

HQIC Weekly COVID Office Hours – Infection Prevention Chats

Welcome!

- Please ask any questions in the chat
- Please actively participate in discussions
- Lines will be muted upon entry

We will get started shortly!

Making Health Care Better *Together*

COLLABORATORS:

Alabama Hospital Association
Alliant Health Solutions
Comagine Health
Georgia Hospital Association
KFMC Health Improvement Partners
Konza

Hospital Quality Improvement

Welcome from all of us!



Facilitator



Amy Ward, MS, BSN, RN, CIC

INFECTION PREVENTION SPECIALIST

Amy is a registered nurse with a diverse background in acute care nursing, microbiology, epidemiology and infection control. She is passionate about leading and mentoring new and future infection preventionists in their career paths.

Amy loves to ride bikes and be outdoors!

Contact: Amy.Ward@Allianthealth.org

Format for IP Chats

- Sessions are not recorded and minutes are not taken
 - If you prefer to remain anonymous, please use the call-in option
- Review of updates surrounding COVID-19 regulations and guidelines
- Open forum discussion
 - Survey findings discussion (corrective action/standards referenced, etc.)
 - Current COVID-19 response challenges or barriers to IP practice
 - IP mentoring or support needed

Feedback on IP Chats

CMS is interested in knowing if these sessions are beneficial to you.

Please enter to chat:

1 = Very beneficial

2 = Somewhat beneficial

3 = Neutral

4 = Unbeneficial

5 = Very unbeneficial

CMS Memo QSO-22-04-ALL

- <https://www.cms.gov/files/document/qso-22-04-all.pdf>
- Survey and Enforcement of the vaccine requirement for health care staff in Medicare and Medicaid certified providers and suppliers suspended while court ordered injunctions are in effect.
 - CMS will not enforce the new rule regarding vaccination of health care workers or requirements for policies and procedures in certified Medicare/Medicaid providers and suppliers (hospitals, nursing facilities, dialysis facilities, and all other provider types covered by the new rule while there are court ordered injunctions in place prohibiting the enforcement of this provision.

QSO-22-04-ALL

- CMS has appealed both of the decisions and has filed motions for stays of these orders.
- CMS remains confident in its authority to protect the health and safety of patients in facilities certified by the Medicare/Medicaid programs
- Healthcare facilities may voluntarily choose to comply with the interim final rule

AHA Blog: Updates on Legal Challenges to CMS Vaccine Mandate Rule

[Blog: Updates on Legal Challenges to CMS Vaccine Mandate Rule | AHA News](#)

To help hospitals and health system leaders stay up-to-date on all of the legal developments related to vaccine mandates, the AHA has developed a blog authored by Sean Marotta, a partner at Hogan Lovells and outside counsel for the AHA. Marotta will provide regular updates on this page as new developments occur.

Omicron Variant

- Named variant of concern by the World Health Organization on 11/26/2021.
- No cases identified in the United States as of 11/26/2021.
- First case identified on 12/1/2021, with majority of states having now identified cases
- Delta continues to be predominant strain circulating
- Travelers to the United States should continue to follow the [CDC recommendations for traveling](#).

Omicron Infectivity and Spread

- Spread - Omicron is predicted to spread more easily than the original SARS-CoV-2 strain. It is still unclear if omicron spreads more or less easily than the Delta variant.
- Illness severity – more information is needed
- Vaccination effectiveness – current vaccines are expected to reduce severe illness, hospitalization, and death due to Omicron. Breakthrough infections are likely to occur, however, vaccination and boosters are important.
- Treatment effectiveness – based on genetic makeup of the omicron variant, it is expected that some existing treatments may be effective while others may be less so.

Tools to Fight Omicron

- Vaccination – remains the best public health measure to slow transmission and reduce emergence of new variants
- Masks – continue to wear masks in public indoor settings in areas with high to substantial community transmission regardless of vaccination status.
- Testing – testing for current infection so you can self isolate for 10 days after symptom onset.

COVID-19 Vaccine Booster Shots

NEW Everyone ages 18 and older should get a booster shot

Everyone Ages 18 and Older Should Get a Booster Shot

IF YOU RECEIVED

Pfizer-BioNTech or Moderna

Who should get a booster:

Everyone 18 years or older

When to get a booster:

At least 6 months after completing your primary COVID-19 vaccination series.

Which booster should you get?

[Any of the COVID-19 vaccines](#) authorized in the United States.

IF YOU RECEIVED

Johnson & Johnson's Janssen

Who should get a booster:

Everyone 18 years or older

When to get a booster:

At least 2 months after completing your primary COVID-19 vaccination.

