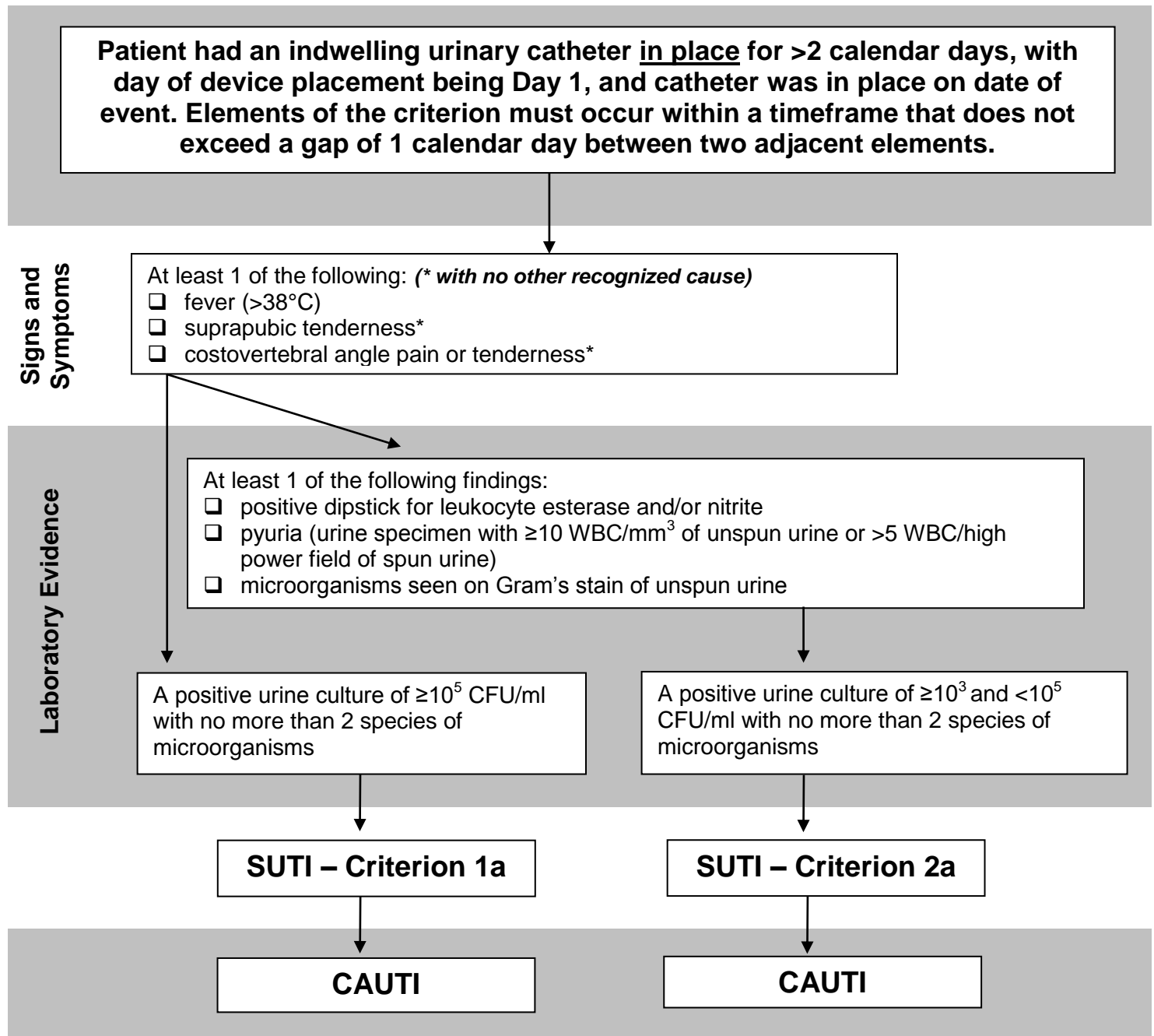
Are asymptomatic bacteremic urinary tract infections (ABUTIs) in patients in adult and pediatric intensive care units (ICUs) included in the reporting requirements for CMS's Hospital Inpatient Quality Reporting Program beginning January 2012?

Yes. Keep in mind that ABUTI may occur in patients with or without an indwelling urinary catheter. Therefore, if a patient in an adult or pediatric ICU has an indwelling urinary catheter within the timeframe to meet the device-associated rule, this infection is a CAUTI and is reportable to CMS. Remember that the date of event is defined as the date when the last element used to meet the CDC/NHSN site specific criterion occurred. Only catheter-associated UTI data (both ABUTI and SUTI) are shared with CMS.

Identification and Categorization of SUTI with Indwelling Catheter

See comments section above for important details.

(Last updated January 1, 2014)



Identification and Categorization of SUTI When Indwelling Catheter Has Been Removed

See comments section above for important details.

