El Camino Health

AGENDA
QUALITY, PATIENT CARE AND PATIENT EXPERIENCE COMMITTEE OF THE EL CAMINO HOSPITAL BOARD OF DIRECTORS

Monday, October 4, 2021 – 5:30pm
El Camino Hospital | 2500 Grant Road, Mountain View, CA 94040

PURSUANT TO STATE OF CALIFORNIA EXECUTIVE ORDER N-29-20 DATED MARCH 18, 2020, El CAMINO HEALTH **WILL NOT BE PROVIDING A PHYSICAL LOCATION FOR THIS MEETING**. INSTEAD, THE PUBLIC IS INVITED TO JOIN THE OPEN SESSION MEETING VIA TELECONFERENCE AT:

1-669-900-9128, MEETING CODE: 985 8786 1271#. No participant code. Just press #.

PURPOSE: To advise and assist the El Camino Hospital (ECH) Board of Directors ("Board") in constantly enhancing and enabling a culture of quality and safety at ECH, and to ensure delivery of effective, evidence-based care for all patients. The Quality Committee helps to assure that excellent patient care and exceptional patient experience are attained through monitoring organizational quality and safety measures, leadership development in quality and safety methods and assuring appropriate resource allocation to achieve this purpose.

	AGENDA ITEM	PRESENTED BY		ESTIMATED TIMES
1.	**CALL TO ORDER/ROLL CALL**	Julie Kliger, Quality Committee Chair		**5:30 – 5:32pm**
2.	**POTENTIAL CONFLICT OF INTEREST DISCLOSURES**	Julie Kliger, Quality Committee Chair		**information 5:32 – 5:33**
3.	**CONSENT CALENDAR ITEMS** *Any Committee Member or member of the public may pull an item for discussion before a motion is made.* ***Approval*** a. Minutes of the Open Session of the Quality Committee Meeting (09/07/2021) ***Information*** b. Report on Board Actions c. FY 2022 Pacing Plan d. Article of Interest	Julie Kliger, Quality Committee Chair	*public comment*	**motion required 5:33 – 5:43**
4.	**CHAIR'S REPORT**	Julie Kliger, Quality Committee Chair		**information 5:43 – 5:48**
5.	**PATIENT STORY**	Cheryl Reinking, DNP, RN NEA-BC, Chief Nursing Officer		**discussion 5:48 – 5:53**
6.	**FY 2021 & FY 2022 QUALITY DASHBOARD METRICS**	Mark Adams, MD, Chief Medical Officer		**discussion 5:53 – 6:08**
7.	**CULTURE OF SAFETY SURVEY RESULTS**	Mark Adams, MD, Chief Medical Officer		**discussion 6:08-6:38**
8.	**PUBLIC COMMUNICATION**	Julie Kliger, Quality Committee Chair		**discussion 6:38-6:41**
9.	**ADJOURN TO CLOSED SESSION**	Julie Kliger, Quality Committee Chair	*public comment*	**motion required 6:41 – 6:42**
10.	**POTENTIAL CONFLICT OF INTEREST DISCLOSURES**	Julie Kliger, Quality Committee Chair		**information 6:42-6:43**

A copy of the agenda for the Regular Meeting will be posted and distributed at least seventy-two (72) hours prior to the meeting. In observance of the Americans with Disabilities Act, please notify us at (650) 988-7504 prior to the meeting so that we may provide the agenda in alternative formats or make disability-related modifications and accommodations.

	AGENDA ITEM	PRESENTED BY		ESTIMATED TIMES
11.	**CONSENT CALENDAR** *Any Committee Member may pull an item for discussion before a motion is made.* ***Approval*** *Gov't Code Section 54957.2.* a. Minutes of the Closed Session of the Quality Committee Meeting (09/07/2021) b. Quality Council Minutes (09/01/2021)	Julie Kliger, Quality Committee Chair		**motion required 6:43– 6:44**
12.	*Health and Safety Code Section 32155* **MEDICAL STAFF CREDENTIALING AND PRIVILEGES REPORT**	Mark Adams, MD, CMO		**motion required 6:44 – 6:54**
13.	*Health and Safety Code Section 32155* for a report of the Medical Staff; deliberations concerning reports on Medical Staff quality assurance matters: **SERIOUS SAFETY EVENT/RED ALERT REPORT** (verbal report out)	Mark Adams, MD, CMO		**discussion 6:54 – 6:59**
14.	**ADJOURN TO OPEN SESSION**	Julie Kliger, Quality Committee Chair		**motion required 6:59 – 7:00**
15.	**RECONVENE OPEN SESSION/ REPORT OUT** To report any required disclosures regarding permissible actions taken during Closed Session.	Julie Kliger, Quality Committee Chair		**information 7:00– 7:01**
16.	**CLOSING WRAP UP**	Julie Kliger, Quality Committee Chair		**discussion 7:01 – 7:06**
17.	**ADJOURNMENT**	Julie Kliger, Quality Committee Chair	*public comment*	**motion required 7:06 – 7:07pm**

Next Meeting: November 1, 2021, February 7, 2022, March 7, 2022, April 4, 2022, May 2, 2022, June 6, 2022

Minutes of the Open Session of the
Quality, Patient Care and Patient Experience Committee
of the El Camino Hospital Board of Directors
Tuesday, September 7, 2021
El Camino Hospital | 2500 Grant Road, Mountain View, CA 94040

Members Present	Members Absent	Others Present
Julie Kliger, MD, Chair	George O. Ting, MD, Vice Chair	Mark Adams MD, CMO
Carol Somersille, MD	Terrigal Burn, MD	Shreyas Mallur, MD
Jack Po, MD	Caroline Currie	Dan Woods, CEO
Alyson Falwell		Jim Griffith, COO
Krutica Sharma, MD		Cheryl Reinking, CNO
Melora Simon		Christine Cunningham, Exec.
Apurva Marfatia, MD		Dir. Patient Exp. & Perf Imp.
Michael Kan, MD		Shiraz Ali, Dir of CEO Office

Agenda Item	Comments/Discussion	Approvals/ Action
1. CALL TO ORDER/ ROLL CALL	The open session meeting of the Quality, Patient Care and Patient Experience Committee of El Camino Hospital (the "Committee") was called to order at 5:33pm by Chair, Julie Kliger. A verbal roll call was taken. Dr. Ting, Dr. Burn and Ms. Currie were not present during roll call. All other members were present at roll call and participated in-person or telephonically. A quorum was present pursuant to State of California Executive Orders N-25-20 dated March 12, 2020 and N-29-20 dated March 18, 2020.	
2. POTENTIAL CONFLICT OF INTEREST DISCLOSURES	Chair, Kliger asked if any Committee members had a conflict of interest with any of the items on the agenda. No conflicts were reported.	
3. CONSENT CALENDAR	Chair, Kliger asked if any members of the Committee or the public wished to remove an item from the consent calendar. No items were removed, however, there was one correction, FY 2022 Enterprise Quality Dashboard should be changed to FY 2021 Enterprise Quality Dashboard. **Motion**: To approve the consent calendar. (a) Minutes of the Open Session of the Quality, Patient Care and Patient Experience Committee Meeting (09/07/2021); For information: (b) FY 2021 Enterprise Quality Dashboard, (c) Report on Board Actions and (d) Article of Interest **Movant**: Po **Second**: Kan **Ayes**: Kliger, Kan, Marfatia, Po, Sharma, Somersille, Falwell, Simone **Noes**: None **Abstain**: None **Absent**: Burn, Ting, Currie **Recused**: None	***Consent Calendar approved***
4. CHAIR'S REPORT	The request to have a really useful Pacing Plan continues to come to the forefront. Dr. Adams is continuously thinning out the Pacing Plan, in an effort, to make room on the agenda for discussions and interactive conversations. There have been a number of topics raised over the years, as well as, reflected in the minutes and committee conversations. Some of the topics include the following: broader discussions on Health Equity as it relates to Quality measured outcomes; ways to	

	improve thinking through ambulatory care; ways to bring forward the voice of the patient; patient experience; ambulatory performance improvement; and, deeper dive into protocols, as well as, involving physicians (positive and negative inquiry); how patients in the community are getting care (access); and annual employee physician survey (how results are trending) culture of safety.	
5. PATIENT STORY	Cheryl Reinking, provided a story from an email received in the Patient Experience Department from a new mom. This was a follow-up from a few months ago as it relates to a new mom who had some concerns around lactation support that she received. Since then, there has been much education with all staff to teach them more principles related to lactation. The email from the mom addressed how pleased she was with a particular Nurse (Kitty) who helped transfer her son in Mother Baby over to NICU after oxygen saturations dropped. Nurse Kitty continued to teach this mom about breast feeding and was able to instill confidence by giving her the tools and techniques. She was also pleased with the Labor and Delivery nurse and mentioned this experience was one she would cherish forever.	
6. PATIENT EXPERIENCE (HCAHPS)	The Patient Experience Executive Director, Christine Cunningham, provided a comprehensive overview of the Patient Experience, what we are working on and, what we are planning in the future as well as the expectations of patients and how those expectations have changed over the years. Christine discussed one of the ways of measuring performance by looking at HCAHPS scores. Over the last year, in spite of ups and downs with Covid, the LTR scores continue to outperform both California and the national averages. Although the scores are from Press Ganey customers only, the database in California consist of approximately 300 hospitals, and nationwide about 4,000 hospitals. The Mother/Baby Unit had a small dip last October, pre-surge, but continue to outperform California and national. The ED over the last year was able to increase their percentile ranking and continues to outperform national averages. For FY22 there will be some journey mapping, working across the continuum, and making sure our patients know what to do when they leave the hospital. Integrating the voice of the patient is very important.	
7. PUBLIC COMMUNICATIONS	There was no public communication.	
8. ADJOURN TO CLOSED SESSION	**Motion**: To adjourn to closed session at 6:32pm. **Movant**: Po **Second**: Falwell **Ayes**: Kliger, Kan, Marfatia, Po, Sharma, Somersille, Falwell, Simone **Noes**: None **Abstain**: None **Absent**: Burn, Ting, Currie **Recused**: None	***Adjourned to closed session at 6:32pm***

El Camino Health

EL CAMINO HOSPITAL BOARD OF DIRECTORS
COMMITTEE MEETING MEMO

To: Quality Committee
From: Stephanie Iljin, Supervisor of Executive Administration
Date: October 4, 2021
Subject: Report on Board Actions

Purpose: To keep the Committee informed regarding actions taken by the El Camino Hospital and El Camino Healthcare District Boards.

Summary:

1. Situation: It is essential to keep the Committees informed about Board activity to provide context for Committee work. The list below is not meant to be exhaustive; still, it includes agenda items the Board voted on that are most likely to be of interest to or pertinent to the work of El Camino Hospital's Board Advisory Committees.

2. Authority: This is being brought to the Committees at the request of the Board and the Committees.

3. Background: Since the last time we provided this report to the Quality Committee, the Hospital and District boards have met once. In addition, since the Board has delegated specific authority to the Executive Compensation Committee, the Compliance and Audit Committee, and the Finance Committee, those approvals are also noted in this report.

Board/Committee	**Meeting Date**	**Actions** (Approvals unless otherwise noted)
ECH Board	Sept 22, 2021	- Minutes of the Open & Closed Sessions of the Hospital Board Meeting (08/18/2021) - Medical Staff Credentials and Privileges Report - FY 21 Annual Patient Safety and Claims Report - Inpatient Rehabilitation Business Development - Minutes of the Open Session of the Joint Hospital Board & Finance Committee Meeting (05/24/2021) - Policy Revisions - FY 21 Period 12 Financials - MV Cath Lab Replacement Project - Pyxis MedStation Replacement Project - Medical Staff Development Plan
ECHD Board Special Study Session	Sept 14, 2021	- N/A
Executive Compensation Committee	Sept 28, 2021	- Minutes of the Open & Closed Sessions of the Hospital Board Meeting (05/27/2021) - Policy Revisions - Proposed FY 21 Performance Incentive Plan Payouts - Proposed FY 22 Executive Salary Ranges - Proposed FY 22 Executive Bas Salaries - Ad Hoc Committee Report

Report on Board Actions
October 4, 2021

Board/Committee	**Meeting Date**	**Actions** (Approvals unless otherwise noted)
Compliance Committee	Sept 30, 2021	- Minutes of the Open & Closed Sessions of the CAC Meeting (08/19/2021) - Status of FY 22 Committee Goals - KPI Scorecard and Trends - Activity Log July 2021 - Activity Log August 2021 - Internal Audit Work Plan - Internal Audit Follow Up Table - Committee Pacing Plan - Consolidated Financial Statements, 403 (b) and Cash Balance Audit Results
Finance Committee	Sept 27, 2021	- Minutes of the Open & Closed Sessions of the Finance Committee (08/09/2021) - FY 22 Period 1 Financials - FY 22 Period 2 Financials - Enterprise OB Hospitalist Services Renewal Agreement - LG Orthopedic Surgery Panel - Radiation Oncology Recruitment Agreement

List of Attachments: None.

Suggested Committee Discussion Questions: None.

QUALITY, PATIENT CARE, AND PATIENT EXPERIENCE COMMITTEE

Revised 10/1/2021 **FY22 Pacing Plan**

FY2022 Q1		
JULY 2021	**AUGUST 2, 2021**	**SEPTEMBER 7, 2021**
No Committee Meeting **Routine (Always) Consent Calendar Items:** ▪ **Approval of Minutes** ▪ **FY 22 Quality Dashboard** ▪ **Progress Against FY 2021 Committee Goals (Quarterly)** ▪ **FY22 Pacing Plan (Quarterly)** ▪ **Med Staff Quality Council Minutes (Closed Session)** ▪ **Hospital Update**	Standing Agenda Items: 1. Report on Board Actions 2. Consent Calendar (PSI Report) 3. Patient Story 4. Serious Safety/Red Alert Event as needed 5. Credentials and Privileges Report 6. QC Follow-Up Items Special Agenda Items 1. Q4 FY21 Quarterly Quality and Safety Review 2. Quarterly Board Dashboard Review 3. EL Camino Health Medical Network Report	Standing Agenda Items: 1. Board Actions 2. Consent Calendar (ED Patient Satisfaction) 3. Patient Story 4. Serious Safety/Red Alert Event as needed 5. Credentials and Privileges Report QC Follow-Up Items Special Agenda items: 7. Annual Patient Safety Report 8. Pt. Experience (HCAHPS)
FY2022 Q2		
OCTOBER 4, 2021	**NOVEMBER 1, 2021**	**DECEMBER 6, 2021**
Standing Agenda Items: 1. Board Actions 2. Consent Calendar 3. Patient Story 4. Serious Safety/Red Alert Event as needed 5. Credentials and Privileges Report 6. QC Follow-Up Items Special Agenda Items: 7. FY21 & FY 22 Quality Dashboard Results 8. Culture of Safety Survey Results	Standing Agenda Items: 1. Board Actions 2. Consent Calendar (CDI Dashboard, Core Measures) 3. Patient Story 4. Serious Safety/Red Alert Event as needed 5. Credentials and Privileges Report 6. QC Follow-Up Items Special Agenda Items: 7. Safety Report for the Environment of Care 8. Q1 FY22 Quarterly Quality and Safety Review 9. Quarterly Board Dashboard Review 10. EL Camino Health Medical Network Report 11. Medical Staff Peer Review Process	Standing Agenda Items: 1. Board Actions 2. Consent Calendar 3. Patient Story 4. Serious Safety/Red Alert Event as needed 5. Credentials and Privileges Report 6. QC Follow-Up Items Special Agenda items: 7. Readmission Dashboard 8. PSI Report
FY2022 Q3		
JANUARY 2022	**FEBRUARY 7, 2022**	**MARCH 7, 2022**

