COVID-19 and Increased CLABSI in Acute Care Settings

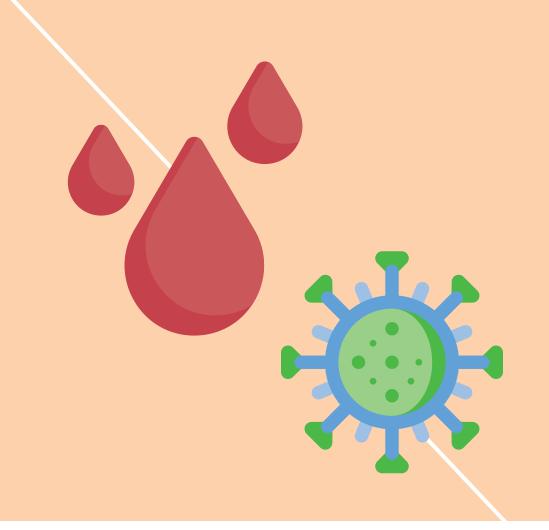


Problem Statement

The COVID-19 pandemic increased the incidence of CLABSI in acute care settings. Emergency response to the pandemic resulted in a shift to crisis care that disrupted supply availability, standard work, utilization, management, and discontinuation of central lines.

Baseline SIR

(1/1/2019–12/31/2019) Baseline CLABSI standardized infection ratio (SIR) was 0.64.

