





Health Quality Innovation Network

# HQIC Summer Spread and Sustainment Series

June 13, 2024

# Logistics – Zoom Meeting



To ask questions, click on the **Chat** icon. At the end of the presentation, you will also be able to unmute to ask a question verbally.

You may adjust your audio by clicking the caret next to the **Mute** icon.

Resources from today's session will be shared after the call.



## **HQIC Summer Spread & Sustainment Series**

### **Hospital Acquired Infections & Antimicrobial Stewardship**

# Health Quality Innovation Network

## Today's Faculty



**Deb Smith, MLT, BSN, CIC, CPHQ**  
Consulting Manager, HQI

# Disclosure of Relevant Financial Relationships

The faculty: Tyler Craft, PharmD, BCPS, Katie Jo Hogenmiller, BSN, RN, and Deborah Smith, MLT (ASCP), BSN, CIC, CPHQ, reported no relevant financial relationships or relationships with ineligible companies of any amount during the past 24 months.

The directors, planners, managers, peer reviewers, and relevant staff for this activity reported no financial relationships they have with any ineligible company of any amount during the past 24 months.

# Series Learning Objectives

- 1 Examine new options for reducing hospital acquired infections, sepsis, and readmissions
- 2 Develop strategies to improve outcomes for hospital acquired infections, sepsis, and readmissions
- 3 Outline operationalizing new interventions to improve outcomes for hospital acquired infections, sepsis, and readmissions
- 4 Apply new strategies to strengthen your improvement efforts
- 5 Identify approaches to integrate health equity and engage patients and their families with the support of leadership

# National Priorities





# Increase Patient Safety

- Reduce all-cause harm
- Reduce readmissions
- Reduce ADEs due to opioids, anticoagulants and diabetic agents
- Reduce *C. Difficile*, MRSA and other drug resistant organisms
- **Improve antibiotic stewardship**
- Sepsis and septic shock
- Pressure ulcers
- Surgical site infections
- Venous thromboembolism
- Ventilator-associated events
- Injury from falls and immobility
- Airway safety
- CLABSI and **CAUTI** in all hospital settings



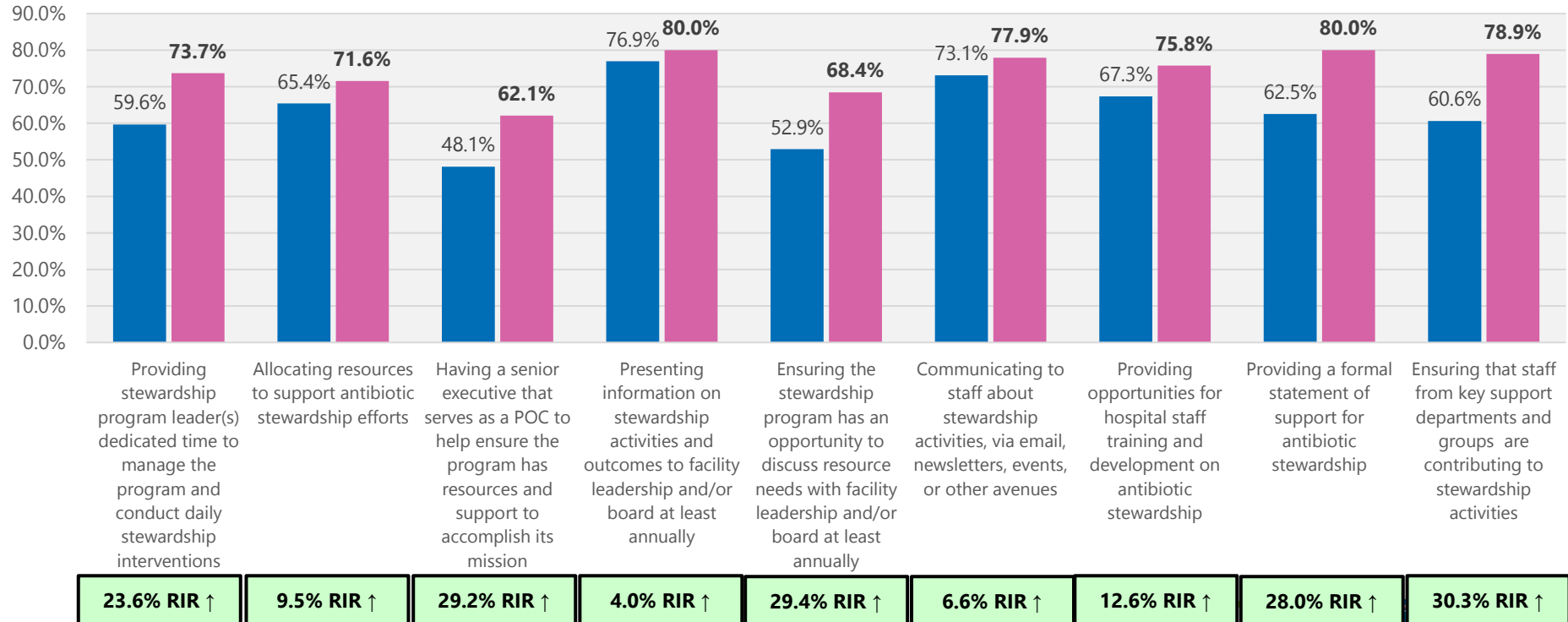


# **2023 Annual Hospital Survey: Antimicrobial Stewardship Practices**

5/15/24

## % of HQIC hospitals whose facility leadership has **demonstrated commitment to antibiotic stewardship efforts** in the following areas

■ 2021 (n = 104) ■ 2023 (n = 95)





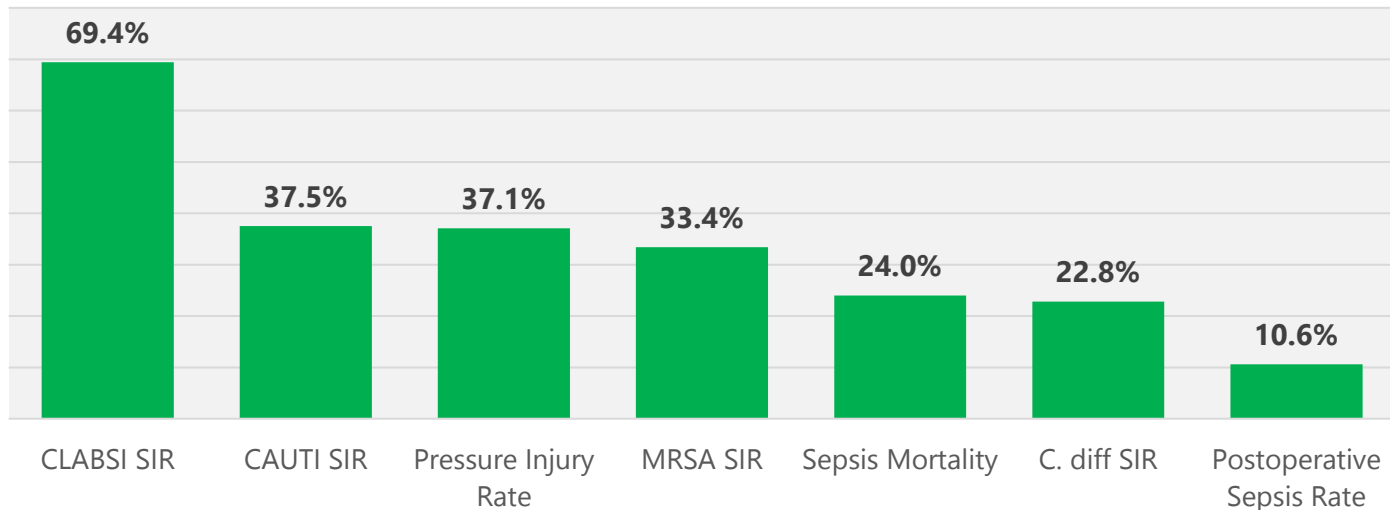
Health Quality Innovation Network

# HQIC Patient Safety Progress

5/15/24

# Hospital Quality Improvement Contractor (HQIC) HQIC Results

Relative Improvement Rate from Baseline\* (Oct20-Sep21) to  
Remeasurement (Oct22-Mar24)