(Last updated January 1, 2014)

Patient had an indwelling urinary catheter removed the day of or the day before the date of event. Elements of the criterion must occur within a timeframe that does not exceed a gap of 1 calendar day between two adjacent elements.

Signs and Symptoms

At least 1 of the following: (* *with no other recognized cause*)

- | | |
|--|---|
| <input type="checkbox"/> fever (>38°C) | <input type="checkbox"/> dysuria* |
| <input type="checkbox"/> urgency* | <input type="checkbox"/> suprapubic tenderness* |
| <input type="checkbox"/> frequency* | <input type="checkbox"/> costovertebral angle pain or tenderness* |

Laboratory Evidence

At least 1 of the following findings:

- ☐ positive dipstick for leukocyte esterase and/or nitrite
- ☐ pyuria (urine specimen with ≥ 10 WBC/mm³ or >5 WBC/high power field of spun urine)
- ☐ microorganisms seen on Gram's stain of unspun urine

A positive urine culture of $\geq 10^5$ CFU/ml with no more than 2 species of microorganisms

A positive urine culture of $\geq 10^3$ and $< 10^5$ CFU/ml with no more than 2 species of microorganisms

SUTI – Criterion 1a

SUTI – Criterion 2a

Was an Indwelling urinary catheter in place for >2 calendar days on the day of or the day before the date of event?

Yes

CAUTI SUTI

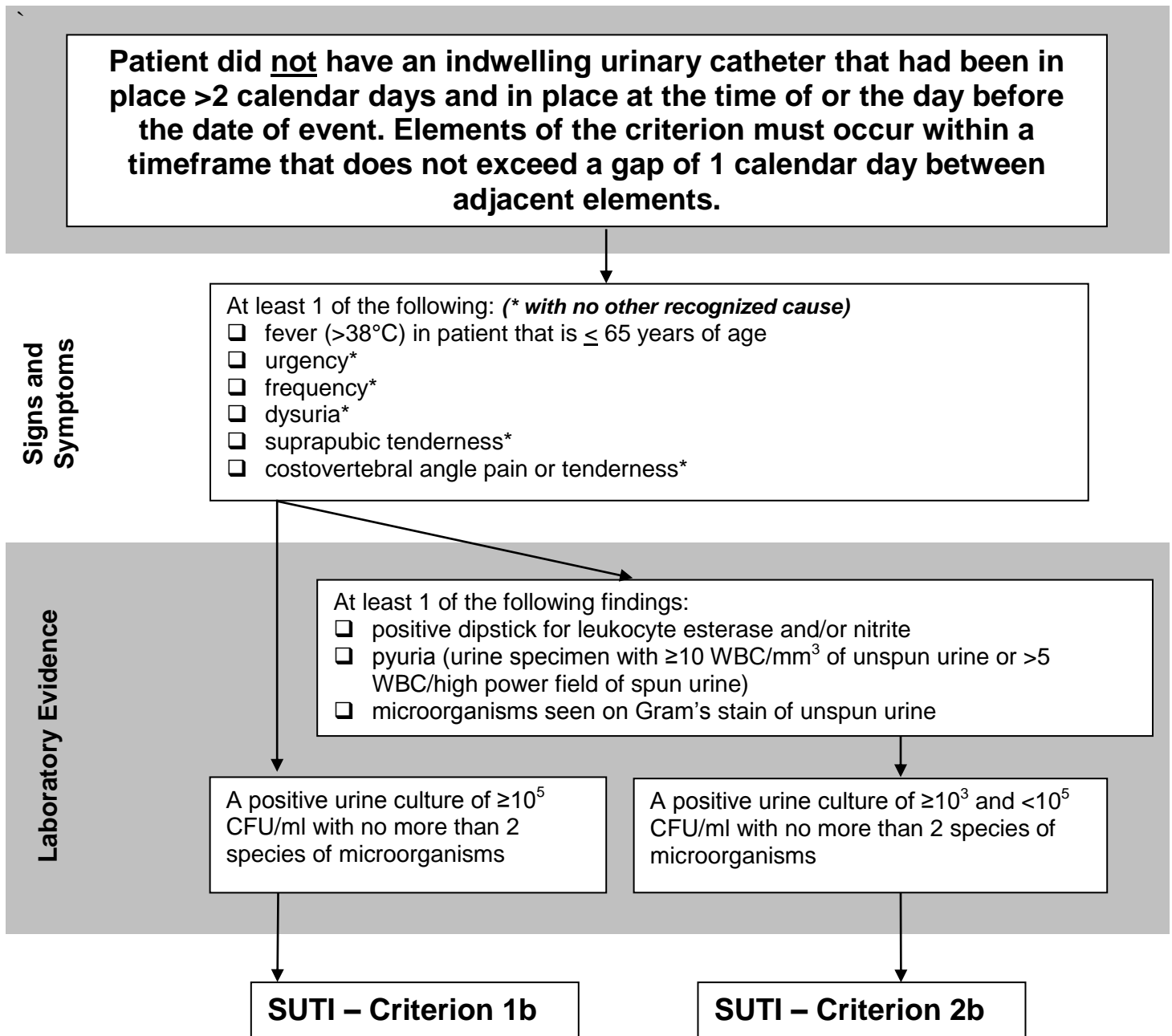
No

SUTI
(not catheter-associated)

Identification and Categorization of SUTI Without Indwelling Catheter

See comments section above for important details.