No Committee Meeting	Standing Agenda Items: 1. Board Actions 2. Consent Calendar 3. Patient Story 4. Serious Safety/Red Alert Event as needed 5. Credentials and Privileges Report 6. QC Follow-Up Items Special Agenda Items: 7. Q2 FY22 Quality and Safety Review 8. EL Camino Health Medical Network Report 9. Quarterly Board Quality Dashboard Review	Standing Agenda Items: 1. Board Actions 2. Consent Calendar 3. Patient Story 4. Serious Safety/Red Alert Event as needed 5. Credentials and Privileges Report 6. QC Follow-Up items Special Agenda Items: 7. Proposed FY23 Committee Goals
FY2022 Q4		
APRIL 4, 2022	**MAY 2, 2022**	**JUNE 6, 2022**
Standing Agenda Items: 1. Board Actions 2. Consent Calendar 3. Patient Story 4. Serious Safety/Red Alert Event as needed 5. Credentials and Privileges Report 6. QC Follow-Up items Special Agenda Items: 7. Value Based Purchasing Report 8. Pt. Experience (HCAHPS) 9. Approve FY23 Committee Goals 10. Proposed FY23 Committee Meeting Dates 11. Proposed FY23 Organizational Goals	Standing Agenda Items: 1. Board Actions 2. Consent Calendar(CDI Dashboard, Core Measures) 3. Patient Story 4. Serious Safety/Red Alert Event as needed 5. Credentials and Privileges Report 6. QC Follow Up Items Special Agenda Items: 7. Proposed FY23 Pacing Plan 8. Q3 FY22 Quality and Safety Review 9. Proposed FY23 Organizational Goals 10. EL Camino Health Medical Network Report 11. Quarterly Board Quality Dashboard Report	Standing Agenda Items: 1. Board Actions 2. Consent Calendar (Leapfrog) 3. Patient Story 4. Serious Safety/Red Alert Event as needed 5. Credentials and Privileges Report 6. QC Follow-Up Items Special Agenda Items: 7. Readmission Dashboard 8. PSI Report 9. Approve FY23 Pacing Plan 10. Medical Staff Credentialing Process 11. Progress on Quality and Safety Plan 12. Finalize FY23 Organizational Goals 13. Approve Quality Assessment and Performance Improvement Plan (QAPI)

The impact of coronavirus disease 2019 (COVID-19) on healthcare-associated infections in 2020: A summary of data reported to the National Healthcare Safety Network

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Abstract

Objectives:

To determine the impact of the coronavirus disease 2019 (COVID-19) pandemic on healthcare-associated infection (HAI) incidence in US hospitals, national- and state-level standardized infection ratios (SIRs) were calculated for each quarter in 2020 and compared to those from 2019.

Methods:

Central–line–associated bloodstream infections (CLABSIs), catheter-associated urinary tract infections (CAUTIs), ventilator-associated events (VAEs), select surgical site infections, and *Clostridioides difficile* and methicillin-resistant *Staphylococcus aureus* (MRSA) bacteremia laboratory-identified events reported to the National Healthcare Safety Network for 2019 and 2020 by acute-care hospitals were analyzed. SIRs were calculated for each HAI and quarter by dividing the number of reported infections by the number of predicted infections, calculated using 2015 national baseline data. Percentage changes between 2019 and 2020 SIRs were calculated. Supporting analyses, such as an assessment of device utilization in 2020 compared to 2019, were also performed.

Results:

Significant increases in the national SIRs for CLABSI, CAUTI, VAE, and MRSA bacteremia were observed in 2020. Changes in the SIR varied by quarter and state.

The largest increase was observed for CLABSI, and significant increases in VAE incidence and ventilator utilization were seen across all 4 quarters of 2020.

Conclusions:

This report provides a national view of the increases in HAI incidence in 2020. These data highlight the need to return to conventional infection prevention and control practices and build resiliency in these programs to withstand future pandemics.

Type

Original Article

Information

Infection Control & Hospital Epidemiology , First View , pp. 1 - 14

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As the coronavirus disease 2019 (COVID-19) pandemic swept through the United States, regions experienced peak cases and hospitalizations at various times in 2020.[1] The pandemic response placed burden on acute-care hospitals (ACHs), which may have altered staffing practices, increased critical care capacity, and modified use of personal protective equipment (PPE).[2,3] In the early stages of the pandemic, little was known about how COVID-19 hospitalizations would affect the incidence of healthcare-associated infections (HAIs). Single-site studies observed early signs of increases in select HAIs during the spring of 2020.[4–6] Others have studied the occurrence of secondary infections in COVID-19 patients.[7–9] Additionally, a report from the National Healthcare Safety Network (NHSN) found significant increases in central-line–associated bloodstream infections (CLABSIs) during the early months of the pandemic.[10]

The NHSN is the nation's largest HAI surveillance system and is used by nearly all US hospitals to fulfill local, state, or federal HAI reporting requirements. NHSN data are used to measure progress toward prevention goals; this progress is assessed using an observed-to-predicted ratio called the standardized infection ratio (SIR).[11] Nationally, from 2015 to 2019, there have been consistent, significant reductions in the SIRs for CLABSIs, catheter-associated urinary tract infections (CAUTIs), and *Clostridioides difficile* infection (CDI) laboratory-identified (LabID)

events.[12–14] Some significant year-to-year decreases have also been observed in methicillin-resistant *Staphylococcus aureus* (MRSA) bacteremia LabID events since 2010.[12,13,15] Conversely, there has been minimal change in the occurrence of ventilator-associated events (VAEs).[12] Given the potential for COVID-19 response activities to impact HAI prevention and surveillance, the NHSN team analyzed national and state SIRs to identify potential changes in HAI incidence between 2019 and 2020.

Methods

CLABSIs, CAUTIs, VAEs, select surgical site infections (SSIs), MRSA LabID, and CDI LabID events that occurred in ACHs between 2019 and 2020 and were reported to the NHSN Patient Safety Component as of April 1, 2021, were included in this report. Standard surveillance definitions and exclusion rules are described elsewhere for each HAI type.[16]

CLABSIs and CAUTIs included in this analysis were those in scope for the Centers for Medicare and Medicaid Services (CMS) Hospital-Acquired Conditions Reduction Program (HACRP).[17] The HACRP includes infections that occurred in adult and pediatric intensive care units (ICUs), neonatal ICUs (CLABSI only), and adult and pediatric medical, surgical, and medical–surgical wards. VAE data encompass all events classified as ventilator-associated condition (VAC), infection-related ventilator-associated condition (IVAC), and possible ventilator-associated pneumonia (PVAP). VAE surveillance is not included in the CMS HACRP, but events reported voluntarily or due to a state mandate from adult ICUs and adult wards were included. The SSIs included were a subset of those required under the HACRP and classified as deep incisional or organ-space infections following adult inpatient colon or abdominal hysterectomy procedures, detected during the same admission as the procedure or readmission to the same hospital. LabID event surveillance for both organisms is conducted for facility-wide inpatient (FacWideIN) locations and is required for participation in the HACRP. Hospitals that reported no FacWideIN patient days or admissions for a quarter were excluded from the LabID analysis for that quarter.

Temporal comparisons in HAI incidence between 2019 and 2020 were analyzed using national and state SIRs, calculated for each calendar quarter by dividing the number of reported infections by the number of predicted infections, and they were represented by the relative change in magnitude. The number of predicted infections was obtained using regression models created from the 2015 national baseline data with appropriate risk adjustment for the respective HAI. The complete risk adjustment methodology and criteria used for SIR numerators are summarized in the NHSN SIR Guide.[11] SIRs below 1 indicate fewer infections observed than predicted, signaling reductions. Likewise, SIRs above 1 indicate more infections were observed than predicted, signaling increases.

The percentage change between pairs of 2019 and 2020 quarterly SIRs was calculated as follows:

$$\frac{2020\ \text{SIR} - 2019\ \text{SIR}}{2019\ \text{SIR}} \times 100$$

The 95% confidence intervals around the percentage change were calculated, and a 2-tailed $P \leq .05$ calculated by mid-P exact test was considered statistically significant. Percentile distributions of the 2020 SIRs were calculated using data from hospitals with at least 1 predicted HAI.

To reduce potential inclusion bias, SIR analyses were restricted to hospitals with complete surveillance data for both quarters in each pair of quarterly comparisons and for the same locations when applicable (ie, device-associated infections). Given the nature and impact of the pandemic on ACHs, the CMS issued an HAI reporting exception for 2020-Q1–2020-Q2, allowing hospitals to temporarily pause reporting to the NHSN. [18] The impact of this exception was assessed for each HAI type by calculating the percentage of hospitals in 2019-Q1–2019-Q2 that also reported HAI data for 2020-Q1–2020-Q2.

The CDC previously identified the states with a high number of hospitalized COVID-19 patients between April 1 and July 14, 2020. [1] To determine the impact of COVID-19 on HAI incidence in these states, the percentage change in state-level Q2 and Q3 SIRs were calculated for CLABSI, CAUTI, VAE, and MRSA bacteremia. For reference, supplemental data tables and interactive maps are provided on the NHSN website (https://www.cdc.gov/nhsn/datastat/index.html) that provide a comparison between 2019 and 2020 quarterly SIRs for all states and all applicable HAI types, as well as a comparison of location-stratified national SIRs for DA infections.

Additional supporting analyses were performed to help inform the changes in SIRs, including a review of the length-of-stay (from patient admission to discharge date), time to event (from device insertion to infection date), and device utilization measured by the standardized utilization ratio (SUR). SURs were calculated by dividing the number of reported device days by the number of predicted device days, based on 2015 national baseline data. [19] In addition, the inpatient and outpatient quarterly community-onset MRSA bacteremia prevalence rates were reviewed from 2019-Q1 to 2020-Q4. [16] The FacWideIN community-onset prevalence rate was calculated per 1,000 admissions, and the outpatient community-onset prevalence rate was calculated per 10,000 encounters in emergency departments and 24-hour observation units. Data were analyzed using SAS version 9.4 software (SAS Institute, Cary. NC).

Results

Most ACHs reporting 2019 HAI surveillance data continued to report data throughout 2020 (Table 1). Between 86% and 88% of hospitals that conducted surveillance for CLABSI, CAUTI, MRSA bacteremia, or CDI during 2019-Q1 or 2019-Q2 also

reported surveillance data for 2020-Q1 or 2020-Q2. Larger declines in the number of reporting hospitals were seen for VAE (22 – 25% drop) and SSI (25%–36% drop) surveillance. Reporting levels during the second half of 2020 were close to those of the prepandemic period for most HAIs.

Table 1. Number of Hospitals Reporting Healthcare-Associated Infection (HAI) Data to NHSN for 2020 Q1 and 2020 Q2 When a Standard Exception Was in Place for the Centers for Medicare and Medicaid (CMS) Hospital-Acquired Conditions Reduction Program

	2020 Quarter 1			2020 Quarter 2		
HAI Type	No. of Hospitals Reporting in Both 2020 Q1 and 2019 Q1	Total Hospitals Reporting in 2019 Q1	Decrease in Reporting Hospitals, %[a]	No. of Hospitals Reporting in Both 2020 Q2 and 2019 Q2	Total Hospitals Reporting in 2019 Q2	Decrease in Reporting Hospitals, %[a]
CLABSI	3,130	3,567	−12.3	3,057	3,563	−14.2
CAUTI	3,129	3,566	−12.3	3,049	3,561	−14.4
VAE[b]	1,402	1,807	−22.4	1,332	1,783	−25.3
SSI, colon surgery	2,518	3,358	−25.0	2,443	3,351	−27.1
SSI, abdominal hysterectomy	2,269	3,345	−32.2	2,124	3,338	−36.4
Laboratory-identified MRSA bacteremia	3,176	3,626	−12.4	3,106	3,622	−14.2
Laboratory-identified CDI	3,190	3,631	−12.1	3,113	3,628	−14.2

Note: NHSN, National Healthcare Safety Network; CLABSI, central-line–associated bloodstream infection; CAUTI, catheter-associated urinary tract infection; VAE, ventilator-associated event; SSI, surgical site infection; MRSA, methicillin-resistant *Staphylococcus aureus*; CDI, *Clostridioides difficile* infection; CMS, Centers for Medicare and Medicaid Services.
[a] Calculated as follows: [(hospitals reporting in 2020 − hospitals reporting in 2019) ÷ hospitals reporting in 2019] × 100.
[b] VAE data are not included in the requirements for the CMS Hospital-Acquired Conditions Reduction Program.

CLABSI

Despite an initial 12% decrease in the 2020-Q1 CLABSI SIR compared to 2019-Q1, the SIRs in 2020-Q2–2020-Q4 were significantly higher than those in 2019 (Tables 2–5). The largest year-to-year magnitudes of increase (46%–47%) occurred during Q3 and Q4, with the highest CLABSI SIR of 1.01 occurring during 2020-Q3. The increases in the CLABSI SIRs were driven by larger SIR numerators in 2020; for example, in 2020-Q3, there were 4,460 CLABSIs reported, representing a 53% increase compared to the 2,911 events reported from the same hospitals and locations in 2019-Q3. During the same time, the number of predicted CLABSIs increased by 5% (data not shown).

Table 2. National Healthcare-Associated Infection (HAI) Standardized Infection Ratios (SIRs) for Acute-Care Hospitals, January–March 2020 (Q1)

HAI Type	No. of Hospitals[a]	2020 Q1			Q1 SIR				Percentile Distribution of 2020 Q1 Hospital-Level SIRs[e]					
		No. of HAIs Reported	No. of HAIs Predicted	Device Days, Procedures, or Patient Days[b]	2020	2019	% Change in SIR[c]	95% CI Around SIR % Change	0%	25%	50%	75%	90%	100%
CLABSI[f]	3,130	2,236	3,738.12	3,725,983	0.60	0.68	−11.8[d]	(−17.2 to −7.3)	0.00	0.00	0.49	0.87	1.33	4.51
CAUTI[g]	3,129	2,449	4,152.83	3,562,137	0.59	0.75	−21.3[d]	(−33.2 to −20.0)	0.00	0.00	0.48	0.85	1.39	4.34
VAE[h]	1,402	5,642	5,239.51	756,925	1.08	0.97	11.3[d]	(6.5-14.9)	0.00	0.00	0.83	1.86	2.82	5.87
SSI, colon surgery[i]	2,518	1,437	1,802.05	71,170	0.80	0.88	−9.1[d]	(−15.5 to −2.6)	0.00	0.00	0.75	1.35	2.01	4.41
SSI, abdominal hysterectomy[i]	2,269	336	423.36	64,158	0.79	0.94	−16.0[d]	(−26.6 to −2.2)	0.00	0.00	0.69	0.91	1.90	3.75
Laboratory-identified MRSA bacteremia[j]	3,176	1,689	2,205.32	34,345,939	0.77	0.83	−7.2[d]	(−13.9 to −1.7)	0.00	0.00	0.69	1.11	1.75	6.59
Laboratory-identified CDI[k]	3,190	9,910	19,231.71	31,915,519	0.52	0.63	−17.5[d]	(−20.3 to −16.0)	0.00	0.17	0.43	0.73	1.09	3.77

Note. CI, confidence interval; CLABSI, central-line–associated bloodstream infection; CAUTI, catheter-associated urinary tract infection; VAE, ventilator-associated event; SSI, surgical site infection; MRSA, methicillin-resistant *Staphylococcus aureus*; CDI, *Clostridioides difficile* infection; NHSN, National Healthcare Safety Network; CMS, Centers for Medicare and Medicaid Services; ICU, intensive care unit.

[a] The number of acute-care hospitals that reported complete HAI surveillance data for both quarters in the comparison.

[b] Device days are shown for CLABSI, CAUTI, and VAE. Procedure counts are shown for SSI. Patient days are shown for laboratory-identified events.

[c] % change was calculated as follows: [(2020 SIR − 2019 SIR) ÷ 2019 SIR] × 100.

[d] Statistical significance based on 2-tailed $P \leq .05$, reflected in the relative % change in magnitude.

[e] Percentile distribution of hospital-level SIRs includes only those hospitals that had at least 1 predicted HAI.

