Stewardship & Sustainability

Infection Prevention Affinity Group

July 21, 2026

Agenda

Welcome to Cal HQ
Perspectives from the field
Questions and dialogue
Next steps & ways to engage

Cal HQ's vision – a statewide movement

- Elevate Patient Care for ALL Californians
- Unlock the Power of Data: Accelerating Digital Quality Measures
- Build a Network of Excellence

Our Bold Goal

By December 31, 2027

Prevent over 2,000 additional infections

Who's in?

Cal HQ

COVERED CALIFORNIA

California Hospital Association

HSAG HEALTH SERVICES ADVISORY GROUP

13 Health Plans

115 Hospitals

HCAi

CalPERS

PBGH California Quality Collaborative

PFCCpartners Patient & Family Centered Care

See the full list here: https://calhq.calhospitalcompare.org/wp-content/uploads/2026/07/List-of-Cal-HQ-Partners-and-Participants-as-of-7.2026.pdf

Cal Healthcare Compare

Sign up for our listserv here

Cal HQ's Bold Goal

By December 31, 2027

Prevent over 2,000 additional infections

Save ~100 lives

Save $64,000,000*

**AHRQ's Estimating the Additional Hospital Inpatient Cost and Mortality Associated With Selected Hospital-Acquired Conditions (2017)*

How can my hospital contribute to Cal HQs statewide goal?

Hospital Size*	Total HAIs 2024	42% Reduction in Total HAIs	2027 Infection Reduction Targets per hospital
< 50 (n=73)	187	31	1
50-99 (n=53)	324	83	2-3
100-199 (n=83)	1384	301	7
200-299 (n=47)	1303	378	11-12
300+ (n=44)	2815	558	26-27

*Missing hospital size data for 26 hospitals

Source: CMS Public Data File, Q12026 Refresh

Welcome to the Infection Prevention Affinity Group

Sejal Naik

Senior Manager for Regional Infection Prevention Program

Kaiser Permanente Northern California

Mamta Desai

Director of Infection Control

Pomona Valley Hospital

Cheryl Flesner

Infection Prevention Manager

Dignity Health Sequoia Hospital

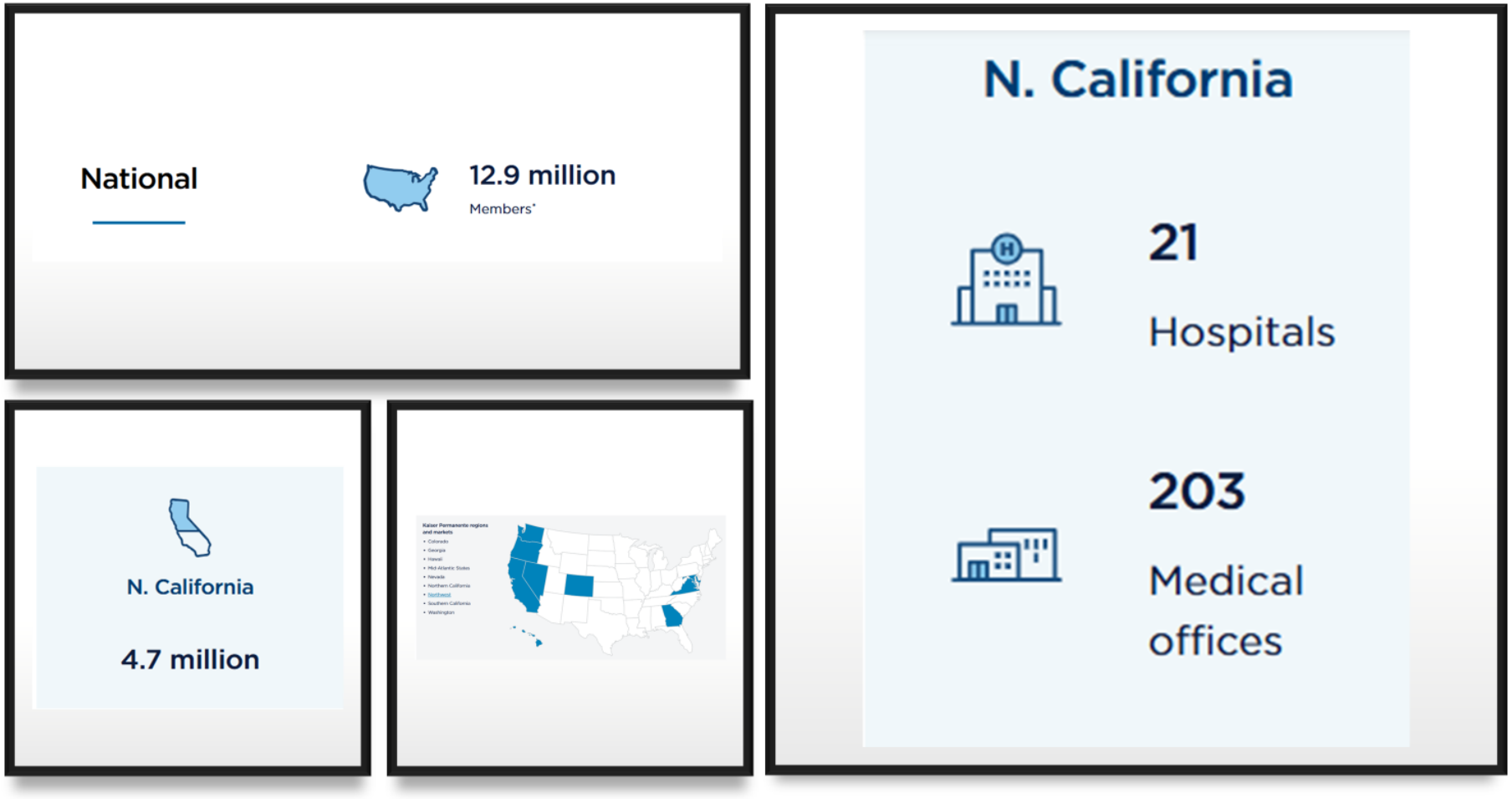
NCAL Risk & Patient Safety

Designing Protocols for Standardization

Sejal Naik, DNP, MHA, RN, AL-CIP, CIC, FAPIC

July 21, 2026

About Kaiser Permanente



Why Standardization?

- Standardization is a fundamental starting point for any improvement effort, eventually sustainability
- Standardization is designing a protocol, so the same appropriate action holds across every unit, shift, and provider.
- Concept borrowed from automobile industry
- Without standardization you do not have a single process but many.

"Clinical standardization is the establishment of standards and protocols for caregivers to follow when treating patients" - Dimmer et al, 2024 [2]

Envisioning a Different Starting Point

Implement → Educate → Sustain

- Build the protocol
- Train and educate staff
- Audit compliance
- Re-educate when it slips
- Sustainability is the goal

Design for Sustainability, Work Backward

- Ask : how do we make the wrong action harder than the right one?
- Embed the answer into existing tools: e.g., order sets, BPAs
- The system carries the behavior; not reliant on individual memory
- Adherence therefore is a structural default

Education……and What Else?

Where Education Still Matters

- Onboarding new staff and physicians
- Communicating the evidence and rationale behind a change
- Building physician buy-in before a hard stop goes live
- Handling true clinically significant cases the workflow can't anticipate

Why It Can't Stand Alone

- Workflow varies unit to unit — one training doesn't fit every context
- Shift changes, turnover, and float staff dilute what training reaches
- Competing priorities push a remembered rule down the list

Designing The Shift: Pair education with structural design — order sets and BPAs that hold steady regardless of local workflow variation.

Standardization in Practice

Decision-support	Appropriateness criteria embedded directly in the order set, checked before the order can be placed. The **Michigan Appropriateness Guide for Intravenous Catheters** (MAGIC)) appropriateness tool embedded directly in the PICC/Mid- line order set — enforces the appropriateness check before the order can be placed.
Best Practice Advisory	The system blocks the inappropriate action outright, rather than warning and allowing an easy override. **C. diff BPA** reminds sample collection— triggered by discrete documentation in I/O flowsheet
Removing the automatic reflexes	Reflex and bundled pathways are broken apart so a **deliberate clinical decision** is required. UA and urine culture orders uncoupled requiring physician evaluation prior to ordering urine culture

Decision Support in the Orderset: Line and Lumen Selection

Appropriateness criteria embedded directly in the order set, checked before the order can be placed.

