
Clinical Quality Dashboard for University of California Medical Centers

**Dr. Robert Cherry, MD, Chief Medical and
Quality Officer for UCLA Health**

For Meeting of October 20, 2020

Key Updates & Changes



The dashboard is intended to provide a snapshot of UC Health's current quality performance.

- Only finalized results included in update:
 - ✓ CMI, Mortality, Length of Stay, Excess Bed Days, HCAHPS, CLABSI, and CAUTI through August (Q3TD) 2020
 - ✓ Readmissions through July (Q3TD) 2020
 - ✓ HAPU through Q2 2020
 - ✓ Vizient & Equity Rankings through Q2 2020
 - ✓ Other Updates:
 - ✓ Data pulled from Vizient uses:
 - ✓ 2020 Risk Model (AMC) and AHRQ V2019
 - ✓ Hospital Comparison Group: Vizient Quality & Accountability - Comprehensive Academic Medical Center (2020)
 - ✓ Federal Fiscal Year Percentiles (Q4 2018 to Q3 2019)
 - ✓ Retrospective Data Updates:
 - ✓ Q2 2019 to Q2 2020 for the following measures: CMI, Mortality, Readmissions, LOS, EBD, and HAPU

HSC October 2020 Executive Summary: Inpatient Quality Metrics

Executive Summary: Inpatient (Q2 2020)

Domain	Mortality	Effectiveness	Safety	Patient Centeredness	Efficiency	Equity	Rank
Institution	Inpatient Mortality	% 30 day Readmissions	CLABSI SIR	HCAHPS: Overall Rating	LOS Index	Equity Rank* / % Points Received	Vizient Rank*
UCD	0.81	14.67%	0.70	73.6%	0.98	1 / 100, 100%	NA
UCI	0.38	13.41%	0.20	78.5%	0.77	1 / 100, 100%	NA
UCLA - RR	0.55	13.57%	1.27	84.0%	1.03	1 / 100, 100%	NA
UCLA - SM	0.62	11.77%	2.03	79.2%	0.97	54 / 100, 95.03%	NA
UCSD	0.58	14.99%	0.75	81.8%	0.93	1 / 100, 100%	NA
UCSF	0.74	13.07%	1.35	82.0%	1.14	1 / 100, 100%	NA
UC Health	0.62	13.86%	0.93	79.6%	0.98		NA
Median Nat'l Comparator Group	0.85	13.57%	1	72.6%	0.98	1	NA

	Mortality, Readmissions, HCAHPS & LOS	CLABSI	Equity Rank	Vizient Rank
	90 th percentile and above	95% confidence interval (CI) not crossing & below 1.0	1 - 10 th	1 - 25 th
	50 th percentile – 89 th percentile	95% confidence interval crosses 1.0		
	Lower than 50 th percentile	95% confidence interval not crossing & above 1.0		

⁴ Based on the latest completed quarterly data (Q2 2020)
 *: Equity and Vizient Rank are from the period of Q&A 2020- Post-COVID
 Discussion Draft 10/14/2020
 Prepared by UCLA – QIA

Inpatient Quality Metrics: 30-Day Readmissions

Patient Mortality

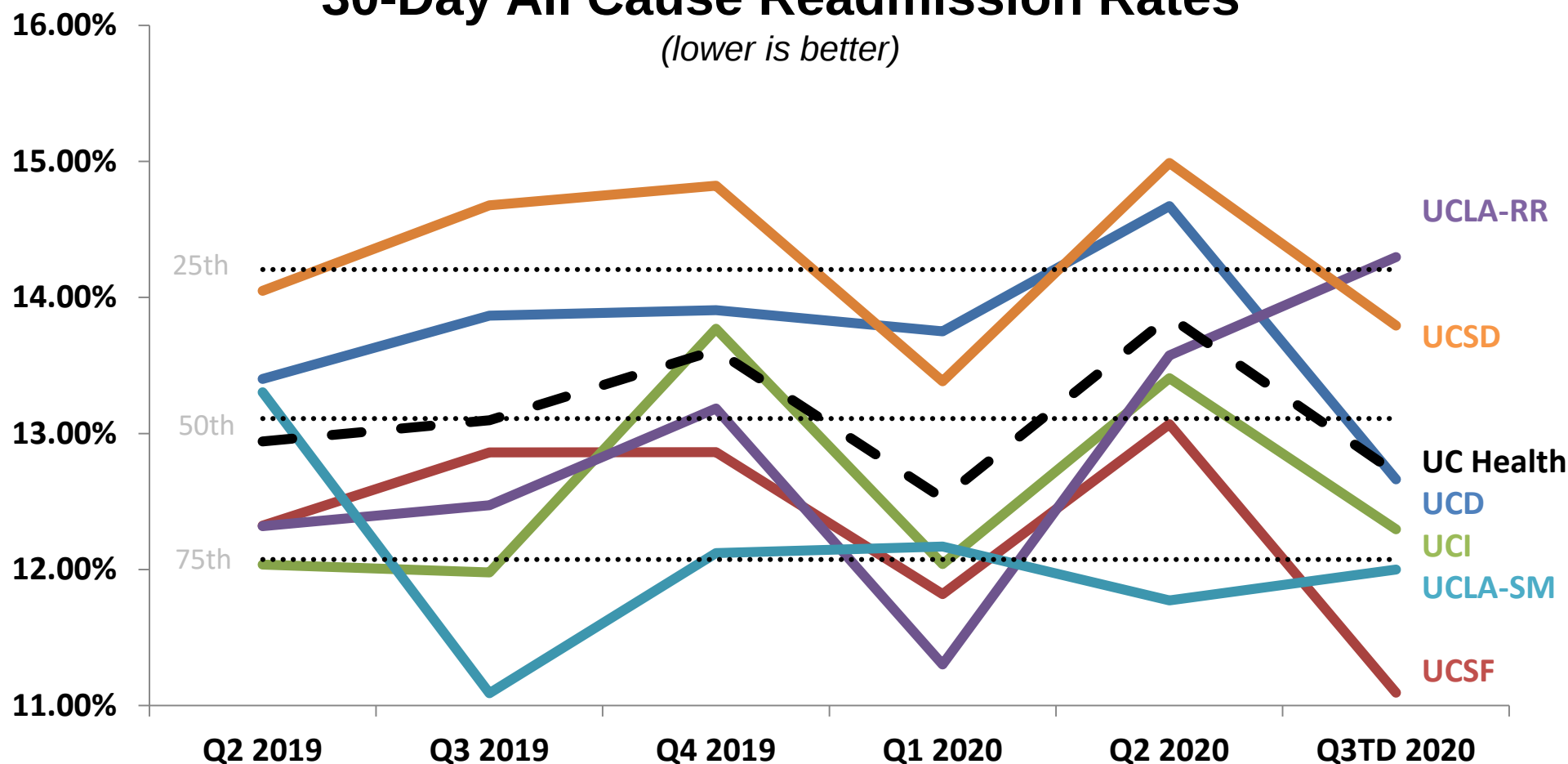
Readmissions

Patient Experience

Patient Safety

30-Day All Cause Readmission Rates

(lower is better)



Q3 data through July

5 Prepared by UCLA – QIA
25th-50th-75th percentiles based on last federal fiscal year (2018Q4-2019Q3) Vizient AMC data

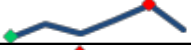
Source: Vizient and University HealthSystem Consortium.

Definition: The 30 day all cause readmission rate for adult, non-OB patients is the % of patients who return to the hospital for any reason within 30 days of discharge from the prior (index) admission.

Standard restrictions: Early Death: Include All; Bad Data: Exclude All; Normal Newborn: Exclude All; Nonviable Neonate: Exclude All; Medical Tourism: Include All; Prison Population: Include All; Rehabilitation: Include All; Hospice: Exclude All; Readmit Type: All; Readmit Cases: Excludes (in numerator): Chemotherapy, Radiation Therapy, Rehabilitation, Death 1st Admit, Dialysis, Delivery/Birth, Mental Diseases/Alcohol & Drug Use; Excludes (in denominator): Death 1st Admit. Advanced restrictions: age 18 or older; Vizient service lines: not in Neonatology, normal newborns, obstetrics)

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Summary and 6 Quarter Trend (through Q2 2020)

Institution	Inpatient Mortality Q2 2020	Q1 2019 - Q2 2020 Average	6 Quarter Trend
UCD	0.81	0.86	
UCI	0.38	0.56	
UCLA - RR	0.55	0.72	
UCLA - SM	0.62	0.65	
UCSD	0.58	0.68	
UCSF	0.74	0.91	
UC Health	0.62	0.74	

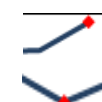
Institution	30d Readm Rate Q2 2020	Q1 2019 - Q2 2020 Average	6 Quarter Trend
UCD	14.67%	13.78%	
UCI	13.41%	12.59%	
UCLA - RR	13.57%	12.51%	
UCLA - SM	11.77%	12.10%	
UCSD	14.99%	14.34%	
UCSF	13.07%	12.68%	
UC Health	13.86%	13.17%	