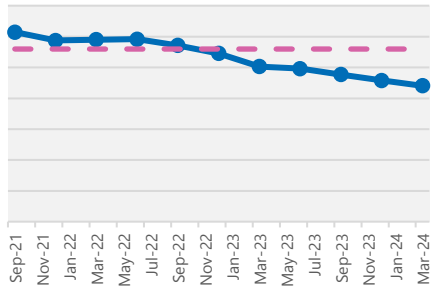


\* The baseline timeframe for all measures depicted above represents Oct20-Sep21 except for the C.diff SIR which has a baseline timeframe of Jan19-Dec19.

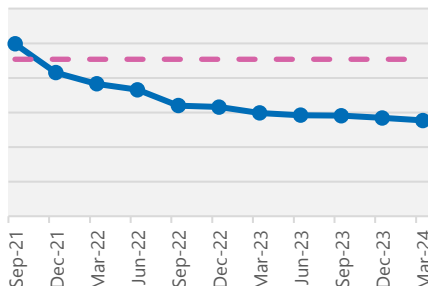
# Hospital Quality Improvement Contractor (HQIC)

## HQIC Results (cont'd)

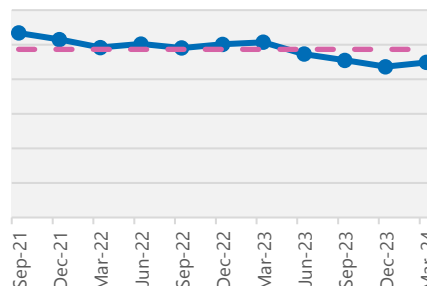
30-Day Sepsis Mortality Rate



CAUTI SIR - All Hospital locations

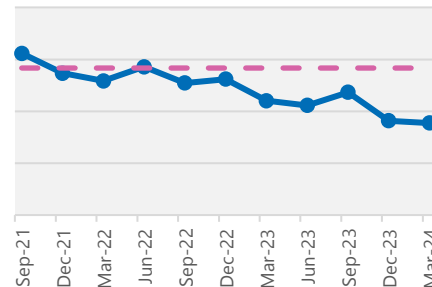


C.diff SIR

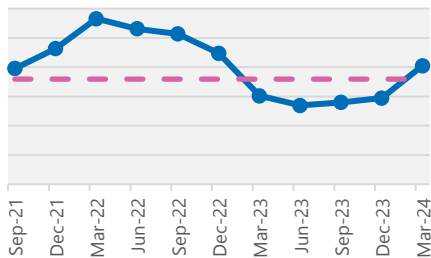


—●— Network Performance  
 - - - GOAL: 9% Reduction

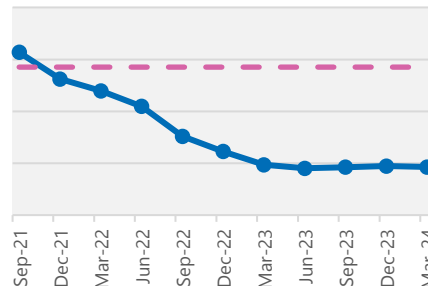
PSI-03: Pressure Injury Rate



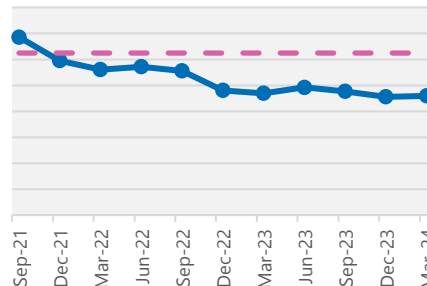
PSI-13: Postoperative Sepsis and Septic Shock Rate



