ADVANCING THE CULTURE OF SAFETY: Strategies to Prevent CLABSI AND CAUTI

Wednesday, January 17, 2024

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How to Use the Chat Box Feature

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- ***Scroll** All the Way **Down***
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- **Type message** in Chat Text Box, press **Enter** on your keyboard

Enter in Chat:

- **Name**
- **Role**
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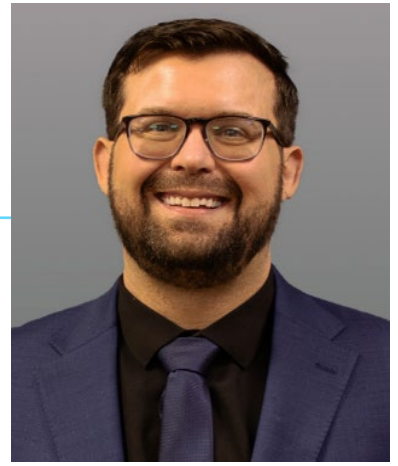
- **State**

Speaker

Priscilla Ebone, MSN, RN, CPPS
Patient Safety Subject Matter Expert
IPRO HQIC (Qlarant)

- Priscilla Ebone, MSN, RN, CPPS, provides patient safety expertise to healthcare systems and organizations to advance the culture of patient safety and innovations at the point of care.
- With 15 years of RN bedside patient care, Priscilla has practiced in the areas of home healthcare, acute care hospitals, hospice care, rehabilitation, and post-acute care settings. She recognizes that across the continuum of care, quality care is the necessary basic step to improve patient satisfaction, decrease length of stay, and better outcomes. In her patient safety role, she has conducted pressure ulcer event investigations, is very familiar with various root cause analysis outcomes, and has provided suggestions for best practices.
- Her passion to improve patient safety has motivated her to facilitate quarterly HQIC Lunch and Learns. She has chosen the topic of pressure injury prevention for this quarter.

Speaker



Justin Caudill, RN, CIC, T-CSCT
Regional Director of Infection Prevention
Appalachian Regional Healthcare

- Justin is an Infection Preventionist from Jackson, KY and serves as the Regional Director of Infection Prevention for ARH, primarily responsible for the Kentucky River Region, including two acute care hospitals and one critical access hospital. Before joining ARH as an Infection Preventionist in 2019, Justin practiced Emergency Medicine for nearly a decade in facilities across the US. In his current role, Justin focuses on reducing HAI through innovative technological solutions and streamlined communication, elevating healthcare standards and providing essential leadership support to Infection Preventionists.

Speaker

James J. Hensley MLS(ASCP), CIC, MBA
System Director of Infection Prevention,
Appalachian Regional Healthcare

- James is an Infection Preventionist from Hazard, Kentucky, and serves as the System Director of Infection Prevention at Appalachian Regional Healthcare (ARH). James graduated from Eastern Kentucky University in 2008 as an Honors Scholar with degrees in Clinical Laboratory Science and Biology. He worked in the laboratory setting at multiple locations in Lexington, Kentucky, and New Haven, Connecticut, for nine years before transitioning to infection prevention with ARH in 2017. James is certified in infection control and currently serves as a member of the Kentucky Sepsis Consortium and advisory boards for K-STRIPE and the Kentucky Infection Prevention Training Center.

Speaker

Amanda Taylor, MPH, CIC
System Epidemiologist,
Appalachian Regional Healthcare

- Amanda is the System Epidemiologist of the Appalachian Regional Healthcare (ARH) system and team lead of the ARH Centralized Surveillance Program. In her role as System Epidemiologist, she successfully developed the organizations first centralized surveillance program to provide standardization, increase data validity and reliability, and increase the floor presence of facility infection preventionists. Before joining the ARH team in 2021, she was the Regional Epidemiologist for the Kentucky River District Health Department from 2015-2021. She received both her Bachelor of Science and Master of Public Health degree from Kaplan University.

IPRO HQIC

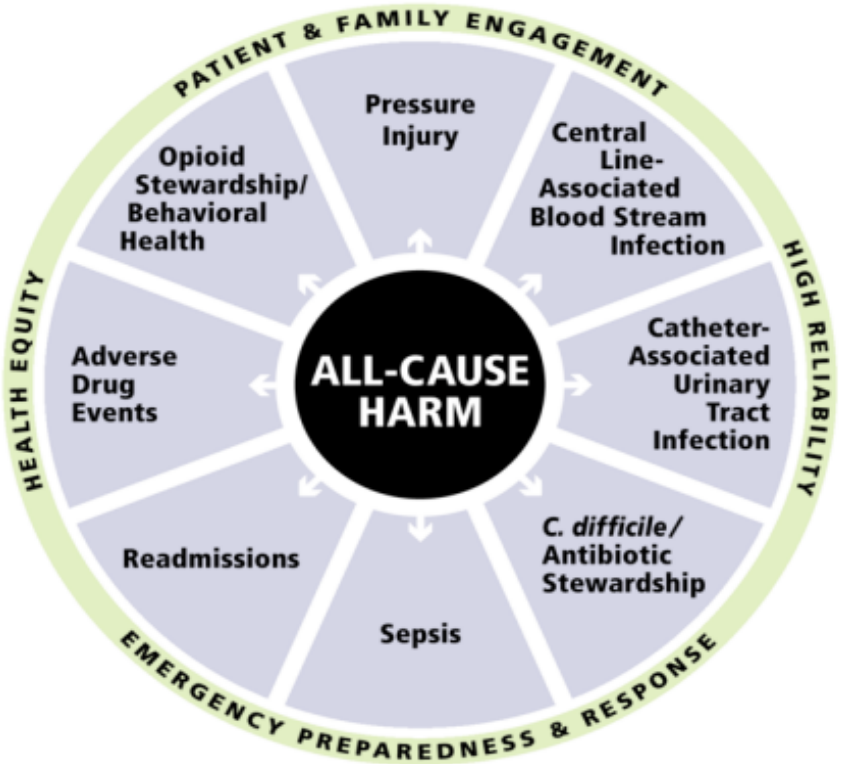
What are HQICs?

Data-driven. It's the data that help hospitals measure progress toward quality improvement (QI) gains. Hundreds of thousands of patients and families benefit from CMS-supported QI projects that make today's hospital stays safer and improve the quality of hospital care.

Dynamic and collaborative. HQICs partner with small, rural and critical access hospitals and facilities that care for vulnerable and underserved patients. Their quality improvement consulting and expertise – offered at no cost to the hospitals – help hospital leaders and clinical teams develop local QI projects designed to:

- Reduce opioid misuse and adverse drug events.
- Increase patient safety with a focus on preventing hospital-acquired infections.
- Refine care coordination processes to reduce unplanned admissions.

HQICs also share their QI resources to assist hospitals with pandemic responses and emergency preparedness.



The federally funded Medicare Hospital Quality Improvement Contractor (HQIC) in 12 states

IPRO (joined by)
- Healthcentric Advisors
- Kentucky Hospital Association
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- Superior Health Quality Alliance
- American Institutes for Research (AIR)
- QSource

States
- MA
- ME
- NY
- OH
- KY
- NJ
- PA
- DE
- MD
- MI
- MN
- WI

6

Hospitals in 49 States and 5 Territories

9 Quality Improvement Partners

4 Years

IPRO HQIC

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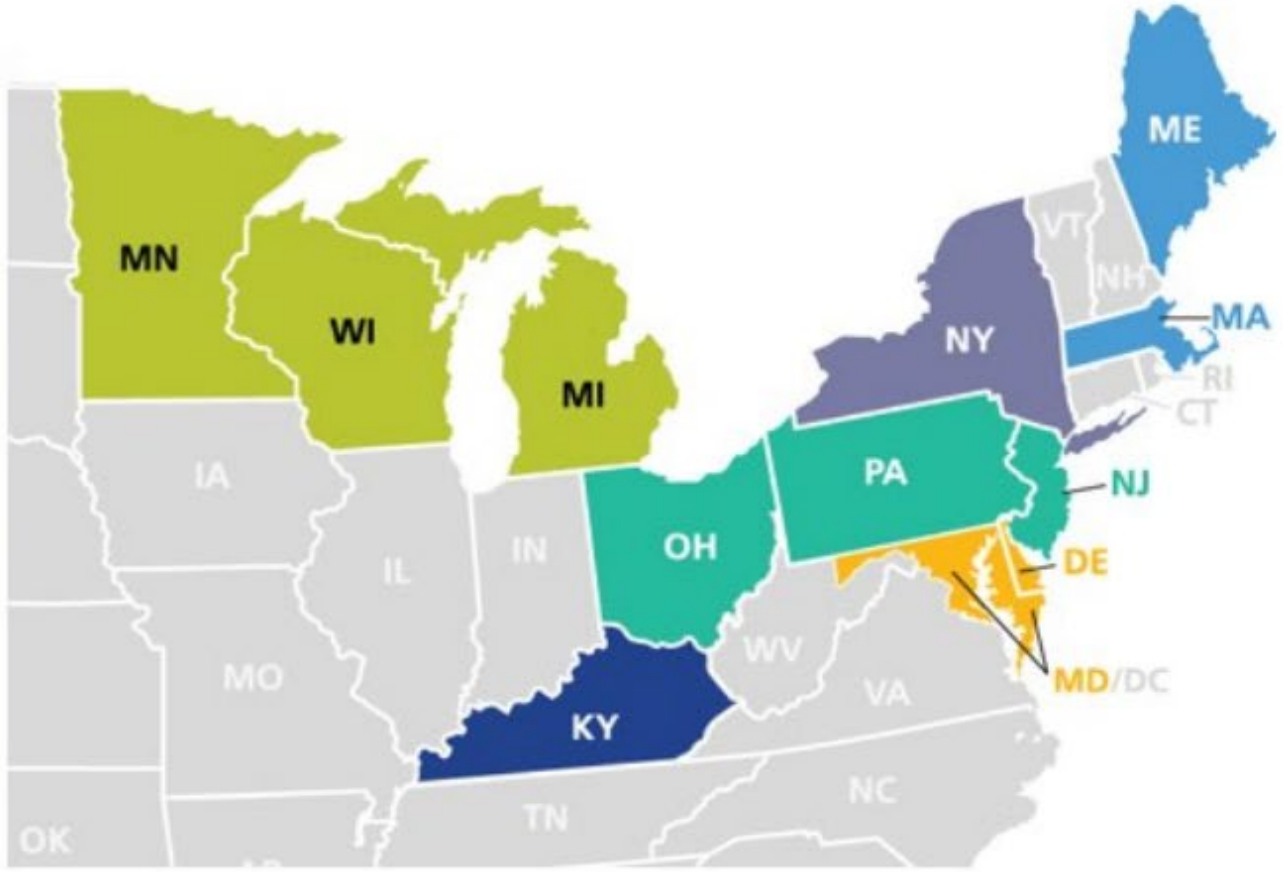
IPRO Hospital Quality Improvement Contractor (HQIC)

- IPRO supports hospitals in improving care delivery systems affecting vulnerable populations
- IPRO works with 272 hospitals across 12 states
- Focus areas include:
  - All-cause harm
  - Patient and family engagement
  - Health equity
  - Immunizations and vaccines
  - Healthcare-acquired infections



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Objectives of Today's Presentation

In this Lunch and Learn Series, we will discuss:

- The prevalence of CLABSI and CAUTI
- The causative factors and evidence-based strategies for CLABSI and CAUTI prevention
- How the Appalachian Healthcare System successfully implemented evidence-based strategies that resulted in a significant decrease in CLABSI and CAUTI rates

Why Focus on Preventing CLABSI?

- Preventing CLABSI is a national patient safety priority
- An estimated 30,100 CLABSIs occur each year
- CLABSIs are preventable when essential infection control practices are followed
- CLABSIs are the 3rd most frequent cause of HAIs
- Mortality rates from CLABSI range from 12%–25% and significantly increase cost and hospital length of stay
- Estimated cost of each CLABSI is $56,702.02 (CMS 2023)*
- The Centers for Disease Control and Prevention estimates each year there are 41,000 blood stream infections caused by contaminated central lines in U.S. hospitals**

*CDC. NHSN Patient Safety Component Manual. https://www.cdc.gov/nhsn/pdfs/pscmanual/pcsmanual_current.pdf
Agency for Healthcare Research and Quality. Estimating the Additional Hospital Inpatient Cost and Mortality Associated With Selected Hospital-Acquired Conditions. https://www.ahrq.gov/hai/pfp/haccost2017-results.html

**CMS HQIC 2023 Cost-Savings Template.

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Why Focus on Preventing CAUTI?

- Among UTIs acquired in the hospital, approximately 75% are associated with a urinary catheter
- Between 15-25% of hospitalized patients receive urinary catheters during their hospital stay*
- The most important risk factor for developing a catheter-associated UTI (CAUTI) is prolonged use of the urinary catheter
- Therefore, catheters should only be used for appropriate indications and should be removed as soon as they are no longer needed
- The cost of CAUTI is $16,256.99 (CMS, 2023)**

*Agency for Healthcare Research and Quality. Estimating the Additional Hospital Inpatient Cost and Mortality Associated With Selected Hospital-Acquired Conditions. https://www.ahrq.gov/hai/pfp/haccost2017-results.html.