	Mortality, Readmissions, HCAHPS & LOS	CLABSI	Equity Rank	Vizient Rank
	90 th percentile and above	95% confidence interval (CI) not crossing & below 1.0	1 - 10 th	1 - 25 th
	50 th percentile – 89 th percentile	95% confidence interval crosses 1.0		
	Lower than 50 th percentile	95% confidence interval not crossing & above 1.0		

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Green Marker = Best performing
Quarter within 6 Quarter Timeframe



Red Marker = Worst performing
Quarter within 6 Quarter Timeframe

Summary and 6 Quarter Trend (through Q2 2020)

Institution	CLABSI SIR Q2 2020	Q1 2019 - Q2 2020 Average	6 Quarter Trend
UCD	0.70	0.47	
UCI	0.20	0.57	
UCLA - RR	1.27	1.13	
UCLA - SM	2.03	0.91	
UCSD	0.75	0.71	
UCSF	1.35	0.77	
UC Health	0.93	0.75	

Institution	CLABSI counts Q2 2020	Q1 2019 - Q2 2020 Average	6 Quarter Trend
UCD	6	4	
UCI	1	3	
UCLA - RR	10	10	
UCLA - SM	3	2	
UCSD	6	6	
UCSF	9	6	
UC Health	35	31	

Institution	CLABSI line days Q2 2020	Q1 2019 - Q2 2020 Average	6 Quarter Trend
UCD	6266	6248	
UCI	3763	4631	
UCLA - RR	7259	8014	
UCLA - SM	1412	1762	
UCSD	6139	6530	
UCSF	6215	7509	
UC Health	31054	34693	

	CLABSI
	95% confidence interval (CI) not crossing & below 1.0
	95% confidence interval crosses 1.0
	95% confidence interval not crossing & above 1.0

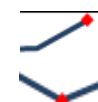
7 Based on the latest completed quarterly data (Q2 2020)

Prepared by UCLA – QIA

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Green Marker = Best performing Quarter within 6 Quarter Timeframe



Red Marker = Worst performing Quarter within 6 Quarter Timeframe

Summary and 6 Quarter Trend (through Q2 2020)

Institution	HCAHPS: Recommend Q2 2020	Q1 2019 - Q2 2020 Average	6 Quarter Trend
UCD	78.3%	78.6%	
UCI	81.0%	81.0%	
UCLA - RR	86.6%	86.6%	
UCLA - SM	84.3%	83.5%	
UCSD	86.1%	83.3%	
UCSF	88.2%	87.0%	
UC Health	84.1%	83.3%	

Institution	HCAHPS: MD Commun Q2 2020	Q1 2019 - Q2 2020 Average	6 Quarter Trend
UCD	78.7%	80.8%	
UCI	81.1%	83.3%	
UCLA - RR	83.6%	85.2%	
UCLA - SM	82.2%	83.2%	
UCSD	86.4%	84.8%	
UCSF	85.3%	86.1%	
UC Health	83.1%	83.9%	

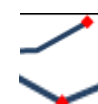
Institution	HCAHPS: Nurs Commun Q2 2020	Q1 2019 - Q2 2020 Average	6 Quarter Trend
UCD	78.4%	79.1%	
UCI	76.7%	79.1%	
UCLA - RR	80.1%	82.5%	
UCLA - SM	79.3%	80.5%	
UCSD	81.8%	81.5%	
UCSF	82.3%	82.7%	
UC Health	80.2%	81.0%	

Mortality, Readmissions & HCAHPS

CLABSI

90 th percentile and above	95% confidence interval (CI) not crossing & below 1.0
50 th percentile – 89 th percentile	95% confidence interval crosses 1.0
Lower than 50 th percentile	95% confidence interval not crossing & above 1.0

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Inpatient Quality Metrics

Inpatient Quality Metrics: Case Mix Index

Patient Mortality

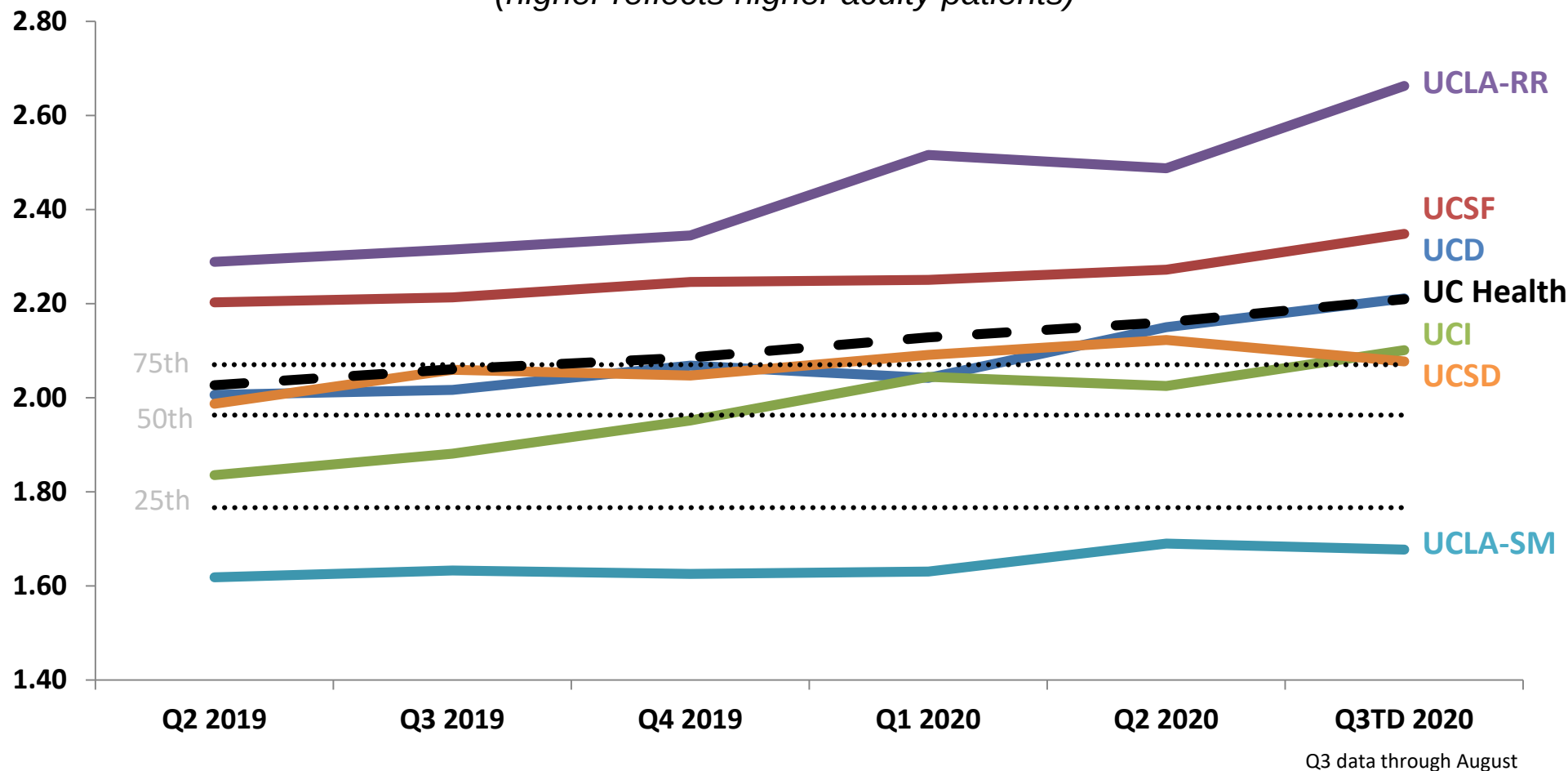
Readmissions

Patient Experience

Patient Safety

Case Mix Index

(higher reflects higher acuity patients)



10 Prepared by UCLA – QIA
25th-50th-75th percentiles based on last federal fiscal year (2018Q4-2019Q3) Vizient AMC data

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Source: Vizient / UHC: University HealthSystem Consortium.

Definition: A relative value assigned to treat the mix of inpatients.

Notes: the higher the CMI, the sicker its patients and the more resources patients required during treatment

Standard Restrictions: LOS Outlier: Include All; Early Death: Include All; Bad Data: Exclude All; Normal Newborn: Include All; Nonviable Neonate: Exclude All; Pediatrics Age: Include All; Medical Tourism: Include All; Prison Population: Include All; Rehabilitation: Include All; Hospice: Exclude All.