Which booster should you get?

[Any of the COVID-19 vaccines](#) authorized in the United States.

NHSN Corner – CAUTI Focus

- Tips and information to make your NHSN reporting easier (I promise, it can be done!)
- Please pre-submit questions to me at amy.ward@allianthealth.org so I can answer on the upcoming session
- Live Q&A time after presentation

CAUTI Surveillance

- Always refer to NHSN Chapter 2 when defining infection window period, present on admit, healthcare associated infection, etc.
- Conduct CAUTI Surveillance in any inpatient locations where denominator data can be collected (ICU, Ward, Step-down, inpatient rehab, etc.)
 - Denominator data includes (daily collection or weekly sample method, if eligible)
 - Patient days by
 - Urinary catheter days
- NHSN Surveillance is not aimed at a specific device but rather at identifying risk to the patient that is a result of device use in general

CAUTI Event Types

- CAUTI – a UTI where indwelling urinary catheter was in place for more than 2 consecutive days in an inpatient location on the date of the event, with the day of device placement = day 1 AND catheter was in place on the date of the event or the day before.
 - If catheter present at time of admission, then day one of catheter day counts begins with admission date to first inpatient location
- SUTI 1a
- SUTI 1b (never catheter associated)
- ABUTI

Surveillance Tips for Identifying Events

- Review all urine culture results for inpatients
 - Rule out mixed flora or any result with >2 species of organism
 - Rule out results with any *Candida* species, yeast, mold, dimorphic fungi or parasites
 - Rule out cultures that do not have at least one species with a result of >100,000 CFU/ml
- Review chart for presence of foley catheter
 - In place >2 days
 - In place on date of the event or the day before the event
- Review chart for presence of signs and symptoms
 - Fever, suprapubic pain, costovertebral angle pain, dysuria, urinary frequency/urgency.

NHSN CAUTI Flow Chart (PSC 2021 Manual 7-10)

Identifying Symptomatic Urinary Tract Infection (SUTI) & Asymptomatic Bacteremic Urinary Tract Infection (ABUTI)

Positive urine culture with no more than two species of organisms, at least one of which is a bacterium of $\geq 10^5$ CFU/ml. All elements of the UTI criterion must occur during the Infection Window Period (Note: if none of the organisms present at $> 10^5$ CFU/ml are bacteria, answer = No)

No

Yes

Does not meet UTI criteria

Had an indwelling urinary catheter that had been in place for > two consecutive days and was either:

1. Present for any portion of the calendar day on date of event
- OR
2. Removed day before date of event?

No

Yes

At least one of the following signs or symptoms?

- Any age patient: fever ($>38.0^{\circ}\text{C}$), suprapubic tenderness*, costovertebral angle pain*, urgency[^], dysuria[^], frequency[^]
- Patients ≤ 1 year of age: fever (38.0°C), hypothermia (36.0°C) suprapubic tenderness*, costovertebral pain*, apnea*, bradycardia*, lethargy*, or vomiting*.