Figure 3. Venous access device recommendations for infusion of peripherally compatible infusate.

Device Type	Proposed Duration of Infusion			
	≤5 d	6–14 d	15–30 d	≥31 d
Peripheral IV catheter	No preference between peripheral IV and US-guided peripheral IV catheters for use ≤5 d			
US-guided peripheral IV catheter	US-guided peripheral IV catheter preferred to peripheral IV catheter if proposed duration is 6–14 d			
Nontunneled/acute central venous catheter	Central venous catheter preferred in critically ill patients or if hemodynamic monitoring is needed for 6–14 d			
Midline catheter	Midline catheter preferred to PICC if proposed duration is ≤14 d			
PICC		PICC preferred to midline catheter if proposed duration of infusion is ≥15 d		
Tunneled catheter				PICC preferred to tunneled catheter and ports for infusion 15–30 d
Port				

Appropriate | Neutral | Inappropriate | Disagreement

IV = intravenous; PICC = peripherally inserted central catheter; US = ultrasonography.

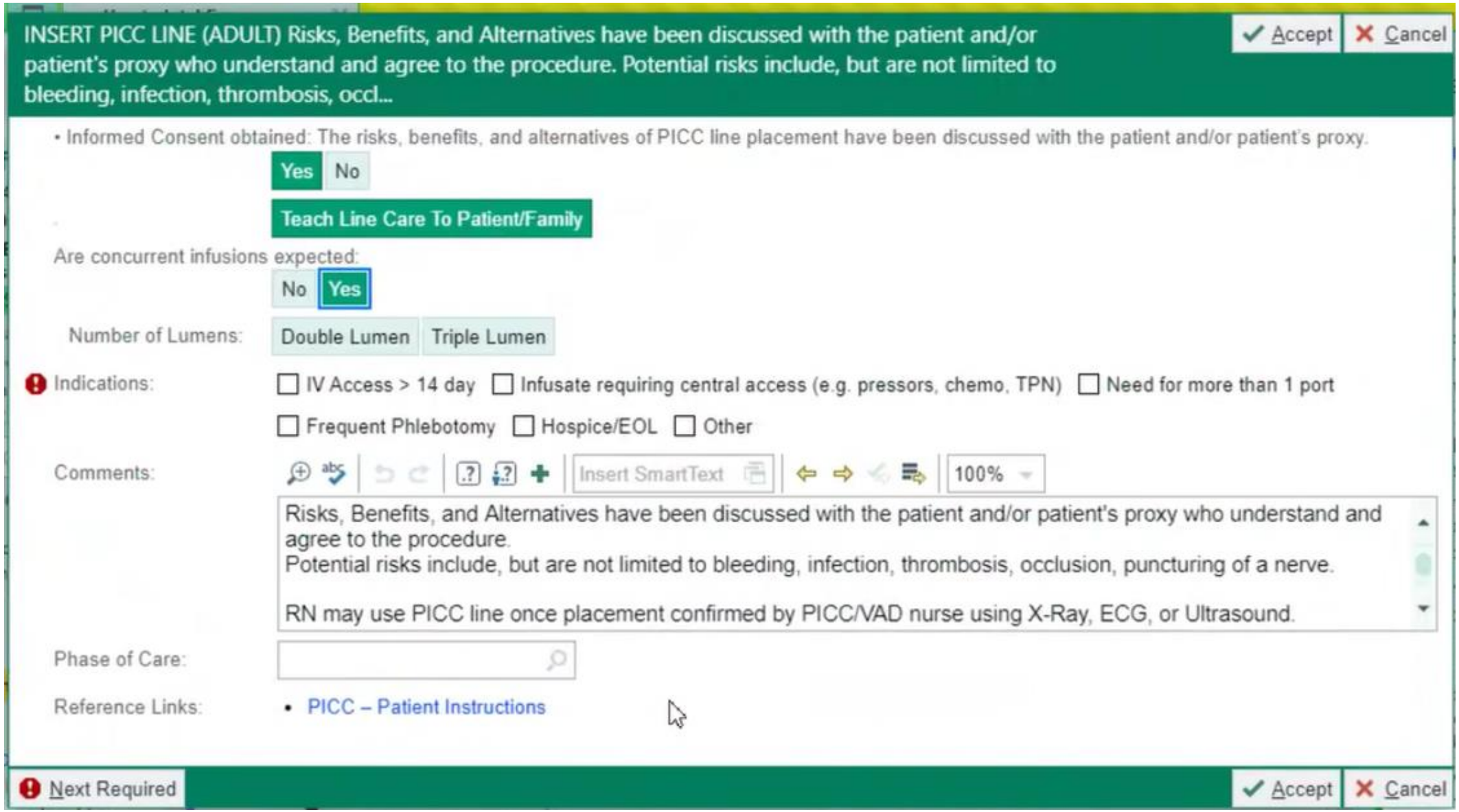
Chopra et al., 2015[5]

Abstract

Rationale: Among patients with peripherally inserted central catheters (PICCs), greater number of catheter lumens increases the risk of catheter-associated complications. However, multi-lumen central access is commonly used among patients admitted to the intensive care unit (ICU), and less is known about complications of PICCs in this population. We assessed the association between number of lumens and risk of PICC-related complications among patients admitted to the ICU.

Hechtman et al., 2024[3]

1. **Michigan Appropriateness Guide embedded at catheter insertion order**
2. **Requires an accepted indication before placement**