CLABSI SIR - All Hospital locations



MRSA SIR

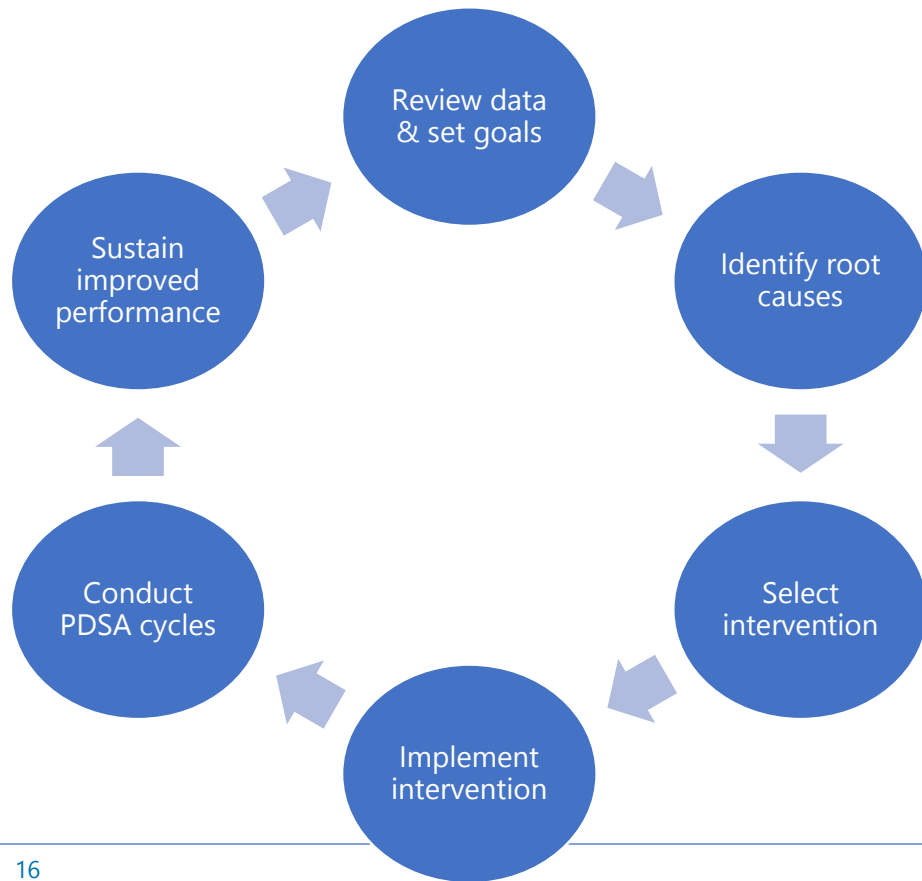


# Hospital Quality Improvement Contractor (HQIC)

## HQIC Results (cont'd)

Measure Name	% of HQIC Hospitals by Performance Category					
	Harms Avoided	Network RIR	Insufficient Data	Improving	Maintaining Zero Rate	Not Improving
30-Day Readmission Rate	1756	↑ 13.9%		73.73%		26.27%
30-Day Sepsis Mortality Rate	1057	↑ 24.0%	2.54%	64.41%	2.54%	30.51%
Anticoagulant ADE Rate	49	↑ 54.5%		22.03%	66.10%	11.86%
C.diff Rate	108	↑ 25.7%	22.88%	38.14%	18.64%	20.34%
C.diff SIR	85	↑ 22.8%	24.58%	33.90%	16.95%	24.58%
CAUTI Rate - All Hospital locations	64	↑ 37.5%	17.80%	26.27%	38.98%	16.95%
CAUTI SIR - All Hospital locations	81	↑ 44.4%	22.03%	27.12%	38.14%	12.71%
CLABSI Rate - All Hospital locations	130	↑ 69.2%	20.34%	16.10%	53.39%	10.17%
CLABSI SIR - All Hospital locations	127	↑ 69.4%	25.42%	16.10%	45.76%	12.71%
High-Dose Opioid Prescribing	284	↑ 43.5%		52.54%	19.49%	27.97%
Hypoglycemic ADE Rate	0	↓ -8.4%		8.47%	83.05%	8.47%
MRSA Rate	20	↑ 23.6%	21.19%	18.64%	50.85%	9.32%
MRSA SIR	29	↑ 33.4%	26.27%	16.95%	44.07%	12.71%
Opioid ADE Rate	58	↑ 26.0%		26.27%	49.15%	24.58%
PSI-03: Pressure Injury Rate	27	↑ 37.1%	2.54%	16.10%	72.88%	8.47%
PSI-13: Postoperative Sepsis and Septic Shock Rate	4	↑ 10.6%	2.54%	11.02%	31.36%	55.08%

# A Collaborative Approach to Improvement



## We helped by:

- Recommending QI strategies
- Building your QI skills
- Coaching on implementation
- Recommending sustainment strategies
- Facilitating peer-to-peer learning
- Delivering educational content
- Making connections
- Providing data analyses
- Suggesting tools and resources



# Today's Presenters



**Tyler Craft, PharmD, BCPS**  
Clinical Pharmacy Coordinator  
Phelps Health



**Katie Hogenmiller, BSN, RN**  
Director of Quality & Infection Prevention  
Ste. Genevieve County Memorial Hospital

# Antimicrobial Stewardship Program (ASP)

Phelps Health

## Background

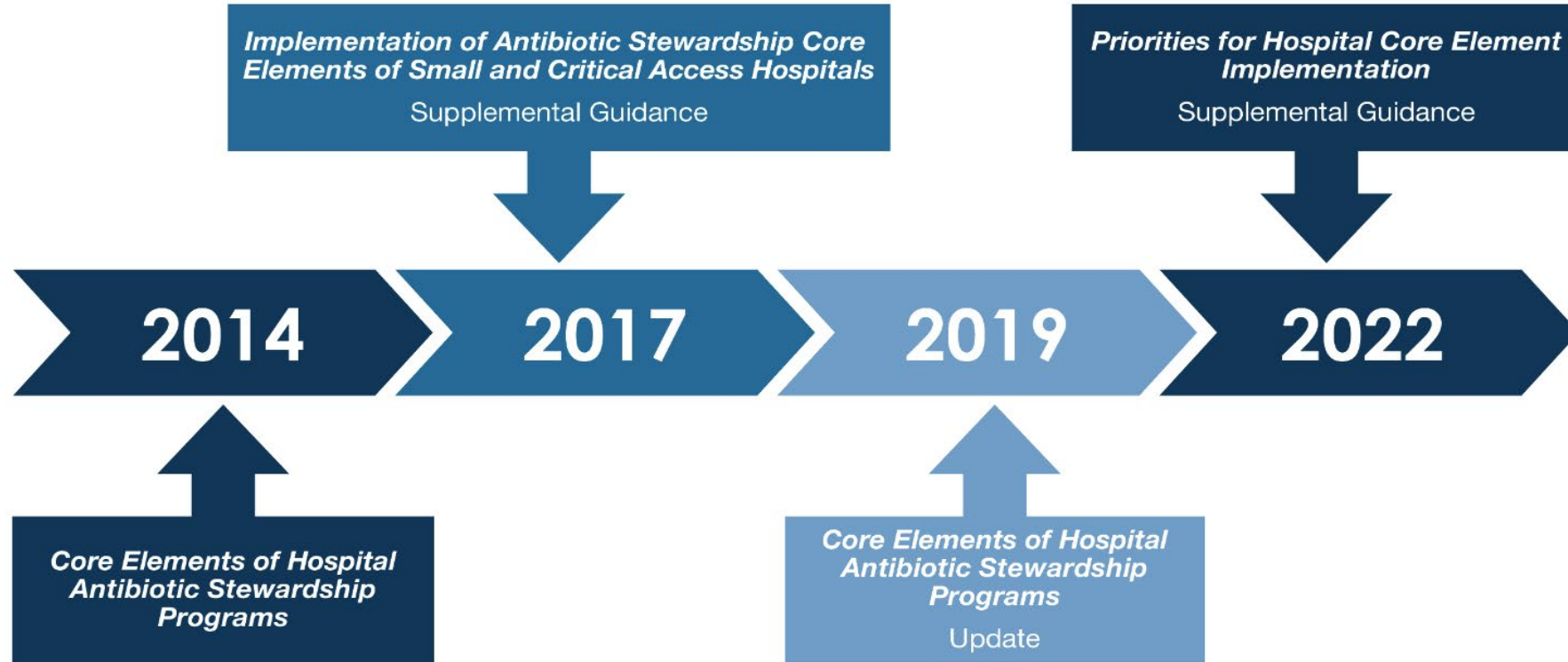
**Location:** Rolla, MO  
**Hospital Type:** Rural Community

**Bed size:** 240  
**Contact info:**

Tyler Craft, PharmD, BCPS  
Clinical Pharmacy Coordinator  
Pharmacy  
**P:** (573) 458-7135  
**E:** [tcraft@phelpshealth.org](mailto:tcraft@phelpshealth.org)



# ASP Core Elements Timeline



# CDC's Core Elements of Hospital of ASP

Hospital Core Elements	Priorities for Hospital Core Element Implementation
<b>Hospital Leadership Commitment</b>	
 Dedicate necessary human, financial, and information technology resources.	Antibiotic stewardship physician and/or pharmacist leader(s) have antibiotic stewardship responsibilities in their contract, job description, or performance review.
<b>Accountability</b>	
 Appoint a leader or co-leaders, such as a physician and pharmacist, responsible for program management and outcomes.	Antibiotic stewardship program is co-led by a physician and pharmacist.*
<b>Pharmacy/Stewardship Expertise</b>	
 Appoint a pharmacist, ideally as the co-leader of the stewardship program, to help lead implementation efforts to improve antibiotic use.	Antibiotic stewardship physician and/or pharmacist leader(s) have completed infectious diseases specialty training, a certificate program, or other training on antibiotic stewardship.
<b>Action</b>	
 Implement interventions, such as prospective audit and feedback or preauthorization, to improve antibiotic use.	Antibiotic stewardship program has facility-specific treatment recommendations for common clinical condition(s) and performs prospective audit/feedback or preauthorization.
<b>Tracking</b>	
 Monitor antibiotic prescribing, impact of interventions, and other important outcomes, like C. difficile infections and resistance patterns.	Hospital submits antibiotic use data to the NHSN Antimicrobial Use Option.
<b>Reporting</b>	
 Regularly report information on antibiotic use and resistance to prescribers, pharmacists, nurses, and hospital leadership.	Antibiotic use reports are provided at least annually to target feedback to prescribers. In addition, the antibiotic stewardship program monitors adherence to facility-specific treatment recommendations for at least one common clinical condition.
<b>Education</b>	
 Educate prescribers, pharmacists, nurses, and patients about adverse reactions from antibiotics, antibiotic resistance, and optimal prescribing.	No implementation priority identified.