Inpatient Quality Metrics: Inpatient Mortality

Patient Mortality

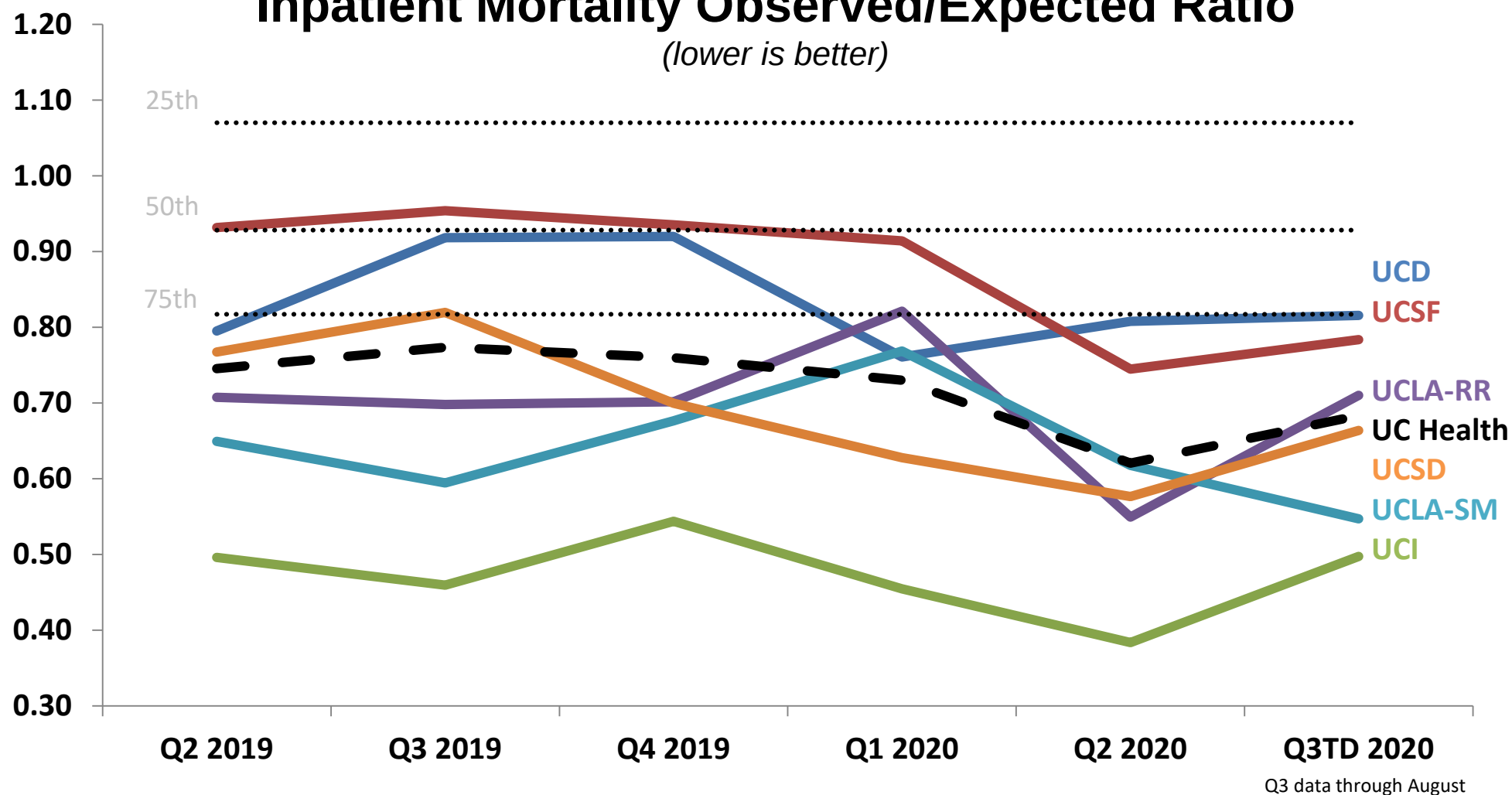
Readmissions

Patient Experience

Patient Safety

Inpatient Mortality Observed/Expected Ratio

(lower is better)



11 Prepared by UCLA – QIA
25th-50th-75th percentiles based on last federal fiscal year (2018Q4-2019Q3) Vizient AMC data

UC HEALTH

Source: Vizient / UHC: University HealthSystem Consortium.

Definition: The total inpatient mortality index represents all inpatient cases that had a discharge status of "expired" (observed mortality rate divided by expected mortality rate).

Notes: A value higher than 1.0 means the rate was higher than expected and a value below 1.0 means the rate was lower than expected.

Standard Restrictions: LOS Outlier: Include All; Early Death: Include All; Bad Data: Exclude All; Normal Newborn: Include All; Nonviable Neonate: Exclude All; Pediatrics Age: Include All; Medical Tourism: Include All; Prison Population: Include All; Rehabilitation: Include All; Hospice: Exclude All.

Inpatient Quality Metrics: HAPU

Patient Mortality

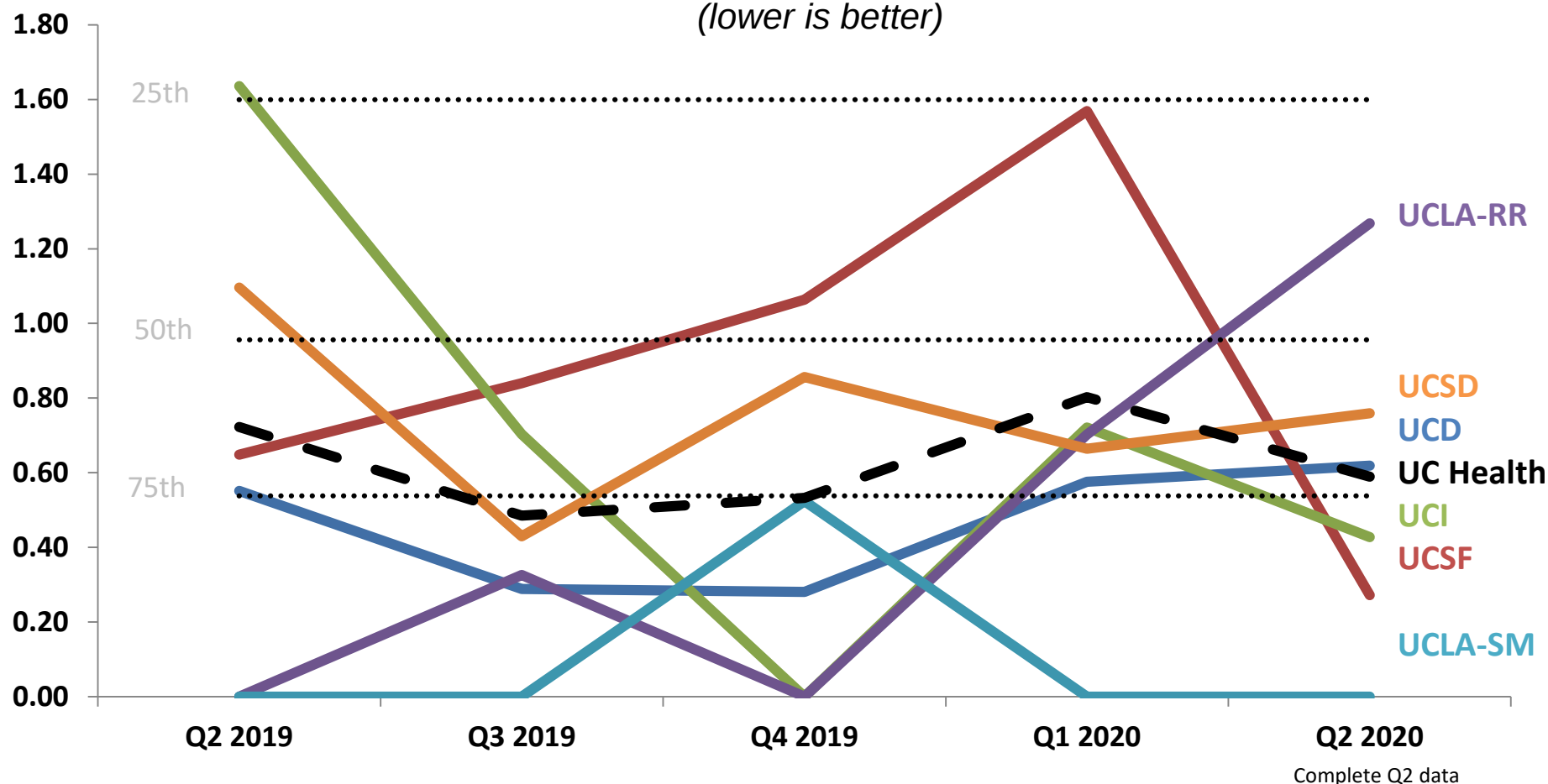
Readmissions

Patient Experience

Patient Safety

Observed Rate Per 1000 Cases for PSI 03 Pressure Ulcer Stage III, IV, Unstageable

(lower is better)



Complete Q2 data

12 Prepared by UCLA – QIA
25th-50th-75th percentiles based on last federal fiscal year (2018Q4-2019Q3) Vizient AMC data

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Source: Vizient / UHC: University HealthSystem Consortium.

Definition: Cases of pressure ulcer per 1,000 discharges with a length of stay greater than four days

Standard Restrictions: LOS Outlier: Include All; Early Death: Include All; Bad Data: Exclude All; Normal Newborn: Include All; Nonviable Neonate: Exclude All; Pediatrics Age: Include All; Medical Tourism: Include All; Prison Population: Include All; Hospice: Exclude All; Rehabilitation: Include All.