**CMS HQIC 2023 Cost-Savings Template

How Can Patients and Families Support Safety?

- Patients and families should alert staff members if they notice the central line dressing coming off or becoming wet or dirty.
- Patients and families should be empowered to speak up ask the health care provider if they have performed hand hygiene before providing line or Foley care.
- Patients and families should be educated on proper handwashing techniques before entering and leaving patients' rooms.

APALACHIAN HEALTH Approach to Preventing CLABSI/CAUTI

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Strategies to Prevent Hospital-Acquired Infections:

CLABSI and CAUTI Prevention

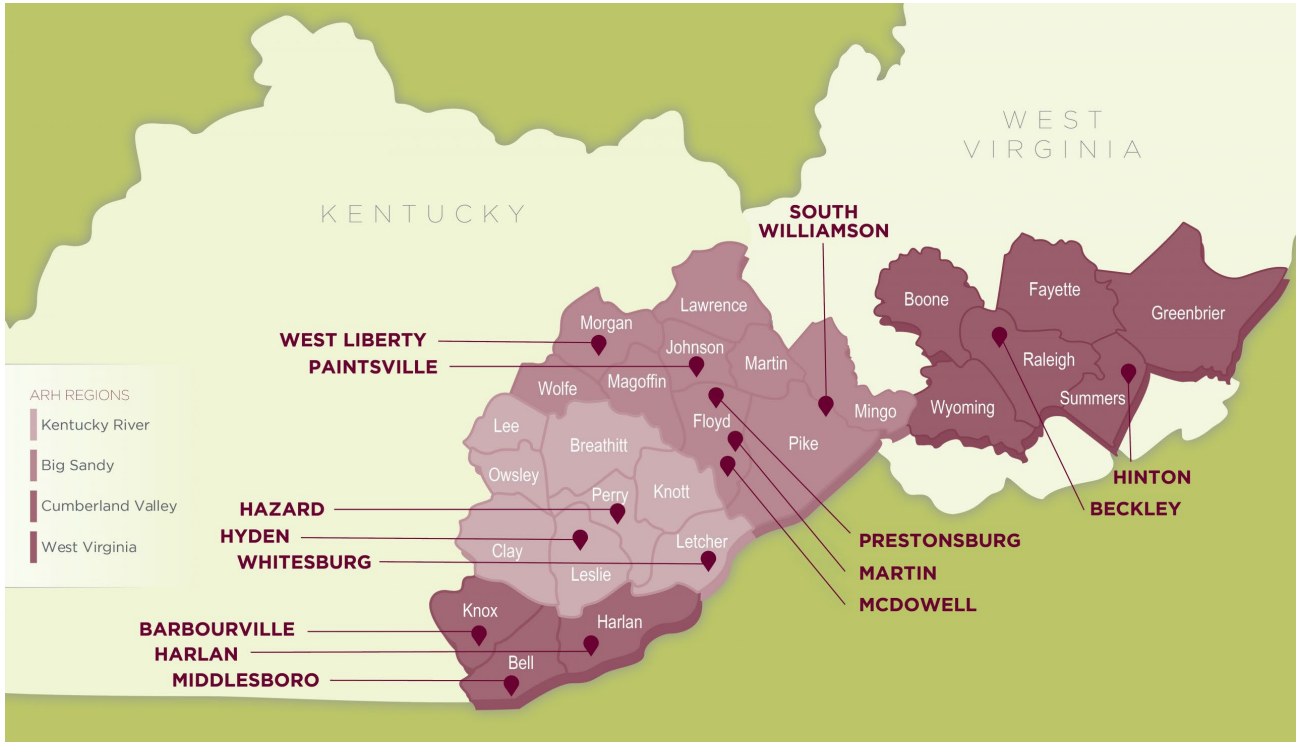
One Team, One Goal

ARH Mission

To improve health and promote well-being of all people in Central Appalachia in partnership with our communities.

ARH Vision

ARH will be the premier destination for quality care, a driver of advancement and development, and a leader in health for the communities we serve.



Infection Surveillance

- Surveillance team performs all surveillance activities using NHSN standardized definitions and methods (may be dedicated team or Infection Preventionist).
  - Ongoing NHSN training
  - Ensures correct and prompt identification of HAIs
  - Timely communication of HAIs, identified lapses in Infection Prevention
  - Initiation of RCA process
- Monitoring of CLABSI/CAUTI Standardized Infection Ratio (SIR) and Device Utilization Rates (DUR)
  - Assess prevention progress over time
  - Target prevention activities

CLABSI Surveillance

CLABSI (Central Line-Associated Bloodstream Infection)

Primary laboratory confirmed bloodstream infection (LCBI) in a patient with a central line in place >2 days on the date of event (DOE)

AND

Either still in place on DOE or removed the day prior to DOE

Resource:
https://www.cdc.gov/nhsn/pdfs/pscmanual/pcsmanual_current.pdf

CLABSI Classifications

LCBI 1 – patient of *any age*, requires at least *one* recognized pathogen identified from one or more blood specimens obtained by culture only OR identified to the genus or species level by non-culture based microbiologic testing; no symptoms required

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LCBI 2 – patient of *any age* requires the same NHSN common commensal identified by a culture from two or more blood specimens collected on separate occasions AND at least *one* of the following symptoms: fever (>100.4), chills, hypotension

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LCBI 3 – patient *≤1 year of age* requires the same NHSN common commensal identified by a culture from two or more blood specimens collected on separate occasions AND at least *one* of the following symptoms: fever (>100.4), hypothermia (<96.8), apnea, bradycardia

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Resource:
https://www.cdc.gov/nhsn/pdfs/pscmanual/pcsmanual_current.pdf

CLABSI Classifications

MBI-LCBI 1 – patient of *any age* meets LCBI 1 criterion AND has only intestinal organisms from the NHSN MBI organism list identified AND patient is either

1. an allogeneic hematopoietic stem cell transplant recipient within the past year with either Grade III or IV GI graft versus host disease OR ≥1-liter diarrhea in a 24-hour period (or ≥20 mL/kg for patients <18 years of age) with onset on or within the 7 calendar days before the date the positive blood specimen was collected OR
2. is neutropenic, defined as at least two separate days with ANC and/or WBC values <500 cells/mm^3 within the 7-day IWP

MBI-LCBI 2 – patient of *any age* meets LCBI 2 criterion AND ONLY Viridans Group Streptococcus and/or Rothia spp. identified AND meets either (1) or (2) criteria as listed above

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MBI-LCBI 3 – patient *≤1 year of age* meets LCBI 3 criterion AND ONLY Viridans Group Streptococcus and/or Rothia spp. identified AND meets either (1) or (2) criteria as listed above

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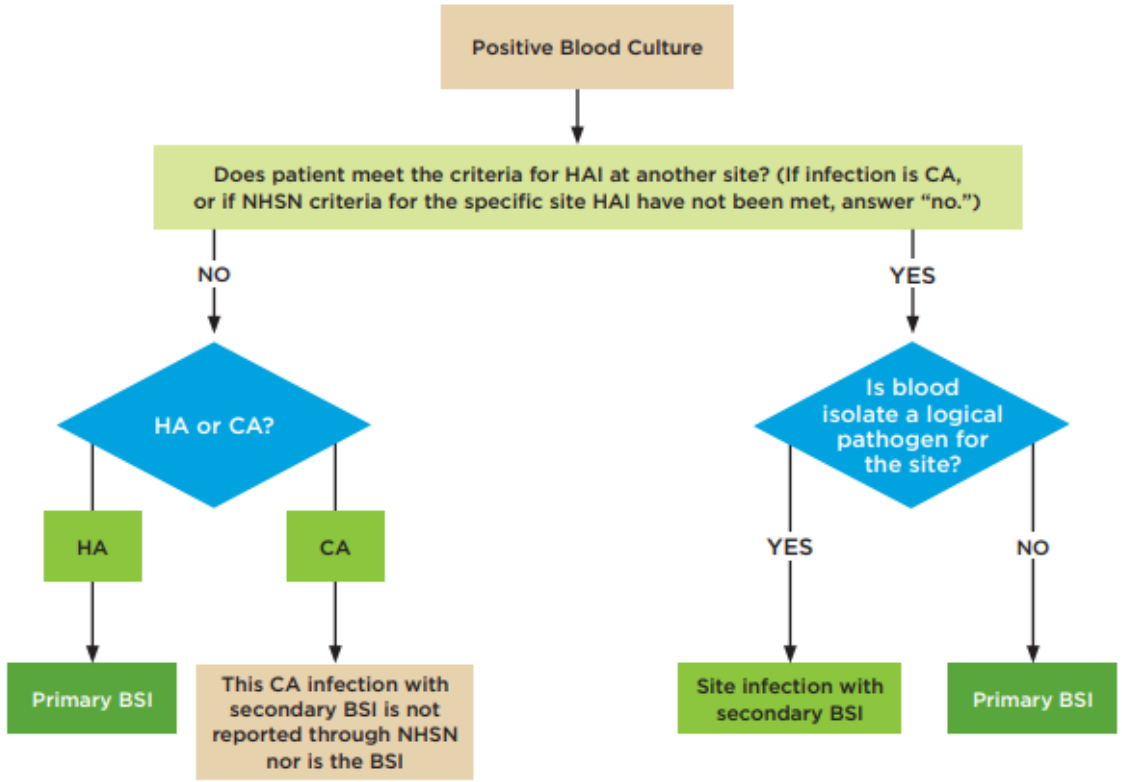
Resource:
https://www.cdc.gov/nhsn/pdfs/pscmanual/pcsmanual_current.pdf

CLABSI Identification Summary

Figure 3.2. Flowchart for Identification of CLABSI, CDC, NHSN



BSI= bloodstream infection
CA = community acquired
HA = healthcare associated
HAI = healthcare-associated infection

Source: Centers for Disease Control and Prevention.

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CAUTI Surveillance

CAUTI (Catheter-Associated Urinary Tract Infection)

- Primary laboratory confirmed urinary tract infection (UTI) in a patient with an indwelling urinary catheter in place >2 days on the date of event (DOE)

  AND

- Either still in place on DOE or removed the day prior to DOE

Resource:
https://www.cdc.gov/nhsn/pdfs/pscmanual/pcsmanual_current.pdf

CAUTI Classifications

SUTI 1 – patient of **any age** had at least **one** of the following symptoms: fever (>104), suprapubic tenderness*, costovertebral angle pain or tenderness*, urinary urgency^, urinary frequency^, dysuria^ AND has urine culture with no more than two species of organisms identified, at least one of which is a bacterium of 100,000 CFU/ml

SUTI 2 – patient **<1 year of age** had at least **one** of the following symptoms: fever (>104), hypothermia (<96.8), apnea*, bradycardia*, lethargy*, vomiting*, suprapubic tenderness* AND has urine culture meeting the same requirements as SUTI 1a

ABUTI – patient has **no** symptoms of SUTI 1 or 2 according to age AND has urine culture meeting same requirements as SUTI 1 & 2 AND patient has organism identified from blood specimen with at least **one** matching bacterium to the bacterium at ≥100,000 CFU/ml identified in the urine specimen OR is eligible for LCBI criterion 2 (without fever) and matching common commensal(s) in the urine

*no other recognized cause documented by physician
^cannot be used when IUC is in place

Resource:
https://www.cdc.gov/nhsn/pdfs/pscmanual/pcsmanual_current.pdf

CLABSI Prevention

CLABSI Impact

- **CLABSIs result annually in:**

- 84,551 to 203,916 preventable infections
- 10,426 to 25,145 preventable deaths
- $1.7 billion to $21.4 billion avoidable costs

Resource: Umscheid CA, Mitchell MD, et al. Estimating the proportion of healthcare-associated infections that are reasonably preventable and the related mortality and costs. Infect Control Hosp Epidemiol 2011 Feb;32(2):101-114.

What is a Central Line?