## PROBLEM:

- Antimicrobial Stewardship Program Core Elements in place but lacked structure and accountability after the pandemic
- EMR transition

## SOLUTION(s):

- Assign responsible leaders for ASP
- Enhance Core Elements work by aligning with Priorities for Hospital Core Element Implementation

# Accountability & Reporting

## Actions:

- **Pharmacist & Physician named as Co-leads of ASP**
- **Formed ASP Committee**
  - Multidisciplinary group
  - Meets every 2 months
  - Standard agenda
- **Standardized data & reporting format**
  - Days of Therapy
  - Pharmacy intervention scorecard
  - Antimicrobial Use & Resistance (AUR)

Hospital Core Elements	Priorities for Hospital Core Element Implementation
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<b>Education</b>	
 Educate prescribers, pharmacists, nurses, and patients about adverse reactions from antibiotics, antibiotic resistance, and optimal prescribing.	No implementation priority identified.

# Tracking

## Actions:

- Driver: Regulatory requirement
- Jump start-
  - Training
  - Informational Technology (IT) engagement
  - Understanding Standard Antibiotic Administration Ratio Resistance (SAAR) data and benchmarks

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# Education

## Actions:

- Attended HQI's Antimicrobial Stewardship Camp
- Antimicrobial Stewardship (AS) education pamphlet
- Mandatory AS computer base learning
- Annual guest presentation
- Washington University

Hospital Core Elements	Priorities for Hospital Core Element Implementation
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# Antimicrobial Stewardship Program (ASP)

Phelps Health

## Results

- **Consistent bi-monthly AMS Committee meeting schedule**
  - Recent addition of a new provider to the committee to provide representation from our Clinics
- **Pharmacy Intervention Scorecard**
  - AMS Committee standing business item
- **Institutional Infectious Disease Treatment Guidance Reference**
  - Enacted early 2023
  - Fulfills TJC requirements

## Quality Metrics

IV to PO Utilization rate

Pharmacist AMS de-escalation  
volume & acceptance rate

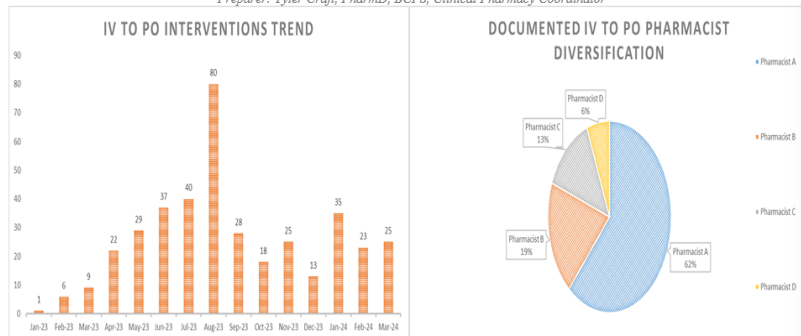
Rate of panic-high  
vancomycin trough levels



# Reporting- IV to PO Utilization Rate

## Phelps Health Pharmacist Utilization of IV to PO Conversion Policy

Department: Pharmacy, Owner: Kreig Moore, Pharmacy Director  
Preparer: Tyler Craft, PharmD, BCPS, Clinical Pharmacy Coordinator



### Raw Data:

Month	Numerator	Denominator
January 2024	35	1
February 2024	23	1
March 2024	25	1
Total	83	

## Phelps Health Pharmacist Utilization of IV to PO Conversion Policy

Department: Pharmacy, Owner: Kreig Moore, Pharmacy Director  
Preparer: Tyler Craft, PharmD, BCPS, Clinical Pharmacy Coordinator

### Analysis of Findings:

- The quarterly rate of pharmacist utilization of the IV to PO Conversion Policy for Q1 2024 remains above the goal of 50 documented interventions per quarter (**83 IV to PO interventions documented in Q1 2024**).
- Diversification of pharmacists utilizing the IV to PO Conversion Policy has decreased to ~45% of our pharmacist documenting at least one IV to PO intervention per quarter (*compared to a year-high of 80% in Q3 2023*)
  - A diversification value of ~60% is a reasonable goal and accounts for the disproportionate opportunities to utilize the IV to PO Conversion Policy on the evening and overnight shifts
- Compared to Q1 2023, significant gains have been made in pharmacist utilization of the IV to PO Conversion Policy – this presumably translates to a potentially significant soft-savings cost
- Marking the year-end milestone for our IV to PO Conversion initiative and performance indicator, it cannot be ruled out that opportunities for IV to PO conversion have decrease compared to the beginning of the year in light of provider awareness and increased frequency of provider-driven IV to PO conversions
- Limitations of this data include the high likelihood of underestimating our utilization of this policy in light of failure to document appropriately, missed opportunities on weekends, evening shifts, and overnight shifts, clinical pharmacist order manipulation comfortability level, and recent lapse and non-adherence to this policy

### Action Plan for Improvement:

Strategies to identify areas that are lacking and improve our efforts include:

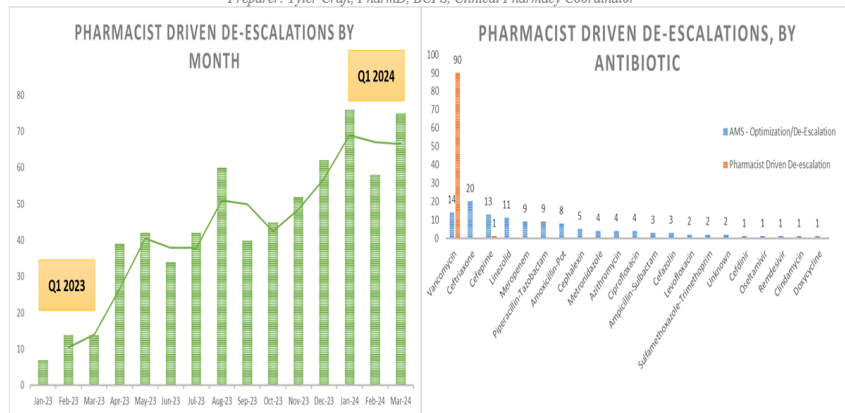
- Congratulating the TEAM for their large efforts and substantial improvement in this area
- Sharing of this data with clinical pharmacy staff to encourage the continued robust utilization of this Policy
- Continued campaigning for the judicious use of our IV to PO Conversion Policy; specifically focusing on the enormous cost-saving potential this initiative holds**
- Identify what reservations (if any) exist in utilizing this policy

# Reporting- AMS De-escalation

Phelps Health

## Rate of Pharmacist-driven Antimicrobial Therapy De-escalation

Department: Pharmacy, Owner: Kreig Moore, Pharmacy Director  
Preparer: Tyler Craft, PharmD, BCPS, Clinical Pharmacy Coordinator



### Raw Data:

Month	Numerator	Denominator
January 2024	76	1
February 2024	58	1
March 2024	75	1
TOTAL	209	

Phelps Health

## Rate of Pharmacist-driven Antimicrobial Therapy De-escalation

Department: Pharmacy, Owner: Kreig Moore, Pharmacy Director  
Preparer: Tyler Craft, PharmD, BCPS, Clinical Pharmacy Coordinator

### Analysis of Findings:

- Pharmacist driven de-escalations of antimicrobial therapy have exceeded both the target goal of 50 documented interventions per quarter as well as the stretch target of  $\geq 100$  documented interventions per quarter (total of **209 documented interventions during Q4 2023**)
- The number of documented pharmacist-driven antibiotic de-escalations has consistently increased over the analyzation period (January 2023 – present)
- Epic updates performed in Q2 2023 have increased the surveillance of such interventions (*less interventions are being missed as a result of faulty documentation*)
- It is possible that a number of de-escalations go undocumented (*particularly on the evenings/overnights and weekends*) in light of wavering opportunities for documentation activities amongst different shifts
- The group of antimicrobial agents with a documented de-escalation intervention is diverse indicating sufficient overall awareness of the importance of this initiative
  - Vancomycin continues to be the leading antibiotic with documented pharmacist-driven de-escalations in light of the established consulting service(s) in place

