

Keep Calm and Prevent CAUTI and CLABSI

Welcome!

- All lines are muted, so please ask your questions in Chat
- For technical issues, chat to the 'Technical Support' panelist
- Please actively participate in polling questions that pop up on the lower right-hand side of your screen

**We will get
started shortly!**

Collaborating to Support Your Quality Improvement Efforts



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HQIC

Hospital Quality Improvement Contractors
CENTERS FOR MEDICARE & MEDICAID SERVICES
QUALITY IMPROVEMENT & INNOVATION GROUP

Agenda

- Welcome and introductions
- CAUTI data analysis trends
- Performance improvement tools
- Northeast Alabama Regional Medical Center (NEARMC)
- Q&A
- Resources
- Adjourn



Karen Holtz, MT
(ASCP), MS, CPHQ
Alliant Health
Solutions

Featured Speaker



Debra Holmes, RN, BSN, CCDS
Director, Case Mgmt/Quality/Social Services/CDI
Northeast Alabama Regional Medical Center/RMC Stringfellow

Debra received her nursing degree from Gadsden State Community College and a bachelor's degree in nursing from Jacksonville State University. She has over 20 years of experience in quality and performance improvement. Prior to becoming a nurse, Debra worked as a pharmacy technician and veterinary assistant.

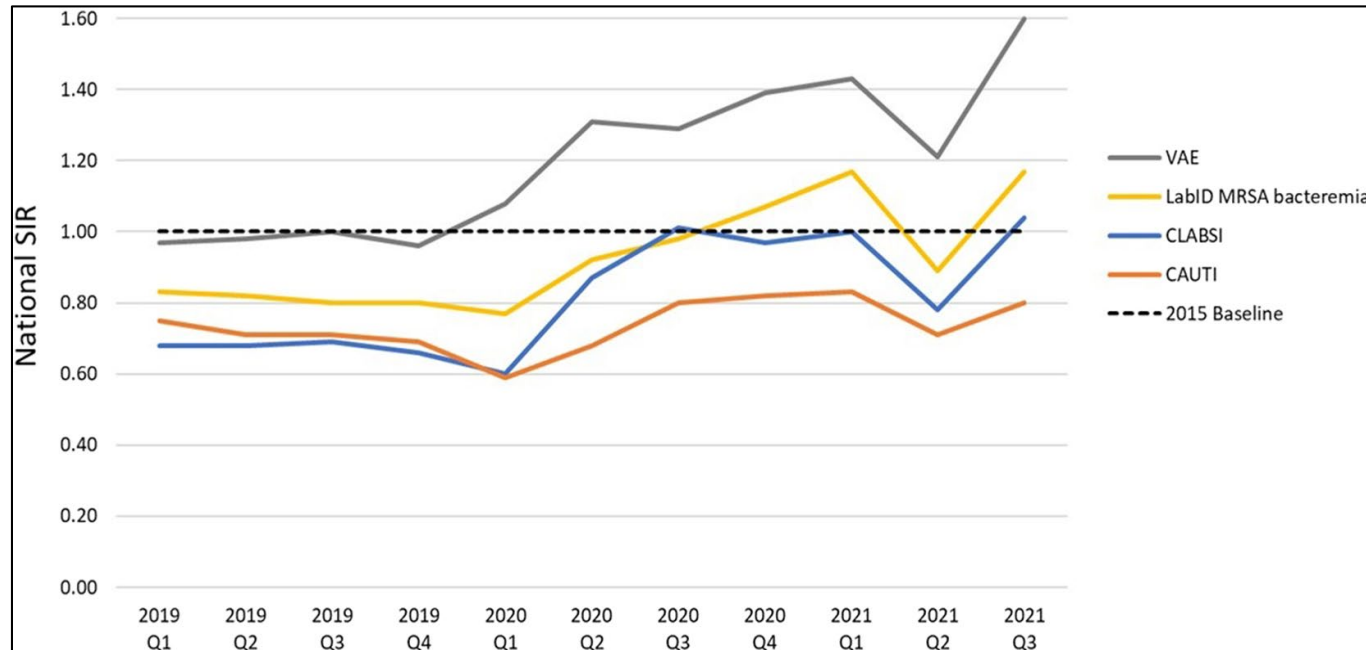
Learning Objectives

- Understand how changing the hospital-acquired infections (HAI) review process resulted in better patient outcomes
- Gain insight into how the Root Cause Analysis (RCA) process is used to identify missed opportunities to prevent CAUTI and CLABSI
- Learn how the team “shops at The Gaps” to implement best practice interventions

Healthcare-Associated Infections (HAI)