Intravascular device that terminates at or close to the heart or one of the great vessels

- Non-tunneled CVCs (subclavian, jugular, femoral)
- Tunneled CVCs
- Dialysis catheter
- Peripherally inserted central catheters (PICCs)
- Implanted ports

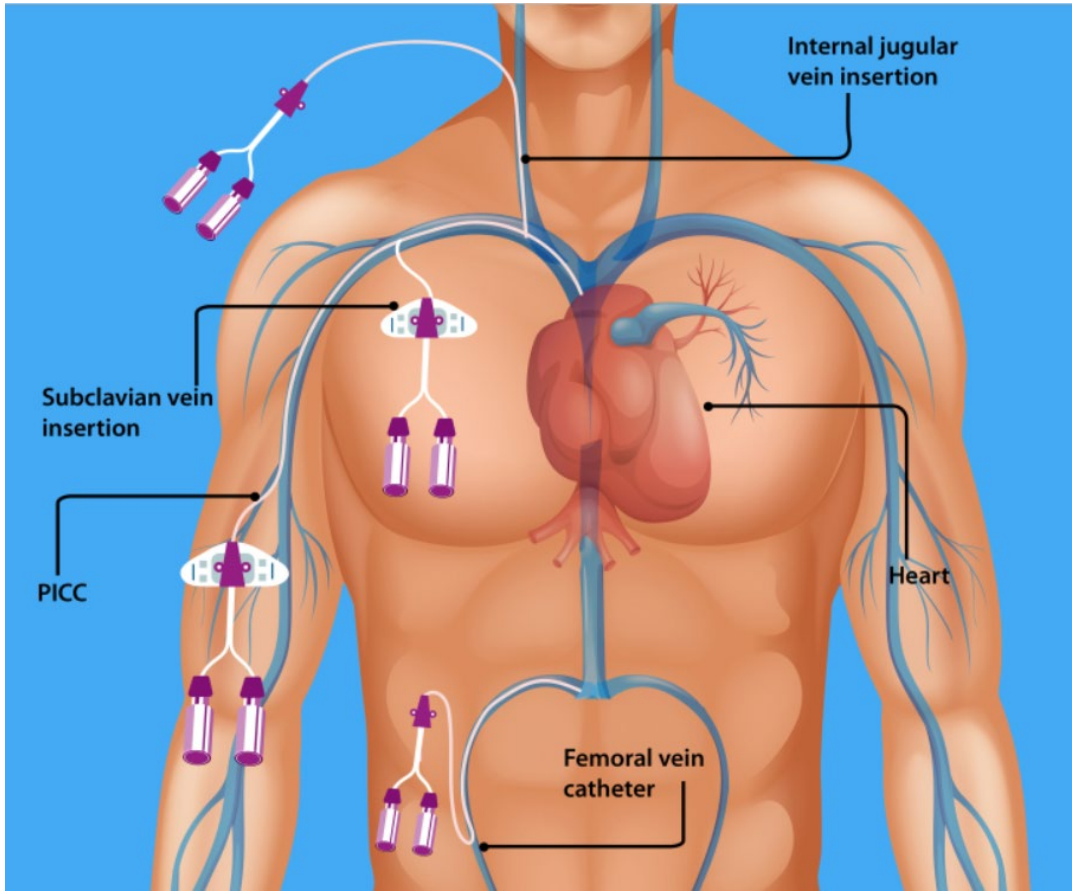

Image Credit: Haddadin Y, Annamaraju P, Regunath H. Central Line–Associated Blood Stream Infections. https://www.ncbi.nlm.nih.gov/books/NBK430891/

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Why is an Invasive Device High Risk?

Invasive devices themselves don't cause infections, but they can provide a route for bacteria and fungi to enter the body.

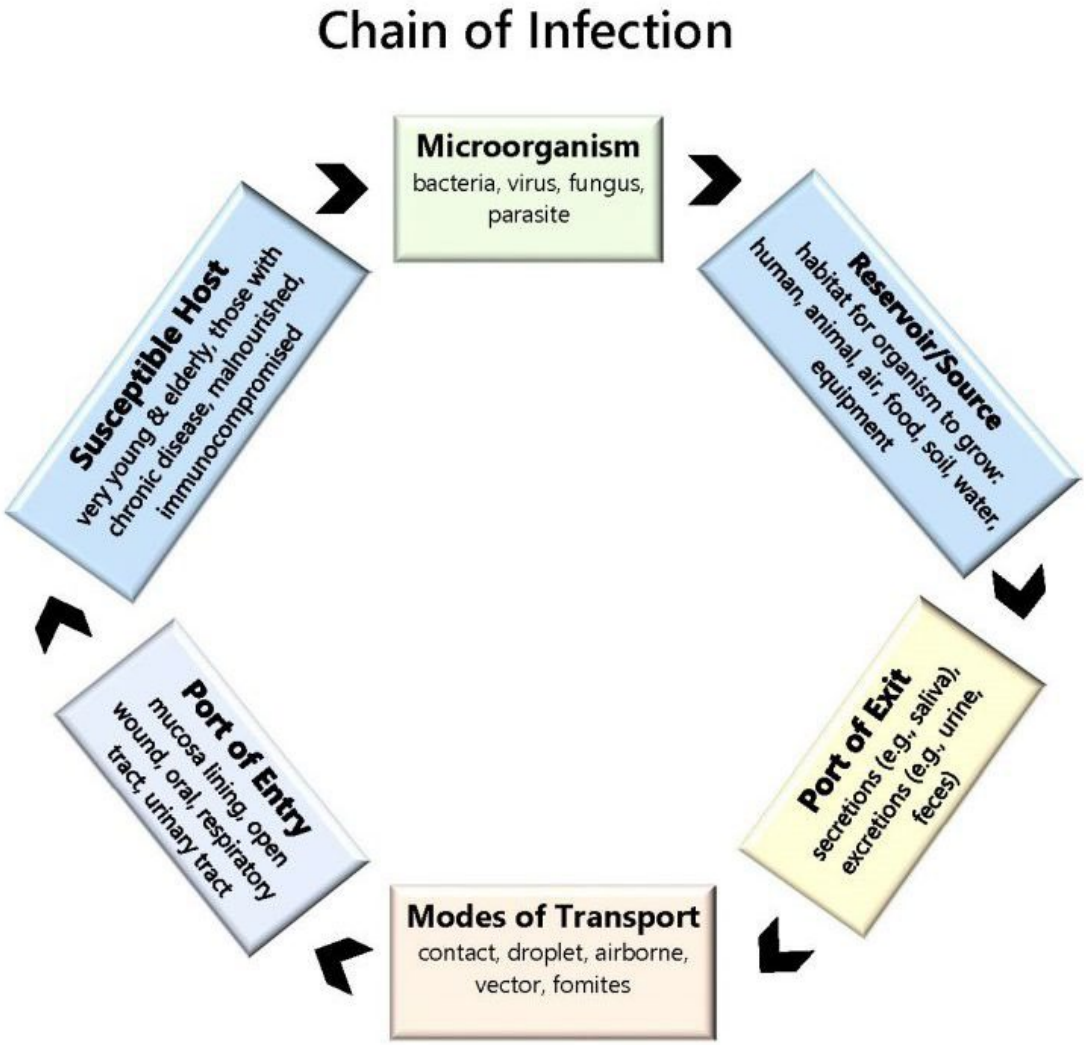


Image Credit: https://www.cdc.gov/niosh/learning/safetyculturehc/module-2/3.html

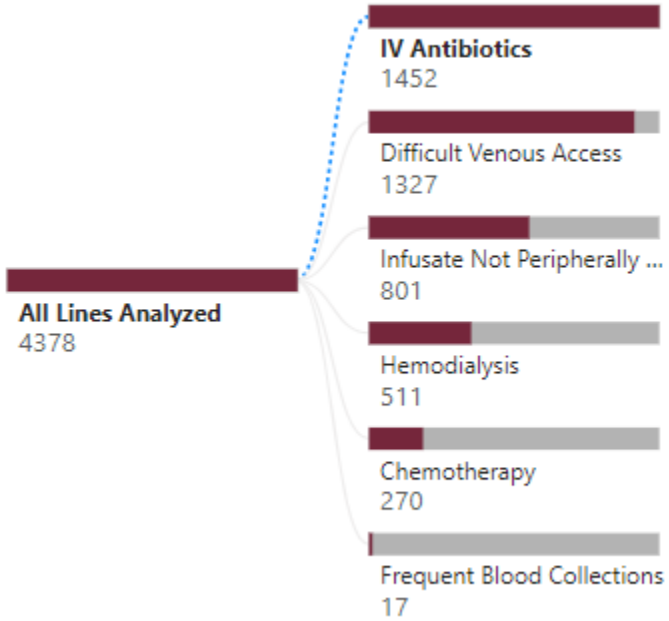
How do CLABSI Occur?

- **Extraluminal:** pathogens migrate along external surface of catheter from skin entry site; often occurs within 7 days of insertion
- **Intraluminal:** hub contamination, migration along internal surface of catheter; more commonly occurs >7 days, intraluminal colonization
- **Secondary BSI:** bacteria from another source in the body infects the blood
- **Infusate Contamination:** introduction of pathogens from fluids infused through the catheter system

Ref: https://www.cdc.gov/infectioncontrol/pdf/strive/CLABSI101-508.pdf

Indications for Central Venous Access

- Administration of vasopressors or other non-peripherally compatible infusates
- Chemotherapy or total parenteral nutrition (TPN)
- Extended course of intravenous (IV) antibiotics (≥6 Days)
- Support high-volume flow for therapy such as hemodialysis
- Hemodynamic monitoring in critically ill patients
- Provide venous access for placement of devices, such as cardiac pacemaker
- Inadequate peripheral venous access
  - Frequent phlebotomy at least every 8 hours for ≥6 days
  - Intermittent Infusions for ≥6 Days



Remember Midlines & Ultrasound-Guided IV Placement are your friends!

Resources:
1. Guidelines for the Prevention of Intravascular Catheter-Related Infections (2011)
2. The Michigan Appropriateness Guide for Intravenous Catheters (MAGIC): Results From a Multispecialty Panel Using the RAND/UCLA Appropriateness Method. Ann Intern Med. 2015 Sep 15;163(6 Suppl):S1-40. doi: 10.7326/M15-0744. PMID: 26369828.

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Follow Proper Insertion Practices

1. Perform hand hygiene before insertion
2. Adhere to aseptic technique
3. Use maximal sterile barrier precautions (i.e., mask, cap, gown, sterile gloves, and sterile full body drape)
4. Choose the best insertion site to minimize infections and noninfectious complications based on individual patient characteristics
5. Prepare the insertion site with >0.5% chlorhexidine with alcohol
6. Place a sterile gauze dressing or a sterile, transparent, semipermeable dressing over the insertion site
7. For patients 18 years of age or older, use a chlorhexidine impregnated dressing

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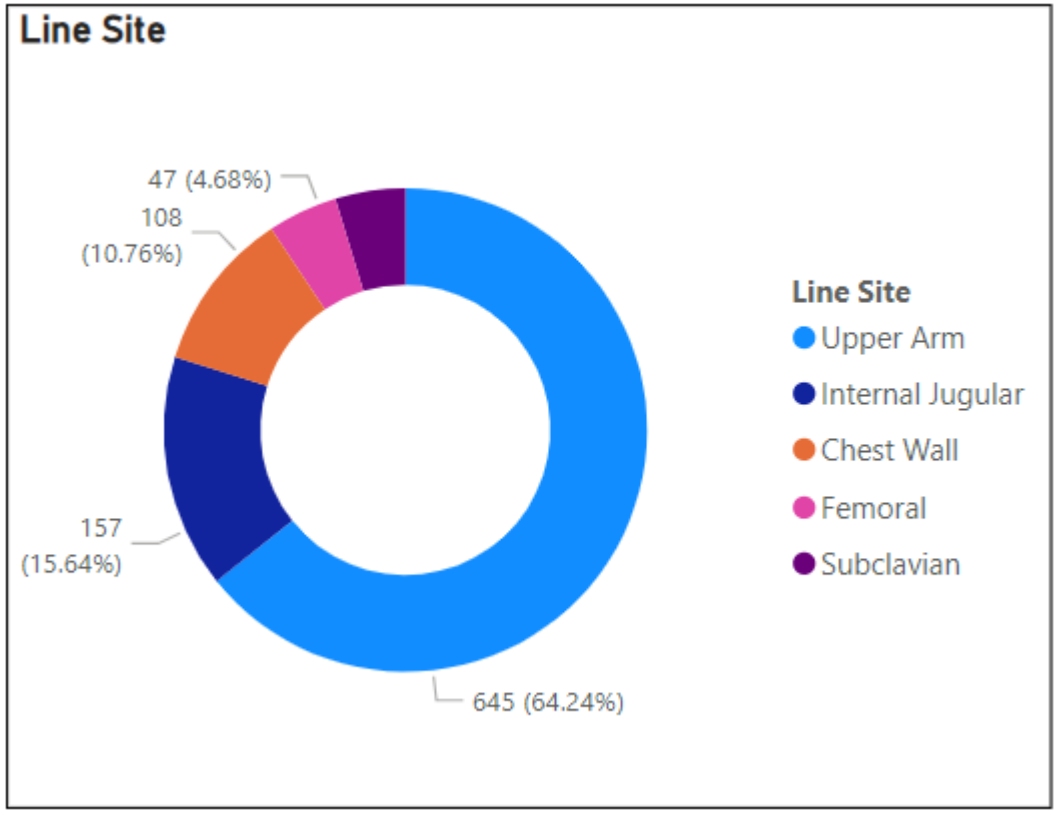
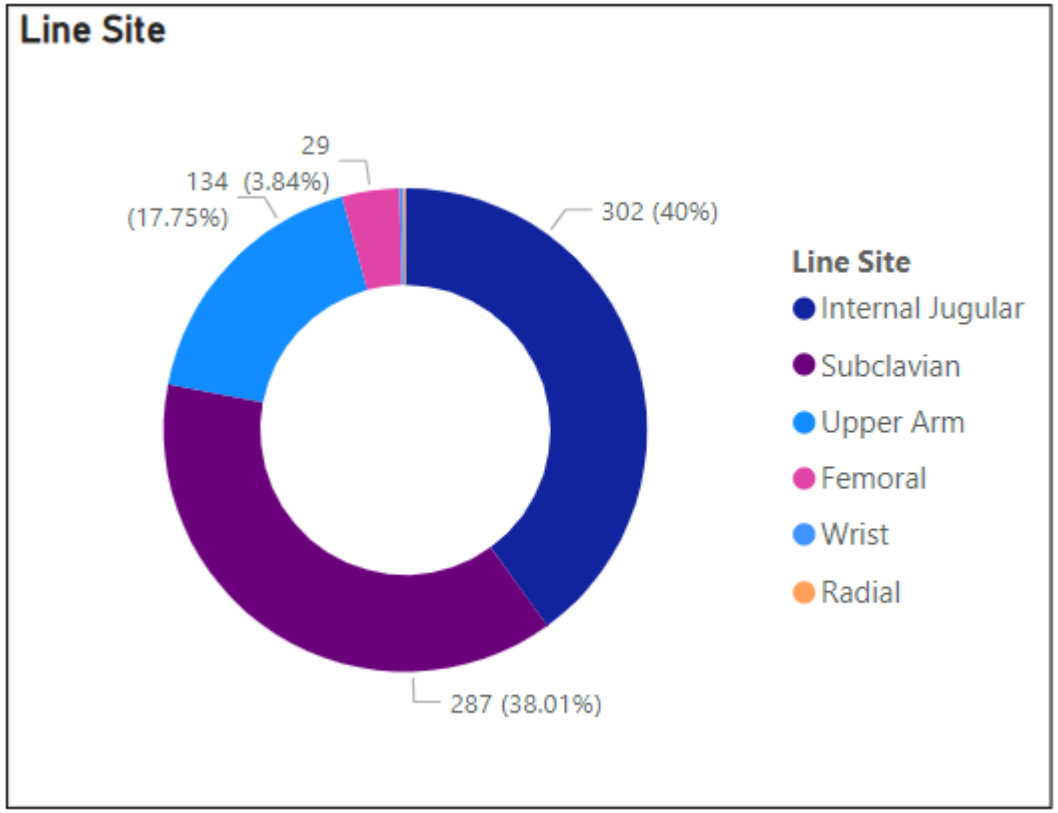
Site Selection Variance