*With no other recognized cause

[^]These symptoms cannot be used when catheter is in place

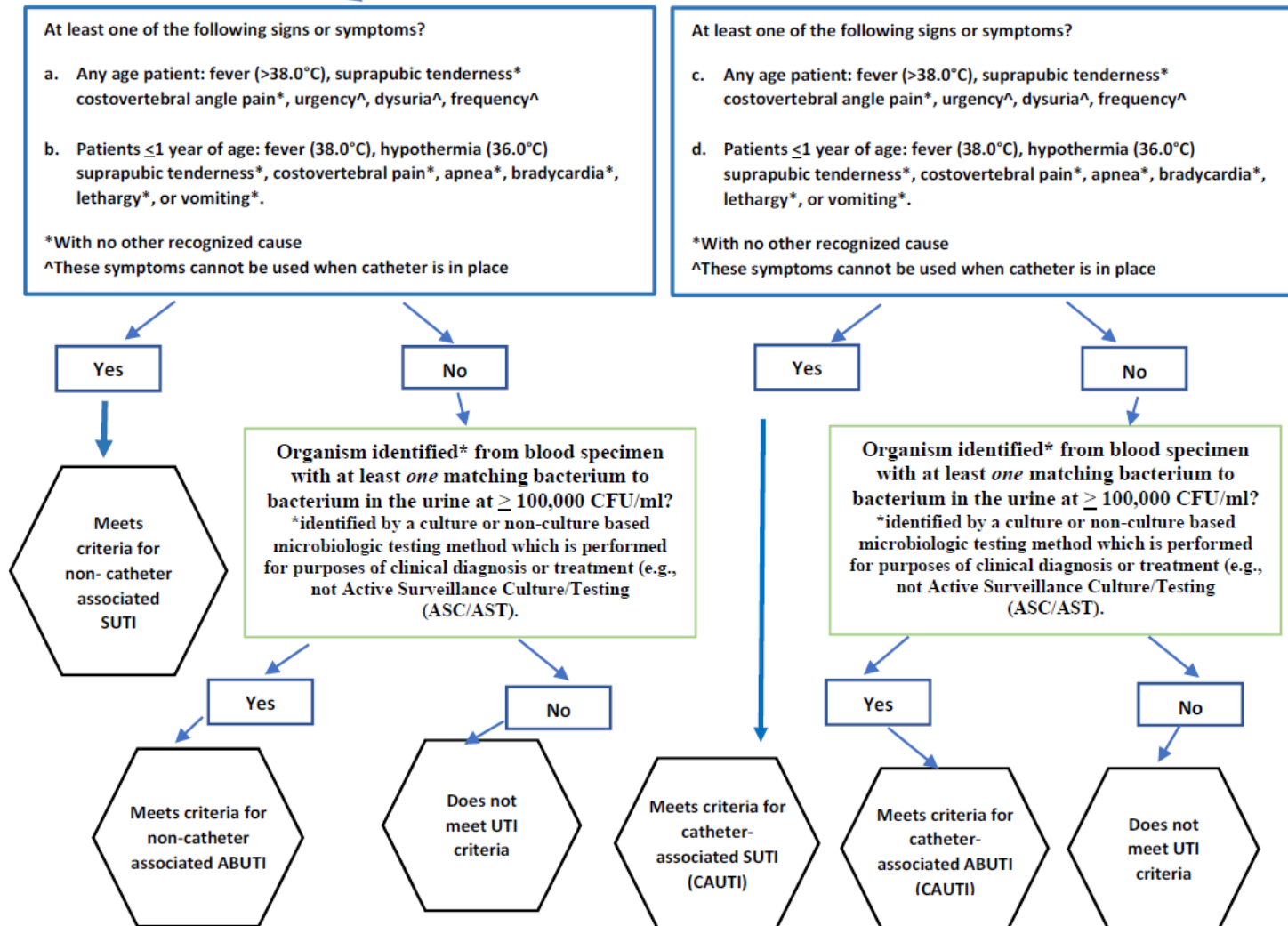
At least one of the following signs or symptoms?

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CAUTI Flow Chart Continued... (PSC 2021 Manual 7-10)



Case Study 1

An asymptomatic patient in the ICU had a Foley catheter in place for 5 days. It is removed, and the same day the patient's urine is sent for "routine" culture. She is then transferred to the routine Medical Ward. The culture results that are reported 2 days later identify $>10^5$ CFU/ml of *E. coli*. Which conclusions would you draw from this information?

- A. The patient meets criteria for a CAUTI which should be recorded for the Medical Ward because it has been 2 days since her transfer to the Medical Ward.
- B. The patient meets criteria for a SUTI which is attributed to the transferring location.
- C. The patient does not meet criteria for CAUTI because she has no symptoms nor does she have a matching positive blood culture.

Case Study 2

- 1/19/19 Mr. Peabody Jr. age 47 admitted to **ICU**
- 1/19/19 Triple lumen left Subclavian CL catheter placed
Indwelling Urinary Catheter (IUC) inserted
- 2/1/19 Fever 100.5⁰F
- 2/3/19 Subclavian CL catheter removed, PICC placed, Fever continues
- 2/3/19 Urine culture collected; *E.coli* >100,000 CFU/ml
- 2/3/19 Blood Culture collected; positive for *E.coli* and *Enterobacter cloacae*
- 2/3/19 BP 77/62

UTI Case 1 Mr. Peabody

Admit date: 1/19/2019

| Hospital Day/Date | First Diagnostic Test | Infection Window Period (*) | Date of Event | Repeat Infection Timeframe (*) | Secondary BSI Attribution Period (*) |
|-------------------|-----------------------|----------------------------------------------------------------------------|---------------|--------------------------------|----------------------------------------------|
| 13. - 1/31/2019 | | <input type="checkbox"/> | | | |
| 14. - 2/1/2019 | | <input checked="" type="checkbox"/> Temp 100.5 F | HAI | | |
| 15. - 2/2/2019 | | <input type="checkbox"/> | | | |
| 16. - 2/3/2019 | ✓ | <input checked="" type="checkbox"/> urine culture E. coli > 100,000 CFU/ml | | | Blood sample E.coli and Enterobacter cloacae |
| 17. - 2/4/2019 | | <input type="checkbox"/> | | | |
| 18. - 2/5/2019 | | <input type="checkbox"/> | | | |
| 19. - 2/6/2019 | | <input type="checkbox"/> | | | |
| 20. - 2/7/2019 | | | | | |
| 21. - 2/8/2019 | | | | | |
| 22. - 2/9/2019 | | | | | |
| 23. - 2/10/2019 | | | | | |
| 24. - 2/11/2019 | | | | | |
| 25. - 2/12/2019 | | | | | |
| 26. - 2/13/2019 | | | | | |
| 27. - 2/14/2019 | | | | | |