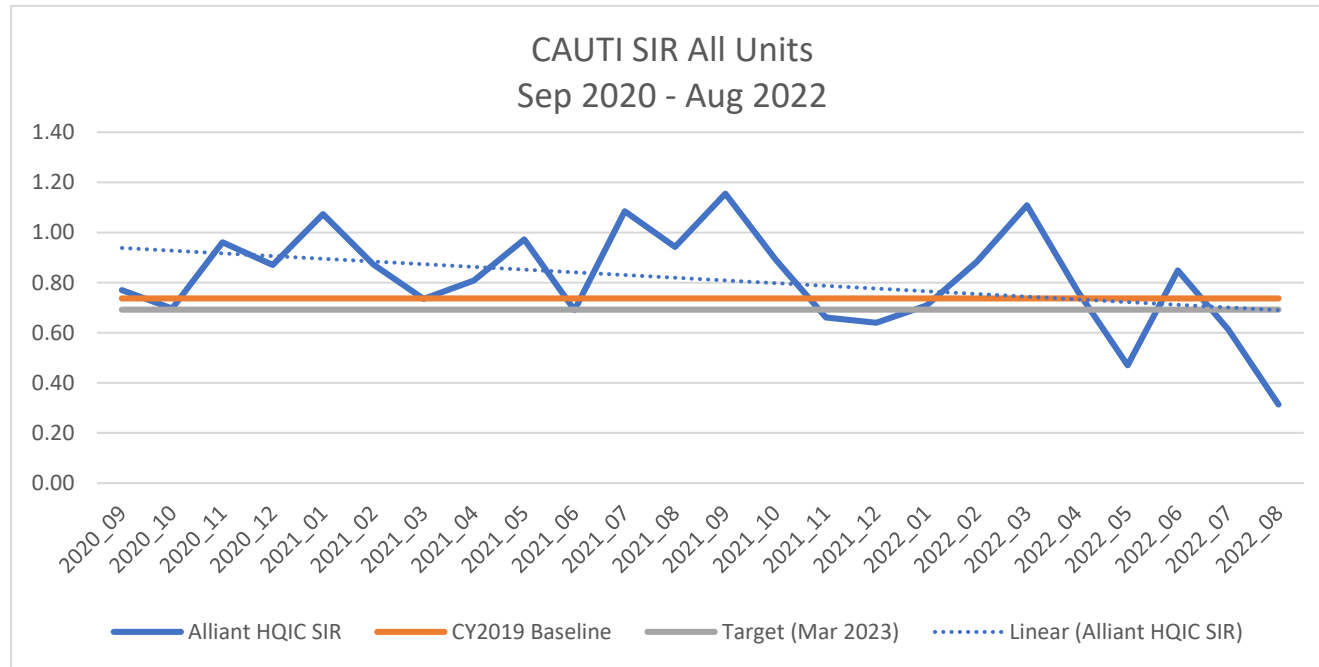
Quarterly National SIRs



Quarterly national SIRs for select HAI types, 2019-Q1 through 2021-Q3. The HAIs shown on this graph have been most affected by the COVID-19 pandemic, as demonstrated by CDC data.

Source: CDC

Alliant HQIC: CAUTI SIR All Units



- Overall downward trend
- Met target goal of 6% reduction from CY2019 baseline



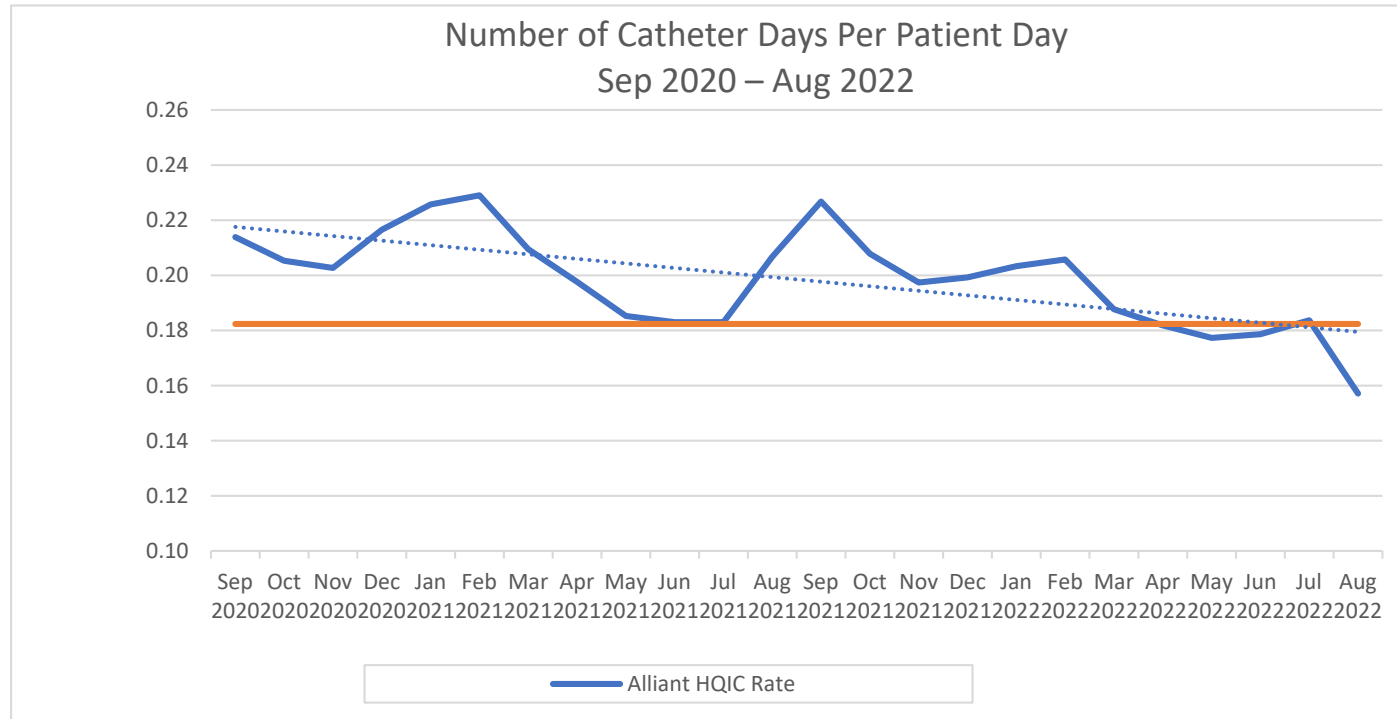
Data Source: NHSN (all payers)

Baseline: CY2019

Target Goal (Mar 2023): Decrease of 6% from CY2019 baseline

HQIC Average: all enrolled HQIC hospitals reporting; N = 123/150 (82%)

Alliant HQIC: Number of Catheter Days per Patient Day



- Overall downward trend
- Met goal of less than CY2019 baseline



Data Source: NHSN (all payers)

Baseline: CY2019

Goal: Achieve less than 2019 Baseline

HQIC Average: all enrolled HQIC hospitals reporting; N = 126/150 (84%)

Alliant HQIC Top Five Interventions

- Nurse-driven protocol
- Alternatives to Foley
- Physician and nurse champions leading the charge
- Ongoing assessment for device necessity reviewed and documented daily
- IP rounding and conducting direct observations and providing education as needed

Top Performance Improvement Tools

- Gap analysis is a tool used to assess the difference between actual practice and expected performance
https://quality.allianthealth.org/wp-content/uploads/2021/11/CAUTI-Gap-Assessment-Tool_2SOW-AHS-TO3-HQIC-1058-10.29.21.pdf
- Cause and effect/fishbone diagram is a tool used to identify and visually display all possible causes related to a problem and to pinpoint the root cause(s)
https://quality.allianthealth.org/wp-content/uploads/2021/07/Fishbone-Diagram-Worksheet_AHSHQIC-TO3H-21-871_11.5.21_508.pdf
- Pressure injuries example of cause and effect diagram
<https://quality.allianthealth.org/wp-content/uploads/2022/04/HQIC-Fishbone-Diagram-Pressure-Injuries-v2.pdf>
- Audit/Observation tool
<https://www.cdc.gov/infectioncontrol/pdf/QUOTS/Urinary-Catheter-Observation-P.pdf>
- CAUTI event report
<https://www.ahrq.gov/hai/cauti-tools/impl-guide/implementation-guide-appendix-o.html>