Facility 1



VS

Facility 2



Handle and Maintain Central Lines Properly

- Comply with hand hygiene requirements
- Bathe ICU patients over 2 months of age with a chlorhexidine preparation on a daily basis
- Scrub the access port or hub with friction immediately prior to each use with an appropriate antiseptic (chlorhexidine, povidone iodine, an iodophor, or 70% alcohol)
- Use only sterile devices to access catheters
- Immediately replace dressings that are wet, soiled, or dislodged
- Perform routine dressing changes using aseptic technique with clean or sterile gloves
- Change administrations sets for continuous infusions no more frequently than every 4 days, but at least every 7 days
- If blood or blood products or fat emulsions are administered change tubing every 24 hours

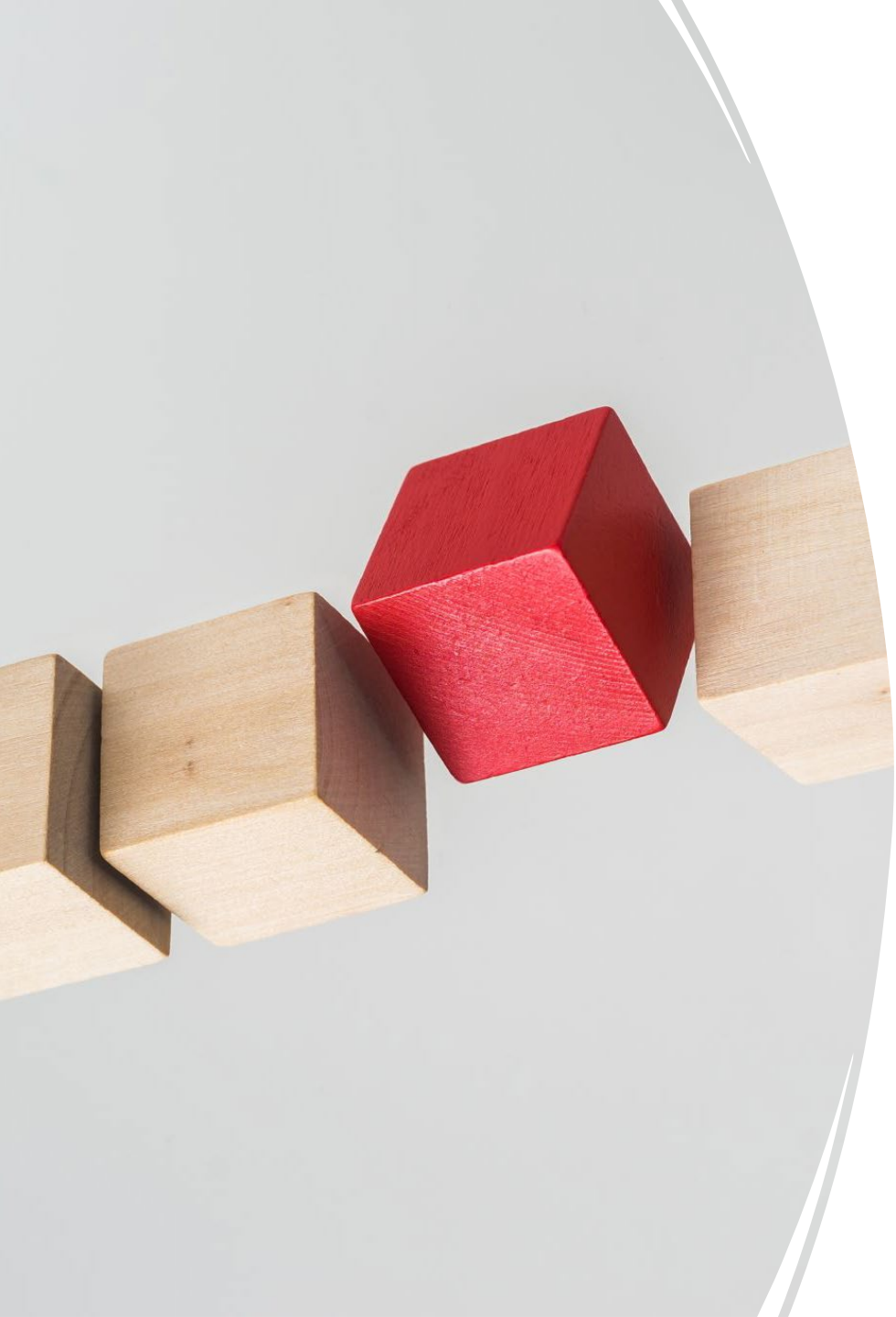
Resource: https://www.cdc.gov/hai/pdfs/bsi/checklist-for-CLABSI.pdf

Modifiable Risk Factors

Characteristic	Higher Risk	Lower Risk
Insertion circumstances	Emergency	Elective
Skill of inserter	General	Specialized
Insertion site	Femoral vein	Subclavian vein
Skin antisepsis	70% alcohol, 10% povidone-iodine	2% chlorhexidine
Catheter lumens	Multilumen	Single lumen
Duration of catheter use	Longer duration	Shorter duration
Barrier precautions	Submaximal	Maximal

Source: Adapted from the TJC monograph Preventing Central Line-Associated Infections—A Global Challenge, A Global Perspective, May 16, 2012, and O'Grady NP, Alexander M, Burns LA et al. (2011). Guidelines for the prevention of intravascular catheter-related infections. Am J Infect Control *2011;39:S1-34.*

Note: It is recommended for removal/replacement of lines at 48-72 hours if placed in the femoral site or placed emergently in submaximal barrier precautions.



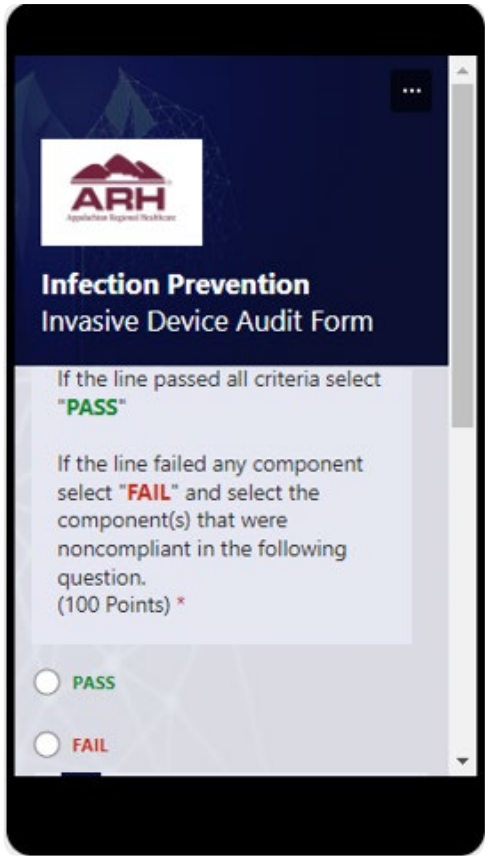
Stepwise Process

- **Evaluate/Ensure Data Integrity** to verify infection events are being correctly identified
- **Confirm Best Practice** to ensure policies and processes are up-to-date
- **Evaluate Care** processes, competency (yearly for insertion and continued care/maintenance), and specimen collection practice; include modifiable risk factors and rationale for both placement and continued use
- **Validate Rationale** daily to ensure it is appropriate
- **Engage Providers and Staff** to gain added insight, foster ownership, and create buy-in to improvement initiatives
- **Communicate Data Effectively** to ensure progress can be evaluated and monitored; automation of audit outcomes can be key here

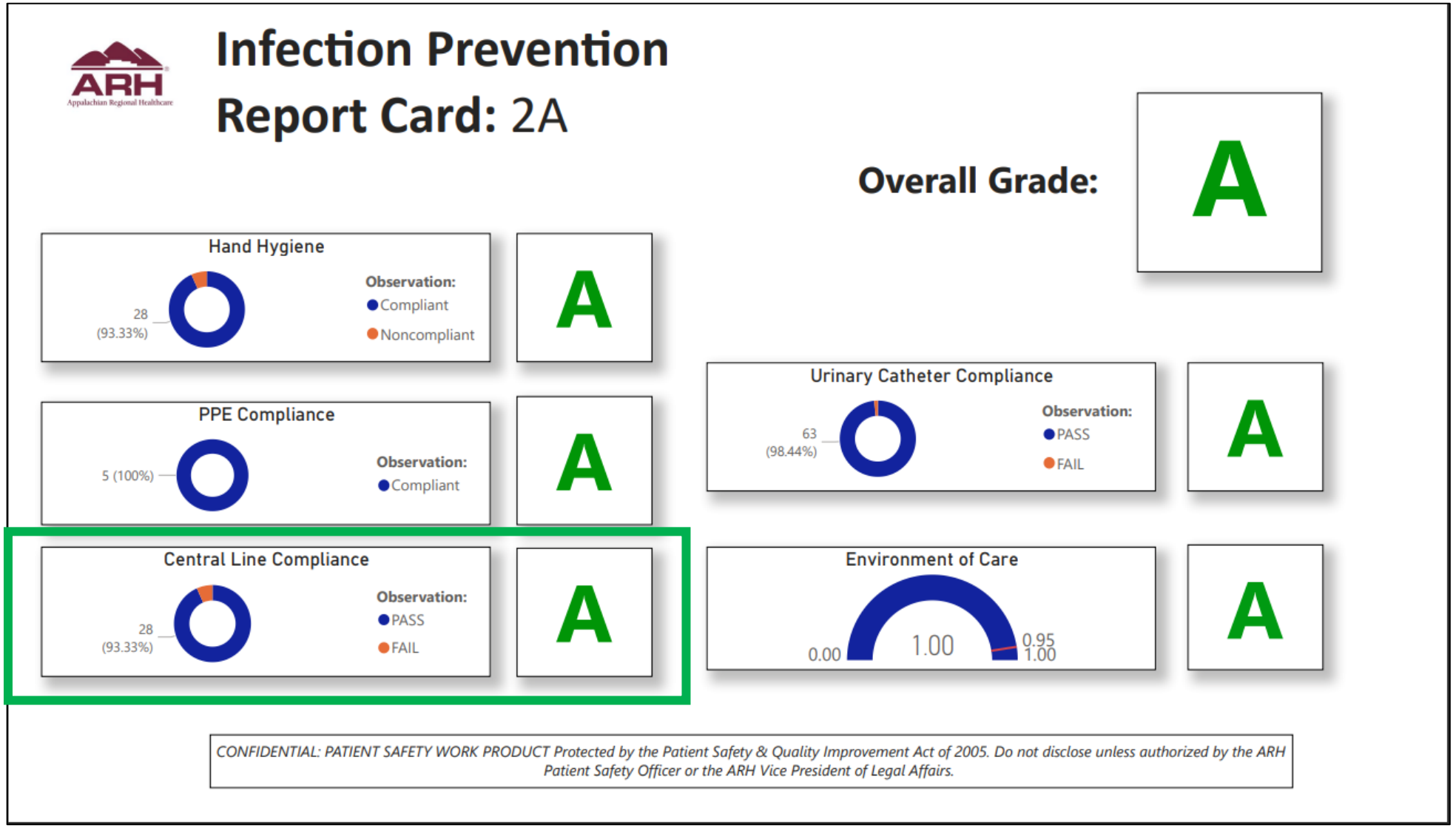
Focus on the Processes

CLABSI can be a measure from which many front line staff feel detached.