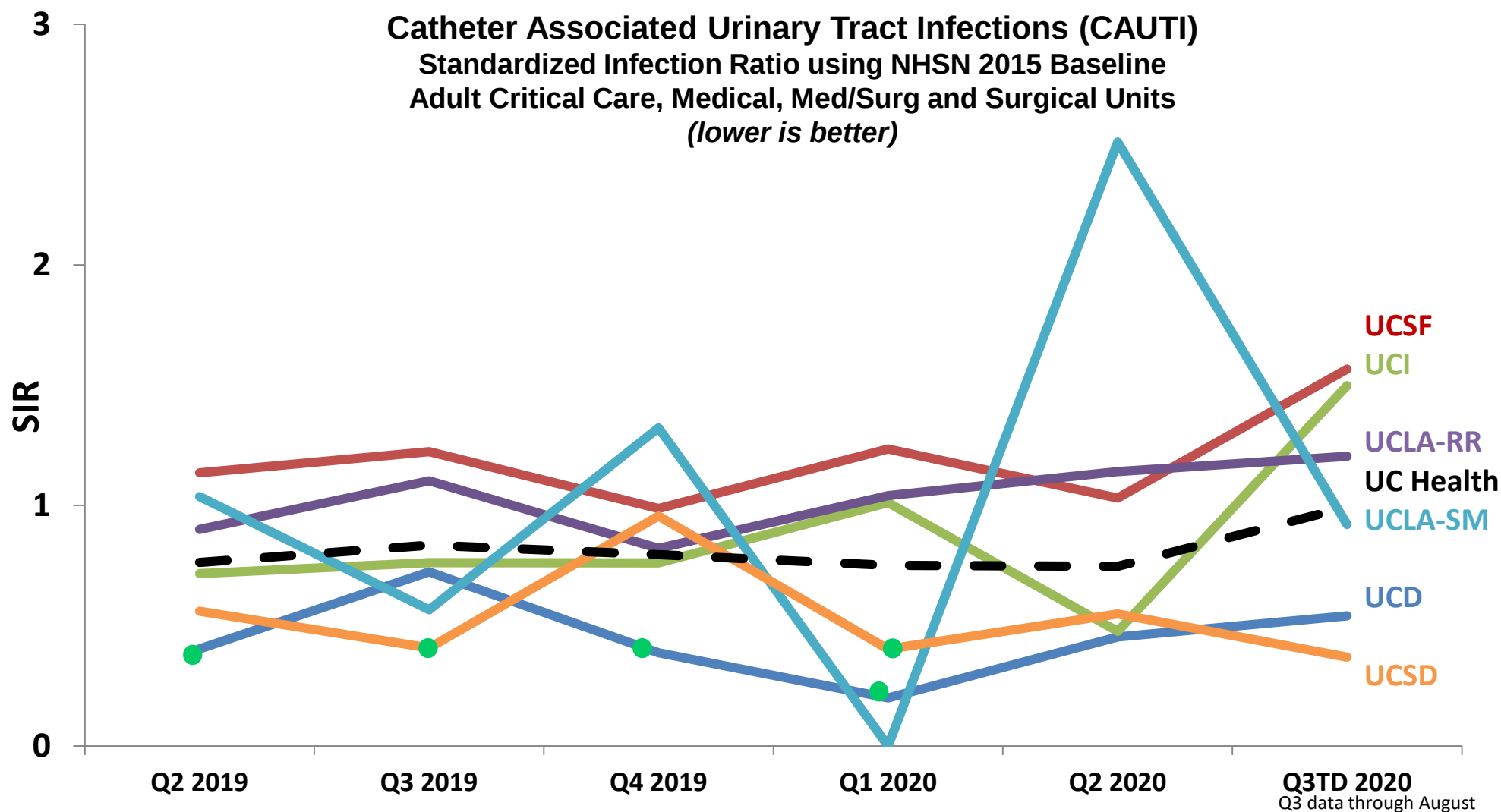
Inpatient Quality Metrics: CAUTI

Patient Mortality

Readmissions

Patient Experience

Patient Safety



13 Prepared by UCLA – QIA

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- Significantly low
- Significantly high

Source: National Healthcare Safety Network (NHSN) CMS/Hospital IQR Report using 2015 baseline. Report modified to include only Adult Units per Vizient method.

Interpretation: A SIR greater than 1.0 (NHSN benchmark) indicates that more HAIs were observed than predicted, accounting for differences in the types of patients followed; conversely, an SIR less than 1.0 indicates that fewer HAIs were observed than predicted. Confidence intervals that do not cross 1 indicate statistical significance; confidence intervals that cross 1 indicate observed is not statistically different from predicted.

Inpatient Quality Metrics: CLABSI

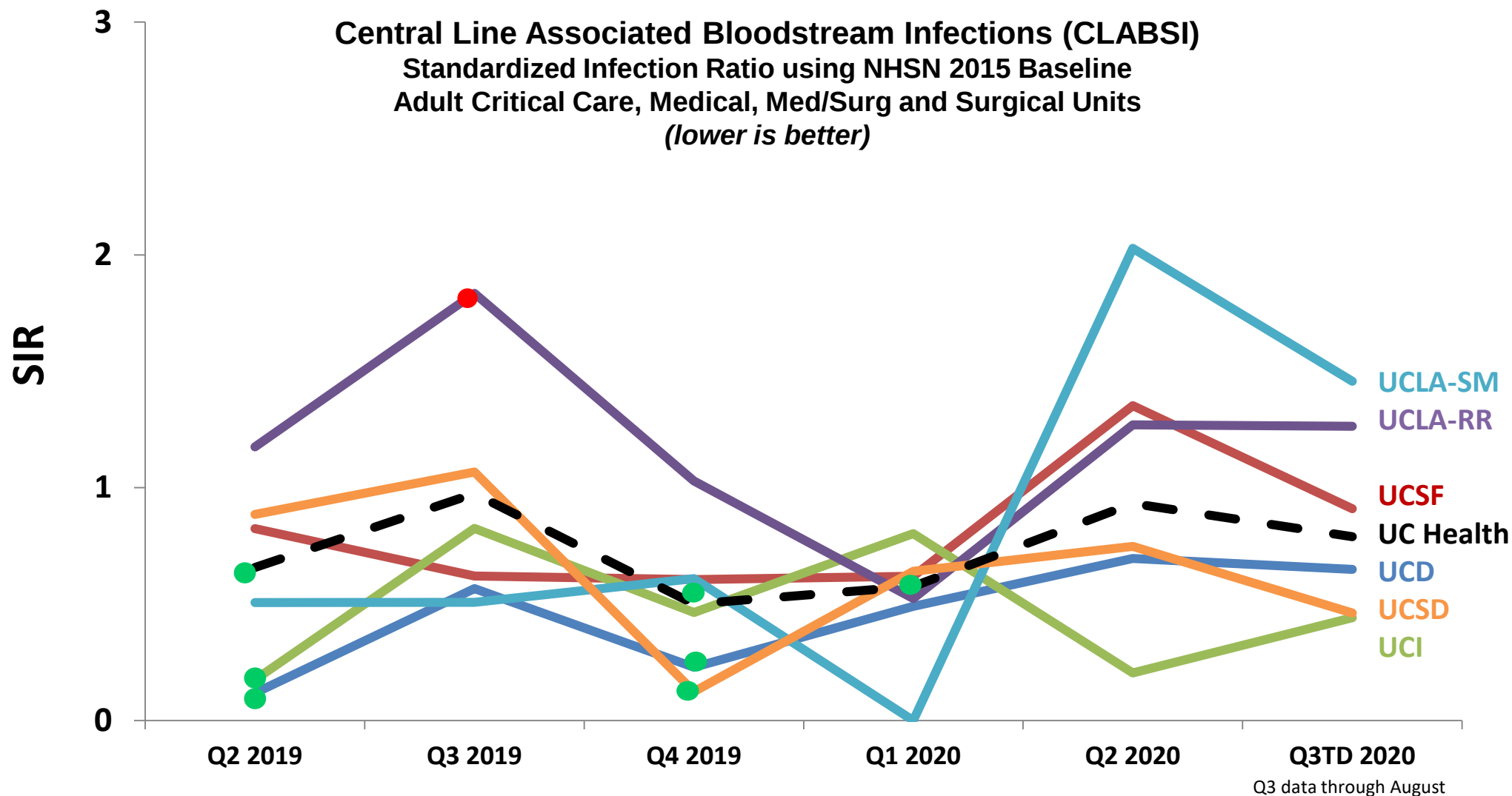
Patient Mortality

Readmissions

Patient Experience

Patient Safety

Central Line Associated Bloodstream Infections (CLABSI)
Standardized Infection Ratio using NHSN 2015 Baseline
Adult Critical Care, Medical, Med/Surg and Surgical Units
(lower is better)



14 Prepared by UCLA – QIA

UC HEALTH

- Significantly low
- Significantly high

Source: National Healthcare Safety Network (NHSN) CMS/Hospital IQR Report using 2015 baseline. Report modified to include only Adult Units per Vizient method.