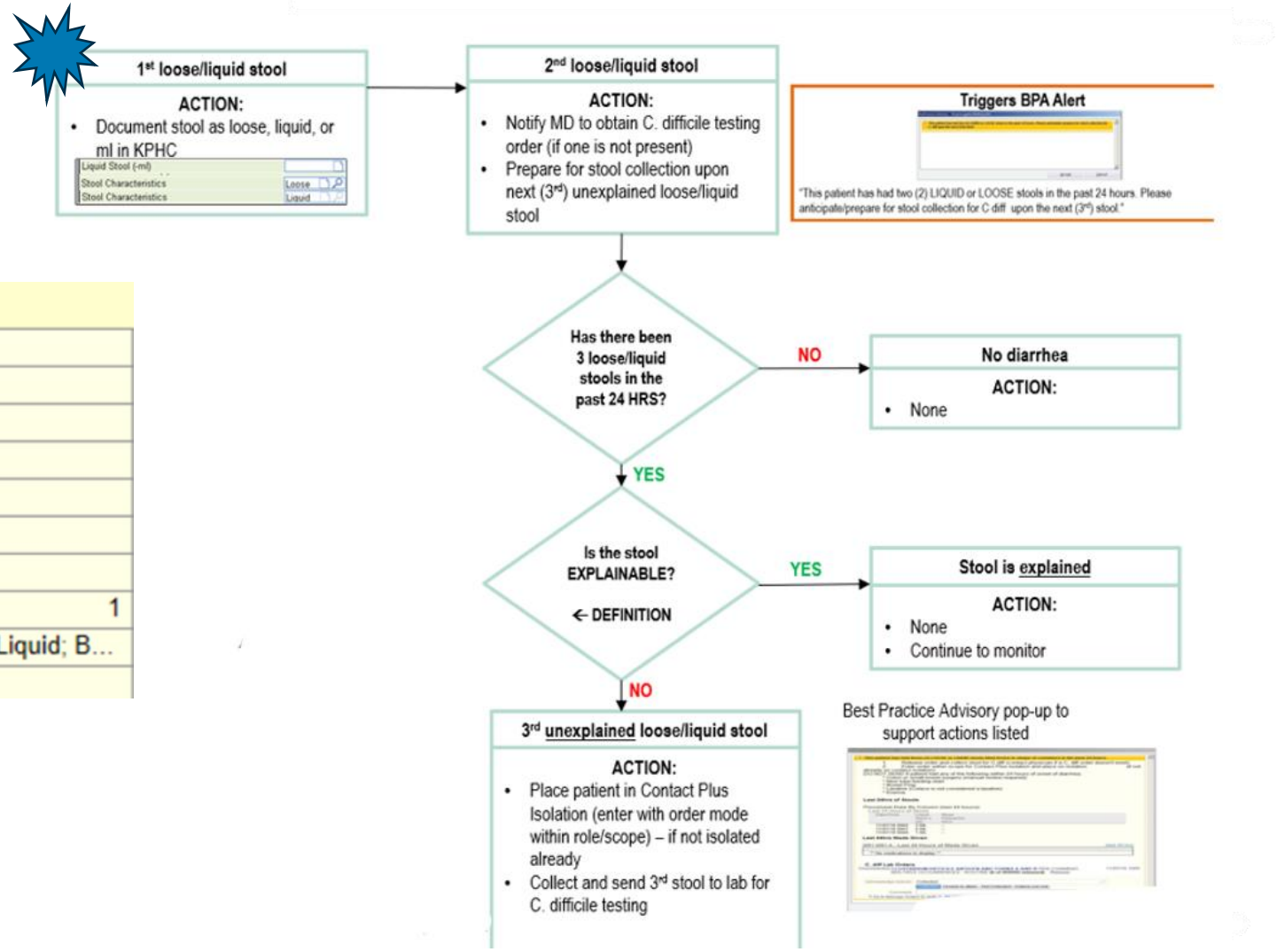

INSERT PICC LINE (ADULT) Risks, Benefits, and Alternatives have been discussed with the patient and/or patient's proxy who understand and agree to the procedure. Potential risks include, but are not limited to bleeding, infection, thrombosis, occl...
Accept
Cancel
• Informed Consent obtained: The risks, benefits, and alternatives of PICC line placement have been discussed with the patient and/or patient's proxy.
Yes
No
Teach Line Care To Patient/Family
Are concurrent infusions expected:
No
Yes
Number of Lumens:
Double Lumen
Triple Lumen
Indications:
IV Access > 14 day
Infusate requiring central access (e.g. pressors, chemo, TPN)
Need for more than 1 port
Frequent Phlebotomy
Hospice/EOL
Other
Comments:
Insert SmartText
100%
Risks, Benefits, and Alternatives have been discussed with the patient and/or patient's proxy who understand and agree to the procedure.
Potential risks include, but are not limited to bleeding, infection, thrombosis, occlusion, puncturing of a nerve.
RN may use PICC line once placement confirmed by PICC/VAD nurse using X-Ray, ECG, or Ultrasound.
Phase of Care:
Reference Links:
PICC – Patient Instructions
Next Required
Accept
Cancel

Designing the Best Practice Advisory: C. difficile

Based on clinical criteria

Nursing documentation of stool consistency and recent laxative use, other contraindications, if any on Doc Flowsheet.

Output		
Voided Urine Color**		
Voided Urine Characteristics**		
Unmeasured Urine (#)	1	
Bladder Scan (ml)		
Emesis		
Unmeasured Emesis (#)		
Liquid Stool (-ml)		
Unmeasured Stool (#)	1	1
Stool Characteristics	Black; Medium;...	Large; Liquid; B...
Estimated Blood Loss (-ml)		



Culture Stewardship: Urine Culture

Indwelling Urinary Catheter Culture Stewardship: Overview

For Health Care Providers
MARCH 14, 2024

Multifaceted approach

Urine culture stewardship is a multifaceted approach to ensure that urine cultures are:

- Performed only when appropriate indications are present in order to determine if treatment with antibiotics is indicated
- Collected, stored, and processed in a manner to best prevent contamination with microorganisms such as bacteria

This approach can be used in patients with and without indwelling urinary catheters in a variety of settings.

Reference: Indwelling Urinary Catheter Culture Stewardship: Overview | Urinary Tract Infection | CDC

Strategies to prevent catheter-associated urinary tract infections in acute-care hospitals: 2022 Update

Part of: ICHE Compendium 2022

Published online by Cambridge University Press: **25 August 2023**

Payal K. Patel, Sonali D. Advani, Aaron D. Kofman, Evelyn Lo, Lisa L. Maragakis, David A. Pegues, Ann Marie Pettis, Sanjay Saint, Barbara Trautner and Deborah S. Yokoe ...Show all authors Show author details

Inappropriate treatment of catheter-associated asymptomatic bacteriuria can promote antimicrobial resistance and *Clostridioides difficile* infection in acute-care facilities.

a. Consider requiring clinicians to identify an appropriate indication for urine culturing when placing an order for a urine culture. The indication should be supported by the literature[29,82–86] and should be appropriate for the specific patient population. Patel et al., 2023 [4]

Reference: Strategies to prevent catheter-associated urinary tract infections in acute-care hospitals: 2022 Update | Infection Control & Hospital Epidemiology | Cambridge Core

NCAL Risk & Patient Safety
Infection Prevention

KAISER PERMANENTE®

CAUTI: Re-designing *Out* the Reflex

- **Uncoupled UA & UC Orders**
  - No more reflex culture off a positive UA
  - Each order requires its own symptom-based indication
  - Removes the automatic pathway that drove cultures on asymptomatic bacteriuria

Process Validation

C.difficile Testing dashboard and Reports

- Provide data to enable facilities to review their testing timeliness and exclusions
- Follow up from a process perspective to create accountability around the testing practices.

Indwelling Catheter Orderset Report

- Provide data to enable facilities to follow up with ordering clinicians and create accountability around the ordering practices.
- Follow up to create accountability around the testing practices.

Key Takeaways

- Standardization is the foundation of any improvement effort leading to sustainability
- Design for sustainability from the start
- Structural design — order sets, BPAs, de-coupled orders — outperforms education alone and makes standards hold over time
- Involve end-users so adherence becomes the structural default, not a memory test

References

1. Bozaan, D., Skicki, D., Brancaccio, A., Snyder, A., Friebe, S., Tupps, M., Paje, D., & Chopra, V. (2019). Less Lumens-Less Risk: A Pilot Intervention to Increase the Use of Single-Lumen Peripherally Inserted Central Catheters. *Journal of hospital medicine*, *14*(1), 42–46. https://doi.org/10.12788/jhm.3097

2. Dimmer, A., Baird, R., & Puligandla, P. (2024). Role of practice standardization in outcome optimization for CDH. World journal of pediatric surgery, 7(2), e000783. https://doi.org/10.1136/wjps-2024-000783

3. Hechtman RK, Paje D, Horowitz J, McLaughlin E, Tatarcuk C, Heath M, Kaatz S, Flanders S, Bernstein S, McSparron JI, Prescott HC, and Chopra V. Association Between Number of Lumens and Peripherally Inserted Central Catheter Complications in Patients Admitted to the Intensive Care Unit. Am J Respir Crit Care Med 2024; 209.

4. Patel, P. K., Advani, S. D., Kofman, A. D., Lo, E., Maragakis, L. L., Pegues, D. A., … Meddings, J. (2023). Strategies to prevent catheter-associated urinary tract infections in acute-care hospitals: 2022 Update. *Infection Control & Hospital Epidemiology*, *44*(8), 1209–1231. doi:10.1017/ice.2023.137

5. Vineet Chopra, Scott A. Flanders, Sanjay Saint, et al. The Michigan Appropriateness Guide for Intravenous Catheters (MAGIC): Results From a Multispecialty Panel Using the RAND/UCLA Appropriateness Method. Ann Intern Med.2015;163:S1-S40. [Epub 15 September 2015]. doi:10.7326/M15-0744

Transitioning Away from the Routine Use of Contact Precautions for MRSA/VRE/ESBL/AmpC

Mamta Desai, MPH, MBA, CIC, FAPIC
Director, Epidemiology and Infection Prevention Dept.