Process monitors are tangible and provide a clear pathway for staff to directly drive improvement, especially when feedback and performance are communicated in ways that are easily interpreted.



IP Report Card



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Whitesburg ARH

CLABSI Prevention

Compliance Rates by Department

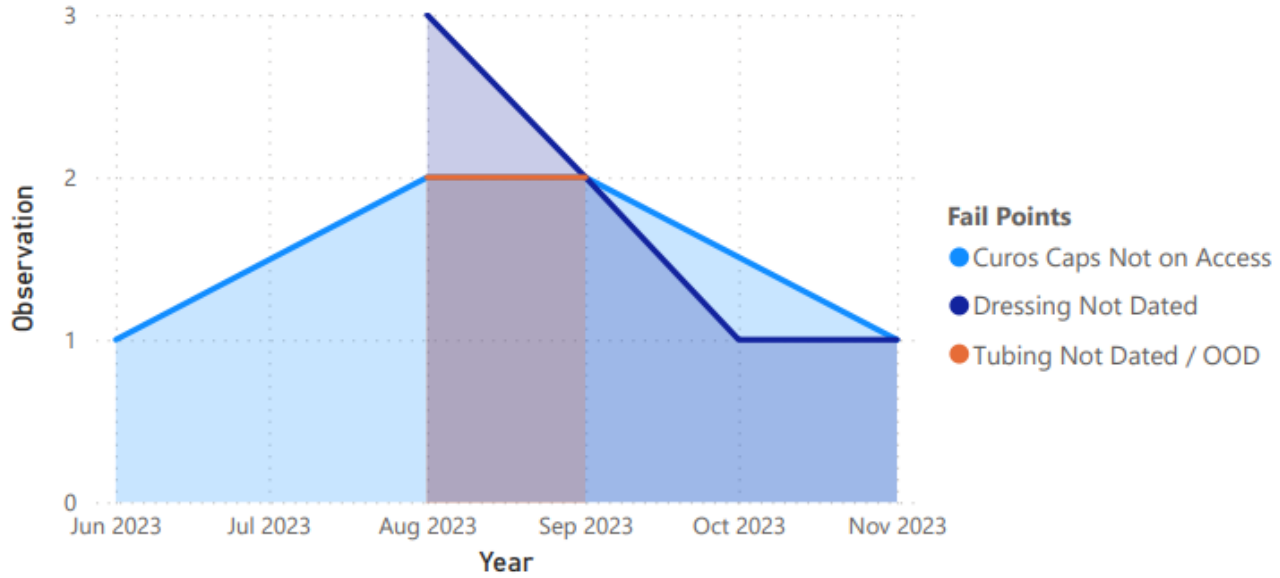
Merged Depts	FAIL	PASS
2 MEDICAL		100.00%
ICU	12.50%	87.50%
SURGICAL		100.00%
Total	**5.26%**	**94.74%**

1 Goal: ≥95% Compliance

Line Usage by Unit

Unit	Line Use Ratio
32	3%
35	0%
37	6%
67	22%

Fail Points by Volume



Fail Points	ICU	Total
Curos caps were not on all access sites and/or not present on tips of tubing.	1	**1**
The dressing was not dated	1	**1**
Total	**2**	**2**

Notes from IP: Even though there were no CLABSI's for November, the overall audit compliance rate declined to 94.7%. The decline was noted in ICU. Nursing department managers should continue to remind staff of audit criteria. During rounding, the IP is going to strive to get more staff involvement and have the patient's nurse be present during the audit in order to increase staff knowledge of the audit criteria.

CLABSI Prevention Goals

2/3

November 2023

2 Goal: 0 Events

0

CLABSI Events

3 Goal: ≤18%

6%

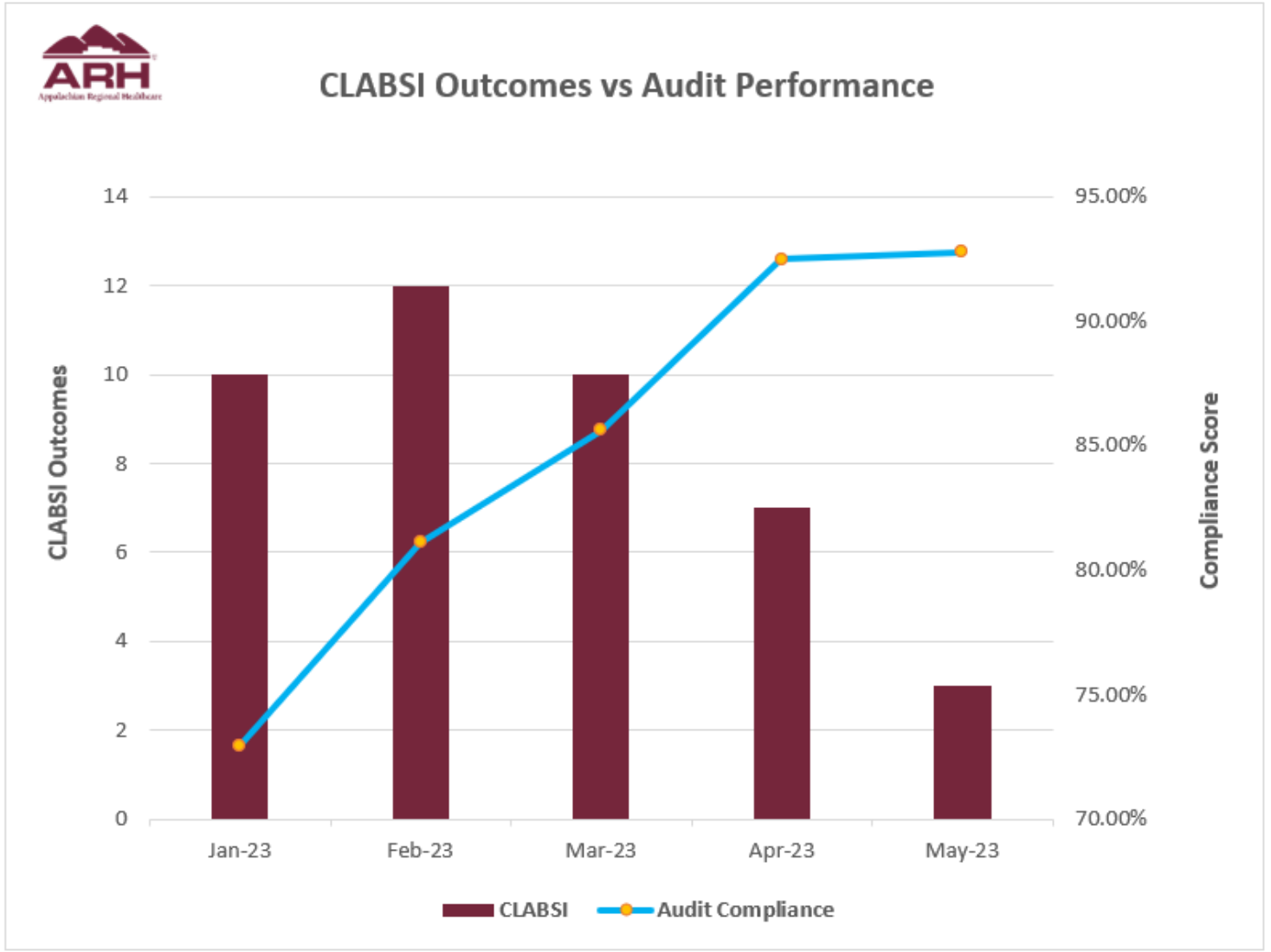
Line Use Ratio

14

National Percentile

Processes Drive Outcomes

- Infection Outcome Measures and Process Measures share an inverse relationship
- As Process Measures improve, infections events decline

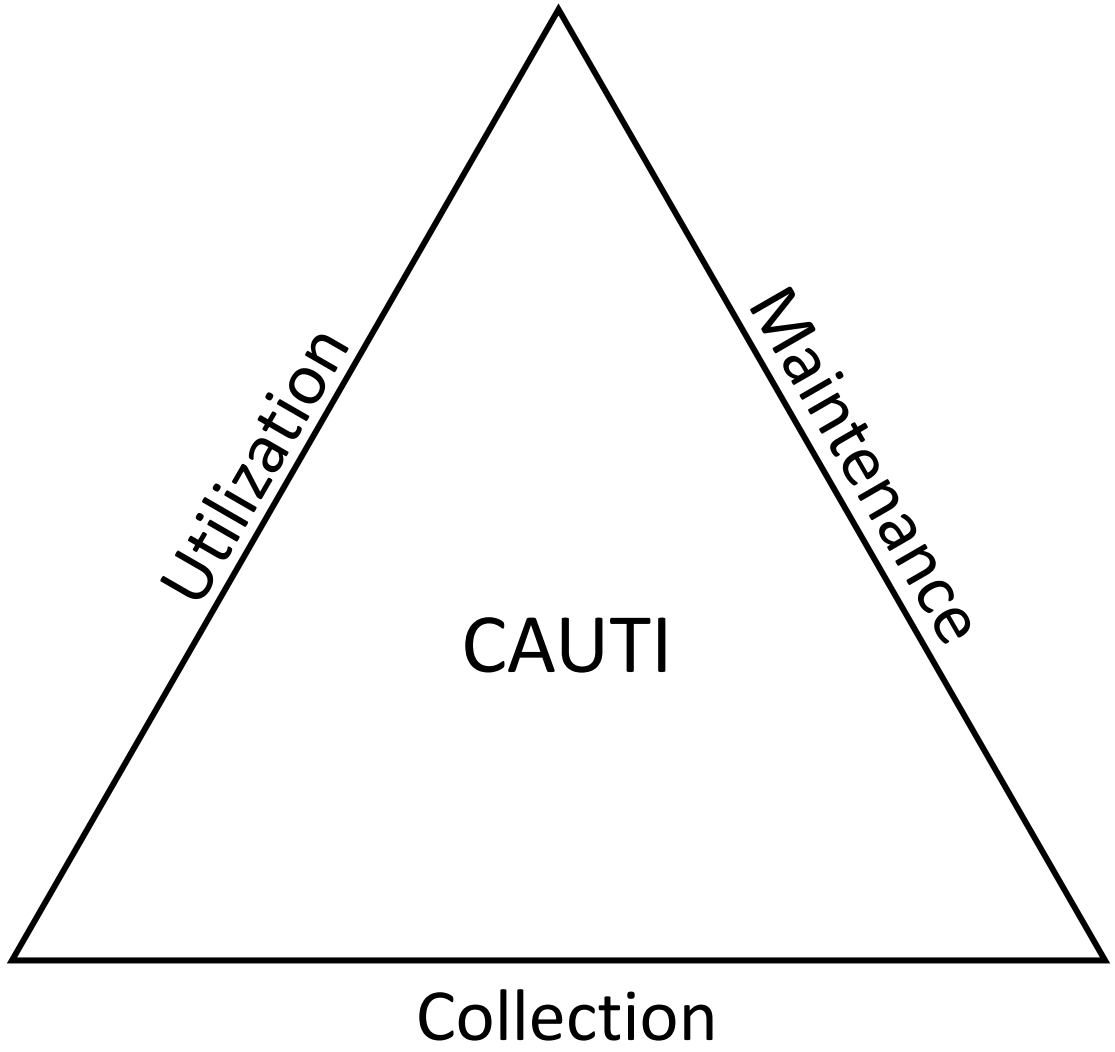


Catheter Tour Guide

Navigating CAUTI Prevention

CAUTI Contributors

Utilization	• Frequency of use • Device selection • Appropriate utilization rationales
Maintenance	• Bedside care bundles • Prompt removal/DC • Protection of closed systems
Collection	• Appropriate collection practices • Diagnostic stewardship