Interpretation: A SIR greater than 1.0 (NHSN benchmark) indicates that more HAIs were observed than predicted, accounting for differences in the types of patients followed; conversely, an SIR less than 1.0 indicates that fewer HAIs were observed than predicted. Confidence intervals that do not cross 1 indicate statistical significance; confidence intervals that cross 1 indicate observed is not statistically different from predicted.

Inpatient Quality Metrics: HCAHPS

Patient Mortality

Readmissions

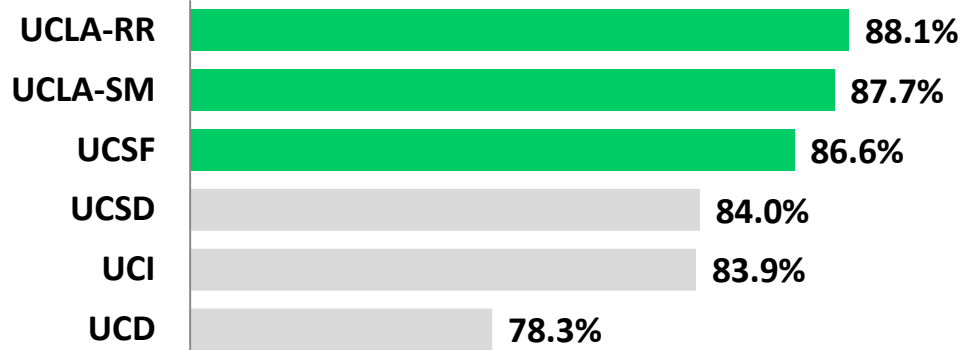
Patient Experience

Patient Safety

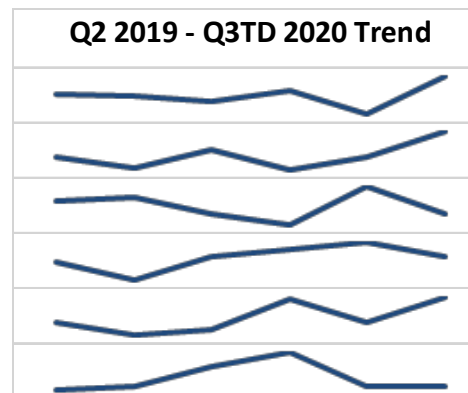
Patient Experience

Would Recommend Hospital

Q3TD 2020 Performance



Q3TD data through August

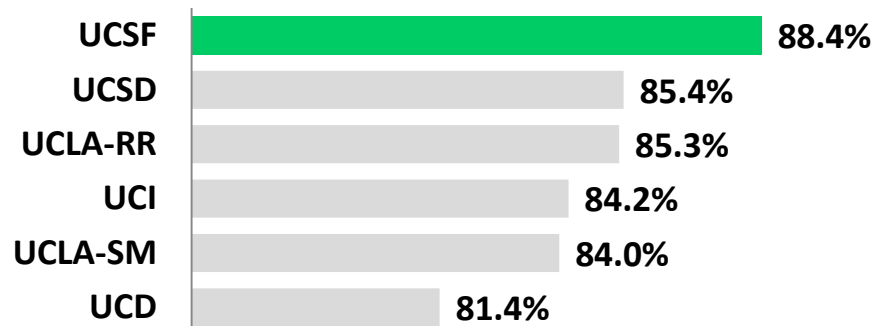


- HCAHPS data pulled by discharge date for all campuses.

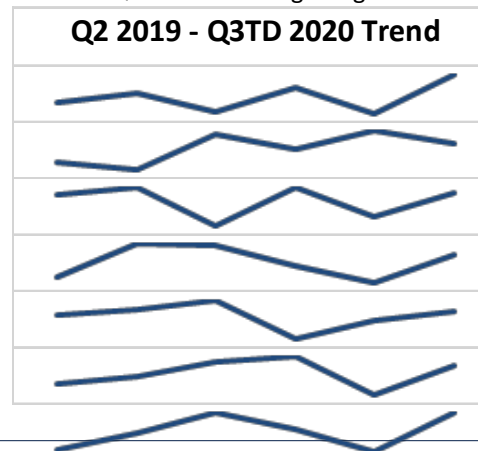
- Two filter analysis and mode adjustment have not been used to produce this dashboard.

Communication with Physicians

Q3TD 2020 Performance



Q3TD data through August



Benchmarks: Performance either above or below Press Ganey's National Client Database are indicated.

- indicates performance above the 90th percentile
- indicates performance between 50th and 90th percentile
- indicates performance below the 50th percentile