[f] CLABSI SIRs were calculated using data from adult and pediatric ICUs, neonatal ICUs, and adult and pediatric medical, surgical, and medical–surgical wards.

[g] CAUTI SIRs were calculated using data from adult and pediatric ICUs, and adult and pediatric medical, surgical, and medical–surgical wards.

[h] VAE SIRs were calculated using data from adult ICUs and wards.

[i] SSIs included are those classified as deep incisional or organ-space infections following adult inpatient procedures that were detected during the same admission as the surgical procedure or upon readmission to the same hospital. The NHSN Complex Admission–Readmission model was used for SIR calculations.

[j] MRSA bacteremia SIRs were calculated using data from all inpatient locations in the hospital (facility-wide inpatient, or FacWideIN) except inpatient rehabilitation and inpatient psychiatric units certified by the CMS. Reported and predicted HAIs were limited to hospital-onset events that were identified in an inpatient location on the fourth day (or later) after admission to the facility.

[k] CDI SIRs were calculated using data from all inpatient locations in the hospital (FacWideIN) except neonatal ICUs, newborn nurseries, and inpatient rehabilitation and inpatient psychiatric units certified by the CMS. Reported and predicted HAIs were limited to hospital-onset incident events that were identified in an inpatient location on the fourth day (or later) after admission to the facility without a prior positive CDI specimen in the previous 56 days.

The change in CLABSI SIR varied by state and quarter (Table 6). Arizona's CLABSI SIR was 149% higher in 2020-Q2 than 2019-Q2, and the SIR for Massachusetts doubled in 2020-Q2. Louisiana and Michigan experienced statistically significant increases of >70% in their Q2 CLABSI SIRs. Although New Jersey and New York reported nonsignificant changes in their CLABSI SIRs in 2020-Q2, both states had a substantial decline (61% and 40%, respectively) in the number of reporting hospitals in 2020-Q2 compared to 2019. 12 The number of reporting hospitals returned to prepandemic levels in 2020-Q3 for both states, and New Jersey's 2020-Q3 CLABSI SIR (0.86) was 59% higher than the SIR from 2019-Q3 (0.54). Arizona, Georgia, and

Florida observed substantial (97%–148%) increases in their 2020-Q3 state SIRs compared to 2019-Q3.

CAUTI

The national CAUTI SIR steadily increased from 2020-Q1 to 2020-Q4, ranging from 0.59 in Q1 to 0.82 in Q4 (Tables 2–5). Significant increases in the 2020 CAUTI SIR compared to 2019 were observed in Q3 and Q4, with the Q4 SIR increasing by 19%, from 0.69 in 2019 to 0.82 in 2020. The increase in the Q4 CAUTI SIR was driven by a 36% increase in the number of infections, from 3,142 in 2019-Q4 to 4,258 in 2020-Q4. The number of predicted CAUTIs increased by 15% during this period. At the state level, significant increases in the Q3 CAUTI SIR were reported by Arizona (69%) and California (24%) (Table 7). Georgia, Massachusetts, Michigan, and New Jersey each observed >20% increase in their state's CAUTI SIR for 2020-Q3 compared to 2019-Q3, although these increases were not statistically significant.

VAE

Between 1,332 and 1,496 hospitals reported VAE data to NHSN for each quarter in 2019 and 2020 (Tables 2–5). The 2020-Q2 and 2020-Q3 national VAE SIRs were 1.31 and 1.29. Preliminary Q4 data indicated an even higher SIR; 10,108 and 7,296 VAEs were reported and predicted respectively, resulting in a 2020-Q4 SIR of 1.39. Significant increases in the national VAE SIRs were observed in all 4 quarters of 2020 compared to 2019, with the largest increase of 45% occurring in Q4. Many states experienced significant increases in their VAE SIRs in 2020-Q2 and 2020-Q3, such as 88% and 91% increases in the Illinois and New York SIRs for Q2, and an 87% increase in the Georgia SIR for Q3 (Table 8). The median hospital-level VAE SIR for 2020-Q2, 2020-Q3, and 2020-Q4 were all above 1.0, with the highest median SIR of 1.30 occurring in Q4.

All Device-Associated infections

Overall, the national distributions of time to infection for CLABSI and CAUTI, or length-of-stay for patients with any device-associated infection were significantly different in 2020 compared to 2019 (not shown). The median time to infection for ICU CLABSIs increased from 8 days in 2019 to 10 days in 2020. The median length of stay for an ICU patient with a CAUTI increased from 17 days in 2019 to 20 days in 2020, and for ICU VAEs, it increased from 17 days in 2019 to 19 days in 2020. Compared to 2019, central-line and urinary catheter usage were significantly higher in 2020-Q2–2020-Q4, and ventilator usage was significantly higher in all 4 quarters of 2020 (not shown). The central-line SUR increased by 7%, from 0.85 in 2019-Q2–2019-Q4 to 0.91 to 2020-Q2–2020-Q4. The urinary catheter SUR increased by 9%, from 0.81 in 2019-Q2–2019-Q4 to 0.88 in 2020-Q2–2020-Q4. The quarterly

ventilator SURs were 25%–31% higher in 2020-Q2–2020-Q4, with the Q4 SUR increasing from 0.94 in 2019-Q4 to 1.23 in 2020-Q4.

MRSA bacteremia LabID

The national SIRs for MRSA bacteremia were significantly higher in 2020-Q2, 2020-Q3, and 2020-Q4 compared to 2019, with the 2020 SIRs ranging from 0.77 in Q1 to 1.07 in Q4 (Tables 2–5).

During 2020-Q2, there was a 15% (5 million) reduction in national FacWideIN patient days, an 18% (1.4 million) reduction in admissions, and a 34% (10 million) reduction in outpatient encounters (Appendix A1–A2 online). These decreases in denominators led to increases in the 2020-Q2 inpatient and outpatient community-onset MRSA bacteremia prevalence rates compared to 2019-Q2; there was a small increase in the inpatient community-onset prevalence rate (0.53 vs 0.59 events per 1,000 admissions) and a large increase in the outpatient community-onset prevalence rate (3.66 vs 5.47 events per 10,000 encounters).

The national MRSA bacteremia SIR was 0.92 in 2020-Q2, a 12% increase from 2019-Q2. This increase was largely driven by the decline in patient days in 2020-Q2, which contributed to a 10% decline in the number of predicted MRSA bacteremia events compared to the same quarter in 2019. A corresponding decline was not observed in the number of reported MRSA bacteremia events; the number of events reported for 2020-Q2 was 1% higher than that reported for 2019-Q2 (data not shown).

During 2020-Q3 and 2020-Q4, the national MRSA bacteremia SIRs were 23% and 34% higher than the 2019 values, resulting from a larger number of LabID events reported during these quarters in 2020 versus 2019. Several states reported significantly higher MRSA bacteremia SIRs in 2020-Q2 than 2019-Q2, such as Arizona with an 80% increase and New Jersey with a 99% increase (Table 9). Among select states in the Q3 comparison, Louisiana had the largest increase in their state SIR of 96%.

SSI and CDI LabID

We detected no significant increases in the national quarterly SIRs for SSI or CDI for any quarter in 2020 compared to 2019. The national CDI SIR steadily declined in 2019-Q1–2019-Q4 from 0.63 to 0.55 and remained stable at 0.52 for each quarter in 2020 (Tables 2–5). Decreases in the SSI SIRs compared to 2019 were reported throughout 2020 for both procedure categories, although some decreases were not statistically significant. Fewer inpatient colon and abdominal hysterectomy procedures were performed in each quarter of 2020 compared to 2019, with the greatest decreases of 23% and 39%, respectively, occurring during Q2 (data not shown).

Table 3. National Healthcare-Associated Infection (HAI) Standardized Infection Ratios (SIRs) for Acute-Care Hospitals, April–June 2020 (Q2)

HAI Type	No. of Hospitals[a]	2020 Q2			Q2 SIR				Percentile Distribution of 2020 Q2 Hospital-Level SIRs[e]					
		No. of HAIs Reported	No. of HAIs Predicted	Device Days, Procedures, or Patient Days[b]	2020	2019	% Change[c] in SIR	95% CI Around SIR % Change	0%	25%	50%	75%	90%	100%
CLABSI[f]	3,057	2,963	3,394.90	3,358,039	0.87	0.68	27.9[d]	(21.5–35.2)	0.00	0.00	0.68	1.19	1.94	6.54
CAUTI[g]	3,049	2,590	3,831.88	3,266,836	0.68	0.71	−4.2	(−9.9 to 0.2)	0.00	0.00	0.58	0.97	1.60	4.86
VAE[h]	1,332	7,191	5,495.34	800,017	1.31	0.98	33.7[d]	(28.5–38.5)	0.00	0.00	1.18	2.33	3.59	12.55
SSI, colon surgery[i]	2,443	1,272	1,462.82	55,790	0.87	0.88	−1.1	(−8.1 to 6.4)	0.00	0.00	0.78	1.41	2.00	4.90
SSI, abdominal hysterectomy[i]	2,124	276	303.54	44,882	0.91	0.99	−8.1	(−20.6 to 6.9)	0.00	0.00	0.89	1.53	1.78	2.99
Laboratory-identified MRSA bacteremia[j]	3,106	1,729	1,881.91	28,488,801	0.92	0.82	12.2[d]	(5.0–20.0)	0.00	0.00	0.75	1.24	1.84	6.77
Laboratory-identified CDI[k]	3,113	8,141	15,701.11	26,107,710	0.52	0.58	−10.3[d]	(−13.8 to −8.7)	0.00	0.15	0.42	0.74	1.09	6.13

Note. CI, confidence interval; CLABSI, central-line–associated bloodstream infection; CAUTI, catheter-associated urinary tract infection; VAE, ventilator-associated event; SSI, surgical site infection; MRSA, methicillin-resistant *Staphylococcus aureus*; CDI, *Clostridioides difficile* infection. NHSN, National Healthcare Safety Network; CMS, Centers for Medicare and Medicaid Services; ICU, intensive care unit.

[a] The number of acute-care hospitals that reported complete HAI surveillance data for both quarters in the comparison.

[b] Device days are shown for CLABSI, CAUTI, and VAE. Procedure counts are shown for SSI. Patient days are shown for laboratory-identified events.

[c] % change was calculated as follows: [(2020 SIR − 2019 SIR) ÷ 2019 SIR] × 100.

[d] Statistical significance based on 2-tailed $P \leq .05$, reflected in the relative % change in magnitude.

[e] Percentile distribution of hospital-level SIRs includes only those hospitals that had at least 1 predicted HAI.

[f] CLABSI SIRs were calculated using data from adult and pediatric ICUs, neonatal ICUs, and adult and pediatric medical, surgical, and medical–surgical wards.

[g] CAUTI SIRs were calculated using data from adult and pediatric ICUs, and adult and pediatric medical, surgical, and medical–surgical wards.

[h] VAE SIRs were calculated using data from adult ICUs and wards.

[i] SSIs included are those classified as deep incisional or organ-space infections following adult inpatient procedures that were detected during the same admission as the surgical procedure or upon readmission to the same hospital. The NHSN Complex Admission–Readmission model was used for SIR calculations.

[j] MRSA bacteremia SIRs were calculated using data from all inpatient locations in the hospital (facility-wide inpatient, or FacWideIN) except inpatient rehabilitation and inpatient psychiatric units certified by the CMS. Reported and predicted HAIs were limited to hospital-onset events that were identified in an inpatient location on the fourth day (or later) after admission to the facility.

[k] CDI SIRs were calculated using data from all inpatient locations in the hospital (FacWideIN) except neonatal ICUs, newborn nurseries, and inpatient rehabilitation and inpatient psychiatric units certified by CMS. Reported and predicted HAIs were limited to hospital-onset incident events that were identified in an inpatient location on the fourth day (or later) after admission to the facility without a prior positive CDI specimen in the previous 56 days.

Table 4. National Healthcare-Associated Infection (HAI) Standardized Infection Ratios (SIRs) for Acute-Care Hospitals, July–September 2020 (Q3)

HAI Type	No. of Hospitals[a]	2020 Q3			Q3 SIR				Percentile Distribution of 2020 Q3 Hospital-Level SIRs[e]					
		No. of HAIs Reported	No. of HAIs Predicted	Device Days, Procedures, or Patient Days[b]	2020	2019	% Change[c] in SIR	95% CI Around SIR % Change	0%	25%	50%	75%	90%	100%
CLABSI[f]	3,451	4,460	4,415.75	4,388,693	1.01	0.69	46.4[d]	(39.4–53.1)	0.00	0.41	0.81	1.46	2.31	8.40
CAUTI[g]	3,448	4,034	5,025.69	4,263,776	0.80	0.71	12.7[d]	(7.9–18.4)	0.00	0.22	0.69	1.18	1.86	7.00
VAE[h]	1,496	8,521	6,604.97	954,394	1.29	1.00	29.0[d]	(24.8–33.8)	0.00	0.00	1.13	2.17	3.31	7.87
SSI, colon surgery[i]	2,769	1,729	2,127.12	80,372	0.81	0.87	−6.9[d]	(−12.6 to −0.3)	0.00	0.00	0.68	1.29	1.99	4.75
SSI, abdominal hysterectomy[i]	2,476	486	488.18	71,473	1.00	1.05	−4.8	(−16.2 to 6.7)	0.00	0.00	0.84	1.39	2.05	3.94
Laboratory-identified MRSA bacteremia[j]	3,512	2,482	2,539.42	38,333,911	0.98	0.80	22.5[d]	(14.6–29.0)	0.00	0.29	0.78	1.43	2.08	7.35
Laboratory-identified CDI[k]	3,511	10,875	21,087.49	35,313,701	0.52	0.57	−8.8[d]	(−11.4 to −6.8)	0.00	0.16	0.44	0.73	1.07	8.16

Note. CI, confidence interval; CLABSI, central-line–associated bloodstream infection; CAUTI, catheter-associated urinary tract infection; VAE, ventilator-associated event; SSI, surgical site infection; MRSA, methicillin-resistant *Staphylococcus aureus*; CDI, *Clostridioides difficile* infection; NHSN, National Healthcare Safety Network; CMS, Centers for Medicare and Medicaid Services; ICU, intensive care unit.

[a] The number of acute-care hospitals that reported complete HAI surveillance data for both quarters in the comparison.

[b] Device days are shown for CLABSI, CAUTI, and VAE. Procedure counts are shown for SSI. Patient days are shown for laboratory-identified events.

[c] % change was calculated as follows: [(2020 SIR − 2019 SIR) ÷ 2019 SIR] × 100.

[d] Statistical significance based on 2-tailed $P \leq .05$, reflected in the relative % change in magnitude.

[e] Percentile distribution of hospital-level SIRs includes only those hospitals that had at least 1 predicted HAI.

[f] CLABSI SIRs were calculated using data from adult and pediatric ICUs, neonatal ICUs, and adult and pediatric medical, surgical, and medical–surgical wards.

[g] CAUTI SIRs were calculated using data from adult and pediatric ICUs, and adult and pediatric medical, surgical, and medical–surgical wards.

[h] VAE SIRs were calculated using data from adult ICUs and wards.

[i] SSIs included are those classified as deep incisional or organ-space infections following adult inpatient procedures that were detected during the same admission as the surgical procedure or upon readmission to the same hospital. NHSN Complex Admission–Readmission model was used for SIR calculations.

[j] MRSA bacteremia SIRs were calculated using data from all inpatient locations in the hospital (facility-wide inpatient, or FacWideIN) except inpatient rehabilitation and inpatient psychiatric units certified by the CMS. Reported and predicted HAIs were limited to hospital-onset events that were identified in an inpatient location on the fourth day (or later) after admission to the facility.

[k] CDI SIRs were calculated using data from all inpatient locations in the hospital (FacWideIN) except neonatal ICUs, newborn nurseries, and inpatient rehabilitation and inpatient psychiatric units certified by CMS. Reported and predicted HAIs were limited to hospital-onset incident events that were identified in an inpatient location on the fourth day (or later) after admission to the facility without a prior positive CDI specimen in the previous 56 days.