Indwelling Catheter Rationale Indications

Indications for Indwelling Urinary Catheters:

- Acute urinary retention or obstruction
- Perioperative use in selected surgeries
- Assistance in healing of severe perineal and sacral wounds in incontinent patients
- Hospice/comfort care/palliative care
- Required strict immobilization for trauma or surgery
- Accurate measurement of urinary output in critically ill patients (in intensive care)

Indwelling Urinary Catheters are NOT Indicated for:

- Urine output monitoring outside the ICU
- Incontinence
- Patients transferred from intensive care to general units
- Prolonged postoperative use
- Morbid obesity (some exceptions)
- Immobility without a sacral or perineal pressure sore
- Confusion or dementia
- Patient request

Agency for Healthcare Research and Quality

https://www.ahrq.gov/hai/cauti-tools/impl-guide/implementation-guide-appendix-j.html

External Catheter Rationale Indications

External catheters are appropriate for the following indications:

- Stage III or IV or unstageable pressure ulcers or similarly severe wounds of other types
- Moderate to severe incontinence-associated dermatitis that cannot be kept clear of urine
- Urinary incontinence in patients for whom nurses find it difficult to provide skin care
- Daily (not hourly) measurement of urine volume that is required to provide treatment
- Single 24-hour or random urine sample
- Reduction in acute, severe pain with movement
- Patient request for external catheter to manage urinary incontinence while hospitalized
- Improvement in comfort when urine collection by external catheter addresses patient and family goals in a dying patient

External catheters are inappropriate in the following cases:

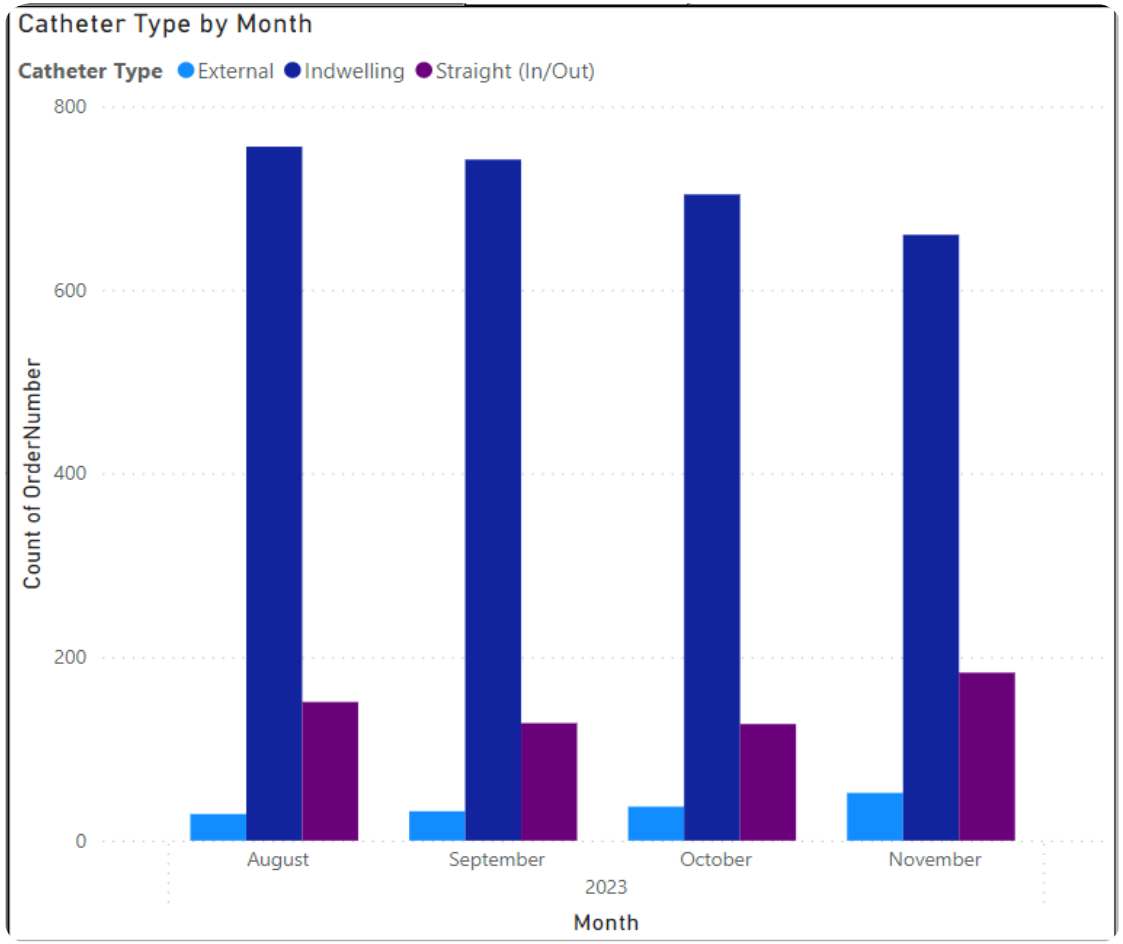
- An uncooperative patient expected to frequently manipulate catheters because of such behavior issues as delirium and dementia
- Any type of urinary retention (acute or chronic, with or without bladder outlet obstruction)
- Hourly measurement of urine volume required to provide treatment
- Urinary incontinence in patients with intact skin when nurses can turn/provide skin care with available resources and when the patient has not requested the external catheter
- Routine use in ICU without an appropriate indication
- To attempt to reduce risk for falls by minimizing the need to get up to urinate
- Postvoid residual urine volume assessment
- Twenty-four-hour or random sample collection if collection is possible by non-catheter strategies
- For convenience of urinary management in patient during transport for tests and procedures
- Patient or family request when there are no expected difficulties managing urine by commode, urinal, or bedpan in non-dying patient
- To prevent urinary tract infection in patients with fecal incontinence or diarrhea or to manage frequent, painful urination in patients with urinary tract infection

AHRQ Agency for Healthcare Research and Quality

https://www.ahrq.gov/sites/default/files/publications/files/implementation-guide_0.pdf

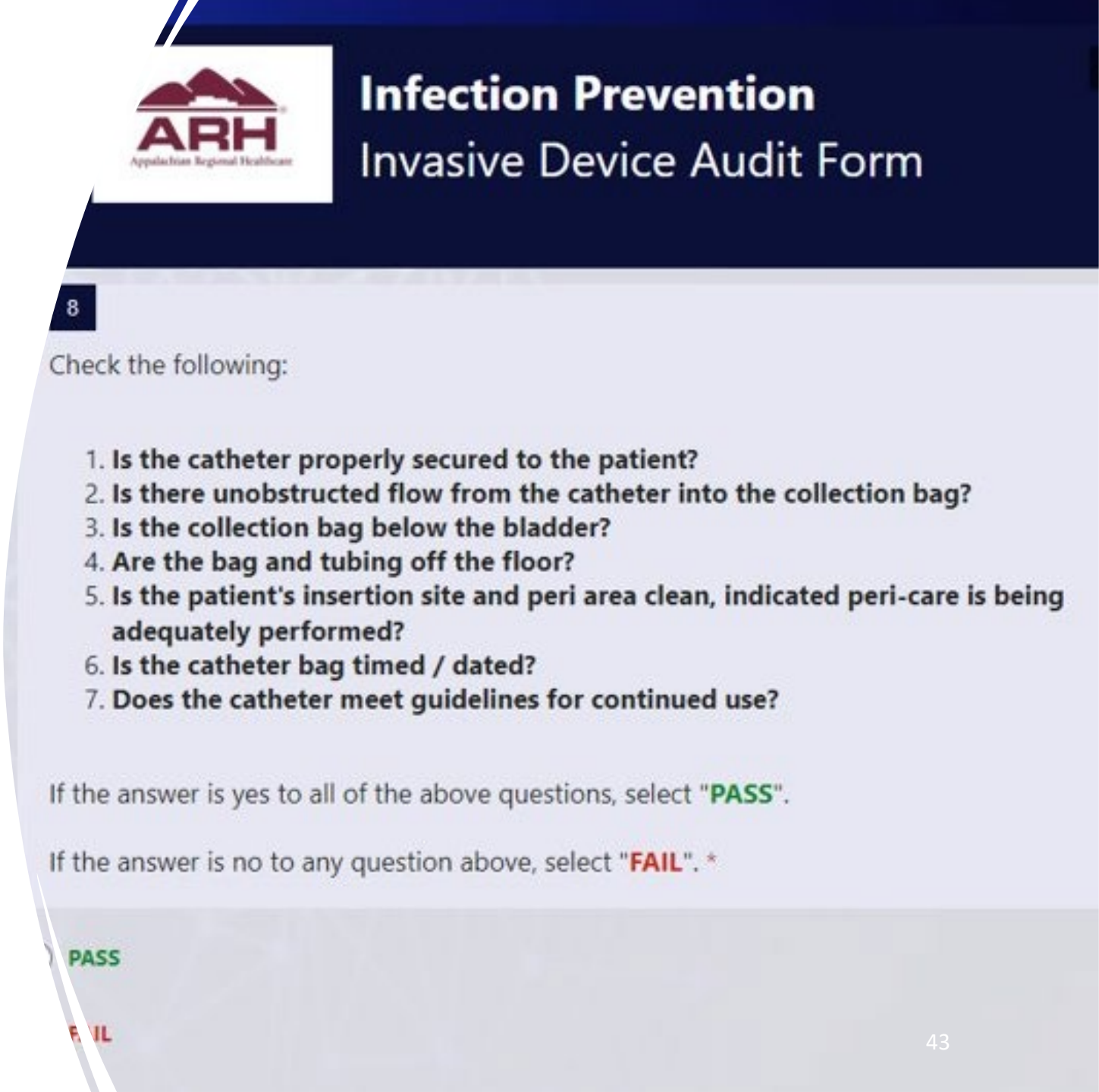
Catheter Device Selection

- External
- Indwelling
- Intermittent Straight Catheters



Clinical Catheter Maintenance

- Ensure staff competency (aseptic technique, catheter insertion)
- Appropriate device selection (indwelling, external, alternative device or method)
- Position of drainage bag (below bladder and urine flow is intact)
- Ensure device meets a qualified rationale for use
- Device IFU is being followed (time/date on bag)
- Device is appropriately secured to patient



Urine Collection Methodology and Stewardship

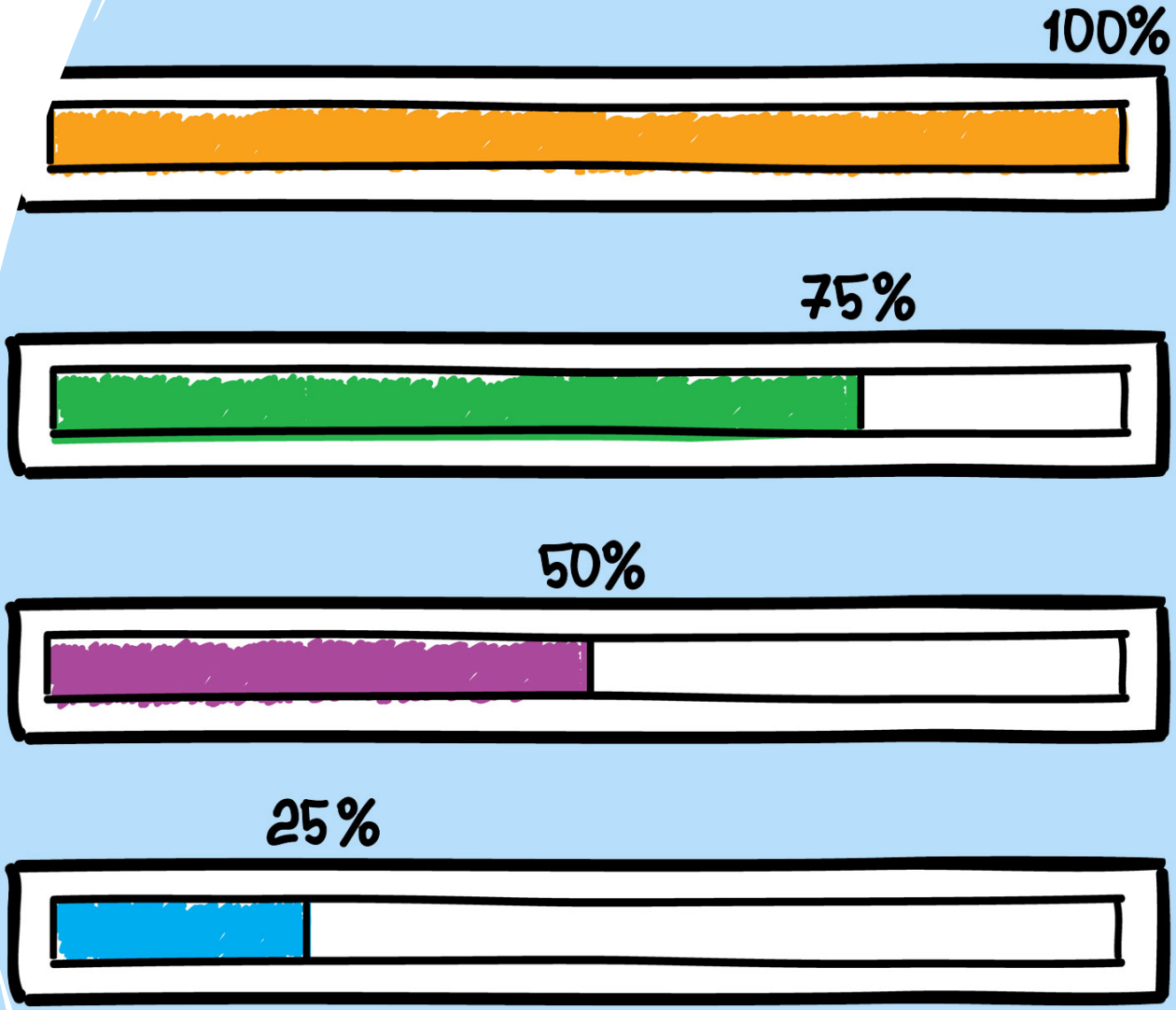
Infection Prevention / Laboratory Interventions