Inpatient Quality Metrics: HCAHPS

Patient Mortality

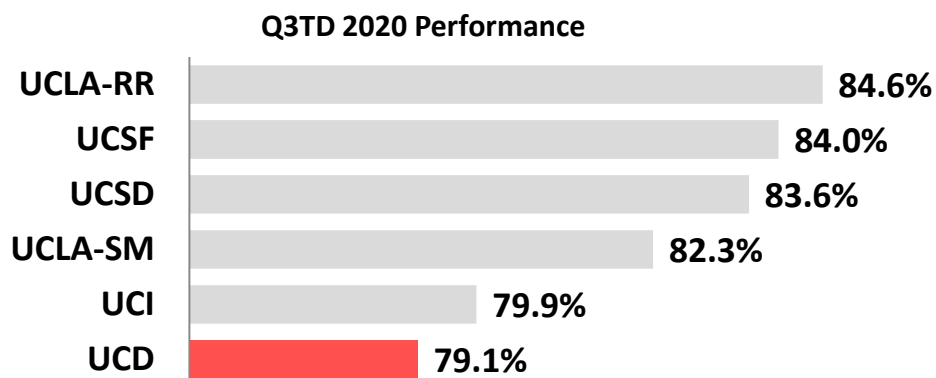
Readmissions

Patient Experience

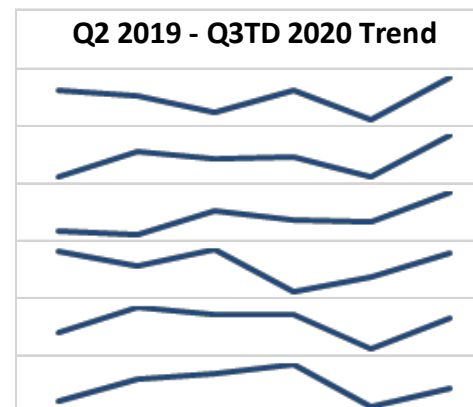
Patient Safety

Patient Experience

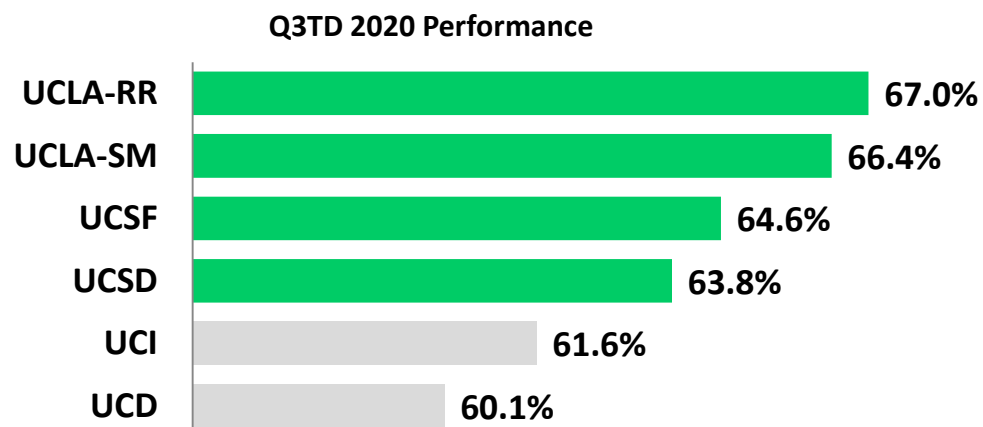
Communication with Nurses



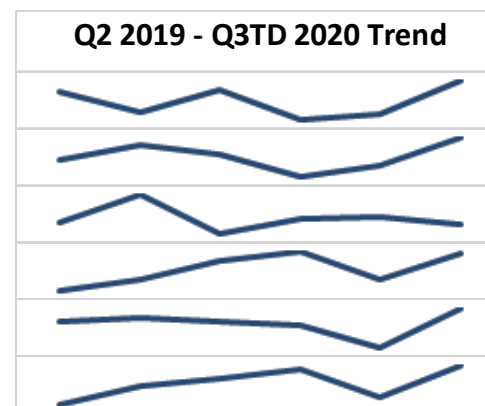
Q3TD data through August



Transition of Care



Q3TD data through August



Inpatient Quality Metrics: HCAHPS

Patient Mortality

Readmissions

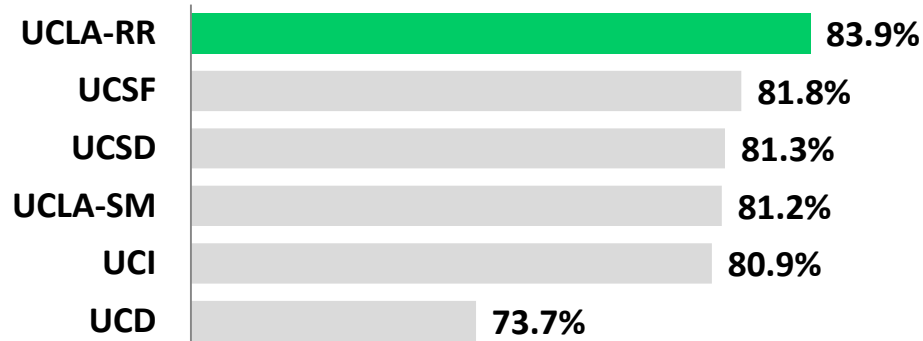
Patient Experience

Patient Safety

Patient Experience

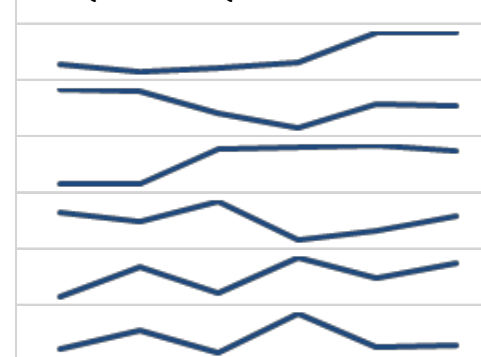
Overall Rating

Q3TD 2020 Performance



Q3TD data through August

Q2 2019 - Q3TD 2020 Trend



Inpatient Quality Metrics: Excess Bed Days

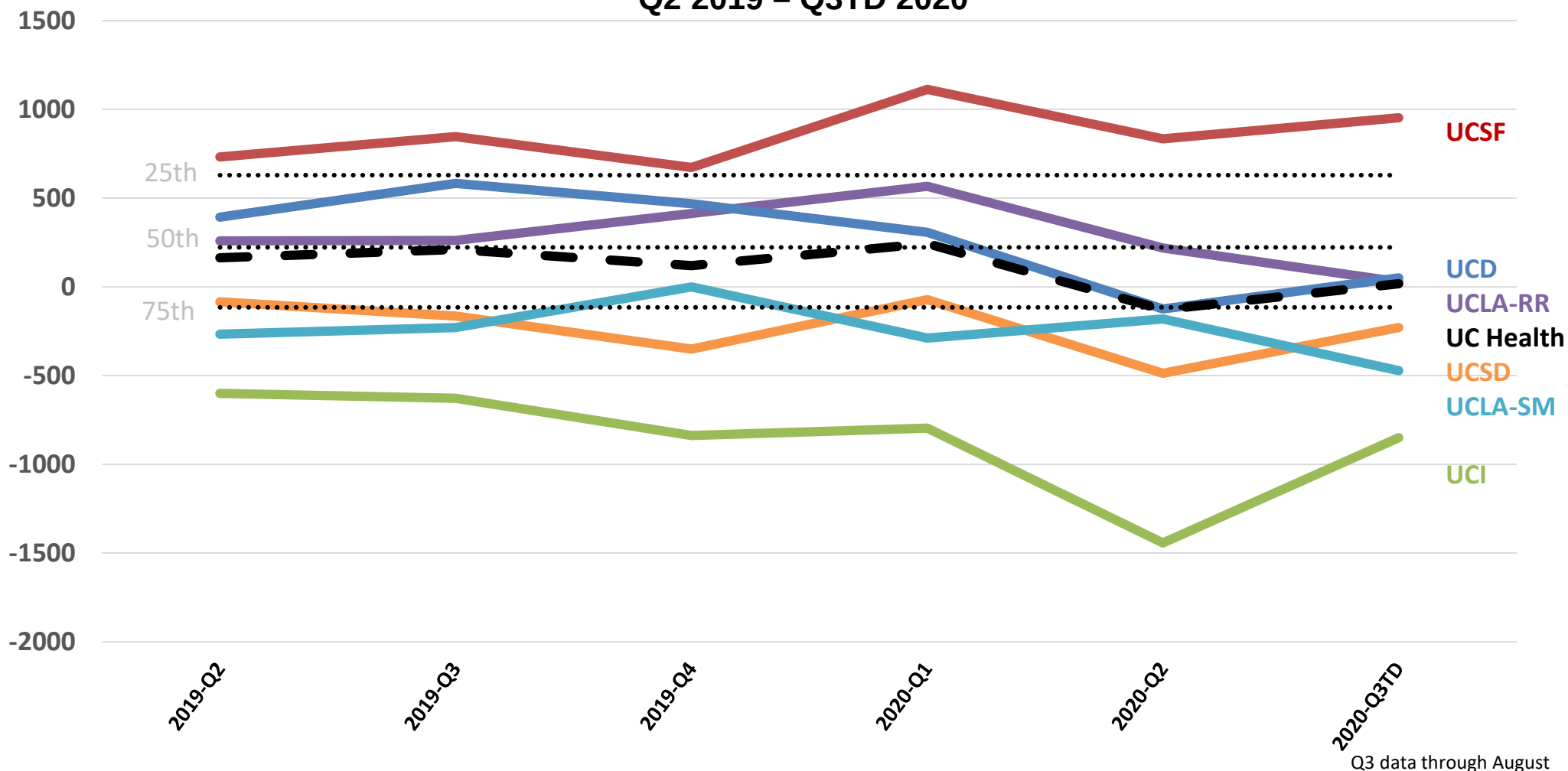
Coordinating Care/Patient Flow

Readmissions

Patient Experience

Patient Safety

Excess Bed Days per K Case by Institution by Quarter Q2 2019 – Q3TD 2020



18 Prepared by UCLA – QIA

25th-50th-75th percentiles based on last federal fiscal year (2018Q4-2019Q3) Vizient AMC data

UC HEALTH

Source: Vizient / UHC: University HealthSystem Consortium.

Definition: Excess bed days per 1000 cases= (Sum(Observed LOS - Expected LOS) of all discharges)/total number of discharges * 1,000

Standard Restrictions: LOS Outlier: Include All; Early Death: Include All; Bad Data: Exclude All; Normal Newborn: Include All; Nonviable Neonate: Exclude All; Pediatrics Age: Include All; Medical Tourism: Include All; Prison Population: Include All; Hospice: Exclude All; Rehabilitation: Exclude All

Advanced Restrictions: Vizient Service Line: Not (Neonatology, Obstetrics, Psychiatry, Rehabilitation)

