

Choosing Wisely: CAUTI in the ICU

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- CAUTI results in:
 - 4 day longer LOS
 - Excess mortality 36/1,000
 - Cost varies in literature but an average of \$13,793/case
- CDC indications – What is “Accurate measurements of urinary output in critically ill?”
- Ann Arbor criteria helps to clarify:
 - hemodynamic instability requiring hourly titrations
 - patients in resp failure – diuresing and needing hourly evaluation
 - NOT just talking about vent patients. Vent in itself is not a reason to maintain foley
- Ensure when transferring patients there is a valid indication to continue indwelling urinary catheter
- NHSN Criteria for CAUTI:
 - Indwelling cath more than 2 days. Day 1 is day of catheter insertion.
 - Patient must have symptoms (ie, fever, suprapubic tenderness, frequency, urgency)
 - Must have culture that has more than 10⁵ CFU/mL of one bacteria (non-bacterial pathogens have been excluded). It doesn't matter who documents the s/s – can be nursing or physician
 - Cauti reported as Standardized Infection Ration (SIR): # observed infections/# predicted
 - Indwelling catheter utilization rate reported as Standardized Utilization Ratio (SUR) - # observed device days/# predicted
 - What was the impact of COVID19 on cauti SIR? CAUTI decreased in Q1 and Q2 2020 then saw significant increases in Q3 and Q4
- Appropriate use, insertion and maintenance, proper removal, culturing
 - Consider alternatives/appropriate use: these should be considered up front as well as when trying to move toward removal
 - male and female external catheters
 - Fit is important and can limit ability to use these for select patients
 - disadvantages: skin care issues, ulcerations/irritation.
 - Are external catheters appropriate for accurate UOP measurements? Depends on the fit
 - Insertion and Maintenance questions before ordering.
 - Can sterile technique be maintained upon insertion?
 - Will it decrease activity?
 - Which catheter is best?
 - Risk of infection is comparable between intermittent, suprapubic and indwelling if duration is less than 5 days. If it is less than 5 days, consider intermittent.
 - Only consider irrigation for occluded catheter if can maintain closed system
 - Prompt removal – if urinary cath remains in for 7 days, risk of infection is 3-7% per day.
 - Developing a culture of culturing. If needed obtain culture within 2 day window. If in for >14 days, change urinary cath prior to obtaining culture, Utilize culture criteria.

- They utilize IDSA approved indication for urine culture. Have also developed list of inappropriate indications for urine culture.
- Supporting CAUTI prevention with awareness:
 - One study found catheterization was more likely to be appropriate if providers were aware of the catheter.
 - One study determined best intervention to reduce catheter use is one integrated to your workflow.