Northeast Alabama Regional Medical Center (NEARMC) Anniston, AL



NEARMC: 338 licensed beds



Stringfellow: 125 licensed beds

Mission Statement



RMC
HEALTH SYSTEM

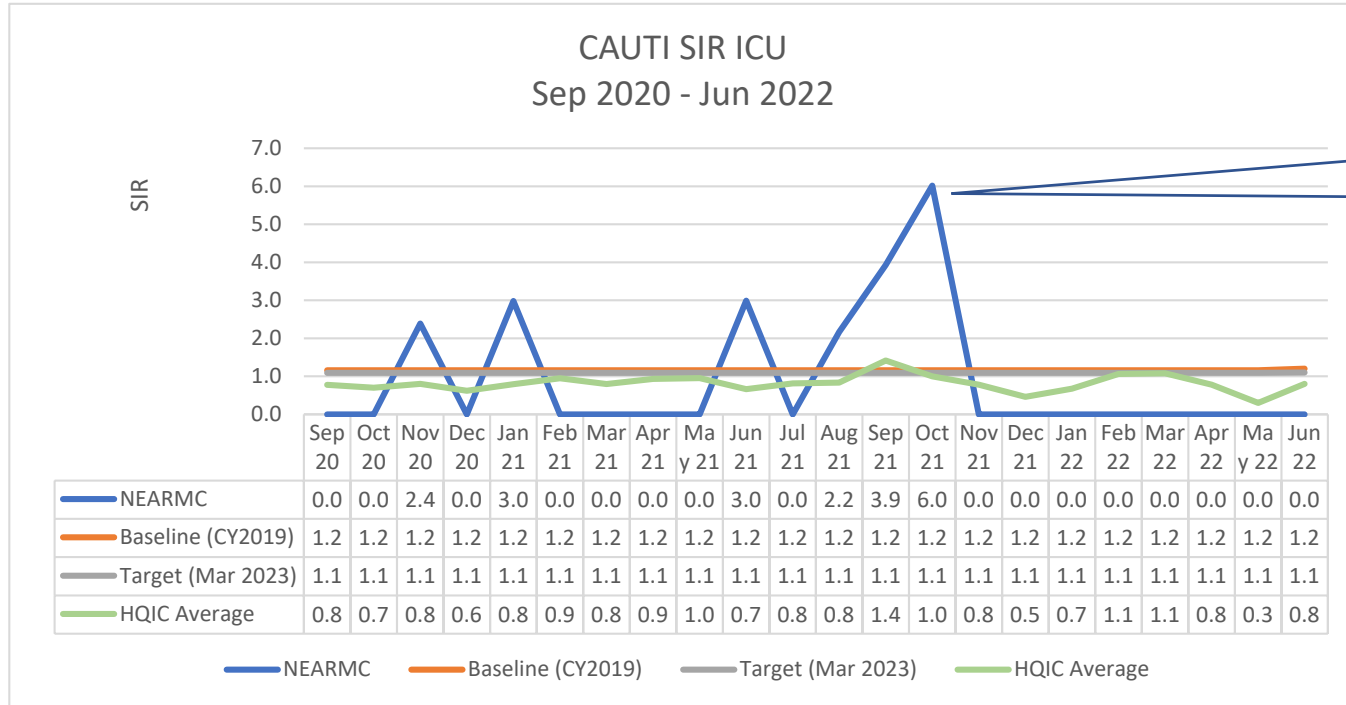
Providing state of the art health care
with integrity,
to the people we serve



RMC
HEALTH SYSTEM

MISSION

CAUTI SIR ICU: Currently Maintaining Zero, Meeting Target Goal and Better than HQIC Average



- All but one patient was Covid+
- 63 Covid deaths in September 2021

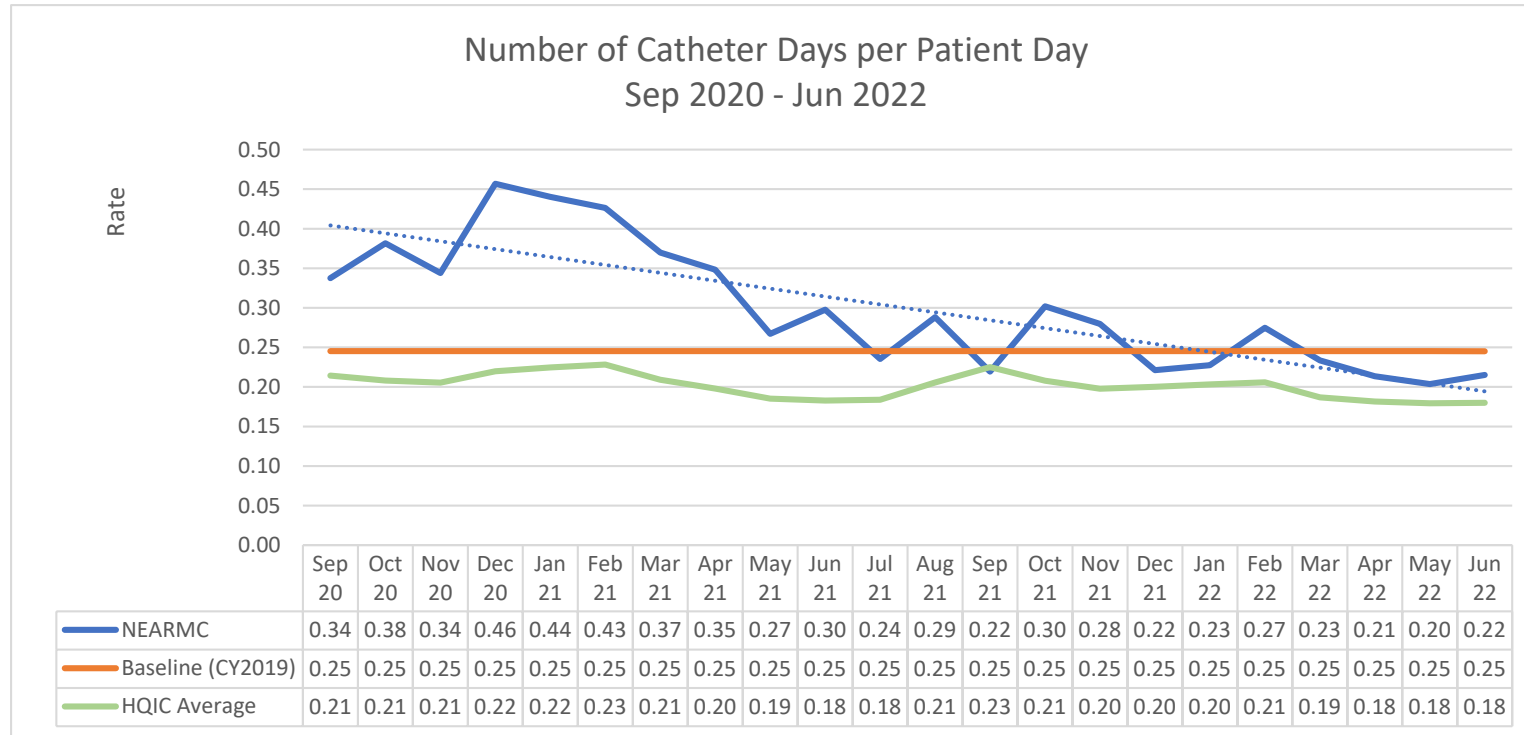
Data Source: NHSN (all payers)