- Order set review (no auto reflex to culture)
- Define collection criteria and process (e.g catheter time frames that allow collection)
- Evaluate competency of those collecting urine cultures (define specified collectors if needed)
- Set clear expectations and limitations for collection (times, transport, transport media, storage)

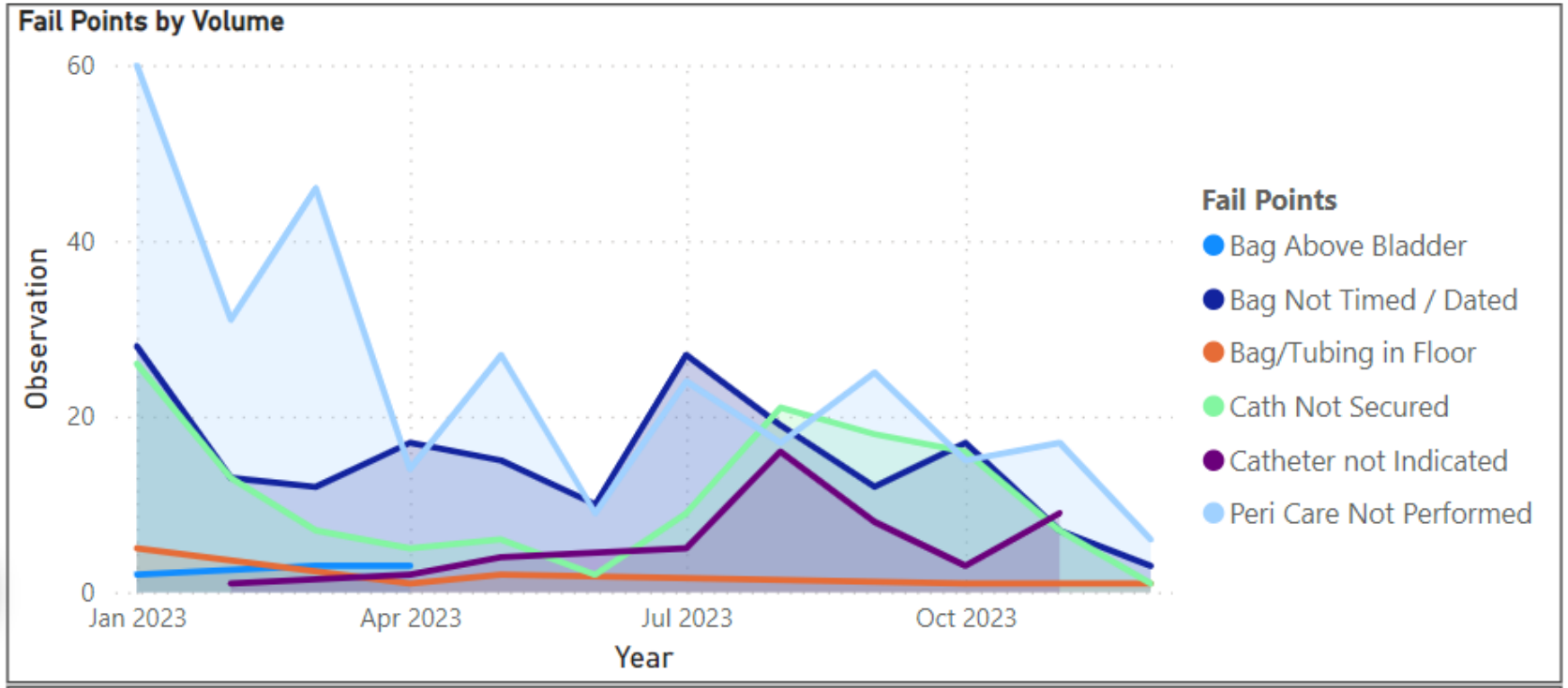
Resource: https://www.idsociety.org/practice-guideline/laboratory-diagnosis-of-infectious-diseases

Continued Interventions

- Administrative buy-in and support
- Stop orders
- Recurring reminders
- Nurse-driven removal protocols
- Physician champions
- Provider and staff buy-in
- Education, re-education, continued education (Change is hard, don't give up!)
- Accountability and Ownership



Catheter Maintenance Evaluation



Please select the component(s) that were non-compliant:	2NW	2SE	2WT	3SE	3WT	ICU	**Total**
Bag and/or tubing were on the floor.			6		2	1	**9**
Catheter bag was not timed and/or dated.	11	30	53	12	34	34	**174**
Catheter did not meet current indications for continued use.		2	25	1	8	12	**48**
Collection bag was above the bladder.			1		2	5	**8**
Patient's catheter insertion site and/or peri area were not clean, indicating peri-care is not being adequately performed.	2	29	88	5	48	109	**281**
The catheter was not properly secured to the patient	12	22	36	6	17	35	**128**
Total	**25**	**83**	**209**	**24**	**111**	**196**	**648**

IP Report Card 2.0

Compliance Rates by Department

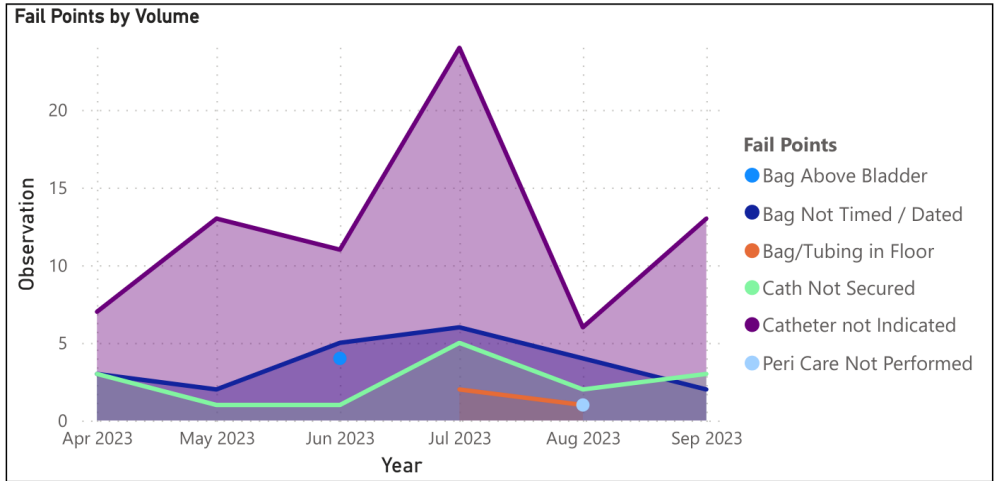
Merged Depts	FAIL	PASS
3RD	10.64%	89.36%
4TH	9.09%	90.91%
ICU/CCU	13.89%	86.11%
Total	**11.22%**	**88.78%**

1 Goal: ≥95% Compliance

Catheter Usage by Unit

Unit	Catheter Usage Ratio
ICU/CCU	44%
4TH	16%
3RD	7%
2ND	0%

CAUTI Prevention



Please select the component(s) that were non-compliant:	3RD	4TH	ICU/CCU	Total
Catheter did not meet current indications for continued use.	5	2	6	**13**
The catheter was not properly secured to the patient		3		**3**
Catheter bag was not timed and/or dated.			2	**2**
Total	**5**	**5**	**8**	**18**

Notes from IP: *0 CAUTI events for August. Catheter usage rate decreased to goal of 18%- down by 8% from July, with decreased usage noted in each unit. Audit compliance increased by 12% overall, but remains slightly below goal. Biggest fail point is no valid rationale for use- a repeat trend from July. IP recommends continued focus on decreasing use of indwelling urinary catheters, increasing compliance with nurse driven protocol (bladder scans and straight caths), education with floor staff and physicians on protocols and valid rationale for use. Also recommend increased rounding by managers and validation of proper need for use of catheter, collaborating with physicians when needed, and progressive action for non-compliant staff. 2/3 CAUTI goals met*