Meets SUTI 1a: CAUTI, DOE 2/1; matching blood is secondary

UTI Case 1 Mr. Peabody

- The 2/3/18 – Urine culture E.coli >100,000 CFU/ml sets the IWP: 1/31 – 2/6.
- The 2/1 fever is used to meet SUTI, date of event 2/1 which is HAI.
- The IUC was in place more than 2 consecutive days as an inpatient on the DOE therefore this meets SUTI 1a: CAUTI. SUTI RIT: 2/1 – 2/14, SBAP: 1/31 – 2/14
- The 2/3 matching blood pathogens occurs within the Secondary BSI attribution period therefore is considered secondary.
- Teaching Point SUTI 1a sets an RIT and SBAP.

CAUTI Data Measures Available in NHSN

| <u>Measure</u> | <u>Calculation</u> | <u>Application</u> |
|----------------------|-----------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| CAUTI SIR | $\frac{\text{Number of Observed CAUTIs}}{\text{Number of Predicted CAUTIs}}$ | Both location specific and summarized measure |
| CAUTI Rates | $\frac{\text{Number of CAUTIs per locaiton}}{\text{Number of Urinary Catheter Days per location}} * 1000$ | Location specific measure only |
| Urinary Catheter SUR | $\frac{\text{Number of Observed Catheter Days}}{\text{Number of Predicted Catheter Days}}$ | Both location specific and summarized measure |
| DUR | $\frac{\text{Number of Catheter Days for a location}}{\text{Number of Patient Days for a location}}$ | Location specific measure only |

CAUTI Data Analysis (PSC 2021 Manual 7-14)

Standardized Infection Ratio

The Standardized Infection Ratio ([SIR](#)) is a summary measure used to track HAIs at a national, state, or local level over time. The SIR adjusts for various facility and/or patient-level factors that contribute to HAI risk within each facility. In HAI data analysis, the SIR compares the actual number of HAIs reported to the number that would be predicted, given the standard population (i.e., NHSN baseline), adjusting for several risk factors that have been found to be significantly associated with differences in infection incidence. The number of predicted infections is calculated using probabilities from negative binomial regression models constructed from 2015 NHSN data.

$$\text{SIR} = \frac{\text{Observed (O) HAIs}}{\text{Predicted (P) HAIs}}$$

An SIR greater than 1.0 indicates that more HAIs were observed than predicted; conversely, an SIR less than 1.0 indicates that fewer HAIs were observed than predicted.

More information regarding the CAUTI SIR model and the parameter estimates can be found in the [SIR Guide](#).


NHSN Resources

- [NHSN 2021 Patient Safety Component Manual](#)
- [NHSN Patient Safety Component Training](#)
- [UTI Training](#)
- [UTI Events](#)
- [HAI and POA worksheet generator](#)

Resources

- Alliant Quality HQIC Website
 - [HQIC IP Chats | Dec. 8, 2021 - NQIIC \(allianthealth.org\)](#)
 - [HQIC IP Chats | Dec. 1, 2021 - NQIIC \(allianthealth.org\)](#)
 - [HQIC IP Chats | Nov. 17, 2021 - NQIIC \(allianthealth.org\)](#)
 - [HQIC IP Chats | Nov. 10, 2021 - NQIIC \(allianthealth.org\)](#)
- [Infection Prevention \(HQIC\) Archives - NQIIC \(alliantquality.org\)](#)

HQIC Goals



Behavioral Health Outcomes & Opioid Misuse

- ✓ Promote opioid best practices
- ✓ Decrease high dose opioid prescribing and opioid adverse events in all settings
- ✓ Increase access to behavioral health services



Patient Safety

- ✓ Reduce risky medication combinations
- ✓ Reduce adverse drug events
- ✓ Reduce *C. diff* in all settings



Quality of Care Transitions

- ✓ Convene community coalitions
- ✓ Identify and promote optical care for super utilizers
- ✓ Reduce community-based adverse drug events

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Thank you for joining us!
How did we do today?

Alliant Health Solutions



AlliantQIO



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