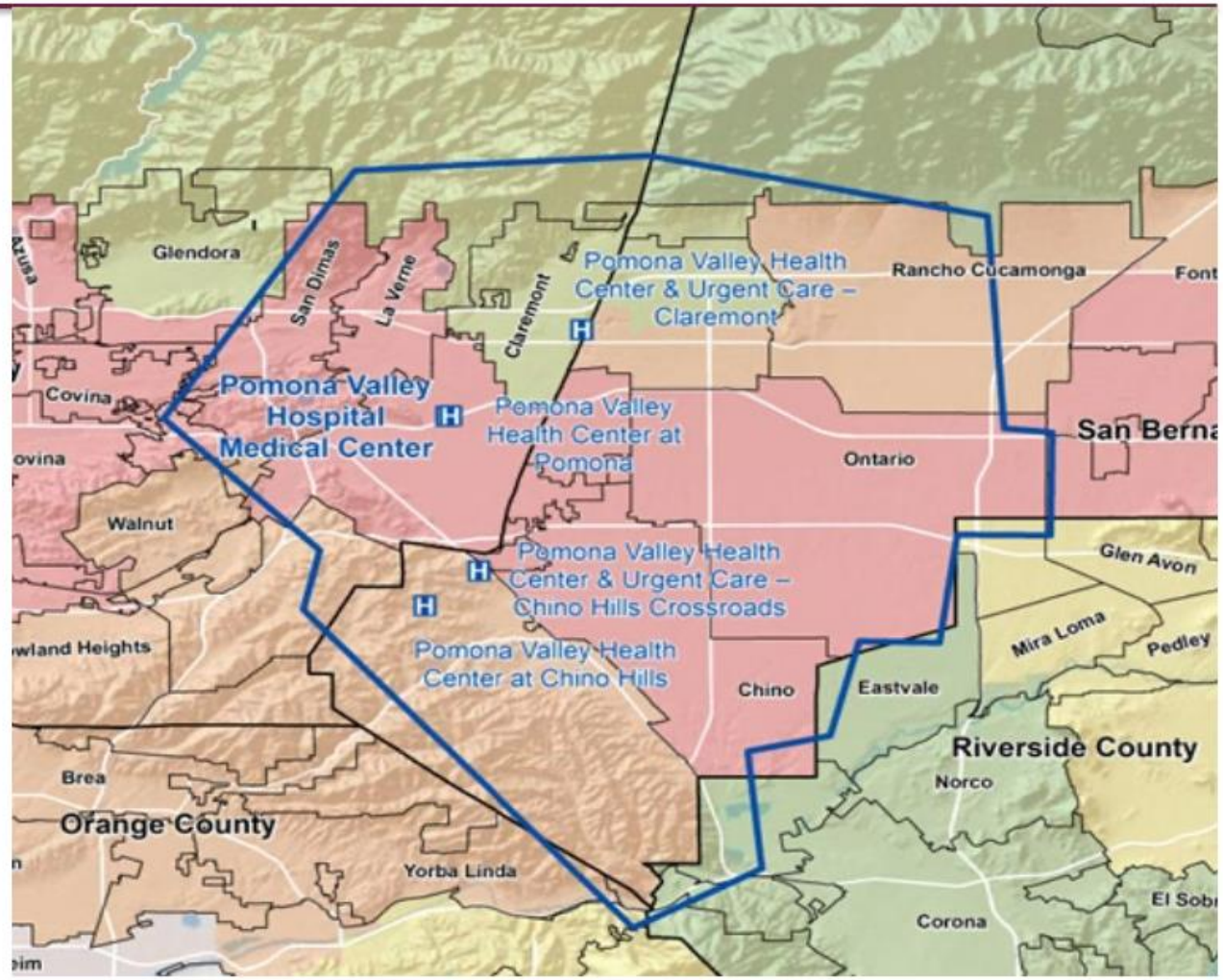
POMONA VALLEY HOSPITAL
MEDICAL CENTER
Expert care with a personal touch

Pomona Valley Hospital Medical Center – Brief History

- Not-for-profit Stand-Alone Facility
- Founded in 1899; Moved into current location in 1913
- 427 Licensed beds
- 3,843 Associates
  - 710 Physicians
  - 798 Active Volunteers

Geographic Location

- Located in Los Angeles County
  - Bordering San Bernardino County
  - Serving Eastern Los Angeles (LA) County and Western San Bernardino (SB) and Riverside County
  - Title 17 public health reportable cases to both LA and SB county



Major Services

Emergency Care Services

Level 2 Emergency Center and Level II Trauma Center

Adult Services

General Medical and Surgical Services, Critical Care Services, Cardiac Catheterization and Surgery, Cardiac Telemetry, Inpatient Dialysis.

Pediatric Services

General Pediatric Medical and Surgical Services, Level IIIB Neonatal Intensive Care, Pediatric Outpatient Clinics

Obstetric Services

High Risk Obstetrics, High Risk Obstetric Transport Services

Ambulatory Services – Multiple Locations

(Cancer Care Center, Pediatric services, GI Lab, Interventional Radiology, Laboratory/Pathology, Magnetic Resonance Imaging/Neurology, Nuclear Medicine, Sleep Disorders Center, Radiation Therapy, Radiology, Rehabilitation- Physical, Occupational, and Speech Therapy, Respiratory Services, , Social Services, Sports Medicine Center, Cardiac Rehabilitation/Cardiology, Surgical Services, Women's Diagnostic Imaging Center)

Graduate Medical Educational Programs:

- Residency: Family Medicine and Pharmacy
- Visiting Residency/ Fellowships include: Emergency, Pediatrics, Surgery, Podiatry, OBGYN, Critical Care, Pulmonary, and Urgent Care

POMONA VALLEY HOSPITAL
MEDICAL CENTER

Designations and Certifications

- Trauma Service – Level 2
- EDAP-Emergency Department Approved for Pediatrics
- Chest Pain / STEMI Receiving Center
  - *Los Angeles County*
  - *San Bernardino County*
- Stroke Receiving Center
  - *Los Angeles County*
  - *San Bernardino County*
- Cancer Care Center
- TJC Laboratory Accreditation
- MAGNET Designation
- Disaster Resource Center – Los Angeles County

- ✓ Advanced Palliative Care
- ✓ Advanced Comprehensive Stroke Center
- ✓ Advanced Joint Replacement – Hip
- ✓ Advanced Joint Replacement - Knee
- ✓ Advanced Inpatient Diabetes
- ✓ Sepsis
- ✓ Perinatal Care
- ✓ Pneumonia

Infection Prevention Team

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Abbreviations

- MDRO – Multidrug resistant organisms
- MRSA – Methicillin Resistant Staphylococcus aureus
- VRE – Vancomycin Resistant Enterococcus
- ESBL – Extended spectrum beta-lactamase
- AmpC – AmpC beta lactamase
- CRE - Carbapenem resistant Enterobacteriaceae
- MDRAB – Multidrug resistant Acinetobacter baumannii
- MDRPA - Multidrug resistant Pseudomonas aeruginosa
- C. auris – Candida auris
- BSI – Blood Stream Infection
- PPE – Personal Protective Equipment

PDMAI - Reconsidering Contact Precaution Project

Plan	Design	Measure	Assess	Improve
• Reconsider Contact Precaution for MRSA/VRE/ESBL/ AmpC • Improve throughput • Cost savings on PPE • Reduced indirect labor – time to don/doff PPE • Improve Patient/family satisfaction • Positive associate work experience	• Review literature and community practice • Collaborate with local LA DPH • Initiate a working taskforce (IP, Nursing, EVS, IT, Lab, House Supv), other as needed • Revise Policies • Communication	• POA and HO rate for MRSA/VRE/ESBL/AmpC • Reduction in # of Contact Precautions Cases • MRSA and VRE BSI Rate • HAI Rate (MRSA/VRE) • Monitor for cluster	• Cost of PPE Pre/Post • Reduce # of isolation • Monitor for cluster/trend	• Optimize throughput • Time saved through reduced PPE donning and doffing • Patient/family satisfaction • Positive associate work experience

Current National Guidelines

CDC

- Based on current evidence, CDC recommends use of Contact Precautions for MRSA-colonized or infected patients
- Interventions such as Contact Precautions and Hand Hygiene have contributed to recent decreases in hospital-onset MRSA bacteremia
  - Contribution of Contact Precautions in comparison to other interventions is unknown

SHEA/IDSA/APIC

- Although Contact Precautions remain an essential practice, considerations for modification based on MRSA-specific risk assessment
  - No outbreak and no high or increasing incidence
  - Strong horizontal prevention measures, e.g., hand hygiene, environmental cleaning and disinfection
  - Process for ongoing monitoring, and oversight
- High-risk populations for whom Contact Precautions should continue, e.g., NICU