Baseline: CY2019

Target Goal: 6.0% reduction from 2019 baseline by March 2023

HQIC Average: all enrolled Alliant HQIC hospitals reporting; N = 70/80 (87.5%)

Number of Catheter Days per Patient Day: Overall Downward Trend and Currently Below 2019 Baseline



As we increased awareness and prevention total device days declined as well = **WIN WIN**

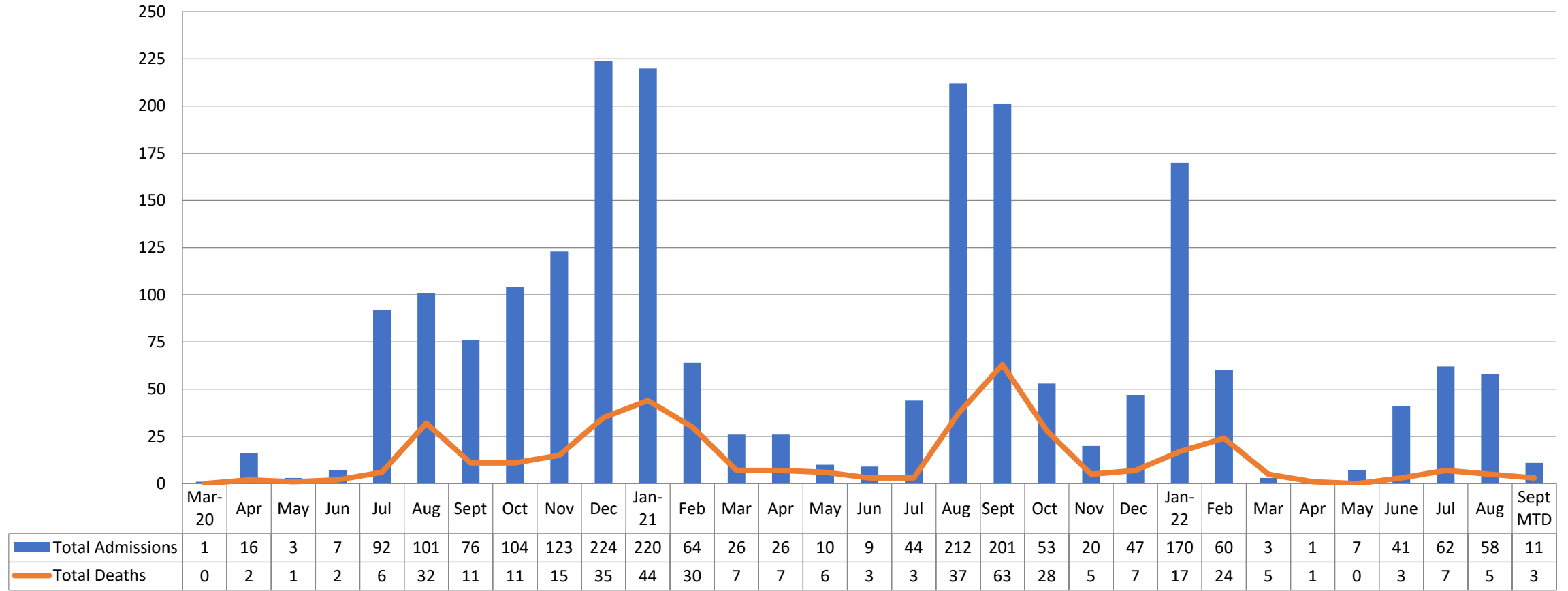
Data Source: NHSN (all payers)

Baseline: CY2019

Goal: Achieve less than 2019 Baseline

HQIC Average: all enrolled HQIC hospitals reporting; N = 126/150 (84%)

