CAUTI Event Report Tool: Data for Event Analysis

This event report tool is designed to be used as a guide through the initial investigation for a defect analysis where the primary goal is to learn what happened and what factors may have contributed to the catheter-associated urinary tract infection (CAUTI). It is not a stand-alone tool. Users are encouraged to review the defect analysis process outlined in the Agency for Healthcare Research and Quality's (AHRQ's) Comprehensive Unit-based Safety Program (CUSP) model. Specifically consult the Identify Defects Through Sensemaking module and the Learn From Defects Tool for a description and instructions on how to perform a full defects analysis on a healthcare-associated infection such as CAUTI.

This tool is also a template, which means it can and should be adapted to each organization. Please manage this documentation according to your hospital's patient confidentiality policy.

The questions listed below are to assist teams in getting started, not limit what is examined. This list of questions is a compilation of initial questions commonly asked during a CAUTI defect analysis/root cause analysis process and does not represent an exhaustive list of all questions that may need to be addressed. Indeed, the questions listed here may very well drive additional questions to understand active and latent issues more thoroughly. The goal is to learn as much as possible about potential latent and active errors contributing to the development of CAUTI in an individual patient. In addition, the data gathered from multiple CAUTI event investigations can and should be aggregated to look for trends and common denominators within a facility or unit, which furthers understanding to reduce risks. Lastly, do not wait too far out to complete the event report tool as it may be difficult to fill in the details.

Demographics

(Please manage this documentation according to your hospital's patient confidentiality policy)

1. Patient's medical record number:

2. Patient's date of birth:

3. Patient's gender: ☐ Male ☐ Female ☐ Other: _____

4. Hospital admission date: _____ Day of week: _____

5. Diagnoses:

6. Patient locations from catheter insertion through time urinary catheter removed (include dates, locations/room numbers, and staffing ratios):

   Location of insertion: ☐ Emergency Department ☐ Ambulatory ☐ Surgery ☐ Direct Admission ☐ Other:_____

   Room #_____ from _____to_____
   Was your nurse–patient staff ratio out of range from the usual numbers?
   ☐ YES ☐ NO

   Room #_____ from _____to_____
   Was your nurse–patient staff ratio out of range from the usual numbers?
   ☐ YES ☐ NO

   Room #_____ from _____to_____
   Was your nurse–patient staff ratio out of range from the usual numbers?
   ☐ YES ☐ NO

   Room #_____ from _____to_____
   Was your nurse–patient staff ratio out of range from the usual numbers?
   ☐ YES ☐ NO

Room #_____From _____ to_____
Was your nurse–patient staff ratio out of range from the usual numbers?
☐ YES ☐ NO

Notes:

CAUTI Information

7. Infection date (date of onset of symptoms or culture date):

8. Criteria met for infection:

9. Why was a urine culture sent? (Select reasons from list of evidence-based rationales below.)

A. Patient has one or more of the following clinical signs/symptoms (check all that apply):
   ☐ Fever without other obvious source
   ☐ Suprapubic pain with no other recognizable cause
   ☐ Flank pain (costovertebral angle pain) with no other recognizable cause
   ☐ Urgency without indwelling urinary catheter in place
   ☐ Frequency without indwelling urinary catheter in place
   ☐ Dysuria without indwelling urinary catheter in place
   ☐ Acute hematuria
   ☐ Delirium
   ☐ Rigors
   ☐ Pelvic discomfort

B. ☐ Part of an evaluation of sepsis **without** a clear source.

C. ☐ Part of an evaluation of patients with isolated fever or altered mental status ONLY IF other foci of infections are not identified on history, on examination, or from other lab testing.

D. ☐ Patients who may present with atypical symptoms of urinary tract infection ONLY IF other foci of infection are not identified on history, on examination, or from other lab testing.

E. For bacteriuria screening in asymptomatic patients with the following underlying comorbidities or conditions (check all that apply):

☐ Prior to urologic procedures
☐ Pregnant woman
☐ Neutropenia

F. ☐ Other (please describe):

Comments:

10. Microorganism(s) cultured: What are the usual modes of transmission for this organism?

(This question is not designed to try to figure out where this patient's organism came from, but to stimulate discussion about possible sources of the infecting organism and its chain of infection. This has implications for prevention strategies. For example, if it is a colonic organism, you may want to look at patient hygiene, management of diarrhea, and environmental cleaning in an occupied bed, or if a multidrug-resistant organism, you may want to examine antibiotic ordering patterns.)