Local and State Public Health Recommendation

- National SHEA/IDSA/APIC guidance provides considerations for risk-based approach
- Regulatory: CDPH fosters the reduction of isolation for MRSA and VRE within acute care hospitals
- Local Public Health Department Medical Director of Acute Communicable Disease Control supports the discontinuation of Contact isolation for MRSA and VRE within general acute care hospitals and long-term care facilities
    - ESBL/AmpC – Inconclusive on recommendation. Defer to individual facility based on risk assessment
- Increases in non-endemic MDROs for which Contact Precautions should be prioritized, e.g., carbapenemase-producing organisms (CPOs), *Candida auris*
- Increasing recognition and concerns for adverse effects of Contact Precautions, including waste/environmental impacts/throughput
- Wide-range of current practices within California hospitals

Reconsidering Contact Precautions

Vertical IPC	Horizontal IPC
• Discontinue contact precautions for MRSA and VRE • Hospitals should continue contact precautions for organisms with greater environmental risk and fewer treatment options: CRE, CRAB, Carbapenem-Resistant Pseudomonas aeruginosa (CRPA), *Clostridioides difficile* (*C .diff*), *Candida auris* (*C. auris*), etc.	• Improve hand hygiene rates • Universal Chlorhexidine Gluconate (CHG) bathing • Povidone iodine nasal decolonization • Environmental cleaning and disinfection • Catheter-Associated Urinary Tract Infection (CAUTI) prevention • Central Line-Associated Bloodstream Infection (CLABSI) prevention • Supplemental environmental disinfection (ultraviolet, etc.) • Bare below the elbows

http://publichealth.lacounty.gov/acd/RethinkingContactPrecautions/index.htm#effectiveness

Pre and Post Isolation Practice for MDROs

- MRSA
- VRE
- ESBL
- AmpC
- CRE
- MDRAB
- MDRPA
- C. auris
- C. difficile

October 2025

No change in NICU

- CRE
- MDRAB
- MDRPA
- C. auris
- C. difficile

Risk Assessment Steps

- Internal Meetings
  - with IP team /Medical Director
    - Review historical data and define Hospital Onset threshold
    - Review Current process and compliance on prevention initiatives
      - MRSA Prevention Protocol
        - » CHG Bathing Compliance
        - » Nasal Decolonization Compliance
      - Hand Hygiene
      - Environmental Hygiene
  - Los Angeles County Department of Public Health
  - PVHMC IT team
    - Revise current process/Isolation order
  - Laboratory – *Microbiology Reports*
  - Nursing, House Supervisor and EVS Team

Standard Precautions

Part of Core practices – Use all the time, in all settings

1. Hand Hygiene –Before, in between and after patient care
2. Use of personal protective equipment (PPE)
   - Based on the risk of exposure/task/activities
3. Respiratory hygiene and cough etiquette
   1. For patients, visitors and healthcare workers
4. Environmental cleaning and disinfection
   - Patient care equipment/instrument/devices
5. Handle dirty linen and textile carefully
6. Injection and medication safety
7. Ensure appropriate patient placement

https://www.cdc.gov/infection-control/hcp/basics/standard-precautions.html

Standard Precautions – When to wear PPE?

- Use of gloves in situations involving possible contact with blood or body fluids, mucous membranes, non-intact skin (e.g., exposed skin that is chapped, abraded, or with dermatitis) or OPIM (other potentially infectious material).
- Use of protective clothing (gown) to protect skin and clothing during procedures or activities where contact with blood or body fluids is anticipated.
- Use of mouth, nose, and eye protection during procedures that are likely to generate splashes or sprays of blood or other body fluids.

https://www.cdc.gov/infection-control/hcp/basics/standard-precautions.html

Hand Hygiene

Continue Hand Hygiene education

- SureWash
- Continue monitoring Hand Hygiene compliance
- Promote the“Hand Check” campaign to improve compliance, and remind HCWs

Hand Check Campaign

POMONA VALLEY HOSPITAL MEDICAL CENTER

TO ALL ASSOCIATES

HAND CHECK

1 **What is Hand Check?**

Hand Check is a fun, friendly and effective way to remind each other to perform hand hygiene.

2 **Why Hand Check?**

- It is a cultural shift towards accountability through education, empowerment and engagement.
- Hand Check is used as a way to remind each other to perform hand hygiene in a non-punitive manner.
- Hand Check can be applied to everyone at PVHMC regardless of rank, title, role, etc.

3 **When do I use Hand Check?**

Use Hand Check:

- When someone forgets to perform hand hygiene before and/or after patient care.
- Before and/or after use of gloves.

4 **Who does it apply to?**

Hand Check applies to everyone at Pomona Valley Hospital Medical Center.

Patient safety is everyone's responsibility

Watch the Hand Check video on the intranet!

POMONA VALLEY HOSPITAL
MEDICAL CENTER

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Environmental Hygiene

Ensure Robust Environmental Hygiene Program

- Environmental Service
  - Continue secondary disinfection using UV light for patients with MDROs, regardless of isolation status/signage.
- Clinical Services
  - Clinical staff to clean high touch surfaces in occupied patient room
  - Patient care equipment per policy

Action items and Follow ups

- Multidisciplinary Taskforce initiated:
  - Collaborated with *IT department to revise "Isolation rules and flags" in EMR only for adult patient populations*
  - *Revised laboratory MDRO reports to reflect practice change*
  - *Revised Policies*
  - *Discussed Communication plan*
- Environmental Hygiene
  - Continue use of UV light for terminal disinfection of patient's room with MRSA/VRE/ESBL/AmpC
  - *Updated Bed Tracking for EVS notification to replace isolation signage*

Communication and Approval Plan

Stakeholder Engagement

- Nursing shared governance committees
- Department huddles
- Medical Staff Committees

Policy Review and approval

- Approval through clinical and medical staff committees (August- September 2025)

Leadership Approval

- Performance Improvement Coordinating Committee (PICC) and Medical Executive committee

Communication & Go-Live

- Practice Alert and Announcement
- Frequently Asked Questions (FAQ)
- Staff Education at department huddles

Conclusion & Expected Outcomes

- PVHMC has transitioned away from routine Contact Precautions for patients with MRSA, VRE, ESBL, and AmpC, while continuing to maintain targeted prevention strategies, robust surveillance, and enhanced environmental cleaning practices.
- Success will be measured through:
  - ❑ *Monitor POA and HO rate for MRSA/VRE/ESBL/AmpC*
  - ❑ *Measure reduction in Contact Precautions Cases*
  - ❑ *Track MRSA and VRE BSI Rate and overall, HAI rate*
  - ❑ *Evaluate reduction in gown utilization*
  - ❑ *Monitor for potential clusters or emerging transmission*

Questions

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Stewardship and Sustainability in Infection Prevention:
Preventing Blood Culture Contamination

Cheryl Flesner, RN, CIC

July 21, 2026

CommonSpirit

Sequoia Hospital – Redwood City, CA

Services Include:

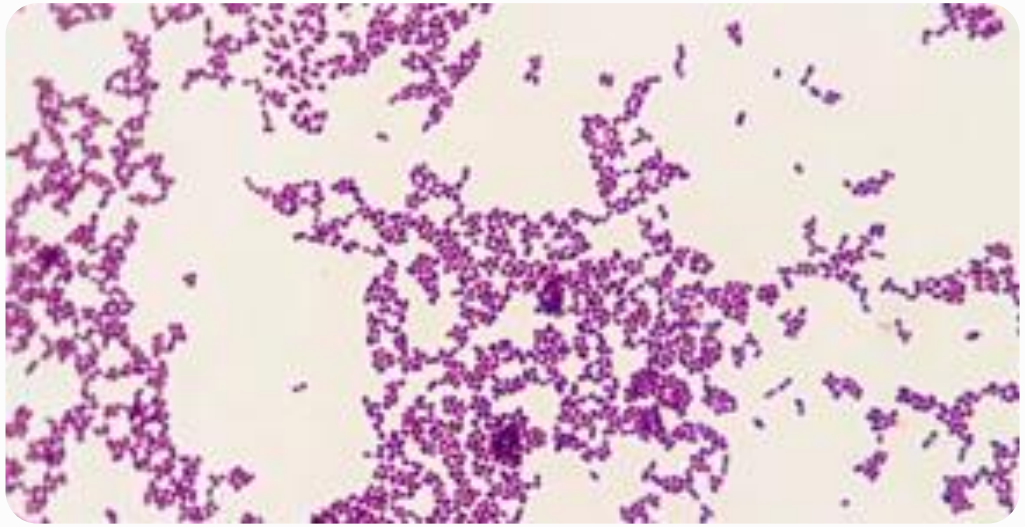
- 184 licensed beds
- Emergency Care (16 beds)
- Total Joint Surgery / Spine / General Surgery
- Cardiac Care (Cath Lab, STEMI, Open Heart, TAVR, Rehab)
- Diabetes Education & Nutrition Center
- Perinatal Services including L & D
- GI / Endoscopy
- Diagnostic Imaging (CT, MRI, Nuclear Med, PET, Breast)
- Infusion Center
- TJC Certified Stroke Center

What is Blood Culture Contamination and why do we care?