### Action Plan for Improvement:

Strategies to identify areas that are lacking and improve our efforts include:

- Sharing of this data with clinical pharmacy staff to enlighten those on the frontline(s) and enable transparency on our antimicrobial stewardship (AMS) efforts
- Continued campaigning for judicious AMS practices and efforts that include de-escalation of eligible antimicrobial therapies
  - Particularly, targeting antibiotics other than vancomycin for AMS de-escalation opportunities
  - It is likely that the number of de-escalations performed on antibiotics other than vancomycin is much higher in light of failure to document

# Reporting- Panic High Vancomycin Levels



## Panic High Vancomycin Levels

Department: Pharmacy, Owner: Kreig Moore, Pharmacy Director

Preparer: Tyler Craft, Clinical Pharmacy Coordinator

Date: 4/11/2024

Date of reported data: 1/1/24-3/31/24

Quarterly Assessment

PI Indicator

Methods

Numerator: 0 (True Panic Highs)  
Denominator: 2 (Total Panic Highs)

Within the Phelps Health inpatient system, the Department of Pharmacy doses the greater majority of intravenous (IV) vancomycin via consultation services – when consulted, pharmacy is responsible for the safe and efficacious management of IV vancomycin. As part of the pharmacokinetic dosing process vancomycin trough levels are periodically monitored depending upon the ordered dosage, frequency, and patient-specific pharmacokinetic parameters. Generally, trough levels within 10-20 mcg/mL are considered within the accepted/therapeutic range, trough levels > 30 mcg/mL are considered “Panic High” trough levels and increase the risk of adverse events, including renal toxicity.

The process of monitoring the frequency with which “Panic High” vancomycin levels occur was enacted in 2020 in hopes of establishing a baseline frequency and indicator that would allow for process improvement strategies. We continue to monitor the frequency of “Panic High” trough levels via newly advanced reporting tools in Epic as a way of gauging performance and facilitating continuous quality improvement (CQI).

Vancomycin interventions/notes and Epic reporting tools will be utilized quarterly to assess the frequency and legitimacy of vancomycin trough levels > 30 mcg/mL.

Target: 4 or less per Quarter  
Stretch Target: 1 or less per Quarter

Changes being Tested, Implemented or Spread

Advancement of a unified and collective pharmacokinetic approach continues. Quarterly assessments of the “Panic High” trough levels will allow for assessment of the implications of this approach.

Data Summary

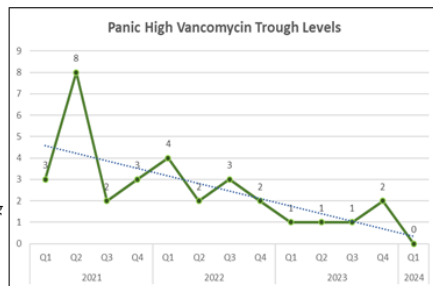
Only 2 panic high vancomycin trough levels were reported in Q1 2024, none of which the inpatient pharmacy was involved in. One reported level represented a case in which the lab was drawn while the vancomycin was infusing and the other occurred in the outpatient setting (inpatient pharmacy not involved).

Recommendations and Next Steps

This represents the achievement of an important milestone of zero panic high vancomycin trough levels reported in a quarter – this is the first time we have reached this achievement, and this demonstrates substantial improvement from early 2021.

Staff will be notified of the results of this quarterly report to allow for discussion and opportunities for growth.

Assessment of “Panic High” trough levels will continue on a quarterly basis.



# Education

<b>Phelps Health</b>	Title: Infectious Disease Treatment Guidance	Reference Word: Infectious Disease
	Initiated: 3/23	Revised: N/A
	Manual: Pharmacy	Page 1 of 7

## Purpose:

To provide standardized guidance on the treatment of select infectious diseases within Phelps Health

## Definitions:

AMS: Antimicrobial Stewardship

TJC: The Joint Commission

CMS: Centers for Medicare & Medicaid Services

## Approach:

Literature surrounding the empiric treatment of leading infectious diseases is plentiful, yet there remains a high incidence of under or over-utilization of broad-spectrum antibiotics in this area. Antimicrobial stewardship (AMS) remains at the cornerstone of high-quality healthcare supported by evidence-based literature and guideline recommendations and highlights the need for robust empiric treatment modalities. Additionally, governing bodies such as TJC and CMS recognize the importance of AMS and have put forth newly revised recommendations for initiatives in this area.

This guidance document and its recommendations are intended to characterize facility-approved empiric treatment regimens for select infectious disease processes. The recommendations contained in this document take into consideration current literature and guideline recommendations in addition to the most recent version of the Phelps Health facility antibiogram. *The recommendations within this document are not to supersede clinical judgement and/or hospital-approved practices but to facilitate evidence-based treatment decisions and AMS-related efforts.*

## Procedure:

Refer to the table(s) that follow for information related to select infectious disease processes, including:

- *Diagnosis*
- *Common pathogens*
- *Preferred empiric drug(s)*
- *Alternative drug(s) for allergy or clinical severity*
- *Duration*
- *Comments*

<b>Phelps Health</b>	Title: Infectious Disease Treatment Guidance	Reference Word: Infectious Disease
	Initiated: 3/23	Revised: N/A
	Manual: Pharmacy	Page 2 of 7

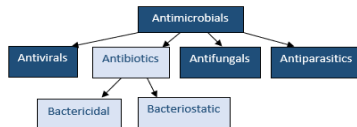
Diagnosis	Common Pathogens	Preferred Empiric Drug(s)	Alternative Drug(s) for Allergy or Clinical Severity	Duration	Comments
Community acquired pneumonia (CAP)	<ul style="list-style-type: none"> <li>• <i>S. pneumoniae</i>, <i>H. influenzae</i>, <i>M. catarrhalis</i>, <i>S. aureus</i>, <i>Chlamydia pneumoniae</i>, <i>Mycoplasma pneumoniae</i>, and <i>Legionella</i> spp.</li> <li>• Viruses</li> </ul>	<p><b>Inpatient, non-severe CAP</b>  <b>Combination therapy:</b> B-lactam + macrolide</p> <ul style="list-style-type: none"> <li>• Amp-sulb 1.5-3g IV Q6H or</li> <li>• Ceftriaxone 1-2g IV Q24H or</li> <li>• Cefotaxime 1-2g IV Q8H</li> </ul> <p><b>PLUS 1 of the following:</b></p> <ul style="list-style-type: none"> <li>• Azithromycin 500mg IV or PO daily or</li> <li>• Clarithromycin 500mg PO BID</li> </ul> <p><b>Monotherapy:</b></p> <ul style="list-style-type: none"> <li>• Levofloxacin 750mg IV or PO daily</li> </ul> <p><b>Inpatient, severe CAP</b>  <b>Combination therapy:</b> B-lactam + macrolide OR B-lactam + levofloxacin (agents and doses listed as above)</p>	<p>Contraindication to macrolide and fluoroquinolone: B-lactam + doxycycline 100mg IV or PO BID</p> <p><b>Add MRSA coverage if:</b></p> <ul style="list-style-type: none"> <li>• Prior respiratory isolation of MRSA within last year</li> <li>• Inpatient, non-severe CAP and MRSA swab positive</li> <li>• Inpatient, severe CAP and recent hospitalization with IV antibiotics within 90 days</li> </ul> <p><b>Agents:</b></p> <ul style="list-style-type: none"> <li>• Vancomycin or</li> <li>• Linezolid 600mg IV or PO Q12H</li> </ul> <p><b>Use anti-pseudomonal B-lactam if:</b></p> <ul style="list-style-type: none"> <li>• Prior respiratory isolation of pseudomonas within last year</li> <li>• Inpatient, non-severe CAP and culture positive</li> <li>• Inpatient, severe CAP and recent hospitalization with IV antibiotics within 90 days</li> </ul> <p><b>Agents:</b></p> <ul style="list-style-type: none"> <li>• Pip-tazo 4.5g IV Q6H or</li> <li>• Cefepime 2g IV Q8H or</li> <li>• <b>ESBL concern</b></li> <li>• Meropenem 1g IV Q8H OR</li> <li>• PCN anaphylaxis</li> <li>• Aztreonam 2g Q8H</li> </ul>	<p>Usual duration if initial response is appropriate:</p> <ul style="list-style-type: none"> <li>• 5 days</li> <li>• 7 days if treating MRSA or pseudomonas</li> </ul>	<ul style="list-style-type: none"> <li>• Avoid switching antibiotic class when transitioning to PO</li> <li>• Transition to PO when clinical response is appropriate (i.e. tolerating other PO meds, baseline mental status, resolution of vital signs)</li> <li>• ONLY use linezolid when vancomycin is contraindicated (i.e. true allergy or vancomycin resistant enterococcus (VRE))</li> </ul>
Healthcare-associated pneumonia (HAP)	See above "Alternative Drugs" section to determine if patient meets criteria to be considered for adding MRSA and/or pseudomonal coverage	See above	See above	7 days if treating MRSA or pseudomonas	2019 ATS/IDSA Guidelines recommend abandoning this categorization