Table 5. Preliminary National Healthcare-Associated Infection (HAI) Standardized Infection Ratios (SIRs) for Acute-Care Hospitals, October–December 2020 (Q4)

HAI Type	No. of Hospitals[a]	2020 Q4			Q4 SIR				Percentile Distribution of 2020 Q4 Hospital-Level SIRs[e]					
		No. of HAIs Reported	No. of HAIs Predicted	Device Days, Procedures, or Patient Days[b]	2020	2019	% Change[c] in SIR	95% CI Around SIR % Change	0%	25%	50%	75%	90%	100%
CLABSI[f]	3,259	4,371	4,498.95	4,476,688	0.97	0.66	47.0[d]	(39.5–53.6)	0.00	0.34	0.81	1.40	2.05	6.48
CAUTI[g]	3,256	4,258	5,205.82	4,424,667	0.82	0.69	18.8[d]	(12.9–23.8)	0.00	0.22	0.71	1.24	1.85	7.41
VAE[h]	1,438	10,108	7,296.11	1,061,907	1.39	0.96	44.8[d]	(38.9–48.7)	0.00	0.00	1.30	2.51	3.78	12.20
SSI, colon surgery[i]	2,594	1,469	1,899.78	72,700	0.77	0.84	−8.3[d]	(−13.6 to −0.6)	0.00	0.00	0.66	1.15	1.79	3.79
SSI, abdominal hysterectomy[i]	2,322	400	464.40	69,145	0.86	0.99	−13.1[d]	(−23.4 to −0.8)	0.00	0.00	0.74	0.96	1.58	7.04
Laboratory-identified MRSA bacteremia[j]	3,296	2,715	2,537.64	38,700,892	1.07	0.80	33.8[d]	(25.6–41.1)	0.00	0.39	0.80	1.47	2.28	7.82
Laboratory-identified CDI[k]	3,299	10,987	21,139.54	35,954,158	0.52	0.55	−5.5[d]	(−8.0 to −3.1)	0.00	0.16	0.43	0.72	1.07	9.25

Note. CI, confidence interval; CLABSI, central-line–associated bloodstream infection; CAUTI, catheter-associated urinary tract infection; VAE, ventilator-associated event; SSI, surgical site infection; MRSA, methicillin-resistant *Staphylococcus aureus*; CDI, *Clostridioides difficile* infection; ICU, intensive care unit; CMS, Centers for Medicare and Medicaid Services; NHSN, National Healthcare Safety Network.

[a] The number of acute-care hospitals that reported complete HAI surveillance data for both quarters in the comparison.

[b] Device days are shown for CLABSI, CAUTI, and VAE. Procedure counts are shown for SSI. Patient days are shown for laboratory-identified events.

[c] % change was calculated as follows: [(2020 SIR − 2019 SIR) ÷ 2019 SIR] × 100.

[d] Statistical significance based on 2-tailed $P \leq .05$, reflected in the relative % change in magnitude.

[e] Percentile distribution of hospital-level SIRs includes only those hospitals that had at least 1 predicted HAI.

[f] CLABSI SIRs were calculated using data from adult and pediatric ICUs, neonatal ICUs, and adult and pediatric medical, surgical, and medical–surgical wards.

[g] CAUTI SIRs were calculated using data from adult and pediatric ICUs, and adult and pediatric medical, surgical, and medical–surgical wards.

[h] VAE SIRs were calculated using data from adult ICUs and wards.

[i] SSIs included are those classified as deep incisional or organ-space infections following adult inpatient procedures that were detected during the same admission as the surgical procedure or upon readmission to the same hospital. The NHSN Complex Admission–Readmission model was used for SIR calculations.

[j] MRSA bacteremia SIRs were calculated using data from all inpatient locations in the hospital (facility-wide inpatient, or FacWideIN) except inpatient rehabilitation and inpatient psychiatric units certified by the CMS. Reported and predicted HAIs were limited to hospital-onset events that were identified in an inpatient location on the fourth day (or later) after admission to the facility.

[k] CDI SIRs were calculated using data from all inpatient locations in the hospital (FacWideIN) except neonatal ICUs, newborn nurseries, and inpatient rehabilitation and inpatient psychiatric units certified by the CMS. Reported and predicted HAIs were limited to hospital-onset incident events that were identified in an inpatient location on the fourth day (or later) after admission to the facility without a prior positive CDI specimen in the previous 56 days.

Discussion

This report is the first to present national and select state-level quarterly SIRs for each HAI type in 2020, along with a comparison to 2019 SIRs. Due to reporting requirements for the CMS HACRP, NHSN data are representative of largely all ACHs in the country and provide a national picture of how patient safety, in particular HAI incidence, may have been affected by the COVID-19 pandemic.

Table 6. 2020 Q2 and Q3 Central-Line–Associated Bloodstream Infection (CLABSI) a Standardized Infection Ratios (SIRs) for Acute-Care Hospitals Compared to 2019 for Select States

State[b]	2020 Q2 vs 2019 Q2							2020 Q3 vs 2019 Q3						
	No. of Hospitals[c]	2020 Q2 No. of CLABSIs	2020 Q2 No. of Predicted CLABSIs	2020 Q2 SIR	2019 Q2 SIR	% Change[d] in SIR	95% CI Around SIR % Change	No. of Hospitals[c]	2020 Q3 No. of CLABSIs	2020 Q3 No. of Predicted CLABSIs	2020 Q3 SIR	2019 Q3 SIR	% Change[d] in SIR	95% CI Around SIR % Change
Arizona	59	80	82.63	0.97	0.39	148.7[e]	(64.6–275.6)	59	105	92.20	1.14	0.46	147.8[e]	(72.5–269.2)
California	300	309	358.57	0.86	0.61	41.0[e]	(18.5–66.6)	323	536	436.18	1.23	0.70	75.7[e]	(51.9–102.8)
Florida	189	166	241.80	0.69	0.72	−4.2	(−22.0 to 18.1)	207	381	312.59	1.22	0.62	96.8[e]	(65.7–137.0)
Georgia	100	131	155.77	0.84	0.59	42.4[e]	(9.4–86.5)	103	238	172.12	1.38	0.68	102.9[e]	(61.7–156.6)
Illinois	111	129	126.73	1.02	0.69	47.8[e]	(12.4–91.9)	129	111	166.12	0.67	0.68	−1.5	(−23.9 to 28.7)
Louisiana	65	47	39.87	1.18	0.69	71.0[e]	(7.9–174.3)	85	101	69.75	1.45	0.89	62.9[e]	(18.4–125.6)
Massachusetts	59	109	87.77	1.24	0.62	100.0[e]	(45.1–181.7)	65	81	95.71	0.85	0.63	34.9	(−3.9 to 86.7)
Michigan	76	119	91.17	1.31	0.75	74.7[e]	(29.6–136.3)	94	111	130.22	0.85	0.64	32.8[e]	(0.1–77.2)
New Jersey	28	37	32.93	1.12	0.81	38.3	(−18.1 to 137.8)	67	76	88.38	0.86	0.54	59.3[e]	(10.7–127.9)
New York	100	73	121.75	0.60	0.61	−1.6	(−29.4 to 34.9)	168	249	285.50	0.87	0.77	13.0	(−5.3 to 35.6)
Pennsylvania	156	222	215.55	1.03	0.77	33.8[e]	(10.4–64.3)	155	197	234.26	0.84	0.80	5.0	(−13.7 to 29.2)
Texas	302	242	305.15	0.80	0.73	9.6	(−8.4 to 31.1)	322	487	395.20	1.23	0.73	68.5[e]	(45.8–97.8)

Note. CI, confidence interval; CDC, Centers for Disease Control and Prevention; NHSN, National Healthcare Safety Network; ICU, intensive care unit.

[a] SIRs were calculated using data from adult and pediatric ICUs, neonatal ICUs, and adult and pediatric medical, surgical, and medical–surgical wards.

[b] Quarterly CLABSI SIRs are available for all eligible states and quarters in the Supplementary Tables (online). The states shown in this table were identified by the CDC as having a high number of hospitalized COVID-19 patients between April 1, 2020, and July 14, 2020. 1

[c] Hospitals reporting complete CLABSI surveillance data to the NHSN for the same location for both quarters in the comparison.

[d] % change was calculated as follows: [(2020 SIR − 2019 SIR) ÷ 2019 SIR] × 100.

[e] Statistical significance based on 2-tailed $P \leq .05$, reflected in the relative % change in magnitude.

Table 7. 2020 Q2 and Q3 Catheter-Associated Urinary Tract Infection (CAUTI) a Standardized Infection Ratios (SIRs) for Acute-Care Hospitals Compared to 2019 for Select States

State[b]	2020 Q2 vs 2019 Q2							2020 Q3 vs 2019 Q3						
	No. of Hospitals[c]	2020 Q2 No. of CAUTIs	2020 Q2 No. of Predicted CAUTIs	2020 Q2 SIR	2019 Q2 SIR	% Change[d] in SIR	95% CI Around SIR % Change	No. of Hospitals[c]	2020 Q3 No. of CAUTIs	2020 Q3 No. of Predicted CAUTIs	2020 Q3 SIR	2019 Q3 SIR	% Change[d] in SIR	95% CI Around SIR % Change
Arizona	61	50	81.37	0.61	0.37	64.9[e]	(4.9–161.2)	61	85	93.35	0.91	0.54	68.5[e]	(15.6–144.5)
California	294	339	388.79	0.87	0.87	0.0	(−13.4 to 16.8)	318	494	470.01	1.05	0.85	23.5[e]	(7.8–41.7)
Florida	188	123	265.60	0.46	0.62	−25.8[e]	(−40.7 to −6.3)	206	224	338.48	0.66	0.59	11.9	(−8.7 to 36.0)
Georgia	101	100	161.07	0.62	0.73	−15.1	(−35.4 to 10.9)	104	167	193.47	0.86	0.68	26.5	(−0.9 to 61.9)
Illinois	110	91	140.55	0.65	0.70	−7.1	(−30.6 to 23.6)	130	132	181.88	0.73	0.70	4.3	(−18.9 to 33.3)
Louisiana	64	44	50.37	0.87	0.84	3.6	(−31.7 to 57.7)	85	58	86.92	0.67	0.80	−16.3	(−41.5 to 19.5)
Massachusetts	59	105	101.67	1.03	0.99	4.0	(−21.6 to 38.7)	65	95	108.33	0.88	0.71	23.9	(−9.3 to 67.7)
Michigan	76	69	113.94	0.61	0.65	−6.2	(−32.6 to 30.2)	94	134	162.37	0.83	0.66	25.8	(−3.6 to 60.5)
New Jersey	29	23	41.40	0.56	0.99	−43.4[e]	(−67.8 to −4.0)	68	82	99.15	0.83	0.64	29.7	(−7.8 to 79.9)
New York	99	74	150.94	0.49	0.78	−37.2[e]	(−53.6 to −16.0)	167	255	342.35	0.74	0.85	−12.9	(−26.2 to 3.6)
Pennsylvania	156	211	263.25	0.80	0.66	21.2	(−0.3 to 49.0)	155	206	273.93	0.75	0.67	11.9	(−8.3 to 37.5)
Texas	299	180	298.04	0.60	0.59	1.7	(−17.0 to 25.0)	323	292	411.87	0.71	0.62	14.5	(−4.5 to 36.4)

Note. CI, confidence interval; CDC, Centers for Disease Control and Prevention; NHSN, National Healthcare Safety Network; ICU, intensive care unit.

[a] SIRs were calculated using data from adult and pediatric ICUs, and adult and pediatric medical, surgical, and medical–surgical wards.

[b] Quarterly CAUTI SIRs were available for all eligible states and quarters in the Supplementary Tables (online). The states shown in this table were identified by the CDC as having a high number of hospitalized COVID-19 patients between April 1, 2020, and July 14, 2020. 1

[c] Hospitals reporting complete CAUTI surveillance data to the NHSN for the same location for both quarters in the comparison.

[d] % change was calculated as follows: [(2020 SIR − 2019 SIR) ÷ 2019 SIR] × 100.

[e] Statistical significance based on 2-tailed $P \leq .05$, reflected in the relative % change in magnitude.

Table 8. 2020 Q2 and Q3 Ventilator-Associated Event (VAE) a Standardized Infection Ratios (SIRs) for Acute-Care Hospitals Compared to 2019 for Select States

State[b]	2020 Q2 vs 2019 Q2							2020 Q3 vs 2019 Q3						
	No. of Hospitals[c]	2020 Q2 No. of VAEs	2020 Q2 No. of Predicted VAEs	2020 Q2 SIR	2019 Q2 SIR	% Change[d] in SIR	95% CI Around SIR % Change	No. of Hospitals[c]	2020 Q3 No. of VAEs	2020 Q3 No. of Predicted VAEs	2020 Q3 SIR	2019 Q3 SIR	% Change[d] in SIR	95% CI Around SIR % Change
Arizona	20	99	68.28	1.45	1.34	8.2	(−22.3 to 47.9)	17	83	90.53	0.92	0.91	1.1	(−26.2 to 46.3)
California	135	664	532.01	1.25	1.07	16.8[e]	(1.6–28.8)	156	878	709.83	1.24	1.04	19.2[e]	(4.2–29.5)
Florida	107	531	388.45	1.37	1.14	20.2[e]	(4.2–34.4)	112	956	552.00	1.73	1.07	61.7[e]	(39.4–76.3)
Georgia	52	457	370.17	1.24	0.78	59.0[e]	(31.3–80.7)	50	597	421.90	1.42	0.76	86.8[e]	(50.8–107.9)
Illinois	35	176	121.20	1.45	0.77	88.3[e]	(38.2–155.9)	44	105	118.60	0.89	0.78	14.1	(−16.8 to 50.1)
Louisiana	22	132	85.89	1.54	1.17	31.6	(−2.9 to 68.5)	26	128	104.95	1.22	0.86	41.9[e]	(0.0–83.7)
Massachusetts	15	146	77.64	1.88	1.27	48.0[e]	(5.9–87.1)	19	59	52.33	1.13	1.27	−11.0	(−36.9 to 28.5)
Michigan	37	342	207.62	1.65	1.32	25.0[e]	(1.0–41.2)	43	337	236.48	1.43	1.26	13.5	(−5.4 to 29.7)
New Jersey	21	86	77.39	1.11	0.82	35.4	(−14.4 to 109.9)	43	159	188.48	0.84	0.76	10.5	(−12.2 to 39.7)
New York	48	159	246.50	0.65	0.34	91.2[e]	(38.8–155.7)	97	341	482.43	0.71	0.64	10.9	(−5.3 to 28.6)
Pennsylvania	115	863	617.58	1.40	0.94	48.9[e]	(30.3–63.0)	111	648	556.45	1.17	1.03	13.6[e]	(0.9–27.4)
Texas	101	519	420.98	1.23	0.87	41.4[e]	(27.0–68.9)	103	903	553.69	1.63	0.96	69.8[e]	(46.8–89.5)

Note. CI, confidence interval; CDC, Centers for Disease Control and Prevention; NHSN, National Healthcare Safety Network; ICU, intensive care unit.
[a] SIRs were calculated using data from adult ICUs and adult wards.
[b] Quarterly VAE SIRs are available for all eligible states and quarters in the Supplementary Tables (online). The states shown in this table were identified by the CDC as having a high number of hospitalized COVID-19 patients between April 1, 2020, and July 14, 2020. 1
[c] Hospitals reporting complete VAE surveillance data to the NHSN for the same location for both quarters in the comparison.
[d] % change was calculated as follows: [(2020 SIR − 2019 SIR) ÷ 2019 SIR] × 100.
[e] Statistical significance based on 2-tailed $P \leq .05$, reflected in the relative % change in magnitude.