The Definition

Blood culture contamination is when organisms from the skin get into the blood culture bottle during collection.

Common culprit: Usually Coagulase negative Staphylococcus (CoNS) or other skin organisms.



The Consequences

False positive results lead to:

- Unnecessary antibiotic use (increases resistance, C. diff risk)
- Unnecessary diagnostic procedures
- Prolonged hospital stays
- Patient anxiety and stress

Financial Impact

$4,538 per contamination event

Average added healthcare cost for each contaminated blood culture (CDC, 2019)

What is our Goal?

- The American Society for Microbiology (ASM) and the Clinical Laboratory Standards Institute (CLSI) have recommended that an overall blood culture contamination rate should not exceed 3% (Ref. CDC). However, the optimal rate is considered < or = to 1%
- **CommonSpirit Health Set a national benchmark of <2%**

CommonSpirit

Causes of Blood Culture Contamination

- Lack of hand hygiene
- Inadequate skin preparation
  - Using wrong antiseptic
  - Not allowing antiseptic to adequately dry
- Re-palpating the vein after skin antiseptic application
- Lack of disinfection of blood culture bottle tops
- Lack of using extra waste tube or diversion device (reduced skin organisms)

Risk of Skin Bacteria Contamination

3 Layers of Skin

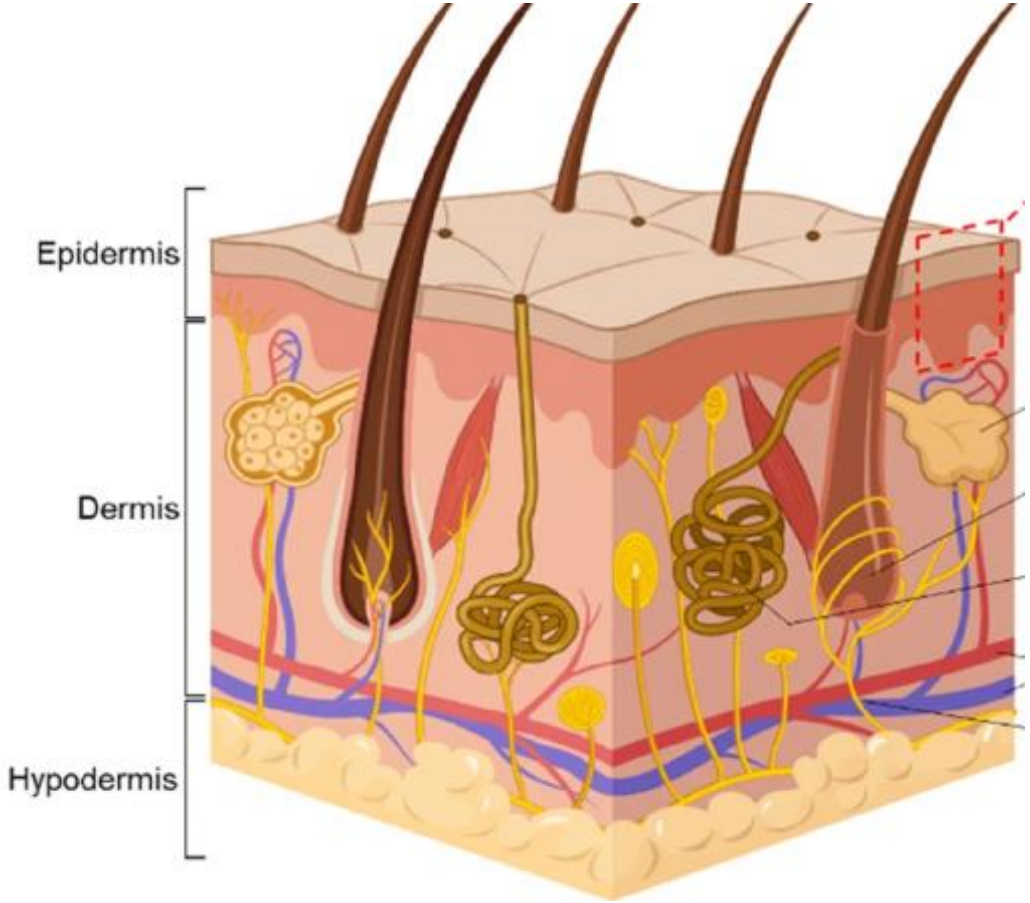
The skin contains 3 distinct layers that act as a barrier.

Deep Bacteria

Some bacteria reside deep in these layers, remaining out of reach of surface preps.

Removal Devices

Waste tubes or diversion devices help to remove organisms that may be picked up in the deeper layers.



CommonSpirit

Sequoia Specific Opportunities

Skin Prep

Some phlebotomists were using alcohol wipes for skin prep instead of chlorhexidine.

Scrub & Dry

Lack of knowledge regarding the required 30 second scrub time and 30 second dry time for chlorhexidine product.

Waste Tube

Lack of using a waste tube to reduce risk of skin organism contamination.

CommonSpirit

Impact to our patients for 1 month

15

Contaminated Blood Cultures

Resulting in an unnecessary financial loss of **$100,000+**.

8

Patients Impacted

Received unnecessary and avoidable antibiotics due to contamination.

2

Patients Affected

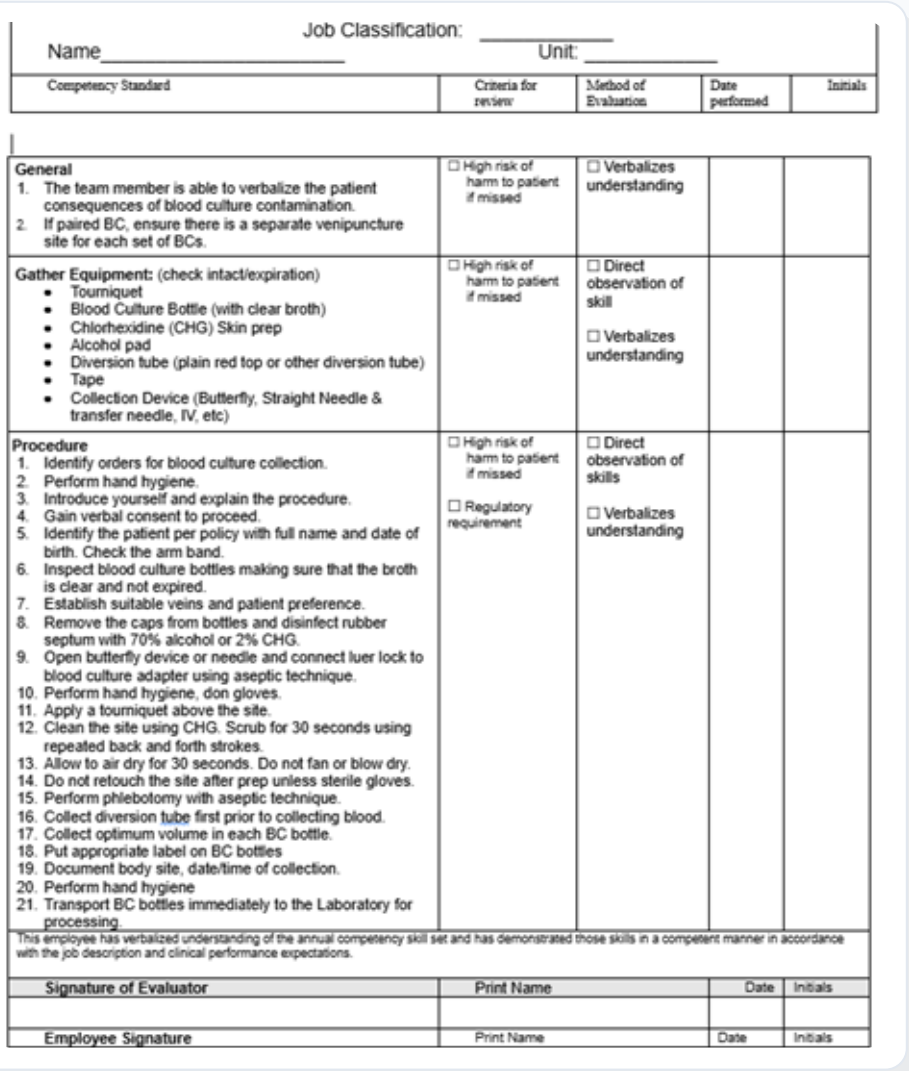
Experienced an increased, unfavorable length of hospital stay and 1 had TEE.