# Education

## Phelps Health Antimicrobial Stewardship

### BASICS OF ANTIBIOTICS

- Not all antibiotics are created equal – different antibiotics cover different infectious organisms
- Inappropriate exposure to antibiotics increases the likelihood of the development of antibiotic resistance
- Narrow spectrum > Broad spectrum
- Fewer antibiotics > More antibiotics



### WHAT IS ANTIMICROBIAL STEWARDSHIP (AMS)?

AMS is a systematic approach to measure and improve how antibiotics are prescribed by clinicians and used by patients

#### Core Elements of AMS Programs



#### The 5 D's of Antimicrobial Stewardship

- Right **D**rug
- Correct **D**ose
- Correct **D**rug route
- Suitable **D**uration
- Timely **D**e-escalation

### WHY IS ANTIMICROBIAL STEWARDSHIP (AMS) IMPORTANT?

In the US > 2.8 million antibiotic resistant infections occur each year, resulting in ≥ 35,000 deaths	2019's CDC Antimicrobial Threats Report demonstrated a reduction in antimicrobial-resistance related deaths of 18% overall and 30% in the hospital setting when dedicated prevention and control efforts have been put in place	As of 2021, the estimated healthcare costs related to the treatment of six of the more-common multi-drug resistant organisms (MDRO) exceeded \$4.6 billion annually
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### WHAT AMS INITIATIVES DOES PHELPS HEALTH HAVE AND HOW CAN I LEARN MORE?

- Antimicrobial Stewardship Committee (multidisciplinary committee meets bi-monthly)
- IV to PO Conversion Policy
- Renal Dose Adjustment Policy
- Aminoglycoside/Vancomycin pharmacokinetic monitoring
- Accelerated Diagnostics culture testing
- Antibiotic utilization reporting as measured by days-of-therapy (DOT)
- Organizational Infectious Disease Treatment Guidance reference
- Clinical Pharmacy surveillance
- + More

#### Want to learn more?

Contact AMS Committee members Jodie Sapaugh ([jsapaugh@phelpshealth.org](mailto:jsapaugh@phelpshealth.org)) or Tyler Craft ([tcraft@phelpshealth.org](mailto:tcraft@phelpshealth.org); x7135) for more information

# Foley Discontinuation/Bladder Management

## Ste. Genevieve County Memorial Hospital

### Background

**Location:** Ste. Genevieve, MO

**Hospital Type:** Critical Access Hospital

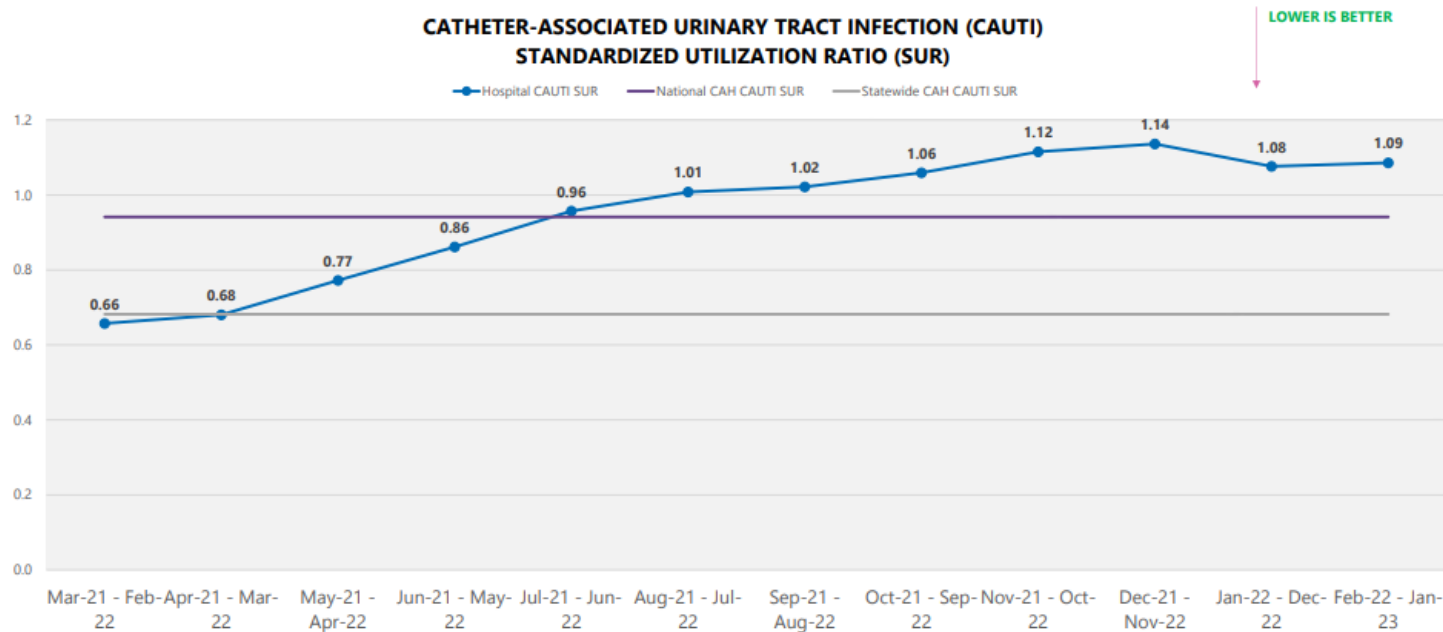
**Bed size:** 25

**Contact info:** Katie Hogenmiller BSN, RN  
Director of Quality & Infection Prevention  
[khogenmiller@sgcmh.org](mailto:khogenmiller@sgcmh.org)



# Foley Discontinuation/Bladder Management

## Ste. Genevieve County Memorial Hospital



**NOTE** • Data has been pulled from NHSN and represents cases observed across all hospital locations.  
• Benchmarked data was pulled from the CDC's 2021 National and Statewide HAI Progress Report.