Table 9. 2020 Q2 and Q3 Laboratory-Identified (LabID) Methicillin-Resistant *Staphylococcus aureus* (MRSA) Bacteremia a Standardized Infection Ratios (SIRs) for Acute-Care Hospitals Compared to 2019 for Select States

State[b]	2020 Q2 vs 2019 Q2							2020 Q3 vs 2019 Q3						
	No. of Hospitals[c]	2020 Q2 No. of HO-MRSA Bacteremia[d]	2020 Q2 No. of Predicted HO-MRSA Bacteremia[d]	2020 Q2 SIR	2019 Q2 SIR	% Change[e] in SIR	95% CI Around SIR % Change	No. Hospitals[c]	2020 Q3 No. of HO-MRSA Bacteremia[d]	2020 Q3 No. of Predicted HO-MRSA Bacteremia[d]	2020 Q3 SIR	2019 Q3 SIR	% Change[e] in SIR	95% CI Around SIR % Change
Arizona	61	46	47.57	0.97	0.54	79.6[f]	(12.4–189.9)	63	50	54.89	0.91	0.66	37.9	(−12.5 to 122.3)
California	301	138	168.72	0.82	0.80	2.5	(−19.0 to 28.7)	325	162	204.71	0.79	0.61	29.5[f]	(2.8–64.6)
Florida	188	168	161.09	1.04	1.04	0.0	(−18.5 to 24.3)	208	260	207.15	1.26	1.11	13.5	(−5.6 to 35.9)
Georgia	98	87	72.57	1.20	0.79	51.9[f]	(10.3–110.9)	102	114	92.97	1.23	1.02	20.6	(−9.6 to 59.8)
Illinois	110	69	69.68	0.99	0.68	45.6[f]	(1.1–111.9)	128	69	83.86	0.82	0.65	26.2	(−10.9 to 82.2)
Louisiana	67	31	24.02	1.29	1.34	−3.7	(−41.5 to 58.5)	85	82	40.54	2.02	1.03	96.1[f]	(35.1–187.0)
Massachusetts	60	49	51.66	0.95	0.86	10.5	(−25.8 to 66.0)	66	43	60.94	0.71	0.70	1.4	(−34.5 to 56.9)
Michigan	81	64	50.35	1.27	0.98	29.6	(−9.6 to 85.2)	99	63	79.74	0.79	0.63	25.4	(−12.7 to 83.3)
New Jersey	31	34	22.23	1.53	0.77	98.7[f]	(13.0–259.1)	68	50	61.82	0.81	0.72	12.5	(−24.8 to 65.5)
New York	91	67	67.25	1.00	0.64	56.3[f]	(7.8–127.1)	169	134	170.41	0.79	0.88	−10.2	(−29.4 to 12.1)
Pennsylvania	164	96	102.89	0.93	0.62	50.0[f]	(11.1–104.2)	164	92	119.33	0.77	0.72	6.9	(−19.7 to 44.8)
Texas	307	138	159.74	0.86	0.83	3.6	(−17.6 to 30.9)	330	255	205.33	1.24	0.87	42.5[f]	(18.2–74.5)

Note. CI, confidence interval; HO, hospital-onset; MRSA, methicillin-resistant *Staphylococcus aureus*; CDC, Centers for Disease Control and Prevention; NHSN, National Healthcare Safety Network; CMS, Centers for Medicare and Medicaid Services.
[a] SIRs were calculated using data from all inpatient locations in the hospital (facility-wide inpatient, or FacWideIN) except inpatient rehabilitation and inpatient psychiatric units certified by the CMS.
[b] Quarterly MRSA bacteremia SIRs are available for all eligible states and quarters in the Supplementary Data Tables (online). The states shown in this table were identified by the CDC as having a high number of hospitalized COVID-19 patients between April 1, 2020, and July 14, 2020. 1
[c] Hospitals reporting complete MRSA bacteremia LabID event surveillance data to the NHSN for both quarters in the comparison.
[d] Hospital-onset events are defined as those that were identified in an inpatient location on the fourth day (or later) after admission to the facility.
[e] % change was calculated as follows: [(2020 SIR − 2019 SIR) ÷ 2019 SIR] × 100.
[f] Statistical significance based on 2-tailed $P \leq .05$, reflected in the relative % change in magnitude.

Prior to the pandemic, widespread decrease in HAI incidence had been observed across US hospitals. 12 Except for VAE, the national 2020-Q1 SIR for each HAI was below 1 and significantly lower than that from 2019-Q1, indicating a continual decline in HAI incidence at the beginning of 2020. As hospitals began to respond to the COVID-19 pandemic in 2020-Q2, increases in national SIRs became apparent. Initial increases in the SIRs were observed early in the year for CLABSI and MRSA bacteremia (starting in 2020-Q2) and for VAE (starting in 2020-Q1). However, compared to 2019, 2020-Q3 and 2020-Q4 saw large and significant increases in the CLABSI, CAUTI, VAE, and MRSA bacteremia SIRs (Fig. 1).

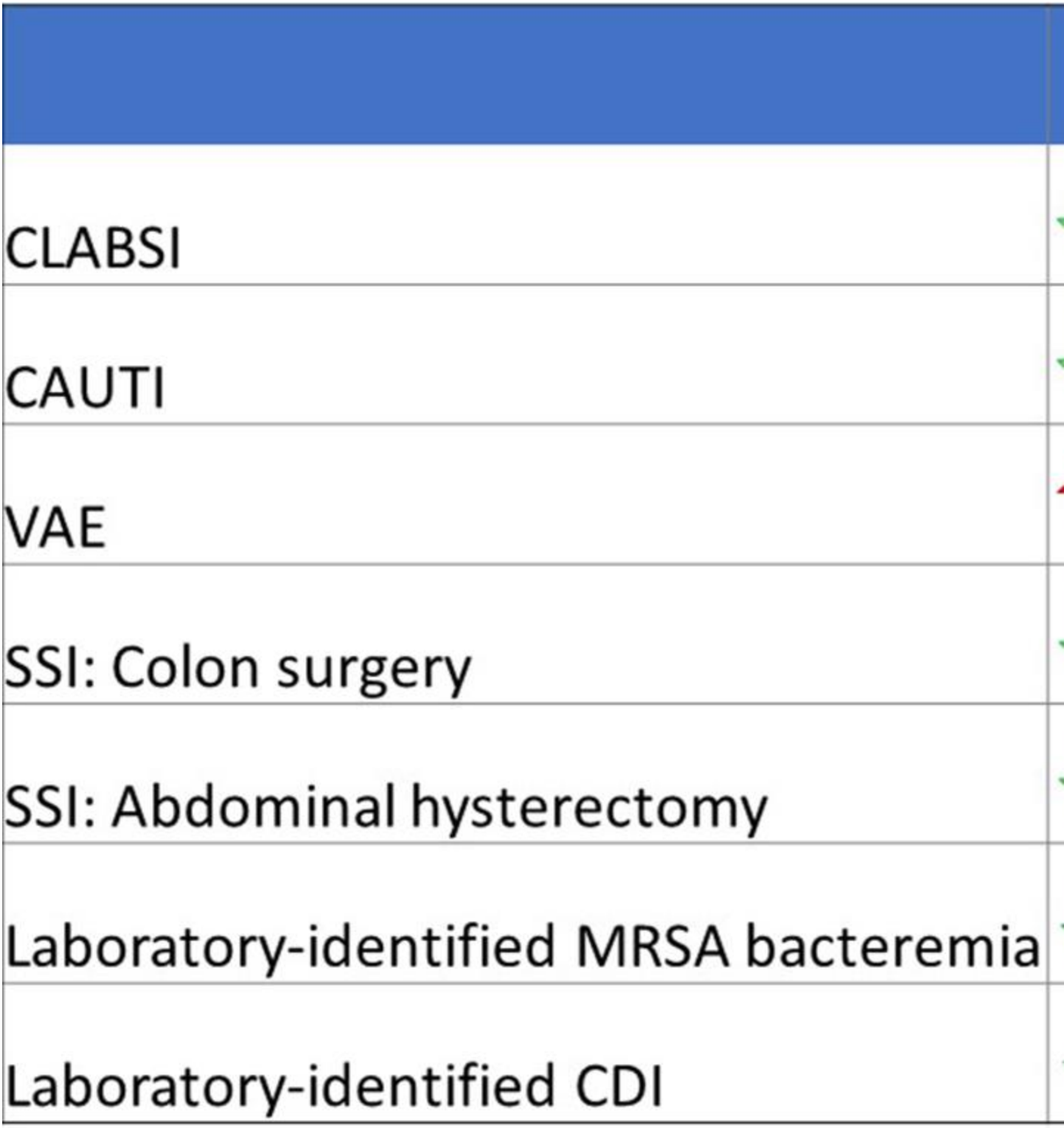


Fig. 1. Changes in the 2020 national healthcare-associated infection (HAI) standardized infection ratios (SIRs) for acute-care hospitals, compared to respective 2019 quarters. Note. CLABSI, central-line–associated bloodstream infection; CAUTI, catheter-associated urinary tract infection; VAE, ventilator-associated event; SSI, surgical site infection; MRSA, methicillin-resistant *Staphylococcus aureus*; CDI, *Clostridioides difficile* infection. Interpretation: Unless otherwise noted, the results of the significance tests comparing consecutive annual pairs of quarterly SIRs are based on a 2-tailed test $P \leq .05$; however, the directional percentage change is based on the relative change in magnitude. An arrow pointing down, and a negative percentage change value, indicate that the 2020 SIR is lower than the 2019 SIR for the same quarter. An arrow pointing up, and a positive

percentage change value, indicate that the 2020 SIR is higher than the 2019 SIR for the same quarter. Note. 1. “No change” signifies that the change in SIR was not statistically significant.

The CLABSI SIR experienced the greatest increase among all HAI types; the heightened CLABSI incidence during the pandemic and the likely impacts of hospital COVID-19 prevention activities on central-line insertion and maintenance practices have been previously documented. [4–6,10] CAUTIs and VAEs were also reported more frequently in 2020 than 2019. A longer patient length-of-stay, additional comorbidities and higher patient acuity levels, and a longer duration of device use in 2020 could have contributed to an overall increased risk of a device-assoicated infection during the pandemic. In addition, some studies identified an increased risk of ventilator-associated conditions in critically ill COVID-19 patients. [5,20] The characteristic worsening of respiratory status in some patients with COVID-19 resulted in an increase in the number of hospitalized patients in 2020 that required ventilation, and an increase in patients’ average duration of ventilation, both of which could have contributed to an increased risk of VAE. Almost all states previously identified by CDC with a high COVID-19 hospital admission burden observed increases in their 2020-Q2 CLABSI and VAE SIRs compared to 2019, most of which were statistically significant. [1]

Preliminary data for 2020-Q4 showed a large increase of 34% in the national MRSA bacteremia SIR compared to 2019-Q4. There were 2,715 MRSA bacteremia events reported for 2020-Q4, which is 41% higher than the number of events reported by the same set of hospitals in 2019-Q4. Further investigation is needed to identify the source of these additional events. A previous study found that device-associated infections, particularly those related to central-lines, are a common source of MRSA bacteremia; thus, the increase in MRSA bacteremia in 2020 is possibly a result of inadequate central-line insertion and maintenance practices. [4,6,21] However, preliminary NHSN data show no substantial changes in 2020, compared to 2019, in the proportion of CLABSIs caused by *S. aureus*, or in the proportion of *S. aureus* CLABSIs that are resistant to methicillin (data not shown). *S. aureus* has been identified as a common cause of secondary bacterial infection in COVID-19 patients. [7,9] One meta-study found that >25% of all coinfections in COVID-19 patients were related to *S. aureus*, more than half of which were MRSA. [22] Whether some of the MRSA bacteremia events reported to NHSN in 2020 occurred as secondary infections in patients with COVID-19 remains unknown.

The increased focus on hand hygiene, environmental cleaning, patient isolation, and use of PPE during 2020, combined with continued inpatient antimicrobial stewardship programs and a marked decline in outpatient antibiotic prescribing, may have resulted in decreases in the CDI SIRs during 2020 compared to 2019. [5,23]

This analysis has several limitations. The 2020-Q4 data were analyzed prior to the CMS HACRP reporting deadline of May 17, 2021, and therefore may be incomplete. This analysis was restricted to hospitals that reported data for both 2019 and 2020;

new hospitals and units that opened in 2020 were not included. Thus, this paper does not reflect all HAIs that occurred in the United States. Information on the voluntarily reported COVID-19 status of patients with HAIs was not explored. In addition, we focused solely on ACHs for this analysis, and did not address HAI incidence in other settings that may have cared for COVID-19 patients, such as critical access and long-term ACHs.

This is the first comprehensive look at the impact of COVID-19 on HAI incidence at the national and state levels. Substantial increases in CLABSIs, CAUTIs, VAEs, and MRSA bacteremia were observed. The year 2020 marked an unprecedented time for hospitals, many of which were faced with extraordinary circumstances of increased patient caseload, staffing challenges, and other operational changes that limited the implementation and effectiveness of standard infection prevention practices. A regular review of HAI surveillance data is critical for hospitals to identify gaps in prevention and address any observed increases in HAIs. Infection prevention staff should continue to reinforce infection prevention practices in their facilities, and consider the importance of building resiliency in their programs to withstand future public health emergencies.

El Camino Health

EL CAMINO HOSPITAL BOARD OF DIRECTORS
COMMITTEE MEETING MEMO

To: Quality Committee of the Board of Directors, El Camino Health
From: Cheryl Reinking, DNP, RN, NEA-BC
Date: October 4, 2021
Subject: Patient Experience feedback from Discharge Phone Call

Purpose: To provide the Committee with written patient feedback that is received from the Press Ganey written comments.

Summary:

1. Situation: These comments are from a patient who received a Press Ganey survey following discharge and commented that his wife did not receive thorough instructions following discharge regarding his care at home.

2. Authority: To provide insight into one patient's experience and discharge planning/instructions adequacy.

3. Background: This patient provided generally good feedback about his experience with the clinical care. He was concerned about the instructions his wife received in order to care for his complicated condition at home.

4. Assessment: This feedback is helpful for us so we can learn where we did not meet the needs of this patient and family regarding the home discharge plan. It is our goal to assure every family care giver is given the needed instructions and follow up care needed in the home. The teams were very concerned hearing this feedback and are attempting to follow up with the family.

5. Other Reviews: None

6. Outcomes: Learning outcomes for care givers are assessed for understanding (i.e. teachback methodology). However, in this case, the family did not feel prepared to care for the patient and his complex plan of care. In addition, the discharge plan is being reviewed to assure that the appropriate resources were provided (i.e. homecare) before discharge.

7. List of Attachments: See patient comments.

Suggested Committee Discussion Questions:

1. How do you investigate individual feedback through Press Ganey?

2. How do you apply learning from this individual issue to the larger organization?

Press Ganey Suvery Comment

Los Gatos, Med Surgery – August 21, 2021

I was sure that you are aware that I got sepsis during my stay. I just want to say that I am aware that these things can happen and I would like to thank the exceptional care I got from your ICU team. However, I think this was badly managed. My wife was expected to give me my IV meds with one training session, manage my wound care, and help me with my colostomy bag. She was given little instruction, this should be addressed when patients are going home.

EL CAMINO HOSPITAL
COMMITTEE MEETING COVER MEMO

To: Quality Committee of the Board
From: Catherine Carson, MPA, BSN, CPHQ, Sr. Director Quality
Date: October 4, 2021
Subject: FY21 Enterprise Quality, Safety, and Experience Dashboard

Summary:

1. Situation: The Enterprise Quality, Safety, and Experience dashboard is used throughout the organization to illustrate, track, and communicate a key set of metrics to align the quality, safety, and experience improvement work. These key metrics are selected based on a careful review of the organizational incentive goals, strategic goals, and areas of concern based on standardized benchmarks. These are not the only metrics that are tracked but represent the highest priority for the organization.

- **A.** Provide the Committee with a snapshot of the FY 2021 metrics monthly with trends over time and compared to the actual results from FY2020 and the FY 2021 goals.
- **B.** Annotation is provided to explain each metric.