CommonSpirit

Interventions

Standard Competency Checklist

- Adequate hand hygiene
- Disinfect tops of blood culture bottles
- CHG skin prep **(30/30 scrub & dry)**
- Correct use of waste tube



Job Classification: _____

Name_____ Unit: _____

Competency Standard	Criteria for review	Method of Evaluation	Date performed	Initials
General 1. The team member is able to verbalize the patient consequences of blood culture contamination. 2. If paired BC, ensure there is a separate venipuncture site for each set of BCs.	☐ High risk of harm to patient if missed	☐ Verbalizes understanding		
Gather Equipment: (check intact/expiration) • Tourniquet • Blood Culture Bottle (with clear broth) • Chlorhexidine (CHG) Skin prep • Alcohol pad • Diversion tube (plain red top or other diversion tube) • Tape • Collection Device (Butterfly, Straight Needle & transfer needle, IV, etc)	☐ High risk of harm to patient if missed	☐ Direct observation of skill ☐ Verbalizes understanding		
Procedure 1. Identify orders for blood culture collection. 2. Perform hand hygiene. 3. Introduce yourself and explain the procedure. 4. Gain verbal consent to proceed. 5. Identify the patient per policy with full name and date of birth. Check the arm band. 6. Inspect blood culture bottles making sure that the broth is clear and not expired. 7. Establish suitable veins and patient preference. 8. Remove the caps from bottles and disinfect rubber septum with 70% alcohol or 2% CHG. 9. Open butterfly device or needle and connect luer lock to blood culture adapter using aseptic technique. 10. Perform hand hygiene, don gloves. 11. Apply a tourniquet above the site. 12. Clean the site using CHG. Scrub for 30 seconds using repeated back and forth strokes. 13. Allow to air dry for 30 seconds. Do not fan or blow dry. 14. Do not retouch the site after prep unless sterile gloves. 15. Perform phlebotomy with aseptic technique. 16. Collect diversion tube first prior to collecting blood. 17. Collect optimum volume in each BC bottle. 18. Put appropriate label on BC bottles 19. Document body site, date/time of collection. 20. Perform hand hygiene 21. Transport BC bottles immediately to the Laboratory for processing.	☐ High risk of harm to patient if missed ☐ Regulatory requirement	☐ Direct observation of skills ☐ Verbalizes understanding		

This employee has verbalized understanding of the annual competency skill set and has demonstrated those skills in a competent manner in accordance with the job description and clinical performance expectations.

Signature of Evaluator	Print Name	Date	Initials
Employee Signature	Print Name	Date	Initials

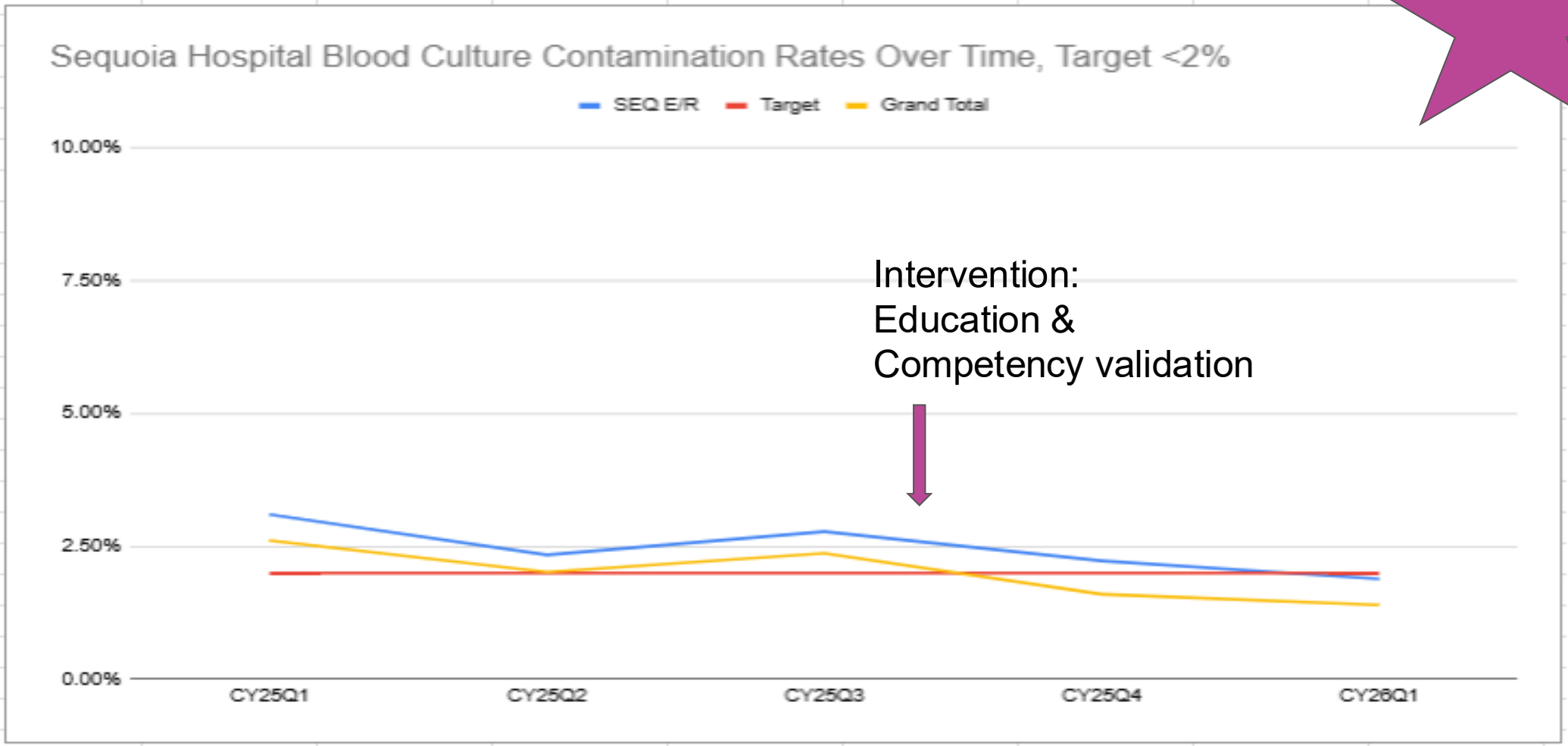
Other Interventions

Share why this matters with stakeholders

Individuals are coached within the week on blood culture contamination

The data is shared with stakeholders. Part of Antibiotic Stewardship Data report.

Our Results: Celebrating our Success!