# Foley Discontinuation/Bladder Management

## Ste. Genevieve County Memorial Hospital

### Plan

- **Develop a Foley Discontinuation and Bladder Management Protocol for Nursing.**
- **Review this protocol/algorithm with the Hospitalist group and nurse practitioner, Health and Safety Committee, and other members of Medical Staff for input and approval.**
- **Med Surg Nurses educated on the algorithm via PowerPoint presentation; in-person and Zoom.**
- **Patient with indwelling Foley catheters will be audited daily over the next year for:**
  - Appropriateness of insertion
  - Prompt discontinuation per protocol
  - Compliance with the bladder management algorithm post-catheter removal.
- **Outcomes and improvement opportunities will be shared with staff in real time as charts are audited.**



# Foley Discontinuation/Bladder Management

## Ste. Genevieve County Memorial Hospital

### Do

- **Develop a Foley Catheter Discontinuation and Bladder Management Tool based upon evidence-based practice.**
  - Foley Catheter sub-committee met to discuss a new nurse-driven protocol for foley catheter discontinuation and bladder management
- **Review this protocol/algorithm with the Hospitalist group and nurse practitioner, Urology, and members of Health & Safety and Medical Staff for input and approval.**
- **Med-Surg nurses educated on the algorithm via PowerPoint presentation.**
  - Presented various dates in March to educate at least 80% of nurses on Med-Surg unit
- **All Foley Catheter Insertion, discontinuation, and post catheter removal bladder management compliance will be monitored over the next year to determine effectiveness of the interventions, protocol, and algorithm.**
- **Outcomes and improvement opportunities will be shared with staff in real time as charts are audited**
  - Data is collected monthly. Feedback shared with staff in real-time and during monthly hospitalist committee meetings.

# Foley Discontinuation/Bladder Management

## Ste. Genevieve County Memorial Hospital

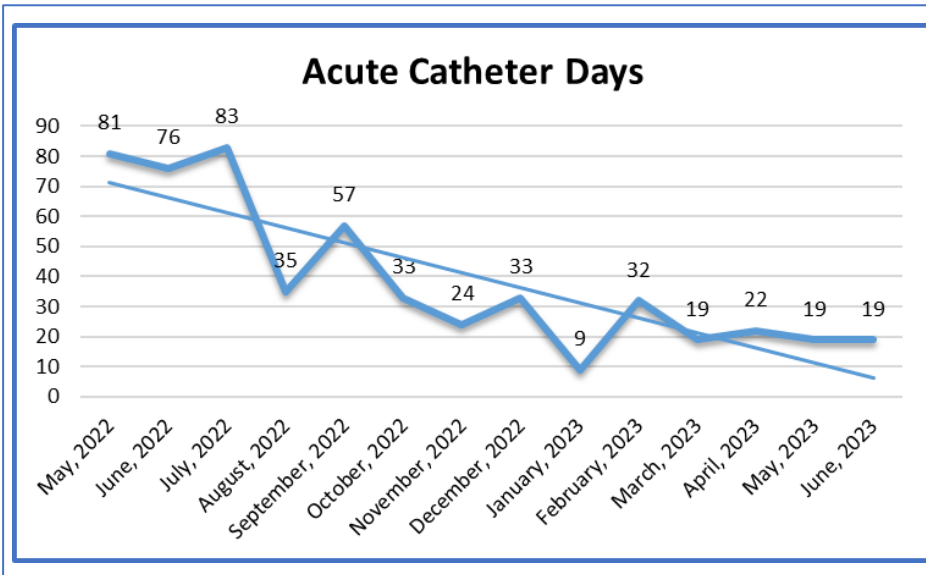
### Study

#### Findings:

- Increased compliance with Foley Discontinuation Protocol as reflected by chart audits.
- Decrease in the number of catheter days since implementation.

#### Lessons learned:

- Staff unaware of the appropriate indications for foley catheter insertion and continuation.
- Clear and simple protocol/algorithm will help yield compliance with nursing.
- ER documentation lacking for appropriate indication for insertion.



# Foley Discontinuation/Bladder Management

## Ste. Genevieve County Memorial Hospital

### Act

Data collection will continue to ensure compliance with best practices for foley catheter insertion and discontinuation criteria.

Continue to monitor nursing and appropriate utilization of foley discontinuation bladder management algorithm/protocol.

CAUTI data will be collected and analyzed for trends.

Catheter days will be assessed monthly and shared with staff.

ER foley catheter tracking/audits to ensure proper documentation and indications for insertion.

- Does Patient have any of the Following?**
- Chronic/suprapubic Catheter per Urology
  - Acute urinary retention or bladder outlet obstruction
  - Critically ill and in need of strict I&O measurement
  - Hemodynamically unstable
  - To assist in the healing of open sacral/perineal wounds in incontinent patients
  - Peri-operative use for selected urologic or GU tract procedures
  - Anticipated prolonged duration of surgery
  - Receiving high-volume infusions or diuretics during surgery
  - Need for intraoperative monitoring of urinary output
  - Prolonged immobilization due to unstable fractures, injury, or pelvic fracture
  - Comfort/end of life care

#### Foley Discontinuation & Bladder Management Guidelines

Nurse will initiate protocol upon catheter insertion or admission with an indwelling foley catheter. This discontinuation protocol will be evaluated every 24hrs while the foley is in place.

- Document:**
- Foley discontinuation & pt tolerance
  - Each intervention completed every 6 hours (in worklist)
  - Bladder scan results
  - All straight cath. amounts
  - Spontaneous void amounts
  - All provider communication
  - Any/all complications or abnormal findings.

**Yes**  
Do not discontinue the Foley. Document accordingly and obtain an order to continue the catheter

**No**  
Notify the Provider and obtain an order to discontinue to the indwelling foley catheter

**DC Foley**  
Initiate prompted voids every 6 hours for 24 hours  
Document all post-catheter removal interventions in the worklist

**Spontaneous voids <300ml in 6 hrs**  
of Foley DC (or since last straight cath)?

**Spontaneous INCONTINENT void in 6 hrs**  
of Foley DC (or since last straight cath)

**No spontaneous void in 6 hours**  
after Foley DC (or since last straight cath) or UNCOMFORTABLE at any time

Volume >300ml?