11. Did the patient occupying the room prior to this patient being diagnosed with CAUTI have an infection with the same organism(s)?

☐ YES ☐ NO

Any there any patients in the intensive care unit (ICU) infected with this same organism(s) currently?
☐ YES ☐ NO

12. Was this patient's urine culture obtained appropriately? (by evidence-based hospital policy)
☐ YES ☐ NO

Was the specimen transported to the lab per hospital policy?
☐ YES ☐ NO

Note: If not known for this patient, inquire of staff how urine cultures are obtained and transported to lab generally. Inquire specifically if obtained via specimen collection port or from urimeter/bag. Ask what happens if specimen

cannot be immediately transported to the lab. Practices may vary between units.

Urinary Catheter Information

13. Date urinary catheter inserted: _____
Date urinary catheter removed: _____

Total number of days urinary catheter was in (dwell time): _____

Number of days between insertion and CAUTI symptoms (or CAUTI criteria in unresponsive/sedated patient): _____

14. Type of provider inserting urinary catheter:
☐ RN ☐ LPN ☐ CNA ☐ Attending physician ☐ Resident

☐ Advanced practice provider

Other (please describe):

15. Did the person who inserted this urinary catheter have documented competency to insert it?
☐ YES ☐ NO ☐ Information not available

If so, did competency assessment require a return demonstration?
☐ YES ☐ NO ☐ Information not available

16. Patient's location when the indwelling urinary catheter was inserted:_____

17. What type of urinary catheter was inserted? (Indwelling, coude, three-way, etc.)_____

_____

What size of urinary catheter was inserted? _____French

Was the seal between catheter and tubing intact? ☐ YES ☐ NO

18. Are hospital indications for indwelling urinary catheter insertion consistent with current evidence-based guidelines? ☐ YES ☐ NO

19. What were indications for insertion? (use hospital policy)

☐ Acute urinary retention (e.g., due to medication [anesthesia, opioids, paralytics], nerve injury)

☐ Acute bladder outlet obstruction (e.g., due to severe prostate enlargement, blood clots, urethral compression)

☐ Need for accurate measurements of urinary output in the critically ill

☐ To assist in healing of open sacral or perineal wounds in incontinent patients

☐ To improve comfort for end of life, if needed

☐ Patient requires strict prolonged immobilization (e.g., potentially unstable thoracic or lumbar spine, multiple traumatic injuries such as pelvic fracture)

☐ Selected perioperative needs:

- Urologic surgery or other surgery on contiguous (adjacent) structures of the genitourinary tract
- Anticipated prolonged duration of surgery (Note: catheters placed for this reason should be removed in the post-anesthesia care unit.)
- Large volume infusions or diuretics anticipated during surgery
- Need for intraoperative monitoring of urinary output

If not included above, what were documented indications?

20. Were indications for insertion for this patient valid, per evidence-based hospital policy and rationale? ☐ YES ☐ NO

21. Was there a physician order for the indwelling urinary catheter prior to insertion?
☐ YES ☐ NO

22. Were alternatives to a urinary catheter documented? ☐ YES ☐ NO

23. What catheter alternatives were available on inserting unit for this patient? (e.g., condom catheter for males, external female catheter, etc.)

Note: Even if this patient's urinary catheter insertion was clinically indicated, assessing units for availability of catheter alternatives is a good practice during these examinations since a lack of availability may be detected. This may vary by unit also.

24. If a bladder scanning protocol was available, was it followed prior to urinary catheter insertion/reinsertion if indicated for this case? ☐ YES ☐ NO ☐ N/A

If not, why?

25. Were issues encountered during catheter insertion? (difficult insertion, breach of sterile technique, more than one insertion kit used, etc.) ☐ YES ☐ NO

If yes, describe:

26. Is there a standard sterile insertion tray available for use that contains a closed drainage system? ☐ YES ☐ NO If YES, was it used? ☐ YES ☐ NO

Note: Never assume one was used even if available. Some providers may not use the kit if they perceive it to be too time consuming or think there is cost savings to not using it. If not used, understanding why will assist in developing interventions to promote use of standardized kits.