RMC Health System COVID Admissions/Deaths March 2020-September 2022 MTD

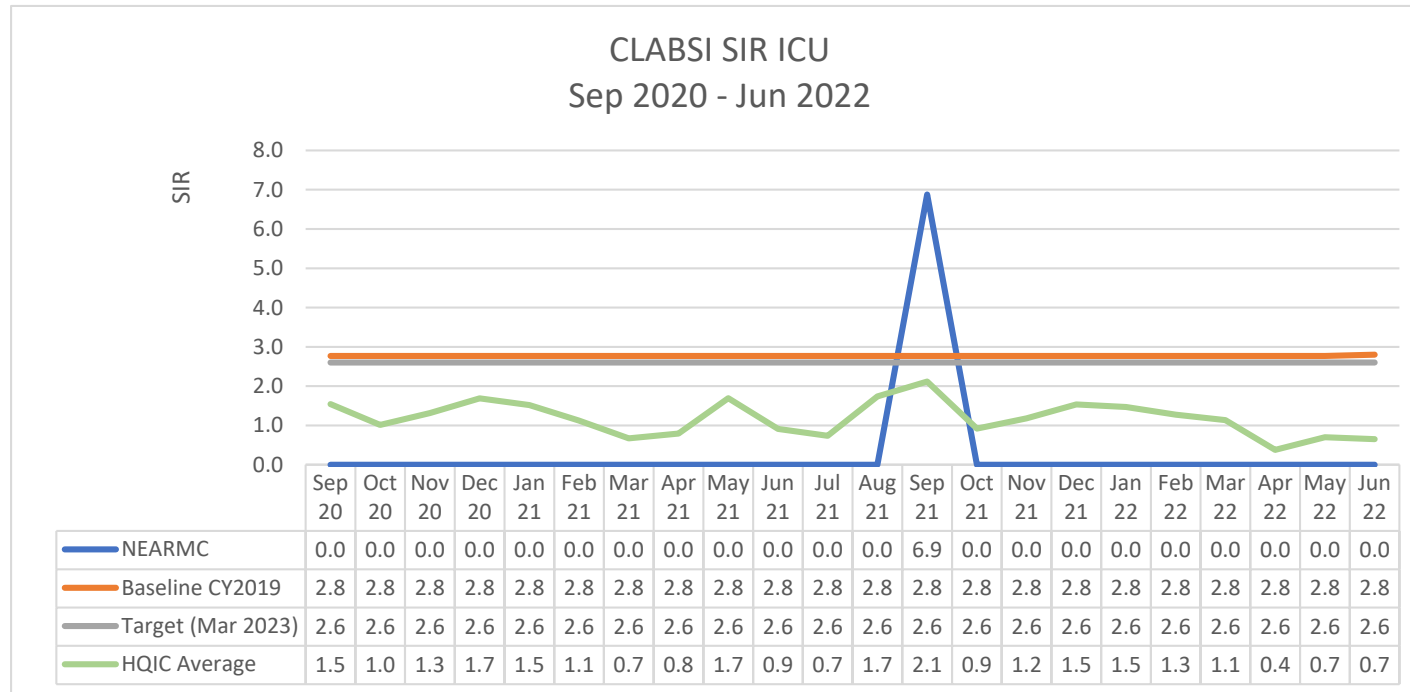


CAUTI Interventions

- Development of a CAUTI prevention team
- Policy review
- Development of an automated daily Foley report emailed to all managers (thank you, IT department!)
- Rounding and monitoring of Foley by ICPs
- Staff education and utilization of external catheters
- Implementation of Provon cleansing wipes for Foley care for ICU patients
- Updated and posted new educational posters for units for when to use Foleys vs. external catheters
- Reviewed best practice for reflex UCs off of UAs
- Re-education on bladder bundle and Foley protocol
- Periodically posting “potty posters” with reminders and education regarding foleys
- **HAI team conducts root cause analysis**

CLABSI SIR ICU: Currently Maintaining Zero, Meeting Target Goal and Better than HQIC Average

One CLABSI is in the midst of a COVID storm...



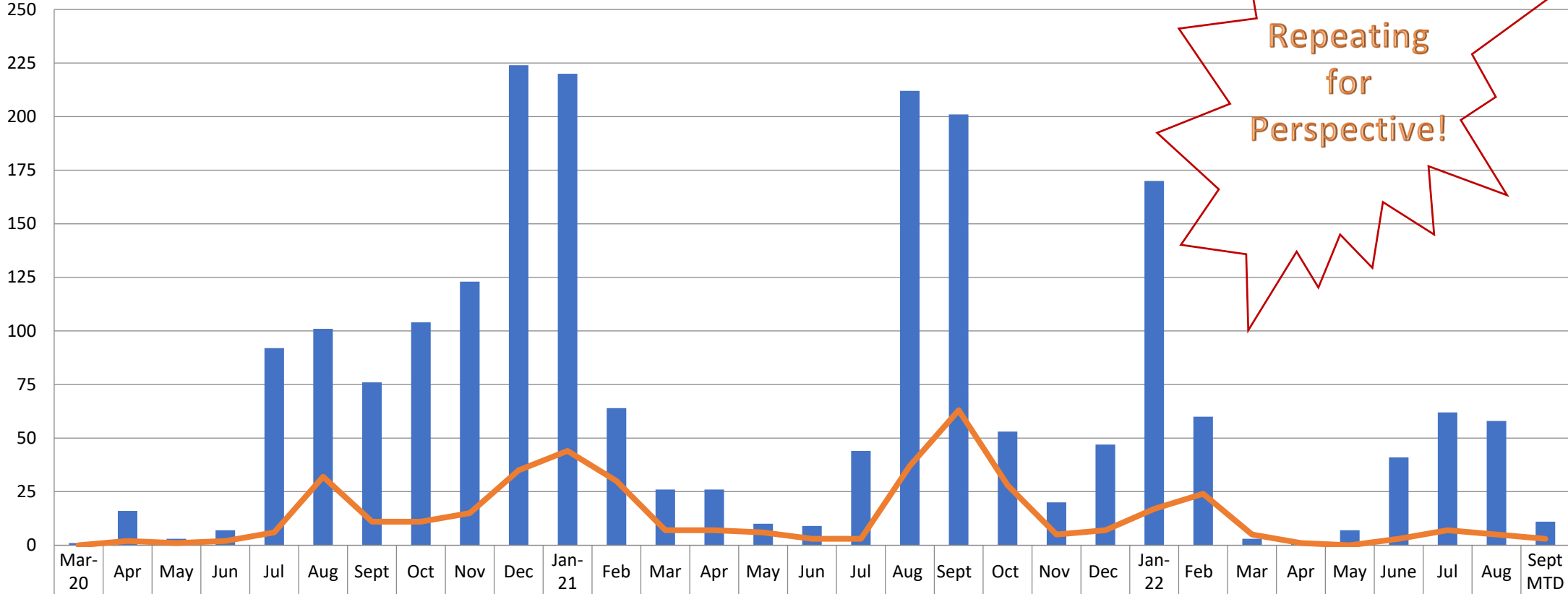
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Baseline: CY2019