Perform bladder scan

Perform Straight Cath

Volume <300ml

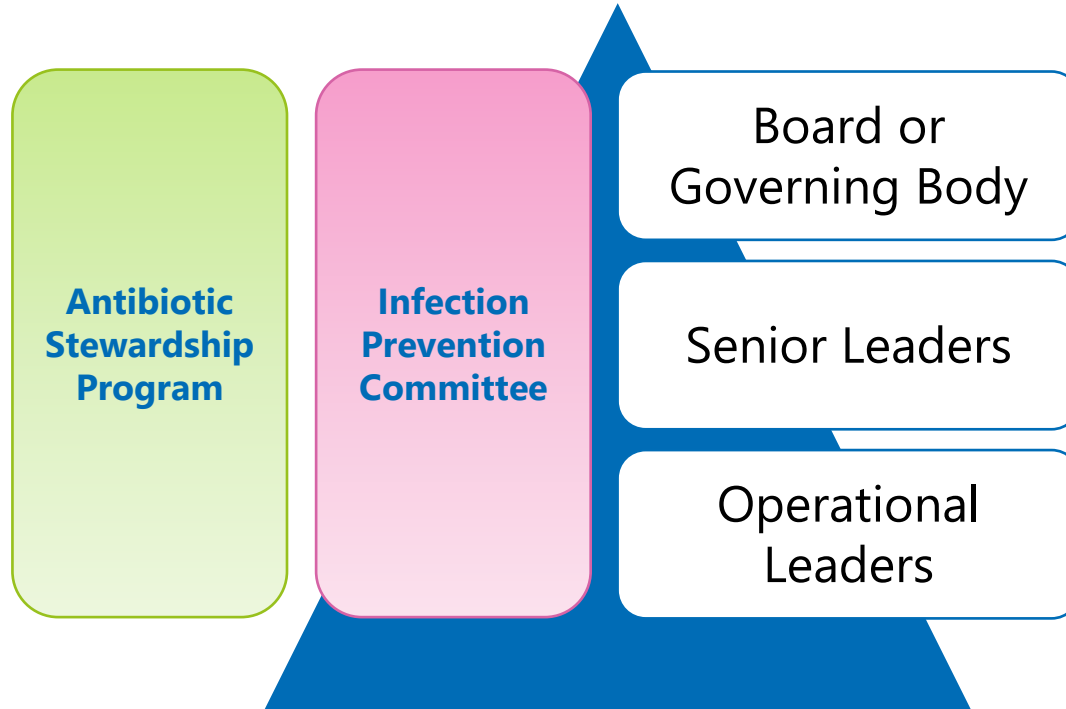
Frequently monitor & encourage prompt voids

- Notify the Provider if:**
- Straight cath 3 times in 24 hours
  - No void OR less than 250ml 8 hours after Foley removal
  - Patient has not yet spontaneously voided in 24 hours

**Document & Repeat the protocol every 6 hours (for 24 hours) and as needed**

- Bladder Scan if:**
- Warranted per protocol
  - Pt is uncomfortable at any time
  - Pt has urge to void but unsuccessful
  - Pt experiences new incontinence

# Leadership Engagement



# Board or Governing Body

Accountable to the  
community

Approve strategic  
plan and  
operational goals

Ensure senior  
leader alignment  
with goals and  
compensation

Requesting and  
pursuing learning  
opportunities

# Senior Leaders

Accountable  
to the Board

Set  
performance  
goals

Serve as  
Executive  
Sponsors

Remove  
barriers

Allocate  
resources

# Operational Leaders

Align individual  
employee goals

Lead  
improvement  
teams

Gather and  
report data

Escalate frontline  
challenges and  
successes

# Sustainability

## Sustainability Decision Guide

### Directions:

This is a resource to help leaders or teams determine if the interventions and changes they are making are sustainable. This guide will help identify why interventions may not be sustainable, and therefore need to be reconsidered. Use this guide at any point during a Performance Improvement Project (PIP), ideally when strategies have been found that appear to be successful and consideration is being given to adopting them broadly within the organization. The more questions that can be answered as "yes," the higher the likelihood of sustainability.

### Systems

- ☐ Has the change been defined in terms of how it fits with the overall organizational mission, vision and strategic plan?
- ☐ Are there policies and procedures written in support of the change?
- ☐ Are those who need to carry out the new actions up to date with the information they need to be successful?
- ☐ Have the organization's systems been revised to encourage the new action? How are staff members reminded to carry out the new actions? Are you monitoring that the new actions are being carried out and is staff being supported in their ability to carry out the new actions?
- ☐ Are there system barriers that prevent the new action from occurring? Are there certain identifiable parts of the system that pose a roadblock to doing things in the new way?
- ☐ Are there incentives or rewards for people who do not adopt the new action that need to be addressed or removed?
- ☐ Has the change been integrated into new employee orientation and training?

### People

- ☐ Has strong leadership support for the change been established? Has the leadership communicated a clear and convincing message about the change and its purpose? Are multiple levels of leadership engaged (e.g., board of directors, administrator, and department managers)? Is the leadership vocal and visible in its support? How will the leadership continue to promote the change and encourage staff to stick with it over time?

## Sustainability Decision Guide

### People (continued)

- ☐ Have roles and responsibilities for carrying out new actions been clearly defined and assigned?
- ☐ Are the people responsible for carrying out the change equipped to manage it? Do staff members have the appropriate skills and knowledge to successfully undertake any new actions required? Have training needs been addressed? Is additional or differently trained staff required?
- ☐ Are there champions for the change who are actively modeling the desired actions? Are there informal or natural leaders among the staff who could be encouraged to act as role models? Are there members of your staff exhibiting clear resistance to the change that should be addressed?

### Environment

- ☐ Is the organization ready to take on this change? What issues in the workplace culture should be addressed before the change can be expected to become permanent? Is the reason given for the change in line with the values and attitudes of the staff?
- ☐ Has adequate funding (if applicable) been budgeted to support the change?
- ☐ Have resources (equipment, materials, staff time, information) been made available? What additional resources would help to encourage the new actions to take place?
- ☐ Are there things that can be done to the physical environment that make it unavoidable to do things in the new way (e.g., automation of processes; removal of certain objects necessary to do things the previous way)?

### Measurement

- ☐ Has ongoing periodic measurement and review been scheduled to ensure the new action has been adopted and is performed consistently?
- ☐ Are indicators/measures chosen that tie directly to the new action? Can the indicator/measure distinguish the performance of different work groups (e.g., by unit, department, shift)? Are some work units carrying out the change more successfully than others?



# Thank You!



MEETING  
Chat  
DIALOG  
TALK  
BUSINESS  
Answers  
IDEAS  
Communicate  
SOCIAL  
PROPOSAL  
IDEAS  
Discuss  
Connection  
Session  
Group  
INPUT  
CONVERSATION  
PARTNERSHIP  
Forum  
SHARE  
OPERATING  
QUESTIONS  
EXPLORATION  
Community  
Group  
Dialog  
Business  
Communication  
TALK  
Debate

# Discussion

# Resources

- [Compendium of Strategies to Prevent Healthcare-Associated Infections in Acute Care Hospitals – SHEA \(shea-online.org\)](https://shea-online.org/)
- [Core Elements of Hospital Antibiotic Stewardship Programs | Antibiotic Prescribing and Use | CDC](https://www.cdc.gov/antibiotic-use/)
- [Best Practices Pocket Cards | HQIN](https://www.hqip.org.uk/best-practices-pocket-cards/)
- [Antimicrobial Stewardship Summer Camp 2022 Slides](#)
- [Do One Thing Differently - Targeting Antimicrobial Stewardship](#)
- [Urine Culture Diagnostic Stewardship](#)
- [Learn From Defects-CAUTI RCA Tool](#)
- [Sustainability Decision Guide](#)

The collage features three primary resources:

- URINARY TRACT INFECTION SURVEILLANCE CHECKLIST:** A vertical checklist detailing criteria for fever, leukocytosis, acute mental status changes, and acute functional decline. It includes a scoring system from 0 to 10 and a section for facility-specific product selection.
- HAND HYGIENE POSTER:** A poster titled 'WHEN SHOULD YOU USE ALCOHOL-BASED GEL?' and 'HOW TO USE HAND SANITIZER'. It provides clear instructions and visual aids for proper hand hygiene techniques.
- CAUTI RCA TOOL:** A tool for conducting root cause analysis for Catheter-Associated Urinary Tract Infections, featuring a QR code and links to related resources.



## HQIC Summer Spread & Sustainment Series

### Upcoming Sessions:

#### **Sepsis**

Thursday, July 11

#### **Readmissions**

Thursday, August 8

(all sessions will be held from 12pm to 1pm ET)

# CONNECT WITH US

Call 877.731.4746 or visit [www.hqin.org](http://www.hqin.org)



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