Inpatient Quality Metrics: Length of Stay

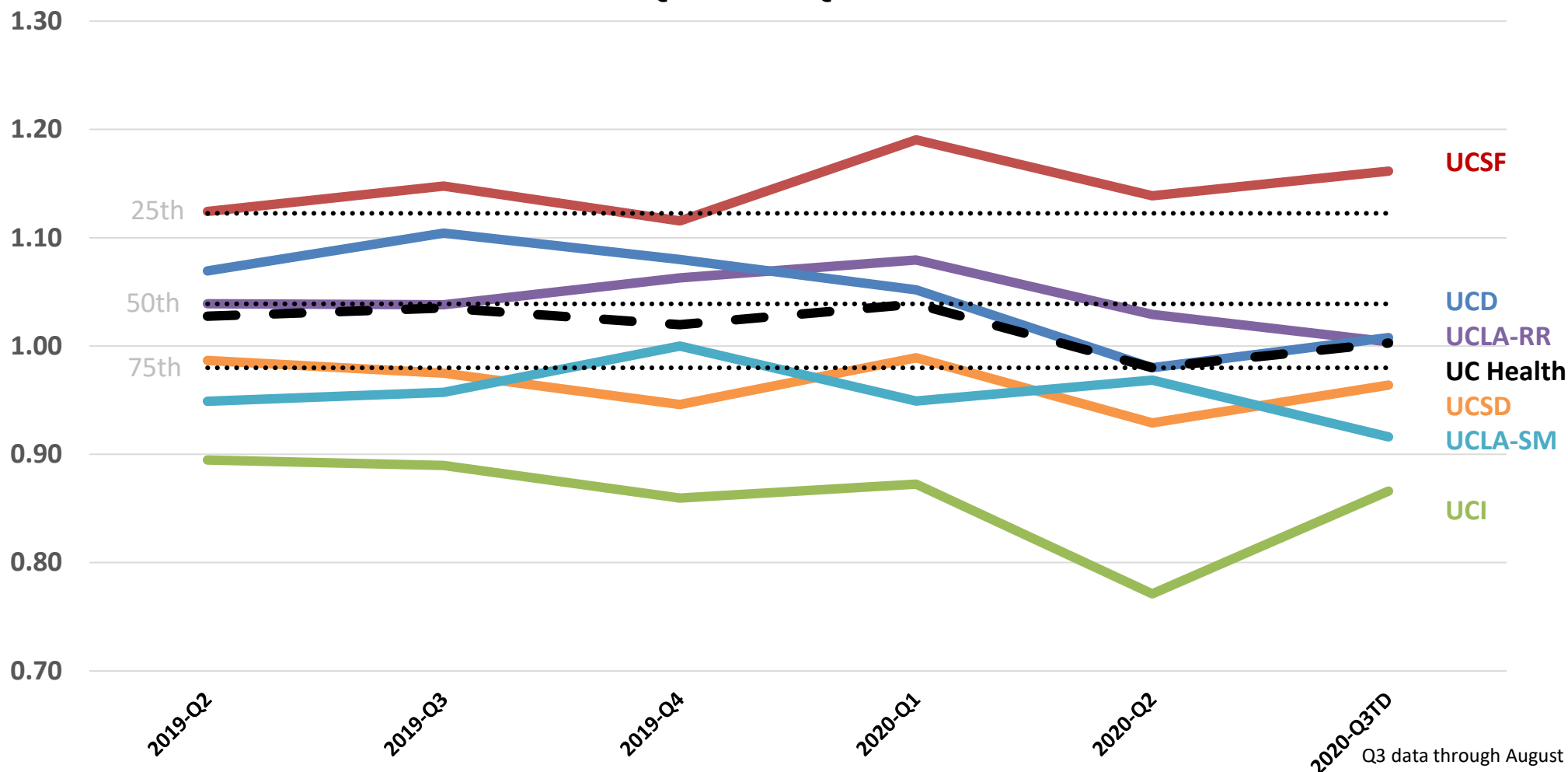
Coordinating Care/Patient Flow

Readmissions

Patient Experience

Patient Safety

LOS Index by Institution by Quarter Q2 2019 – Q3TD 2020



19 Prepared by UCLA – QIA

25th-50th-75th percentiles based on last federal fiscal year (2018Q4-2019Q3) Vizient AMC data

UCHEALTH

Source: Vizient / UHC: University HealthSystem Consortium.

Definition: LOS Index = Mean LOS (Observed) / Mean LOS (Expected)

Standard Restrictions: LOS Outlier: Include All; Early Death: Include All; Bad Data: Exclude All; Normal Newborn: Include All; Nonviable Neonate: Exclude All; Pediatrics Age: Include All; Medical Tourism: Include All; Prison Population: Include All; Hospice: Exclude All; Rehabilitation: Exclude All

Advanced Restrictions: Vizient Service Line: Not (Neonatology, Obstetrics, Psychiatry, Rehabilitation)

Inpatient Quality Metrics: Excess Bed Days

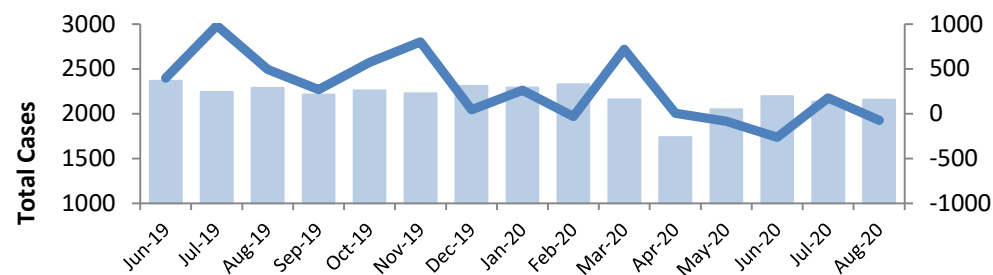
Coordinating Care/Patient Flow

Readmissions

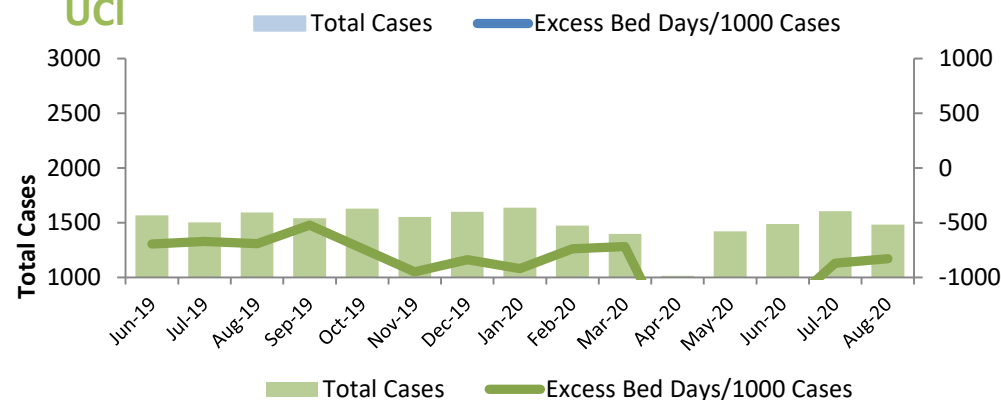
Patient Experience

Patient Safety

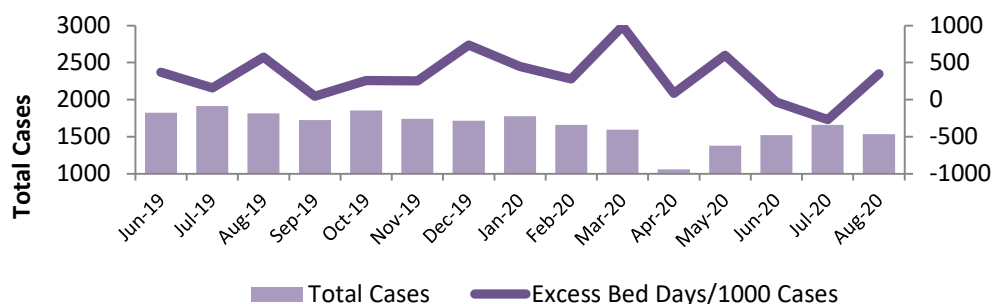
UCD



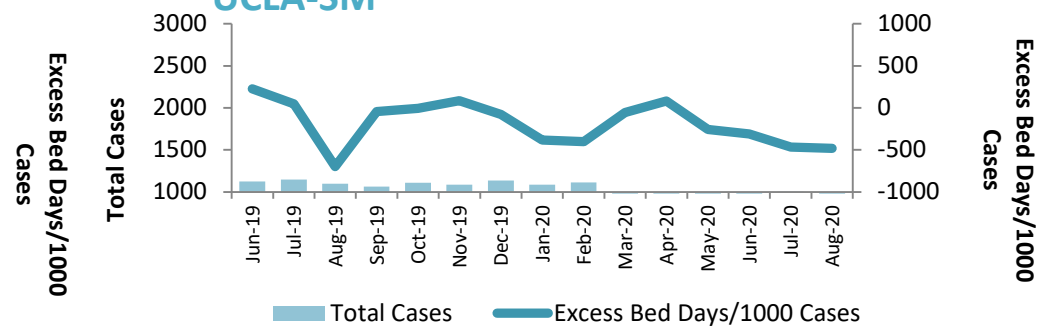
UCI



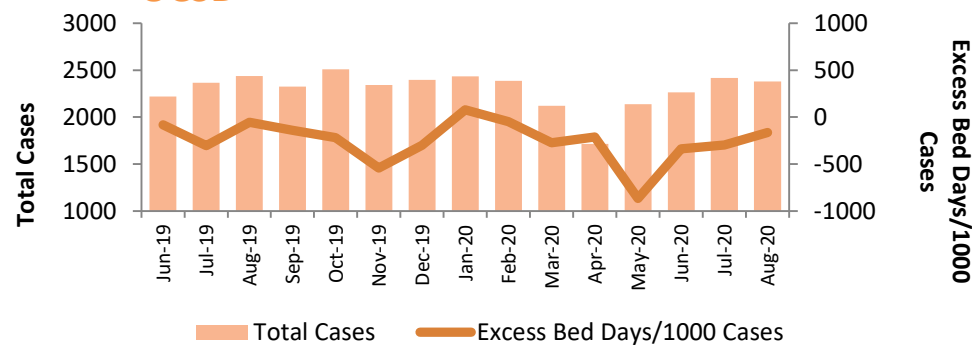
UCLA-RR



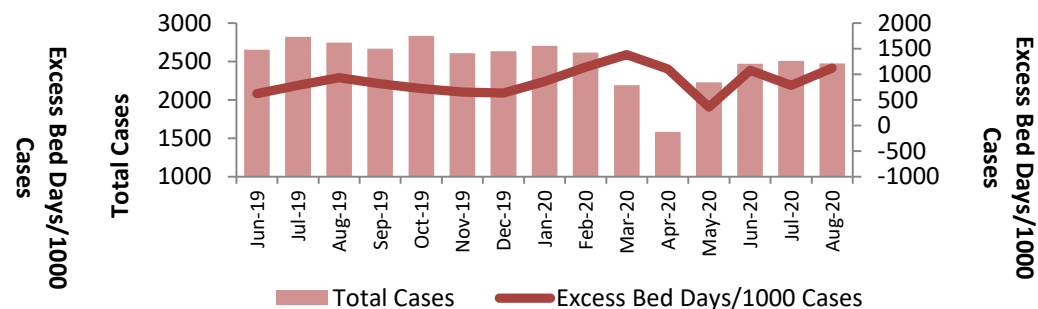
UCLA-SM



UCSD



UCSF



20 Prepared by UCLA – QIA

Source: Vizient / UHC: University HealthSystem Consortium.