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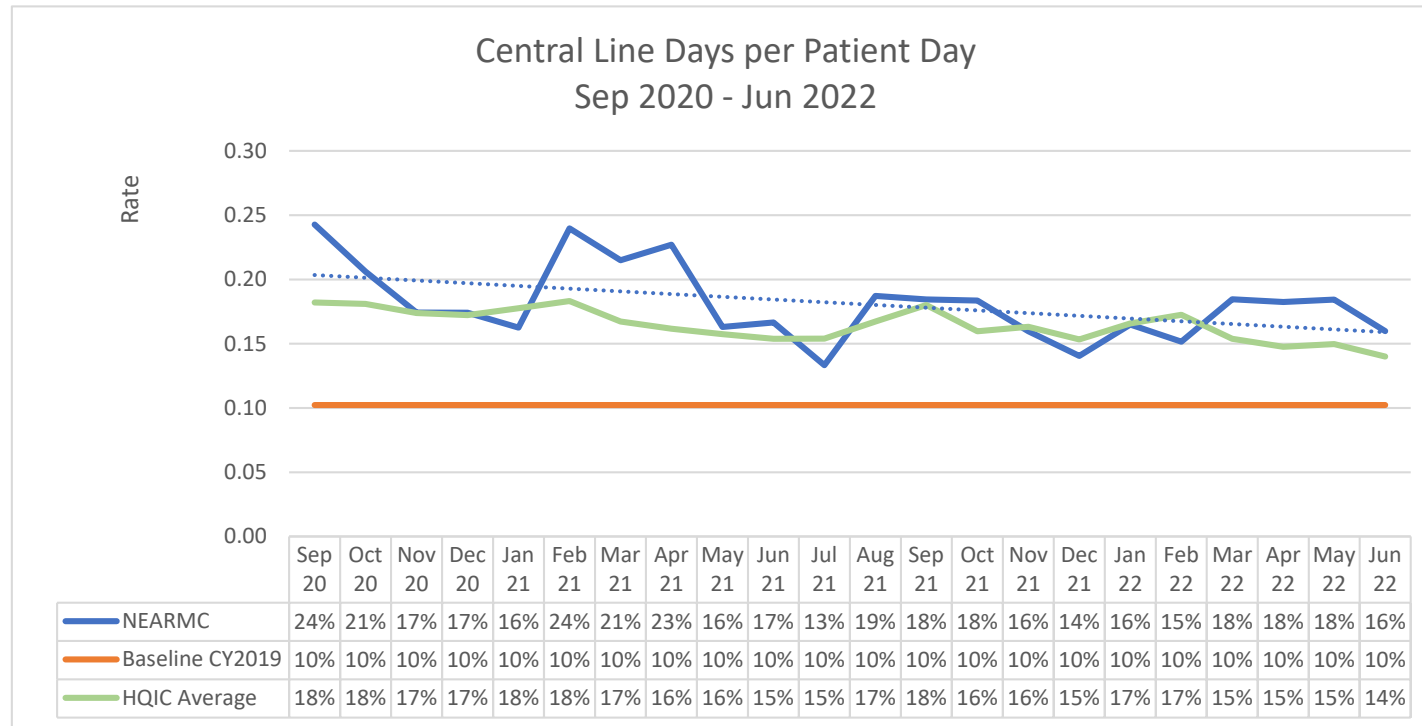
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RMC Health System COVID Admissions/Deaths March 2020-September 2022 MTD



■ Total Admissions	1	16	3	7	92	101	76	104	123	224	220	64	26	26	10	9	44	212	201	53	20	47	170	60	3	1	7	41	62	58	11
— Total Deaths	0	2	1	2	6	32	11	11	15	35	44	30	7	7	6	3	3	37	63	28	5	7	17	24	5	1	0	3	7	5	3

Number of Central Line Days per Patient Day: Overall Downward Trend



Again...awareness
decreases device days

Data Source: NHSN (all payers)

Baseline: CY2019

Goal: Achieve less than 2019 Baseline

HQIC Average: all enrolled HQIC hospitals reporting; N = 126/150 (84%)

CLABSI Interventions

- PICC team is notified of CVLs and performs all scheduled dressing changes at least every seven days and PRN dressing changes when notified by staff
- Utilize an all-inclusive dressing change kit with biopatch
- As the PICC team is consulted for IV access, they will utilize midlines whenever possible in place of a PICC
- All central lines are assessed daily for continued need and obtain an order to DC as soon as appropriate
- Utilize Curoc caps on IV ports
- Re-enforced to staff no blood draws from the central line
- **HAI team conducts root cause analysis**

Multidisciplinary Hospital Acquired Infection (HAI) Team

- ★ Nursing
- ★ Administration
- ★ Quality
- ★ Infection Prevention
- ★ Medical Staff



- HAI team meets every two weeks or more often to conduct an RCA on each failure and apply inclusion/exclusion criteria
- HAI team decides as a group if it is a true reportable CAUTI/CLABSI

Challenges and Solutions AKA Shopping at “The Gaps”

Challenges	Solutions
Working on prevention in the throes of COVID	IP monitoring, nurse manager ownership
Foleys being ordered without true necessity	Re-education regarding Foley bundle
No sense of urgency in discontinuing Foleys	Bundle education. Implemented process to ask for Foley removal prior to transfer from Emergency Department.
No good alternative for male Foleys	Trial and implementation of male external catheter (Liberty)

How the HAI Team Works

- ICPs identify and investigate each potential CLABSI, CAUTI, C Diff, MRSA and SSI, utilizing a worksheet for each measure.
- Prior to meeting, the information goes out to team members for them to investigate (Quality, nurse managers, ED, etc.).
- Every two weeks, the team meets to discuss each case for the root cause and possible preventative measures/actions.
- Inclusion/exclusion criteria are applied as appropriate.
- A decision is made **as a group** if an occurrence qualifies as an HAI.

Root Cause Analysis (RCA) Form Used

Aceto will not count

URINE NIM Work up sheet

NAME _____ MR# _____

AGE 62 yom

ADMIT 8-3

DISCHG 8-22 deceased

COLLECT 8-12

Ordering Physician -UA Reason? _____

>10'S? YES NO e. coli ESBL

FOLEY? YES NO DATES 8-4 → d/c (end of life)

Meets crit for CAUTI? YES NO (in place greater than 2 days and present day of event or day before)

FEBRILE? YES NO DATE 8-12 TEMP 101.2

S&S YES NO

BCs? YES NO X2 negative

Other details or suggestions that may have prevented NIM _____

Covid ⊕

DNR status 8/3

CAUTI

It Takes a Village!



Type Questions in Chat



1. Share checklists for root cause analysis

- Gap analysis is a tool used to assess the difference between actual practice and expected performance

https://quality.allianthealth.org/wp-content/uploads/2021/11/CAUTI-Gap-Assessment-Tool_2SOW-AHS-TO3-HQIC-1058-10.29.21.pdf

- Cause and effect/fishbone diagram is a tool used to identify and visually display all possible causes related to a problem and to pinpoint the root cause(s)

https://quality.allianthealth.org/wp-content/uploads/2021/07/Fishbone-Diagram-Worksheet_AHSHQIC-TO3H-21-871_11.5.21_508.pdf

2. How to do surveillance when not reporting to NHSN for a very small hospital? IP rounding and conducting direct observations and providing education as needed

Key Takeaways

- Understand how changing the HAI review process resulted in better patient outcomes
- Gain insight into how the RCA process is used to identify missed opportunities to prevent CAUTI and CLABSI
- Learn how the team “shops at The Gaps” to implement best practice interventions



How will this change what you do?
Please tell us in the poll...