(Last updated January 1, 2014)

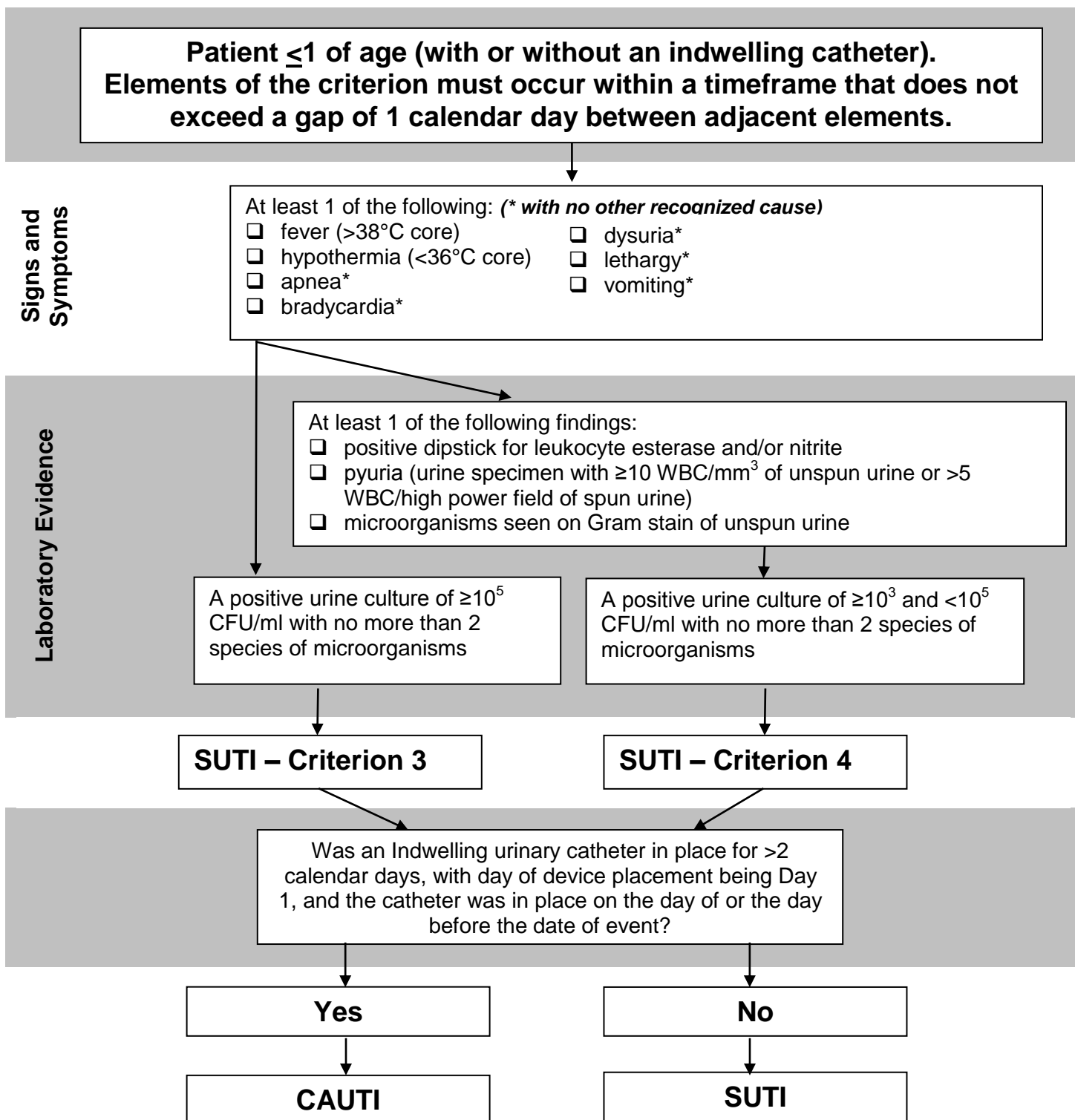


Surveillance Definitions
URINARY TRACT INFECTION (UTI)

Identification and Categorization of SUTI in Patient ≤ 1 Year of Age

See comments section above for important details.