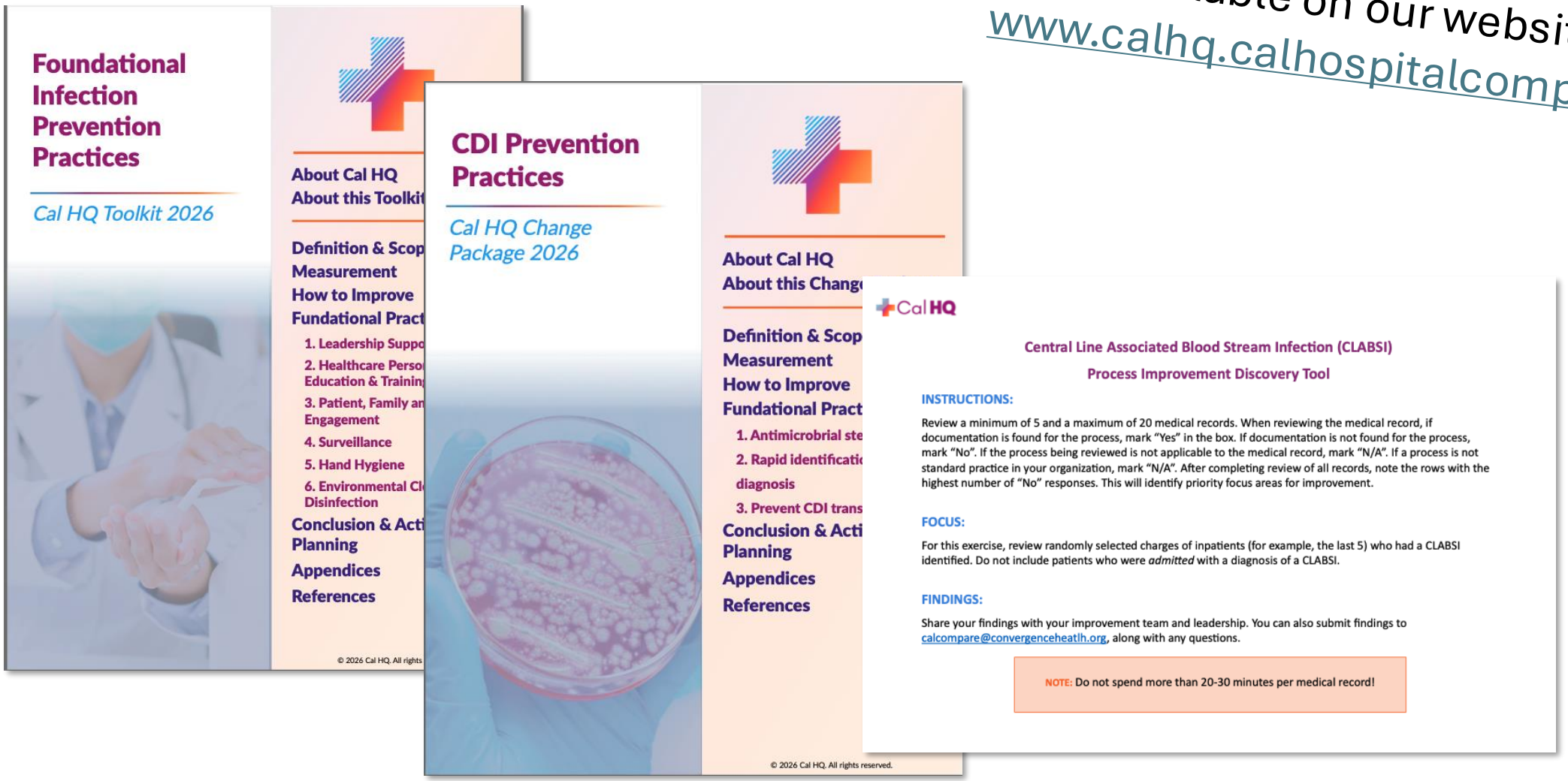
CommonSpirit

Team work makes the dream work!

CommonSpirit

Resources

Available on our website:
www.calhq.calhospitalcompare.org



Upcoming Events

Getting to Goal

Understanding How to Use Cal HQ Data to Guide Improvement Efforts

Wednesday, August 19 |11:00 am PT

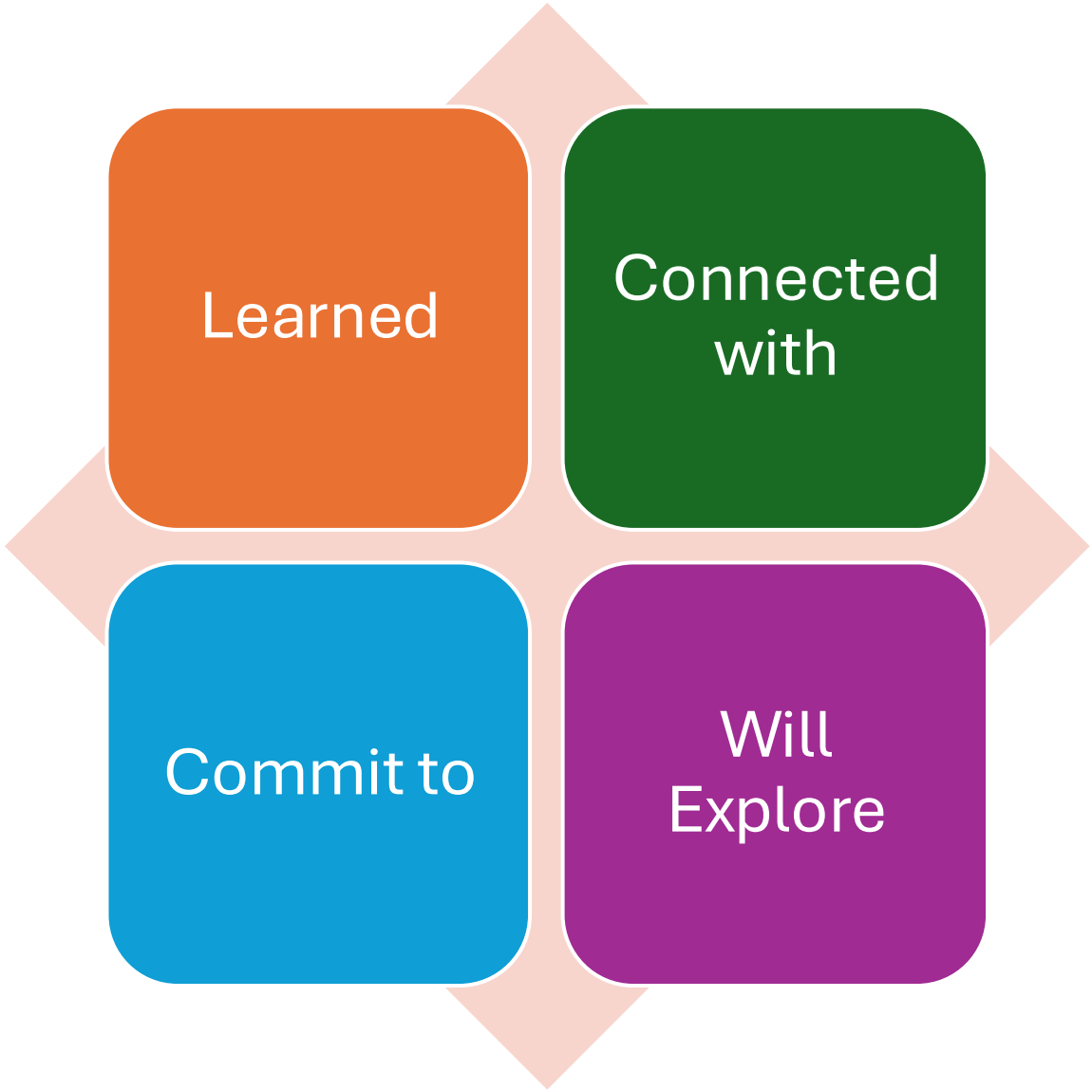
Register here:
https://us06web.zoom.us/meeting/register/5-uKmnC6SLirDHtvvfwv4A#/registration

Join the conversation

- “I’m looking for…”
- “Has anyone tried…?”
- “We’re struggling with…”
- “Does anyone know…”

Email calhqconversation@gaggle.email

Share something you…



Thank you!

Learn more:
www.calhq.calhospitalcompare.org

Contact us:
calcompare@convergencehealth.org

CalHQ