Resources

- CAUTI Coaching Package
https://quality.allianthealth.org/wp-content/uploads/2022/05/AHS-HQIC-Coaching-Package-CAUTI_FINAL_508.pdf
- Alliant Quality HQIC CAUTI Gap Assessment Tool
https://quality.allianthealth.org/wp-content/uploads/2021/11/CAUTI-Gap-Assessment-Tool_2SOW-AHS-TO3-HQIC-1058-10.29.21.pdf
- Toolkit for Reducing Catheter-Associated Urinary Tract Infections in Hospital Units: Implementation Guide (AHRQ)
<https://www.ahrq.gov/hai/cauti-tools/guides/implguide-pt3.html#approp>

NEARMC Bladder Bundle

BLADDER BUNDLE

Policy Applies To:	Organization, Administrative
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Review History:	
Revised History:	11/2011, 3/2013; 2/2016 (formerly Foley Cath); 4/2016, 8/2019, 5/2021

PURPOSE

To prevent and reduce the risk of catheter-associated urinary tract infection

POLICY

To limit the use of urinary catheters to carefully selected patients, thereby reducing the size of the population at risk.

PROCEDURE:

1. Appropriate indications for Indwelling Urethral Catheter use
 - a. Acute anatomic or functional urinary retention or bladder outlet obstruction
 - b. Need for accurate measurements of urinary output in critically ill patients
 - c. Perioperative use for selected surgical procedures
 - d. To assist in healing of open sacral or perineal wounds in incontinent patients
 - e. Patient requires prolonged immobilization (e.g., potentially unstable thoracic or lumbar spine; multiple traumatic injuries, such as pelvic fracture; immediate post op or post procedures requiring bedrest for less than 24 hours; PE or DVT requiring strict bedrest)
 - f. To improve comfort for end of life care if needed
 - g. Chronic indwelling catheter present on admission

Examples of inappropriate use: a substitute for nursing care of the patient with incontinence, prolonged postoperative duration without appropriate indications, and as a means of obtaining urine for culture or other diagnostics when the patient can voluntarily void
2. Proper technique for Urinary Catheter Insertion
 - a. Perform hand hygiene immediately before and after insertion or any manipulation of the catheter device or site.
 - b. Insert using aseptic technique
 - c. Secure line with stat lock device

Policy Applies To:	Organization, Administrative
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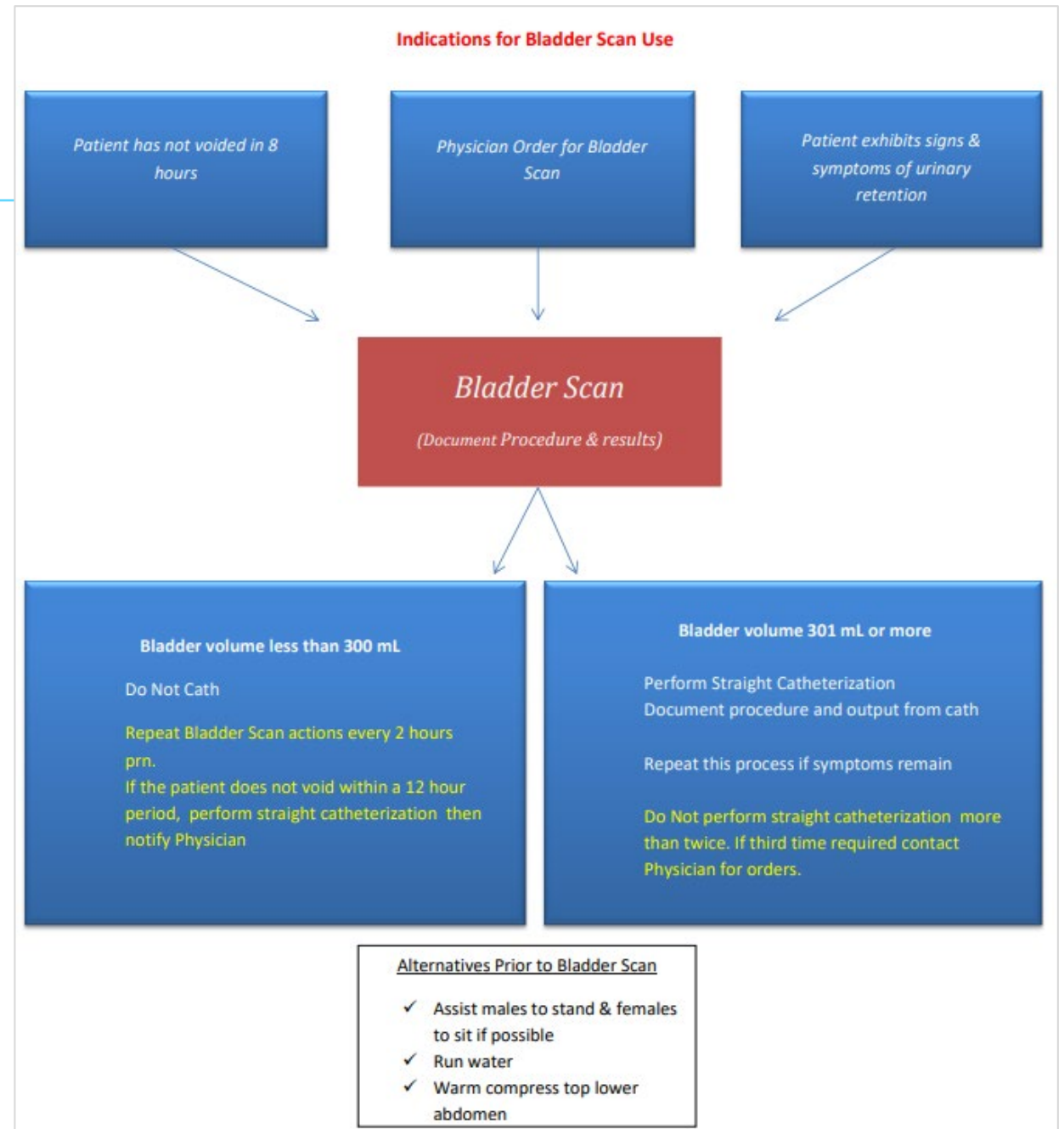
3. Proper techniques for urinary catheter maintenance
 - a. Maintain a closed drainage system
 - b. Maintain unobstructed urine flow
 - i. Keep the tubing free from kinking
 - ii. Keep the collection bag below the level of the bladder at all times
 - iii. Empty the collection bag regularly
 - c. Indwelling urinary catheters inserted in emergency situations must be discontinued or changed within 24 hours
 - d. Obtain urine specimens aseptically
 - i. A urinalysis and urine culture is collected on admission for patients admitted from nursing homes, assisted living facilities, long term care facilities or other hospitals.
 - ii. Patients admitted with an indwelling urinary catheter in place will have it changed out to the silver indwelling catheter system. A urinalysis and urine culture will be collected after the catheter is changed out.
4. Assessment of urinary catheter
 - a. Nursing will assess the patient daily for the need to have an indwelling urinary catheter
 - b. The nurse will discontinue the indwelling urinary catheter if it does not meet criteria, unless ordered by the physician
 - c. Remove indwelling urinary catheters within 24-48 hours after surgery unless ordered by physician
 - d. The ICU nurse will discontinue the indwelling urinary catheter upon transfer of the patient to a medical floor unless reordered by the physician
5. Alternatives to indwelling urinary catheter
 - a. Bladder Scan (see Bladder Scan flowchart)
 - b. Intermittent catheterization
 - c. External catheters
 - d. Bedside commodes
 - e. Prompted toileting