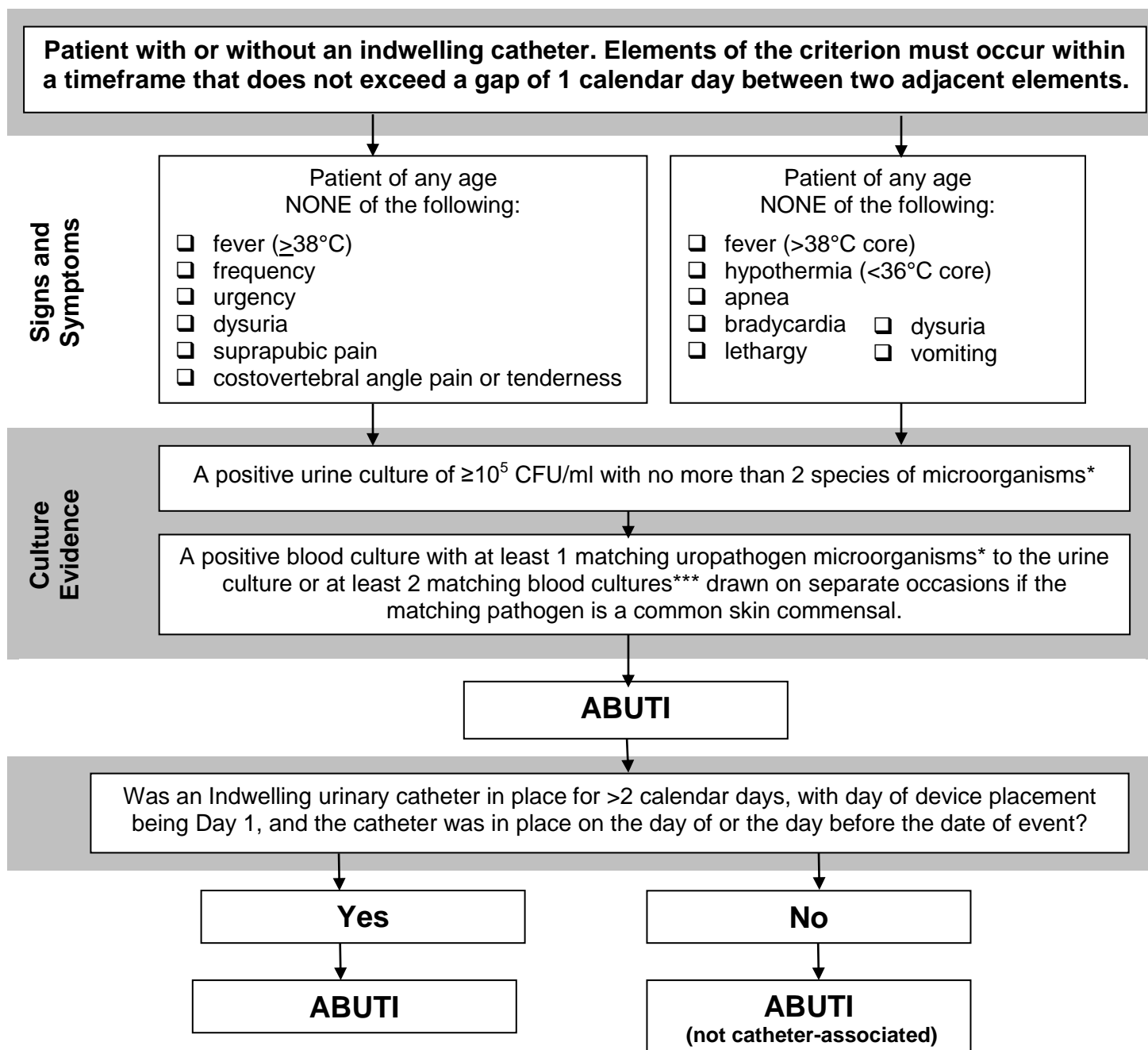
(Last updated January 1, 2014)



Identification of Asymptomatic Bacteremic Urinary Tract Infection ABUTI

See comments section above for important details.

(Last updated January 1, 2014)



*(See complete list of uropathogen microorganisms <http://www.cdc.gov/nhsn/XLS/master-organism-Com-Commensals-Lists.xlsx>)
 Uropathogen microorganisms are: Gram-negative bacilli, *Staphylococcus* spp., yeasts, beta-hemolytic *Streptococcus* spp., *Enterococcus* spp., *G. vaginalis*, *Aerococcus urinae*, *Corynebacterium* (urease positive)†.

Only genus and species identification should be utilized to determine the sameness of organisms (i.e. matching organisms). No additional comparative methods should be used (e.g., morphology or antibiograms) because laboratory testing capabilities and protocols may vary between facilities.

+ Report *Corynebacterium* (urease positive) as either *Corynebacterium* species unspecified (COS) or as *C. Urealyticum* (CORUR) if so specified.