2. Authority: The Quality Committee of the Board is responsible for the quality and safety of care provided to ECH patients. This dashboard provides oversight on key quality metrics.

3. Background: At the beginning of each fiscal year, an assessment is completed to identify specific areas for quality/performance improvement. A subset of these areas are then prioritized and designated as leading indicators to be tracked universally throughout the organization so that all clinicians—physicians included—and support staff are aligned in the improvement activities. Measures that demonstrate sustained improvement are removed (but still tracked) and others added. These twelve (12) metrics were selected for monthly review by this Committee as they reflect the Hospital's FY 2021 Quality, Efficiency and Service Goals.

4. Assessment:

- **A.** Readmission Index reached FY21 target at 0.93 with 113 readmissions in June.
- **B.** Four SSEs assigned by team review for June : 3 SSIs, 1 HAPI
- **C.** Mortality Index decreased from May to 0.76 with fewer deaths and 1 COVID death.
- **D.** HCAHPS Likelihood to Recommend decreased with continued pressure from COVID restrictions.
- **E.** Only 1 C.Diff HAIs for June, maintaining metric below target.
- **F.** 2 SSIs in June from Los Gatos.
- **G.** Sepsis mortality Index dropped from May, 30% of all mortalities were due to Sepsis.
- **H.** PC-01 June data added with zero early elective deliveries
- **I.** PC-02, Cesarean Birth June data added with Los Gatos at below target level
- **J.** Patient Throughput will continue in FY22, focusing on meeting a national benchmark. See additional detailed comments in the annotation of the report

5. Other Reviews: None

6. Outcomes:

Suggested Committee Discussion Questions: None

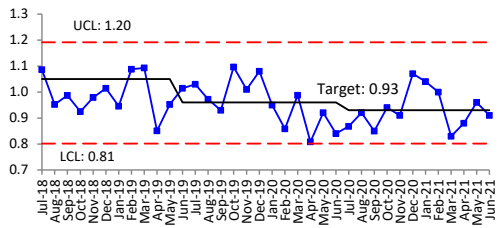
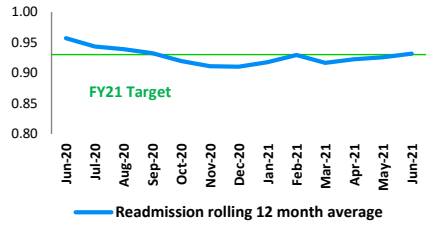
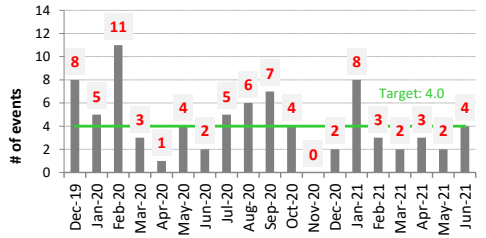
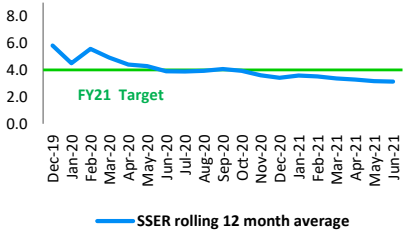
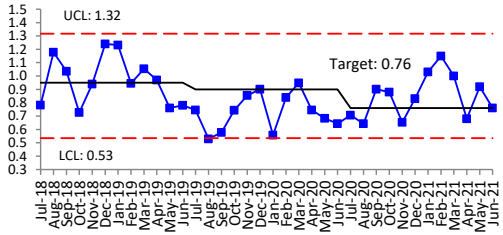
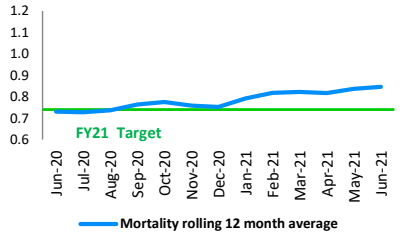
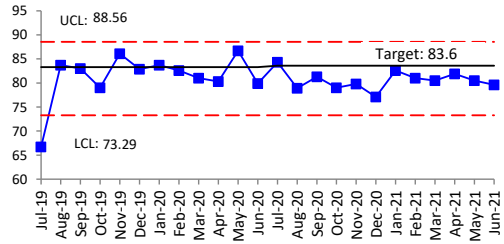
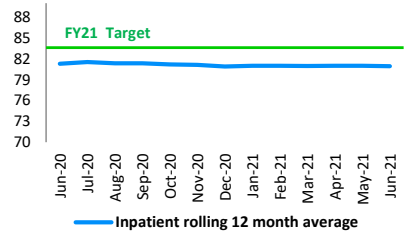
List of Attachments: Final FY 2021 Enterprise Quality, Safety, and Experience Dashboard, June data unless otherwise specified

El Camino Health

Enterprise Quality, Safety, and Experience Dashboard - FY21

June 2021 (unless otherwise specified)

Month to Board Quality Committee:
October, 2021

		FY21 Performance		Baseline FY20 Actual	FY 21 Target	Trend *(showing at least the last 24 months of **available** data)*	Rolling 12 Month Average
		Latest month	FYTD				
1	*Organizational Goal **Readmission Index (All Patient All Cause Readmit)** ***Observed/Expected*** ***Premier Standard Risk Calculation Mode*** *Latest data month: June 2021*	0.91 (7.65%/8.44%)	0.93 (7.70%/8.26%)	0.96	0.93		
2	*Organizational Goal **Serious Safety Event Rate (SSER)** # of events/ (FYTD Rate per 10,000 Acute Adjusted Patient Days) *Latest data month: June 2021*	4	3.13 (80/255449)	4.28	4.0		
3	* Strategic Goal **Mortality Index** ***Observed/Expected*** ***Premier Standard Risk Calculation Mode*** *Latest data month: June 2021*	0.76 (1.50%/1.99%)	0.86 (1.87%/2.18%)	0.74	0.76		
4	*Organizational Goal **IP Enterprise - HCAHPS Likelihood to Recommend** **Top Box Rating of 'Yes. Definitely Likely to Recommend.' , Unadjusted** *Latest data month: June 2021*	79.6	80.3	83.1	83.6		

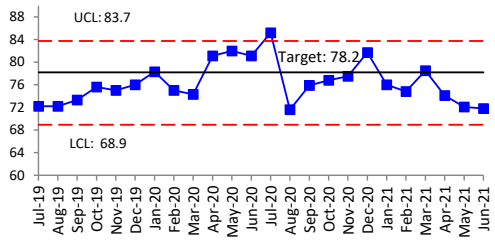
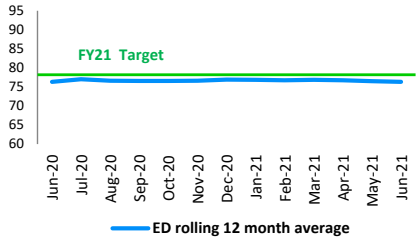
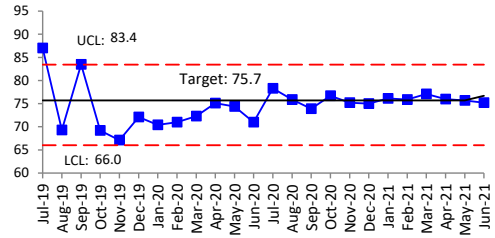
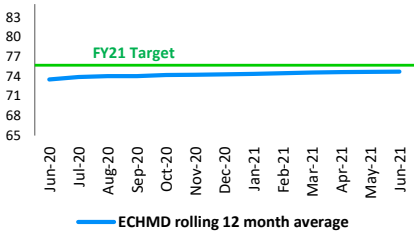
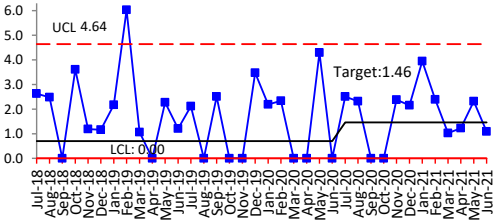
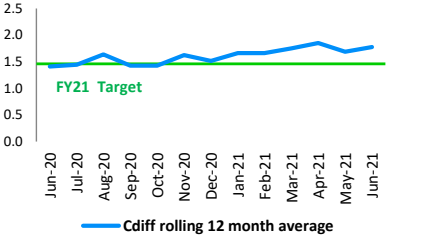
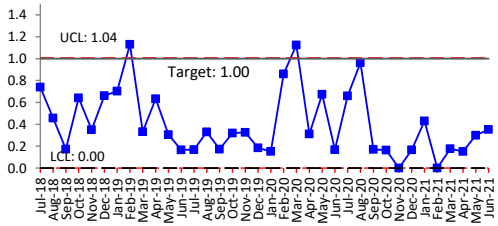
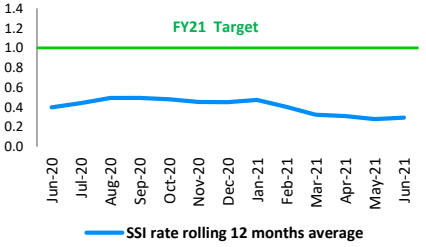
El Camino Health

Enterprise Quality, Safety, and Experience Dashboard - FY21

June 2021 (unless otherwise specified)

Month to Board Quality Committee:

October, 2021

		FY21 Performance		Baseline FY20 Actual	FY 21 Target	Trend *(showing at least the last 24 months of **available** data)*	Rolling 12 Month Average
		Latest month	FYTD				
5	* Organizational Goal **ED Likelihood to Recommend** **Top Box Rating of 'Yes. Definitely Likely to Recommend.' %, Unadjusted** *Latest data month: June 2021*	71.8	75.3	75.7	78.2		
6	* Organizational Goal **ECH MD : Likelihood to Recommend Care Provider** (SVMD only) **Top Box Rating of "Yes. Definitely Likely to Recommend."%, Unadjusted** *Latest data month: June 2021*	75.2	76.0	73.2	75.7		
7	***Hospital Acquired Infections*** *Clostridium Difficile Infection (CDI)* *per 10,000 patient days* *Latest data month: June 2021*	1.08 (1/9225)	1.78 (19/106990)	1.46	<= 1.46 (MV: 10/ LG: 3)		
8	*Organizational Goal **Surgical Site Infections (SSI)- Enterprise** **SSI Rate = Number of SSI / Total surgical procedures x 100** *Latest data month: June 2021*	0.35 (2/568)	0.30 (21/7016)	0.36	SIR Goal: <=1.0 CDC NHSN Risk Adjusted Ratio (not an infection rate)		

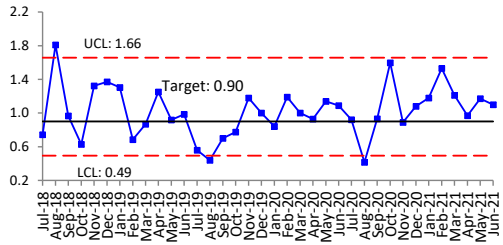
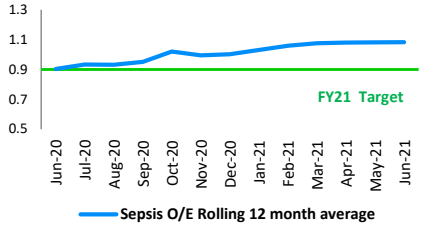
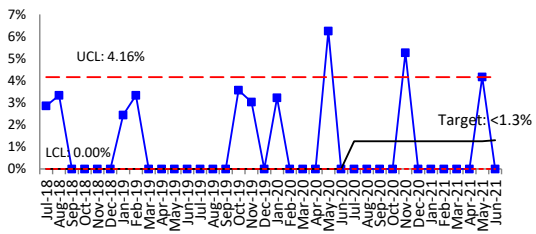
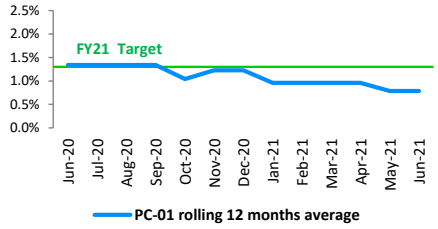
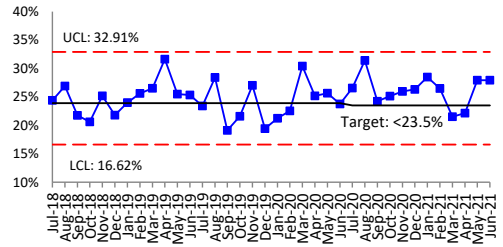
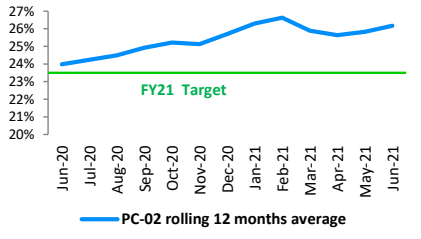
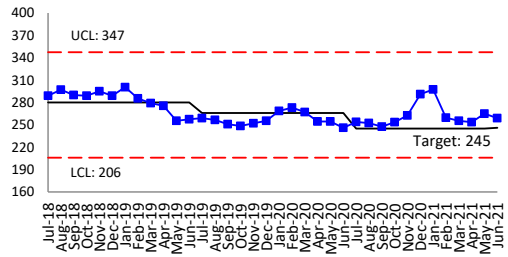
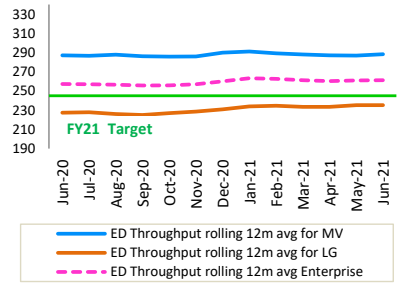
El Camino Health

Enterprise Quality, Safety, and Experience Dashboard - FY21

June 2021 (unless otherwise specified)

Month to Board Quality Committee:

October, 2021

		FY21 Performance		Baseline FY20 Actual	FY 21 Target	Trend (showing at least the last 24 months of ***available*** data)	Rolling 12 Month Average
		Latest month	FYTD				
9	**Sepsis Mortality Index, based on ICD-10 codes** *(Observed over Expected)* *Latest data month: June 2021*	1.10 (12.98%/11.83%)	1.08 (12.86%/11.87%)	0.98	0.90		
10	**PC-01: Elective Delivery Prior to 39 weeks gestation** (lower is better) *Latest data month: June 2021*	MV: 0.0% (0/18) LG: 0.0% (0/4) ENT: 0.0% (0/22)	MV: 0.41% (1/244) LG: 1.32% (1/76) ENT: 0.63% (2/320)	MV: 1.47% (5/341) LG: 0.00% (0/48) **ENT: 1.29%** (5/389)	1.3%		
11	**PC-02: Cesarean Birth** (lower is better) *Latest data month: June 2021*	MV: 28.89% (39/135) LG: 23.08% (6/26) ENT: 27.95% (45/161)	MV: 27.58% (422/1530) LG: 20.69% (72/348) ENT: 26.15% (449/1717)	MV: 24.7% (412/1665) LG: 18.9% (48/253) **ENT: 23.9%** (460/1918)	23.5%		
12	***Strategic Goal** **Patient Throughput- Median Time from Arrival to ED Departure** *(excludes psychiatric patients, patients expired in the ED, Newborns, and excludes transfer between sites)* *Latest data month: June 2021*	MV: 295 min LG: 223 min **Ent: 259 min**	MV: 288 min LG: 239 min **Ent: 264 min**	MV: 304 min LG: 263 min **Ent: 284 min**	MV: 263 min LG: 227 min **Ent: 245 min**		

Report updated: 9/23/21

EL CAMINO HOSPITAL
COMMITTEE MEETING COVER MEMO

To: Quality Committee of the Board
From: Catherine Carson, MPA, BSN, CPHQ, Sr. Director Quality
Date: October 4, 2021
Subject: FY22 Enterprise Quality, Safety, and Experience Dashboard

Summary:

1. Situation: The Enterprise Quality, Safety, and Experience dashboard is used throughout the organization to illustrate, track, and communicate a key set of metrics to align the quality, safety, and experience improvement work. These key metrics are selected based on a careful review of the organizational incentive goals, strategic goals, and areas of concern based on standardized benchmarks. These are not the only metrics that are tracked but represent the highest priority for the organization.