Attachment A: [Indications for Bladder Scan Use \(Attachment-BLADDER BUNDLE\)](#)

Attachment B: [Indwelling Urinary Catheter Removal Protocol \(Attachment-BLADDER BUNDLE\)](#)

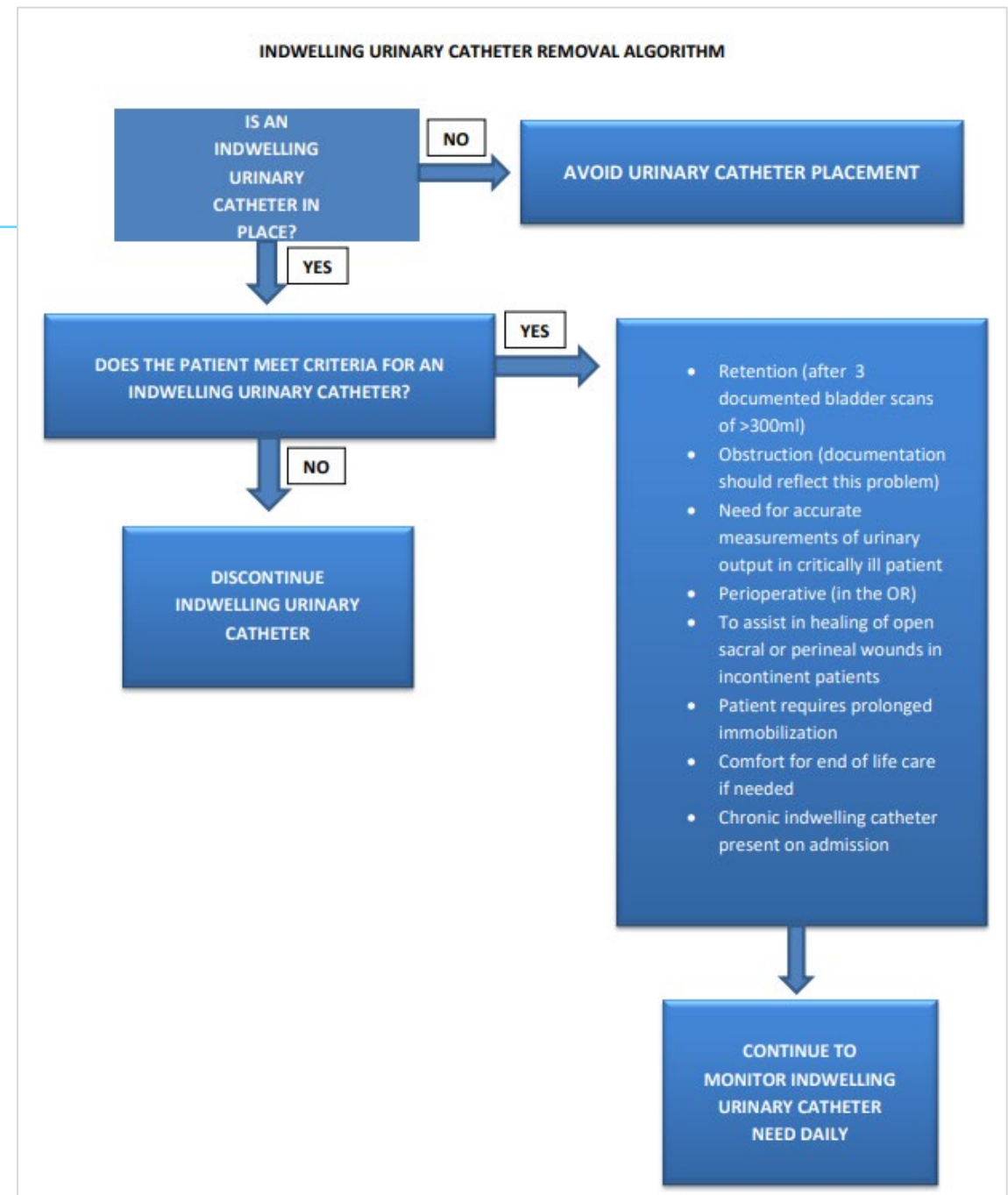
NEARMC Indications for Bladder Scan Use

Attachment A



NEARMC Indwelling Urinary Catheter Removal Algorithm

Attachment B



Upcoming Events



Thursday, Oct. 27, 2022

1-1:30 pm ET/12-12:30 pm CT/11-11:30 am MT/10-11am PT

CAUTI Prevention in Action: Strategies from the Field (physician champion and staff education)

Registration link below

<https://telligen.zoom.us/meeting/register/tZYkcuChrT4uHNGFJWJt2CX8FZHRTWxIbcpS>

Contact Us



HOSPITAL QUALITY
IMPROVEMENT CONTRACTOR



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- Q3 Health Innovation Partners
- Superior Health Quality Alliance



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