Catheter Bundle Practices

(Observations of common practices through rounds may be indicated as some of the following information may not be available for this specific patient.)

27. Is the catheter bundle protocol based on the most up-to-date evidence? ☐ YES ☐ NO

28. Was the catheter anchored to the bag properly per hospital policy? ☐ YES ☐ NO

If NO, why not?

29. Was the patient assessed daily for an ongoing need for the catheter?
☐ YES ☐ NO

If NO, why not?

30. Were criteria met for keeping the catheter in place daily prior to catheter removal? (Refer to Question 20 for criteria.)
☐ YES ☐ NO

If NO, why not?

31. Was the catheter removed as soon as it was no longer clinically indicated?
☐ YES ☐ NO

If NO, why not?

32. Is there a nurse-driven protocol for early catheter removal?
☐ YES ☐ NO

If yes, do the nurses feel comfortable using the protocol without being reprimanded? ☐ YES ☐ NO

33. Was the urinary catheter drainage system opened at any point during the duration of catheterization? (e.g., tamper-evident seal intact, no documentation or staff reports of breach in system) ☐ YES ☐ NO

34. Is the presence of a urinary catheter and date of insertion included on all transfer/shift report checklists/protocols? ☐ YES ☐ NO

35. If tracked, what are hand hygiene compliance rates in each unit where this patient received care for the month in which the CAUTI occurred? (also include non-nursing units, such as radiology, surgical services, emergency department, physical therapy, etc.)

36. If this patient received services from non-nursing units such as radiology or the cardiac catheterization lab, etc., do those departments have policies in place for transport and handling of patients with urinary catheters?

☐ YES ☐ NO ☐ Patient did not receive services from non-nursing units such as radiology, catheterization lab, etc.

If yes, are they compliant with them? ☐ YES ☐ NO ☐ N/A

37. Does each patient have an individual, clean container in which to empty the urinary catheter collection bag? ☐ YES ☐ NO

Is it dedicated to urine only and clearly labeled as such (i.e., this container serves only to empty urine, not to empty other body fluids such as nasogastric drainage, surgical drains, etc.)?

☐ YES ☐ NO

Other Potential Contributing Factors for CAUTI

38. Were there any changes or problems with the urinary catheter equipment or related supplies at any point during the time this patient had a urinary catheter? (e.g., backorders necessitating a product substitution; introduction of a new indwelling urinary insertion kit; change in securement device; backorder/issues with urinary catheter alternatives such as condom catheters) ☐ YES ☐ NO

If YES, please explain:

39. If documented, did the patient and/or family receive education on the urinary catheter and what they could do to prevent infection? ☐ YES ☐ NO

If YES, what sort of education? (e.g., verbal and in person, a written flier/brochure, etc.)

40. What are environmental cleaning routines for terminal room cleans? For occupied rooms? Who cleans the bed and direct patient contact surfaces such

as side rails, call button, TV controls, etc., in an occupied bed? How is that cleaning done?

How is cleaning evaluated?

If available, what are the results of environmental cleaning monitoring in this ICU?

41. Was the patient bathed daily? ☐ YES ☐ NO

How and when was meatal care performed?

Were bath basins used for bathing? ☐ YES ☐ NO

If YES, how were they cleaned and disinfected after each use? (If they were disposable basins, were they thrown away after use?)

Was tap water used for bathing? ☐ YES ☐ NO

How were the bath basins dried before storing?

How were the bath basins stored?

42. From Question 6, was there any potential impact on the development of CAUTI from staffing ratios on the units during the time this patient had a urinary catheter? (e.g., catheter was inserted or left in due to lack of staff for hourly or every 2 hours voiding rounds, staff not available to toilet patients immediately upon need) ☐ YES ☐ NO

Details:

43. **From the information collected and team discussion, was this this CAUTI potentially avoidable? Why or why not?**

(This is a question for team discussion and debate, based on what has been learned through gathering the information above. No definitive answer is required. Discussion needs to include opportunities for improvement not only in the direct aspects of care but also in more latent, upstream areas such as staffing, competency evaluation, patient hygiene, environmental hygiene, diarrhea management, etc. From this point, an evaluation of the proximate probable cause(s) of the CAUTI and development of an action plan to address any identified system gaps is identified, following the AHRQ CUSP Defect Analysis process.)

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