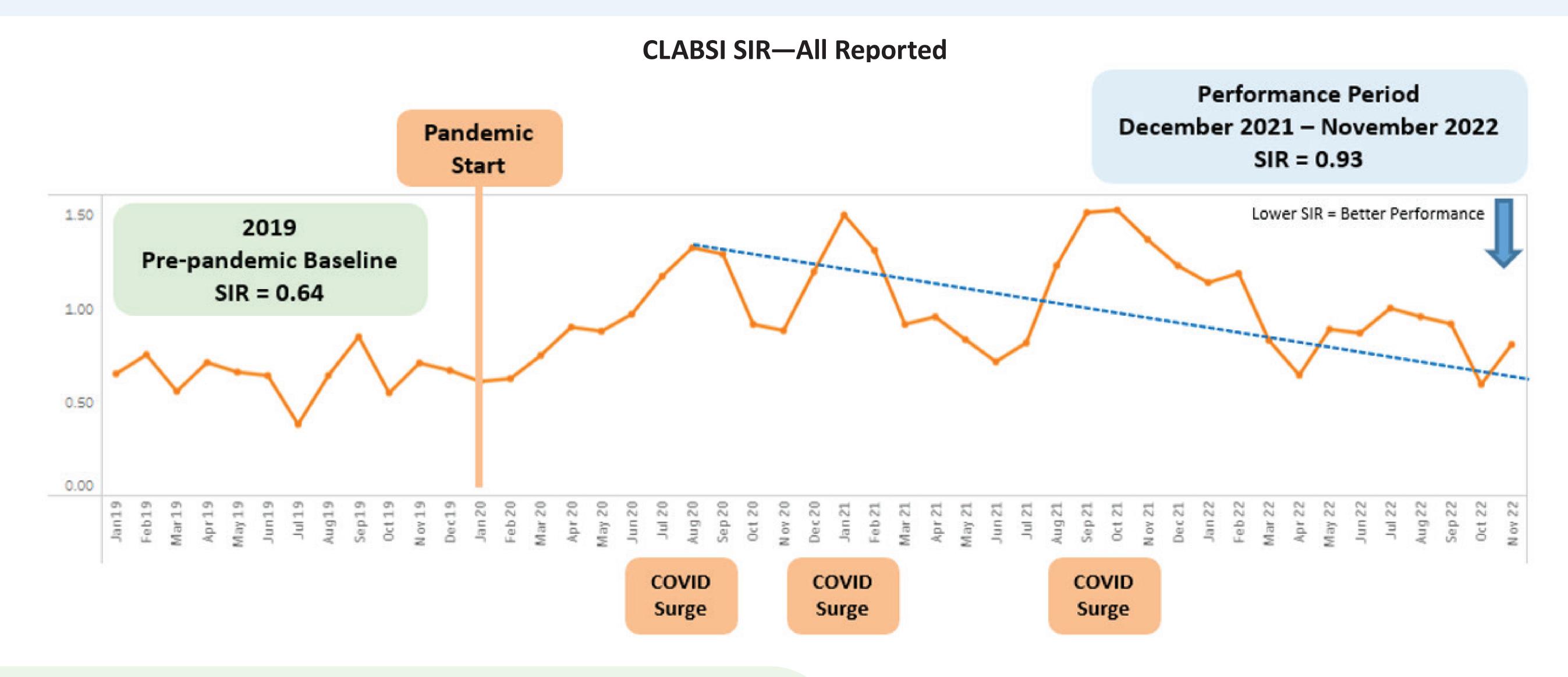


Root Causes

- Increased patient acuity
- Increased length of stay
- Increased device utilization
- Staffing shortages and burnout
- Traveling healthcare workers
- Bundle compliance
- Resource availability
- What must be done versus what should be done (drift)

Outcomes

During the most current 12 months of data available (12/1/2021–11/30/2022) the HSAG HQIC CLABSI SIR is 0.93, demonstrating better performance.



TAP Resource

Target

Interventions

- HSAG infection preventionist 1:1 consultation
- HSAG SUR Calculator
 - Determines predicted device days using a logistic regression model
- TAP Report
 - Identifies units with the greatest burden of infection
- HSAG Central Line Quality and Audit Tool for direct observation and chart review
- Assess staff competencies
- Proper hand hygiene
- Standard work
 - Daily line rounds focusing on line duration
 - Bundle guideline
 - Daily CHG baths, unless contraindicated
 - Maintenance care
- Empower staff to stop non-emergent insertion if proper procedures are not being followed

SUR Calculator Assess targeted facilities/ • Present identified gaps and Generate TAP Reports using units for potential gaps in the National Healthcare data to facility using TAP Unit Type (CDC infection control using the Safety Network (NHSN) Facility Size Teaching Status Hospital Type Measure Type Location Code) Device Days • Identify facilities/units with ≥ 268 beds Major CLABSI Critical Care Units 327 309.886 1.055 Acute Care Hospitals excess healthcare-associated Summarize responses and calculate scores across unit infections (HAIs) using the Acute Care Hospitals CAUTI Acute Care Hospitals CLABSI cumulative attributable facilities, and groups to CDC Location Name: Critical Care Units CDC Location Name: Adult Critical Care difference (CAD) metric identify gaps **Burn Critical Care** Surgical Cardiothoracic Critical Care Engage targeted facilities/ Medical Cardiac Critical Care Medical Critical Care units to participate in focused Surgical Cardiothoracic Critical Care Medical Surgical Critical Care Medical Critical Care prevention efforts Neurology Critical Care Medical Surgical Critical Care Neurosurgical Critical Care Oncology Medical Critical Care Neurosurgical Critical Care **Tools** Pediatric Oncology Critical Care Oncology Medical Critical Care • NHSN TAP Reports TAP Facility Assessment Too Oncology Surgical Critical Care Oncology Medical Surgical Critical Care TAP 'How To' Guide furgical Critical Care NPC= Not placed correctly rauma Critical Care Number of Patients with Devices ion Name: Pediatric Critical Care ediatric Burn Critical Care Complete for each Central Line in use: Central Line 2 ediatric Surgical Cardiothoracic Critical Care COMMENT ediatric Medical Surgical Critical Care ediatric Neurosurgical Critical Care ROOM# Direct Observation ediatric Surgical Care ediatric Trauma Critical Care 1. Are hand hygiene stations and supplies readily available? 2. Is the central line secured via an occlusive dressing and has the ion Name: Burn and Cardiac Critical Care dressing been changed per facility policy? Developed by HSAG using 3. Are antibacterial caps in place per facility policy? a logistic regression model 4. Is the IV tubing dated/timed/initialed per facility policy? mimicking the CDC's NHSN 5. Is the IV solution dated/timed/initialed per facility policy? methodology. 6. Is the tubing capped if not in use? 7. Has the patient been educated regarding appropriate central line care and what to do if he/she notices a concern? **Total Positive Per Patient** 0.0%

Prevent

CLABSI Audit Tool

Total % Adherence Per Patient

8. Is there documentation indicating which department inserted the

Assess

Infection

CLABSI = Central Line-Associated Bloodstream

CHG = chlorhexidine gluconate