- **A.** Provide the Committee with a snapshot of the FY 2021 metrics monthly with trends over time and compared to the actual results from FY2020 and the FY 2021 goals.
- **B.** Annotation is provided to explain each metric.

2. Authority: The Quality Committee of the Board is responsible for the quality and safety of care provided to ECH patients. This dashboard provides oversight on key quality metrics.

3. Background: At the beginning of each fiscal year, an assessment is completed to identify specific areas for quality/performance improvement. A subset of these areas are then prioritized and designated as leading indicators to be tracked universally throughout the organization so that all clinicians—physicians included—and support staff are aligned in the improvement activities. Measures that demonstrate sustained improvement are removed (but still tracked) and others added. These twelve (12) metrics were selected for monthly review by this Committee as they reflect the Hospital's FY 2021 Quality, Efficiency and Service Goals.

4. Assessment:

- **A.** Readmission Index @ 1.05 with 122 readmissions
- **B.** Two SSEs for July: 2 Surgical Site Infections
- **C.** New metric: Precursor Medication Safety Events @ 24, ½ due to administration errors
- **D.** Mortality Index increased in August to 1.02
- **E.** HCAHPS Likelihood to Recommend for inpatient units improved to 85.6, above target
- **F.** ECH MD Likelihood to Recommend down slightly over the summer
- **G.** Zero Surgical Site Infections across the Enterprise.
- **H.** Sepsis mortality Index increased and 32% of all mortalities were due to Sepsis.
- **I.** PC-01 @ zero early elective deliveries
- **J.** PC-02, Cesarean Sections lower due to high delivery volume, lower inductions
- **K.** Patient Throughput will continue in FY22, focusing on meeting a national benchmark. See additional detailed comments in the annotation of the report

5. Other Reviews: None

6. Outcomes:

Suggested Committee Discussion Questions: None

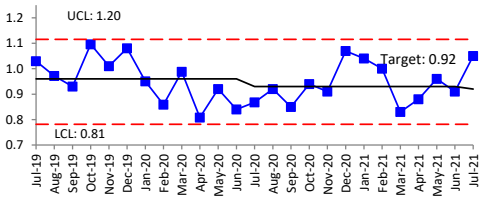
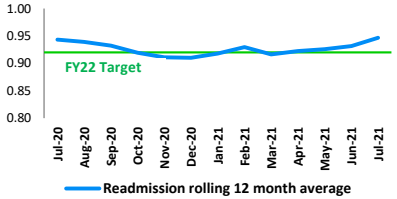
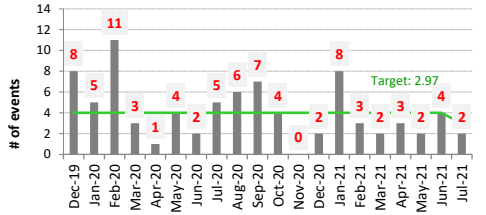
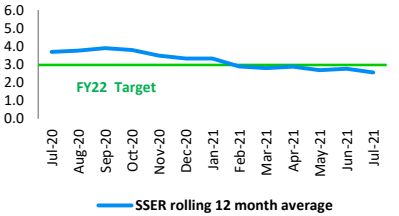
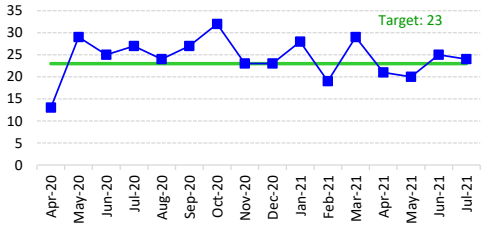
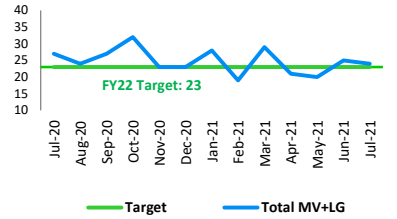
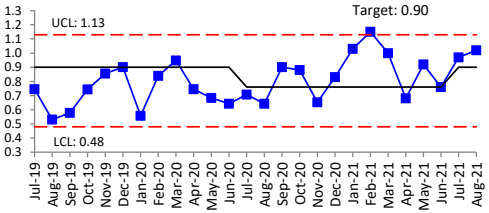
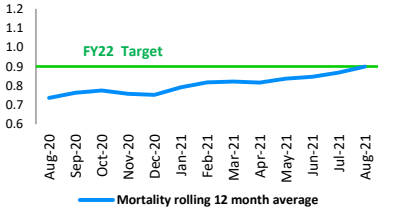
List of Attachments: FY 2022 Enterprise Quality, Safety, and Experience Dashboard, July & August data

El Camino Health

Enterprise Quality, Safety, and Experience Dashboard

August 2021 (unless otherwise specified)

Month to Board Quality Committee:
October, 2021

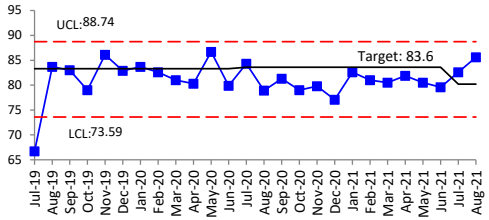
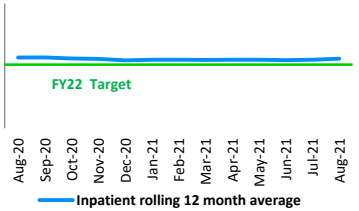
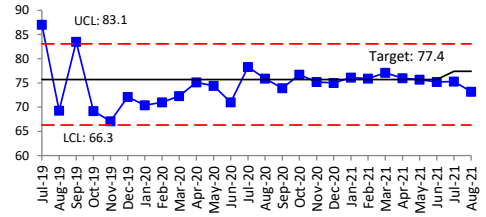
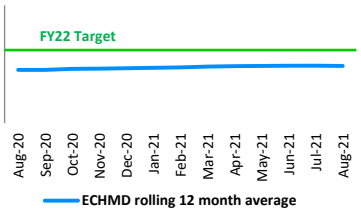
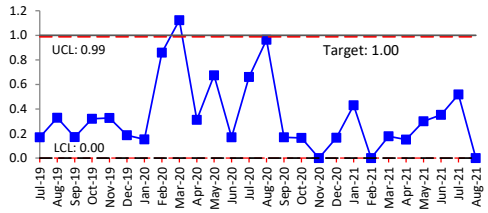
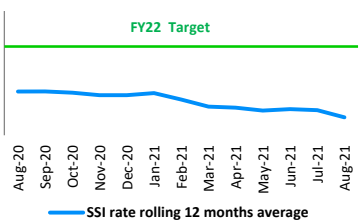
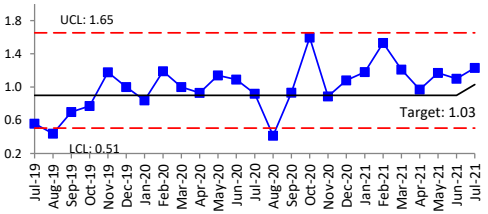
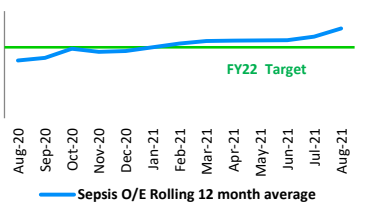
		FY22 Performance		Baseline FY21 Actual	FY 22 Target	Trend (showing at least the last 24 months of ***available*** data)	Rolling 12 Month Average
		Latest month	FYTD				
1	*Organizational Goal **Readmission Index (All Patient All Cause Readmit)** ***Observed/ Expected*** ***Premier Standard Risk Calculation Mode*** ****Latest data month: July 2021*	1.05 (8.08%/7.73%)	1.05 (8.08%/7.73%)	0.93	0.92		
2	*Organizational Goal **Serious Safety Event Rate (SSER) per month** # of events/ (FYTD Rate per 10,000 Acute Adjusted Patient Days) ****Latest data month: July 2021*	2	1.25 (2/15941)	3.13 (Dec 2019 - Jun 2021)	2.97		
3	**Actual # of Medication Precursor Safety Events (MPSE) per month** *****Latest data month* : July 2021*	24	24	320 (25/month) *(April 2020 to April 2021)*	304 (23/month) *(5% reduction from baseline)*		
4	* Strategic Goal **Mortality Index** ***Observed/Expected*** ***Premier Standard Risk Calculation Mode*** *Latest data month: August 2021*	1.02 (1.68%/1.65%)	0.99 (1.61%/1.62%)	0.86	0.90		

El Camino Health

Enterprise Quality, Safety, and Experience Dashboard

August 2021 (unless otherwise specified)

Month to Board Quality Committee:
October, 2021

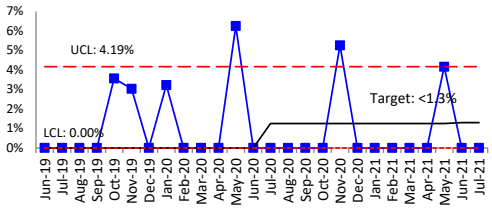
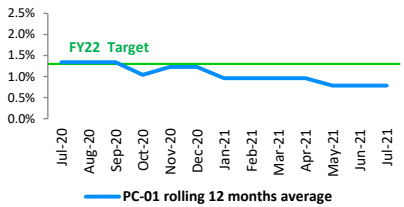
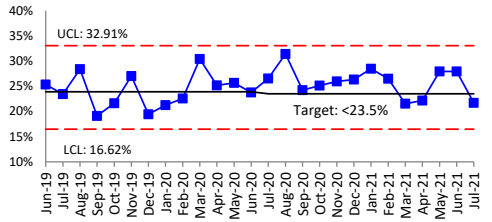
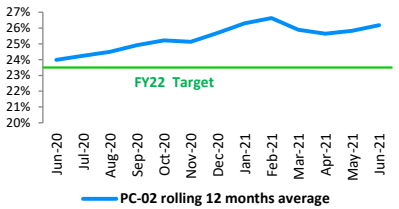
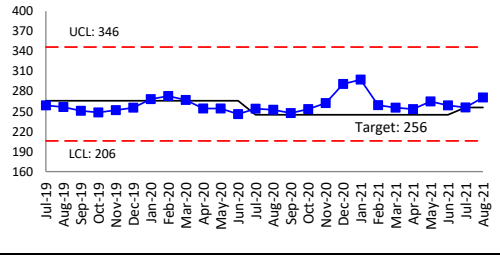
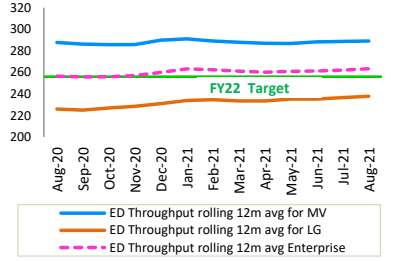
		FY22 Performance		Baseline FY21 Actual	FY 22 Target	Trend *(showing at least the last 24 months of **available** data)*	Rolling 12 Month Average
		Latest month	FYTD				
5	*Organizational Goal **IP Units - HCAHPS Likelihood to Recommend -** *excludes MBU,* **Top Box Rating of 'Yes, Definitely Likely to Recommend' %, Unadjusted** *Latest data month: August 2021*	85.6 (n=208)	84.0	80.3 (n=1983)	80.2		
6	* Organizational Goal **ECH MD : Likelihood to Recommend Care Provider** (SVMD only) **Top Box Rating of 'Yes, Definitely Likely to Recommend' %, Unadjusted** *Latest data month: August 2021*	73.2 (n=1308)	74.2	76.0 (n=15,333)	77.4		
7	**Surgical Site Infections (SSI)- Enterprise** **SSI Rate = Number of SSI / Total surgical procedures x 100** *Latest data month: August 2021*	0.00 (0/467)	0.29 (3/1047)	0.30 (21/7016)	SIR Goal: <=1.0 CDC NHSN Risk Adjusted Ratio (not an infection rate)		
8	**Sepsis Mortality Index, based on ICD-10 codes** *(Observed over Expected)* *Latest data month: August 2021*	1.16 (11.97%/10.34%)	1.19 (11.97%/10.02%)	1.08 (12.86%/11.87%)	1.03		

El Camino Health

Enterprise Quality, Safety, and Experience Dashboard

August 2021 (unless otherwise specified)

Month to Board Quality Committee:
October, 2021

		FY22 Performance		Baseline FY21 Actual	FY 22 Target	Trend *(showing at least the last 24 months of **available** data)*	Rolling 12 Month Average
		Latest month	FYTD				
9	**PC-01: Elective Delivery Prior to 39 weeks gestation** (lower is better) ****Latest data month: July 2021*	MV: 0.0% (0/34) LG: 0.0% (0/5) ENT: 0.0% (0/39)	MV: 0.0% (0/34) LG: 0.0% (0/5) ENT: 0.0% (0/39)	MV: 0.41% (1/244) LG: 1.32% (1/76) ENT: 0.63% (2/320)	1.3%		
10	**PC-02: Cesarean Birth** (lower is better) ****Latest data month: July 2021*	MV: 22.79% (31/136) LG: 17.95% (7/39) ENT: 21.71% (38/175)	MV: 22.79% (31/136) LG: 17.95% (7/39) ENT: 21.71% (38/175)	MV: 27.58% (422/1530) LG: 20.69% (72/348) ENT: 26.30% (494/1878)	23.5%		
11	***Strategic Goal** **Patient Throughput- Median Time from Arrival to ED Departure** *(excludes psychiatric patients, patients expired in the ED, Newborns, and excludes transfer between sites)* *Latest data month: August 2021*	MV: 292 min LG: 250 min Ent: 271 min	MV: 287 min LG: 238 min Ent: 263 min	MV: 288 min LG: 239 min Ent: 264 min	MV: 263 min LG: 227 min **Ent: 256 min**		

*** Readmission, SSE, MPSE, PC-01 and PC-02 data available up to July

Report updated: 9/23/21

El Camino Health

EL CAMINO HOSPITAL
COMMITTEE MEETING COVER MEMO

To: Quality Committee of the Board
From: Mark Adams CMO
Date: October 4, 2021
Subject: Culture of Safety Survey Results

Summary:

1. **Situation**: El Camino Health conducts a periodic employee and physician survey that assesses engagement, alignment, and safety culture.

2. **Authority**: The Quality Committee of the Board is responsible for the quality and safety of care provided to ECH patients. This dashboard provides oversight on key quality metrics.

Background: While engagement and alignment are important, the safety culture presents an opportunity to better understand the underlying foundation necessary to qualify as a high reliability organization.(HRO) The safety culture of an organization is the product of individual and group values, attitudes, perceptions, competencies, and patterns of behavior that impact the commitment and ability to provide a safe environment for employees, physicians and patients. The Safety Culture Index comprises employees' and physicians' perceptions of the organization and work unit culture. In addition, the Safety Culture Index illustrates how these perceptions influence the adoption of processes that focus on safety.