CAUTI Prevention Goals

2/3

August 2023

2 Goal: 0 Events

0

CAUTI Events

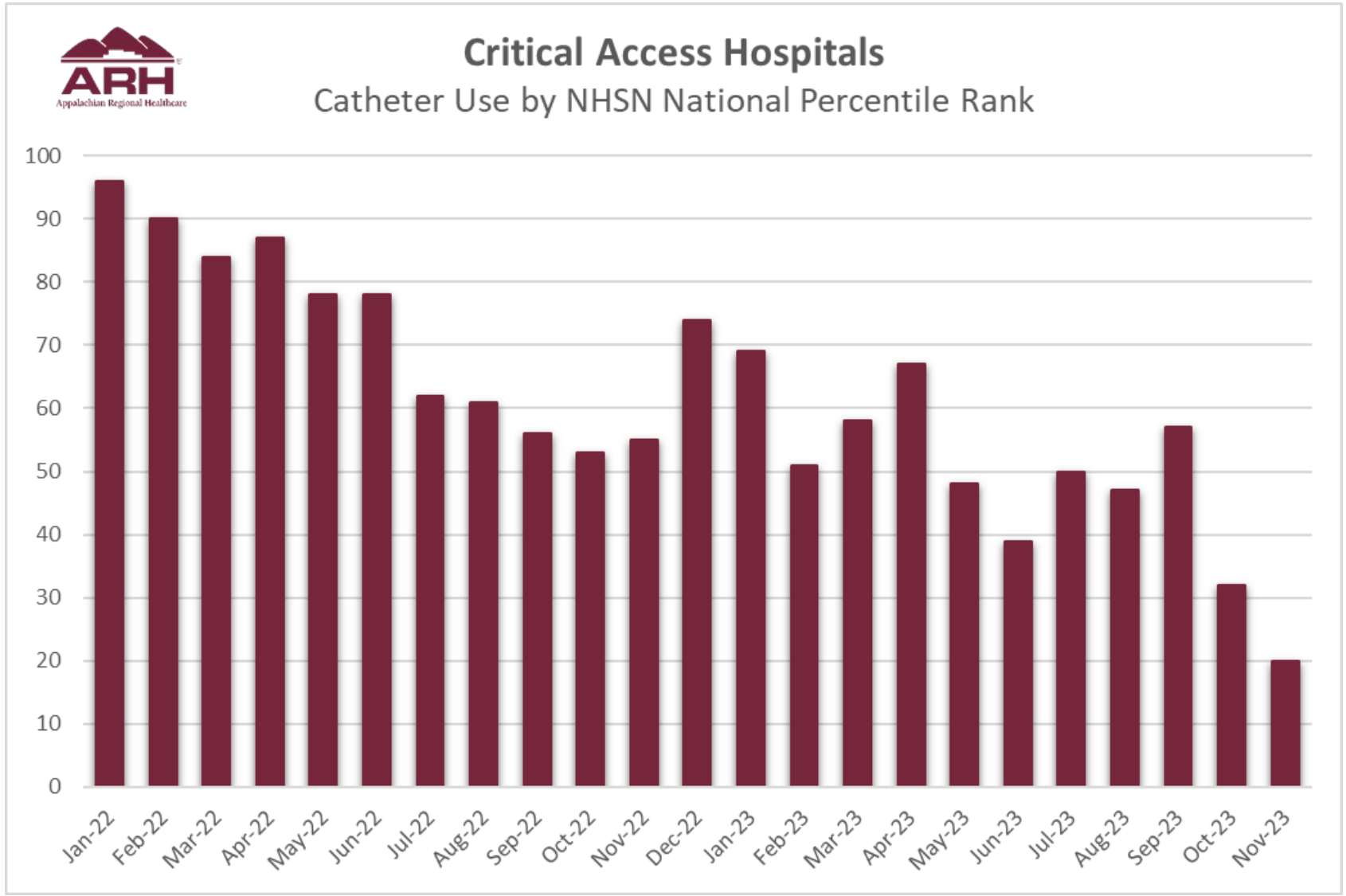
3 Goal: ≤18%

18%

Catheter Usage Ratio

37

National Percentile


Critical Access Hospitals
Catheter Use by NHSN National Percentile Rank
100
90
80
70
60
50
40
30
20
10
0
Jan-22
Feb-22
Mar-22
Apr-22
May-22
Jun-22
Jul-22
Aug-22
Sep-22
Oct-22
Nov-22
Dec-22
Jan-23
Feb-23
Mar-23
Apr-23
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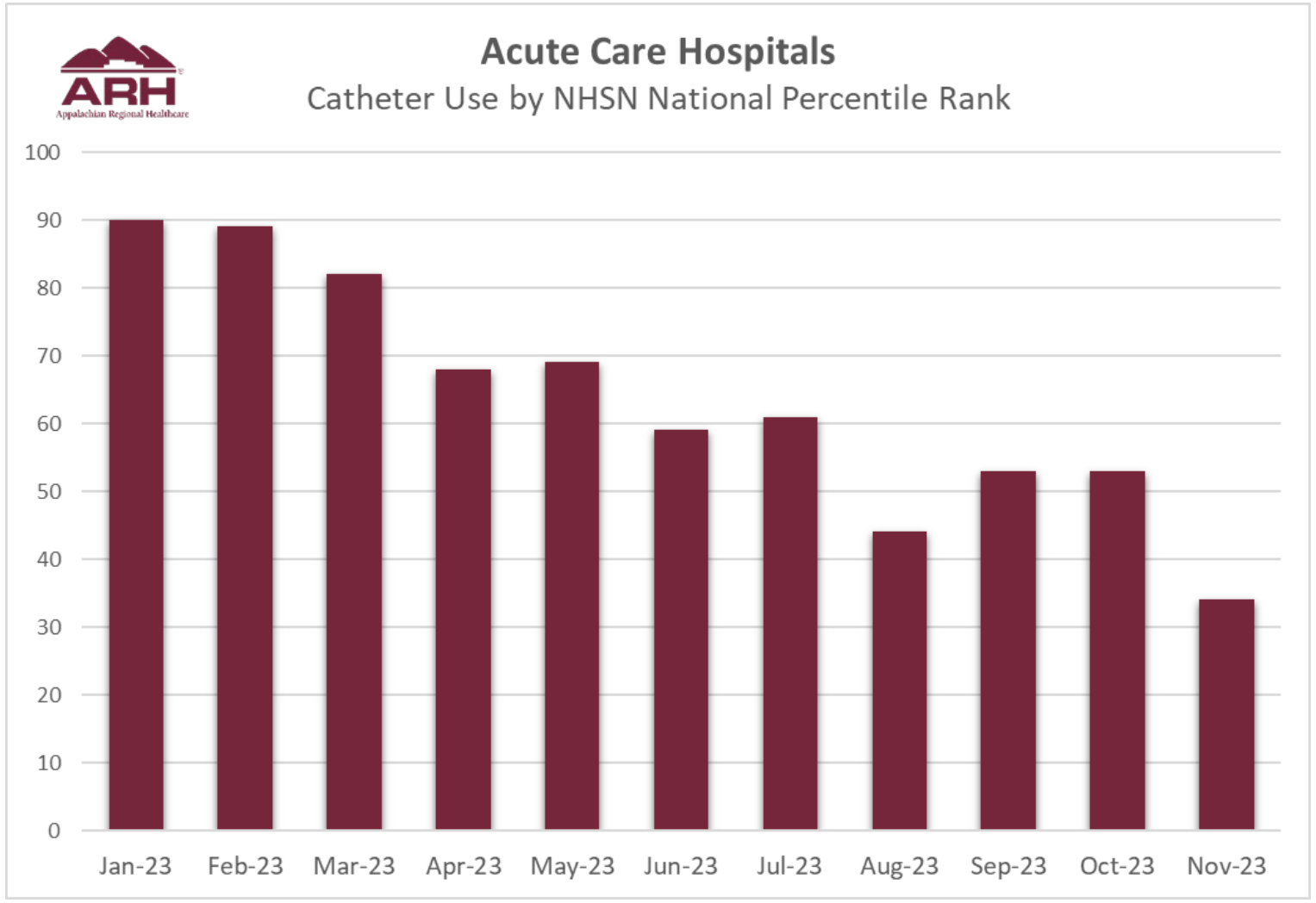
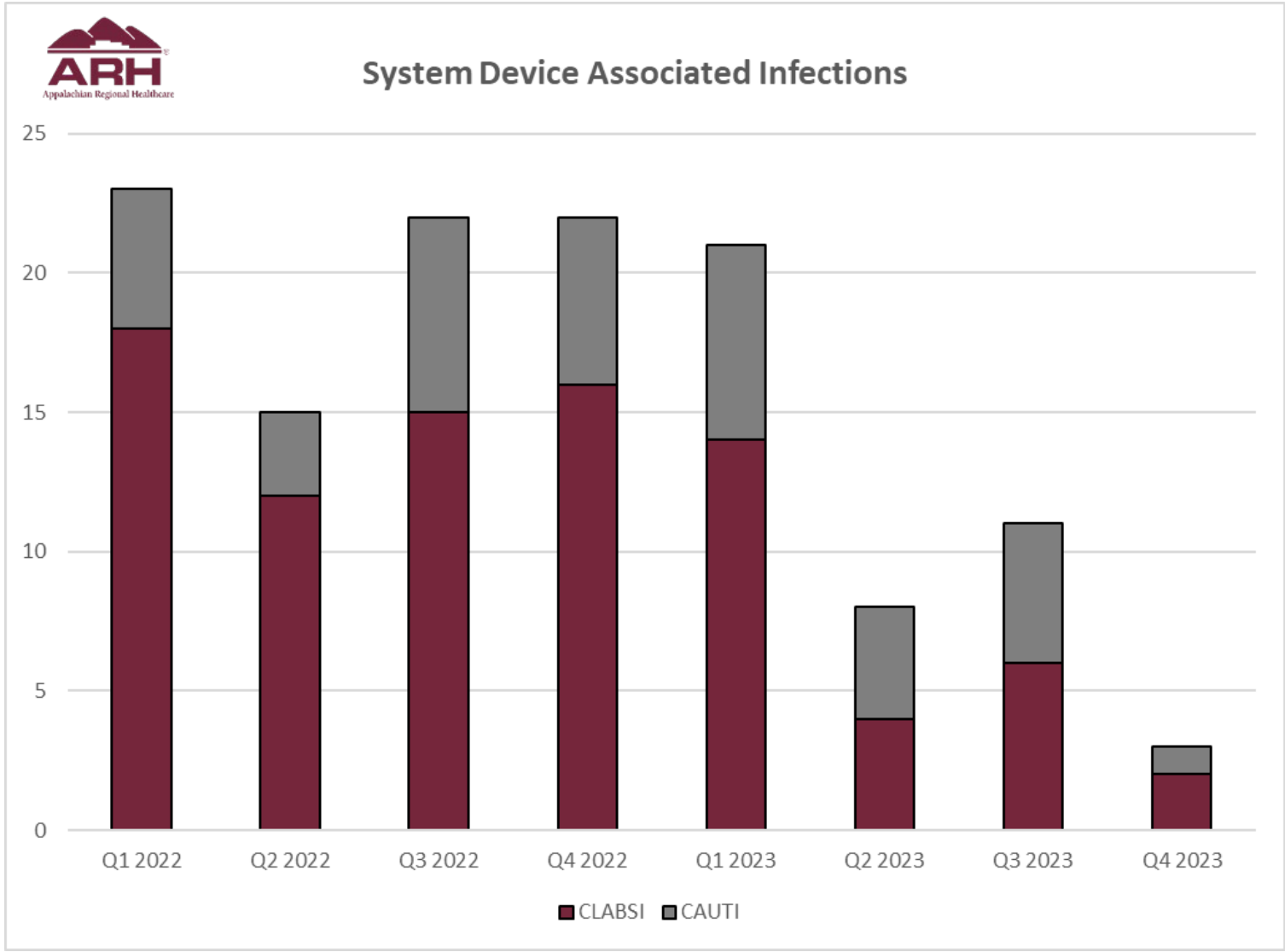
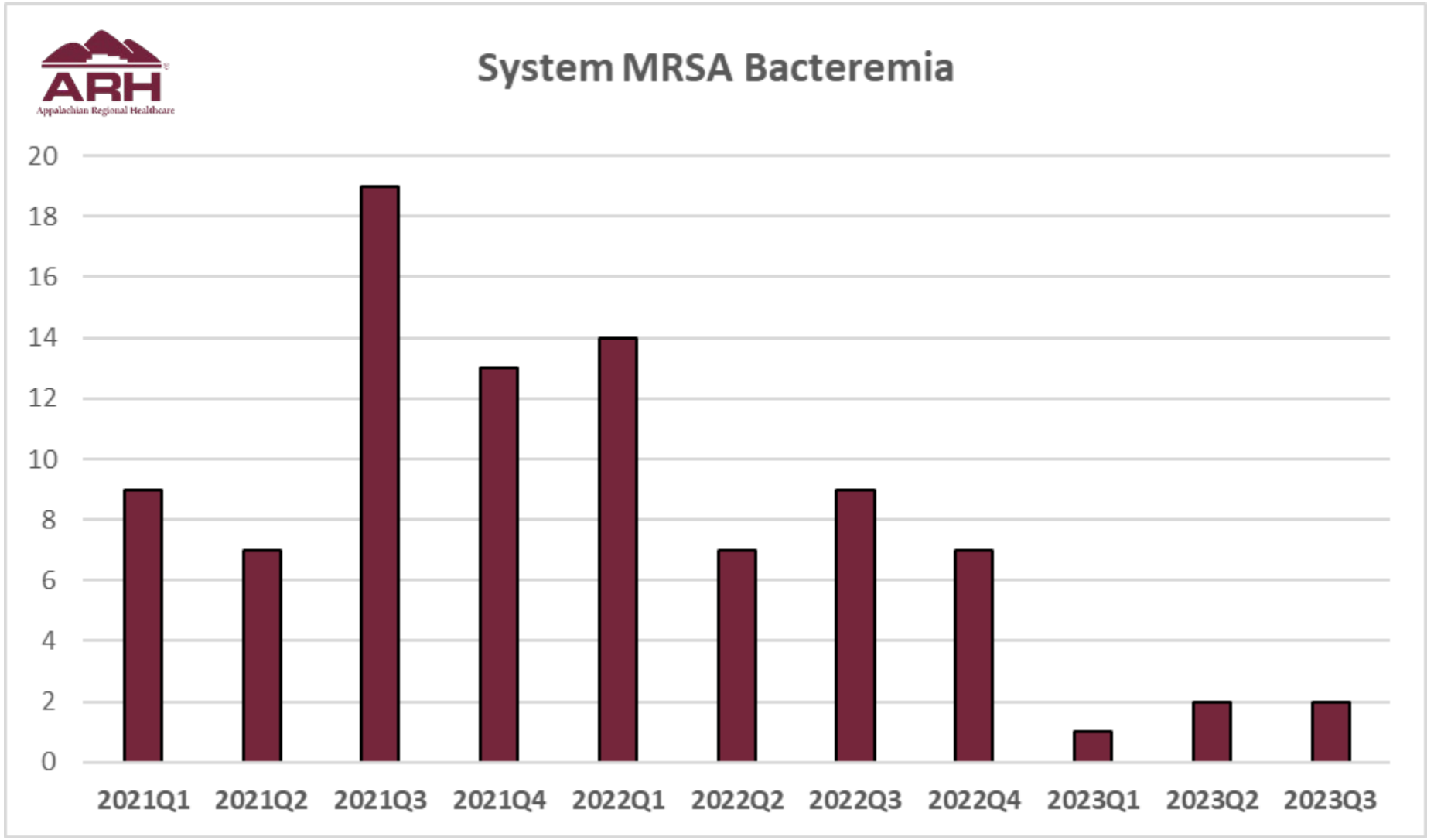
Jun-23
Jul-23
Aug-23
Sep-23
Oct-23
Nov-23


Acute Care Hospitals
Catheter Use by NHSN National Percentile Rank
100
90
80
70
60
50
40
30
20
10
0
Jan-23
Feb-23
Mar-23
Apr-23
May-23
Jun-23
Jul-23
Aug-23
Sep-23
Oct-23
Nov-23


ARH
Appalachian Regional Healthcare
System Device Associated Infections
25
20
15
10
5
0
Q1 2022
Q2 2022
Q3 2022
Q4 2022
Q1 2023
Q2 2023
Q3 2023
Q4 2023
CLABSI
CAUTI


ARH
Appalachian Regional Healthcare
System MRSA Bacteremia
20
18
16
14
12
10
8
6
4
2
0
2021Q1
2021Q2
2021Q3
2021Q4
2022Q1
2022Q2
2022Q3
2022Q4
2023Q1
2023Q2
2023Q3

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