3. The Press Ganey approach categorizes the safety questions into three main categories:

   A. Prevention and Reporting
   B. Resources and Teamwork
   C. Pride and Reputation

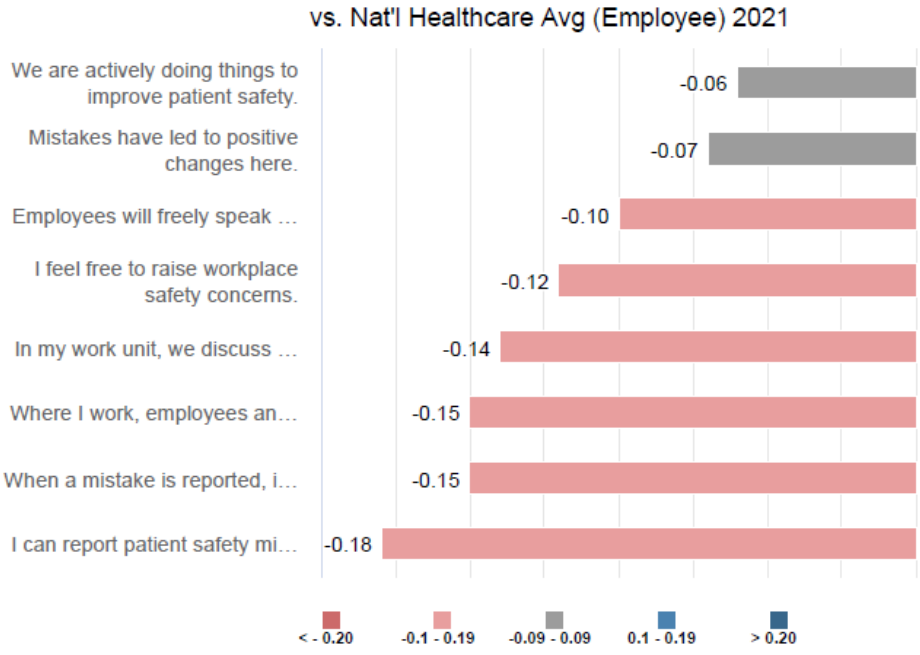
   The scoring is done on a scale of 1 – 5 with 5 as the highest score. The most recent survey results come from May of 2021. Comparisons are made to the employee survey from 2018 and the physician survey from 2019. (The employee survey in 2018 was close to 2019 while the physician survey was delayed until 2019 so they are not exactly aligned for the comparisons.) These results are then analyzed and action plans developed to address any deficiencies noted in the results.

4. **Employee Results**: The Press Ganey culture of safety index was 3.96 which is 0.08 less than the 2018 results and 0.05 less than the national healthcare average.

The breakdown by categories:

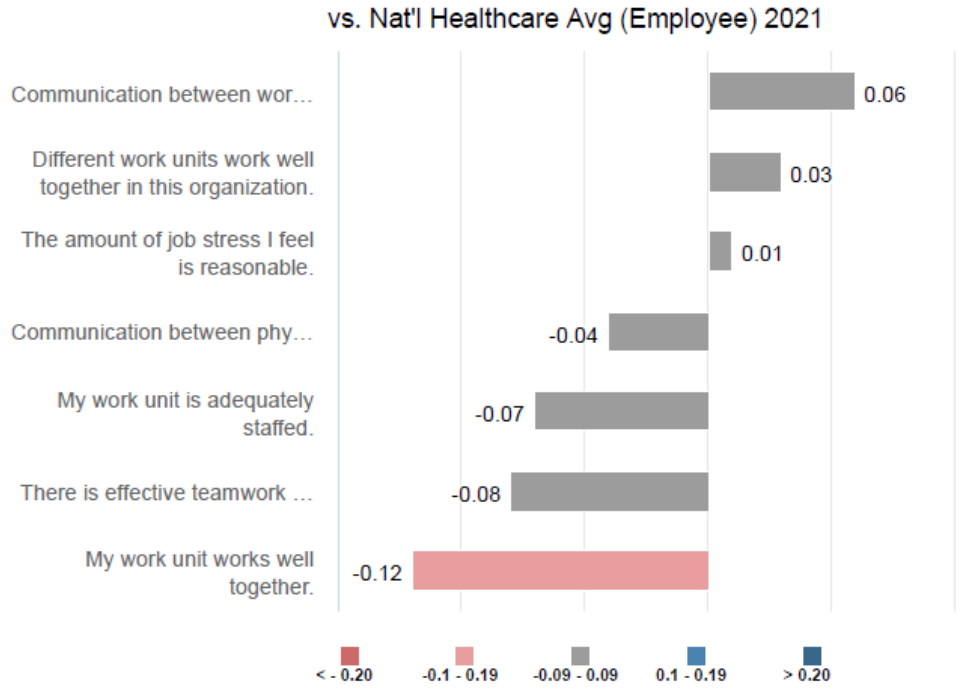
Prevention & Reporting 4.03

Items that focus on prevention. If there is an error, employees feel comfortable speaking up, and that mistakes are used as learning experiences.



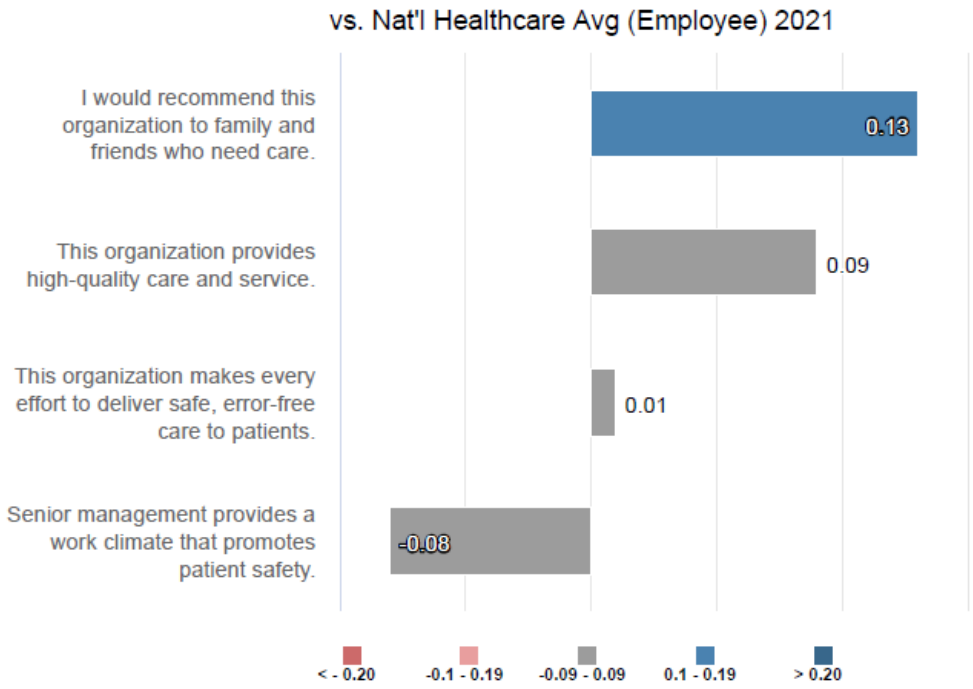
Resources & Teamwork 3.70

Items that measure if employees feel they are well equipped, and that there is effective communication and teamwork within and between departments.



Pride & Reputation 4.25

Employees feel the organization places an emphasis on safety and would feel comfortable recommending their organization for patient care.



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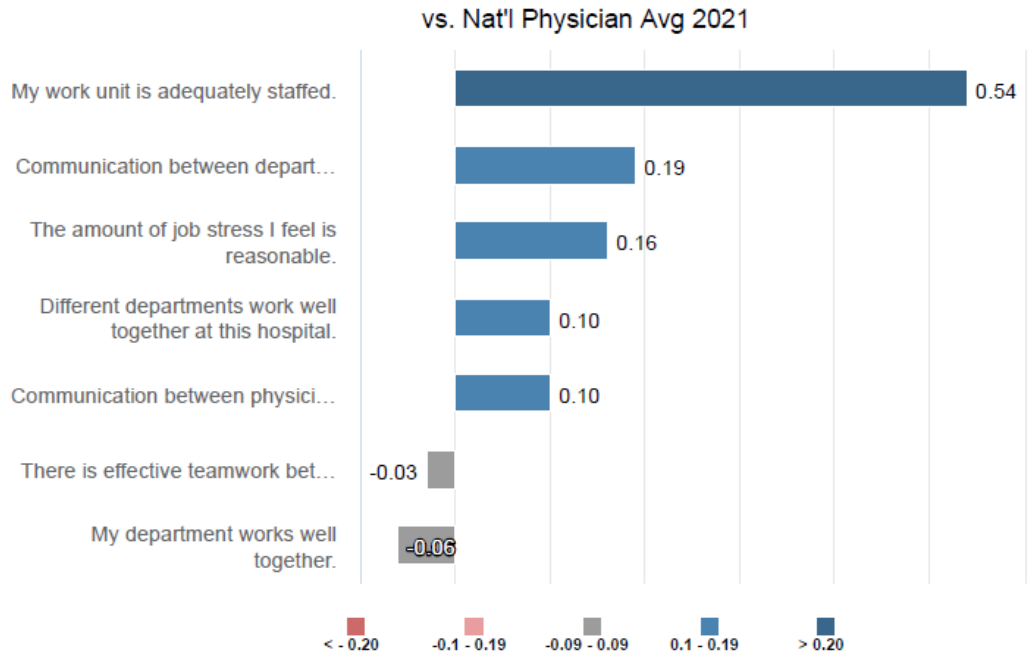
5. **<u>Physician Results:</u>** The Press Ganey culture of safety index for physicians was 4.10 which is an improvement from the 2019 index of 3.97 and is 0.02 above the national average.

The breakdown by category:

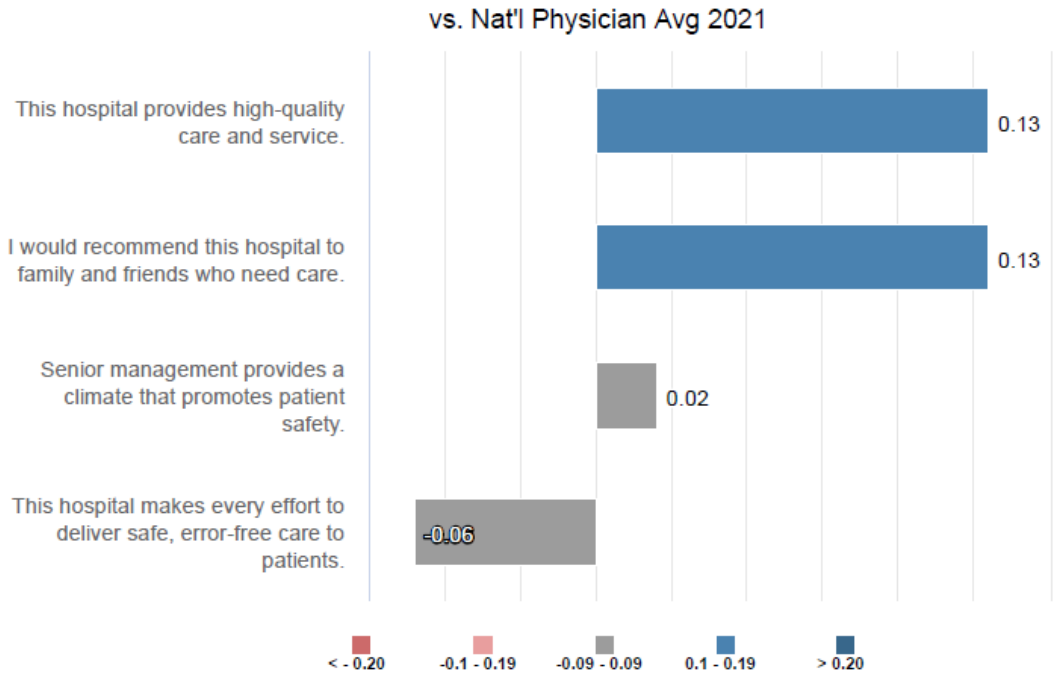
Resources & Teamwork 4.01

Items that measure if employees feel they are well equipped, and that there is effective communication and teamwork within and between departments.



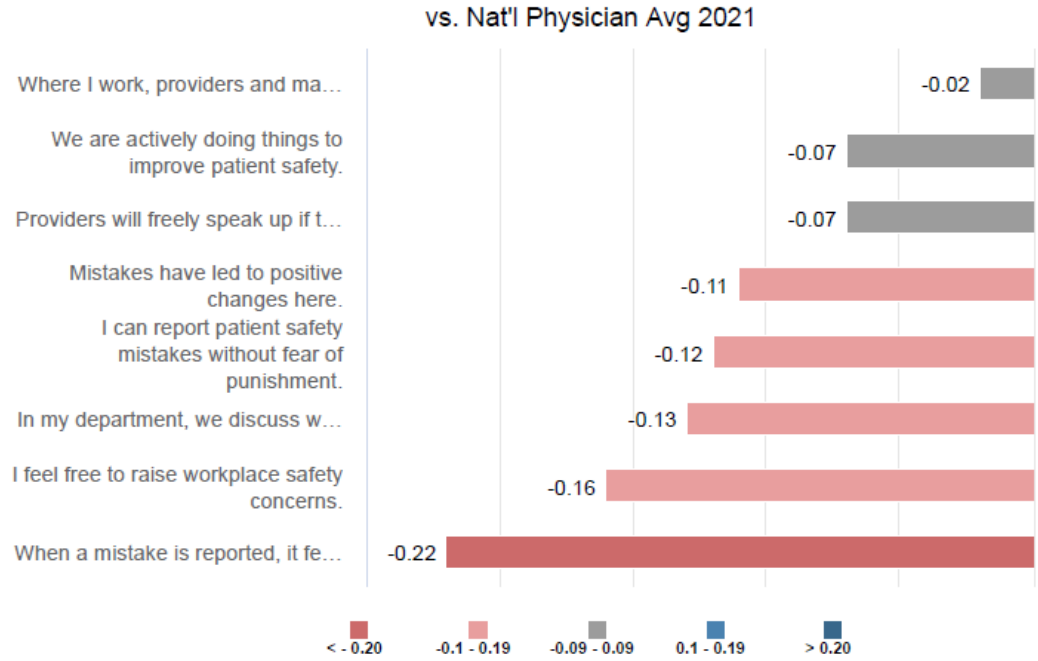
Pride & Reputation 4.30

Employees feel the organization places an emphasis on safety and would feel comfortable recommending their organization for patient care.



Prevention & Reporting 4.07

Items that focus on prevention. If there is an error, employees feel comfortable speaking up, and that mistakes are used as learning experiences.



6. **Assessment**: Interestingly, both groups are fairly similar in responses. Both take great pride in their work and feel that the care that is delivered to patients is high quality. However, both groups score lower in the areas of reporting errors and safety concerns without retribution and confidence that the focus on errors is prevention not punishment. Employees and physicians reported lack of teamwork as well. Teamwork between nurses and physicians scored better among physicians (which is an improvement from prior survey) than it did among nurses. This information reaffirms our need to commit to becoming a high reliability organization emphasizing that errors can be reported safely, processes need to be developed to reduce the possibility of errors, and the application of Just Culture and accountability easily understood and practiced by all will be the pathway to laying a new foundation of a culture of safety.

7. Other Reviews: None

Suggested Committee Discussion Questions:

How might the pandemic have affected these results?

How do committee members reconcile these results based on their own experience?

When asked does this organization provide high quality care and service, does the work I do make a difference, and do you like the work that you do, the scores were very high. Thoughts?

What might contribute to the physicians safety culture scores being higher than employees?

Appendix: Full questions from above—

I can report patient safety mistakes without fear of punishment

In my work unit, we discuss ways to prevent errors from happening again

Employees will freely speak up if they see something that may negatively affect patient care

We are actively doing things to improve patient safety

Mistakes have led to positive changes here

When a mistake is reported, it feels like the focus is on solving the problem, not writing up the person

Where I work, employees and management work together to ensure the safest possible working solutions

I feel free to raise workplace safety concerns

My work unit works well together

Different work units work well together in this organization

There is effective teamwork between physicians and nurses at this hospital

My work unit is adequately staffed

Communication between work units is effective in this organization

The amount of job stress I feel is reasonable

Communication between physicians, nurses, and other medical personnel is good in this organization

This organization provides high-quality care and service

I would recommend this organization to family and friends who need care

This organization makes every effort to deliver safe, error-free care to patients

Senior management provides a work climate that promotes patient safety