Definition: Excess bed days per 1000 cases = (Sum(Observed LOS - Expected LOS) of all discharges) / total number of discharges * 1,000

Standard Restrictions: LOS Outlier: Include All; Early Death: Include All; Bad Data: Exclude All; Normal Newborn: Include All; Nonviable Neonate: Exclude All; Pediatrics Age: Include All; Medical Tourism: Include All; Prison Population: Include All; Hospice: Exclude All; Rehabilitation: Exclude All

Advanced Restrictions: Vizient Service Line: Not (Neonatology, Obstetrics, Psychiatry, Rehabilitation)

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Appendix: Glossary

Glossary (1 of 5)

Mortality Index: (2020 Risk Adjustment Model (AMC), AHRQ Version V2019)

The total inpatient mortality index represents all inpatient cases that had a discharge status of “expired” (observed mortality rate divided by expected mortality rate).

- **Numerator:** Observed mortality rate
- **Denominator:** Expected mortality rate (average probability of death for each patient predicted by risk modeling, taking into account individual patient characteristics)
- **Exclusions:** Standard UHC Clinical Data Base/Resource Manager™ Exclusions (Bad data, nonviable neonates, and hospice)

Case Mix Index: (2020 Risk Adjustment Model (AMC), AHRQ Version V2019)

A relative value assigned to treat the mix of inpatients. The higher the CMI, the sicker its patients and the more resources patients required during treatment. Exclusions: Please see the Mortality Index above.

Excess Bed Days / per 1,000 Cases: (2020 Risk Adjustment Model (AMC), AHRQ Version V2019)

- Standard restrictions: include all LOS outlier, early death, normal newborn, pediatrics age, medical tourism and prison population; exclude bad data, nonviable neonate, hospice, and rehabilitation
- Advanced restrictions: Vizient service line: not (neonatology, obstetrics, psychiatry, rehabilitation)
- Excess beds days per 1,000 cases= $\text{Sum}\{\text{Observed LOS} - \text{Expected LOS}\} \text{ of all discharges} / \text{total number of discharges} * 1,000$

Length of Stay Index: (2020 Risk Adjustment Model (AMC), AHRQ Version V2019)

- Standard restrictions and Advanced restrictions are the same as above for Excess Bed Days
- LOS Index = $\text{Mean LOS (Observed)} / \text{Mean LOS (Expected)}$

Glossary (2 of 5)

All-cause Readmissions Index:(2020 Risk Adjustment Model (AMC), AHRQ Version V2019) **CMS logic is followed.**

The 30-day all cause readmission rate for adult, non-OB patients is the percentage of patients who return to the hospital for any reason within 30 days of discharge from the prior (index) admission.

- **Numerator:** Total number of readmissions (all cause) within 30 days
- **Denominator:** Total number of discharges (eligible for readmission)
- **Note:** The most recent quarter reported uses only 2 months of data (i.e., the last month of the quarter is excluded) in order to capture readmissions within 30 days of discharge.
- **Exclusions:**
 - o *Both numerator and denominator:* Patients < 18 years of age, Bad data, Death on index admission, Nonviable neonates, Normal newborn service line, Neonatology service line, Obstetrics service line, Hospice flag (admitted from hospice, on a hospice care plan)
 - o *Numerator-only exclusions:* Chemotherapy, Rehabilitation, Radiation therapy, Dialysis, Delivery/birth, Mental diseases/alcohol and drug use (patient with MDC 19: Mental diseases & disorders or MDC 20: Alcohol/drug use & alcohol/drug induced organic mental disorders and Days to readmission <= 1 day)

Glossary (3 of 5)

HCAHPS—“Likelihood to Recommend” Top-box Percentage:

- The Centers for Medicare & Medicaid Services (CMS), along with the Agency for Healthcare Research and Quality (AHRQ), developed the HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) Survey, also known as Hospital CAHPS®, to provide a standardized survey instrument and data collection methodology for measuring patients' perspectives on hospital care. The HCAHPS Survey is administered to a random sample of patients continuously throughout the year. CMS cleans, adjusts and analyzes the data, then publicly reports the results. The survey is 32 questions in length—21 substantive items that encompass critical aspects of the hospital experience, 4 screening questions to skip patients to appropriate questions, and 7 demographic items that are used for adjusting the mix of patients across hospitals for analytical purposes. HCAHPS results are based on 4 quarters of data on a rolling basis.
- Three broad goals have shaped the HCAHPS survey. 1), the survey is designed to produce comparable data on the patient's perspective on care that allows objective and meaningful comparisons between hospitals on domains that are important to consumers. 2), public reporting of the survey results is designed to create incentives for hospitals to improve their quality of care. 3), public reporting will serve to enhance public accountability in health care by increasing the transparency of the quality of hospital care provided in return for the public investment. With these goals in mind, the HCAHPS project has taken substantial steps to assure that the survey is credible, useful, and practical. This methodology and the information it generates are available to the public.

A Note About HCAHPS “Boxes”

HCAHPS results are publicly reported on Hospital Compare as “top-box,” “bottom-box” and “middle-box” scores. The “top-box” is the most positive response to HCAHPS Survey items. The “top-box” response is “Always” for five HCAHPS composites (Communication with Nurses, Communication with Doctors, Responsiveness of Hospital Staff, Pain Management, and Communication about Medicines) and two individual items (Cleanliness of Hospital Environment and Quietness of Hospital Environment), “Yes” for the Discharge Information composite, “9” or “10” (high) for the Overall Rating item, “Definitely yes” for the Recommend the Hospital item, and “Strongly agree” for the Care Transition composite.

About HCAHPS “Overall Rating” (question 21 on the survey, known as Rate Hospital 0-10)

The percentage of patients that scored the Overall Rating question with a 9 or 10 on the HCAHPS survey question 21.

- **Numerator:** Number of patients that scored with a 9 or 10 on the HCAHPS survey question 21.
- **Denominator:** Number of patients that scored on the HCAHPS survey question 21.

About HCAHPS “Would Recommend” (question 22 on the survey)

The percentage of patients that scored the Would Recommend question with “Definitely Yes” on the HCAHPS survey question 22.

- **Numerator:** Number of patients that scored with Definitely Yes on the HCAHPS survey question 22.
- **Denominator:** Number of patients that scored on the HCAHPS survey question 22.

Glossary (4 of 5)

Hospital Acquired Pressure Ulcers (HAPU), PSI 03:

Risk Adjustment Model: 2020 Risk Model (AMC)

AHRQ Version: V2019 (Pediatric) / V2019 (Quality) / V2019 (Safety)

- **Definition:** Cases of pressure ulcer per 1,000 discharges with a length of stay greater than four days.
- **Numerator:** Discharges with an ICD9CM code of pressure ulcer in any secondary diagnosis field and ICD9CM code of pressure ulcer stage III or IV (or unstageable) in any secondary diagnosis field among cases meeting the inclusion and exclusion rules for the denominator.
- **Denominator:** All medical and surgical discharges aged 18 years and older defined by specific DRGs or MSDRGs.
- **Exclusion:**
 - Length of stay of less than five days
 - Principal diagnosis of pressure ulcer
 - Secondary diagnosis of stage III or IV (or unstageable) pressure ulcer present on admission
 - MDC 9 (skin, subcutaneous tissue, and breast)
 - MDC 14 (pregnancy, childbirth, and puerperium)
 - Any diagnosis of hemiplegia, paraplegia, or quadriplegia
 - Any diagnosis of spina bifida or anoxic brain damage
 - Debridement or pedicle graft is the only operating room procedure
 - ICD9CM procedure code for debridement or pedicle graft before or on the same day as the major operating room procedure (surgical cases only)
 - Any diagnosis of stage I or stage II pressure ulcer
 - Transfer from a hospital (different facility)
 - Transfer from a skilled nursing facility or intermediate care facility
 - Transfer from another health care facility
 - With missing gender (SEX = missing), age (AGE = missing), quarter (DQTR = missing), year (YEAR = missing), or principal diagnosis (DX1 = missing)

Glossary (5 of 5)

NHSN Standardized Infection Ratio (SIR):

The standardized infection ratio (SIR) is a summary measure used to track HAIs at a national, state, or local level over time. The SIR adjusts for patients of varying risk within each facility. The method of calculating an SIR is similar to the method used to calculate the Standardized Mortality Ratio (SMR), a summary statistic widely used in public health to analyze mortality data. In HAI data analysis, the SIR compares the actual number of HAIs reported with the baseline U.S. experience (i.e., NHSN aggregate data are used as the standard population), adjusting for several risk factors that have been found to be significantly associated with differences in infection incidence. An SIR greater than 1.0 indicates that more HAIs were observed than predicted, accounting for differences in the types of patients followed; conversely, an SIR less than 1.0 indicates that fewer HAIs were observed than predicted.

CAUTI (Indwelling Urinary Catheter Associated Urinary Tract Infection):

- Urinary tract infections (UTIs) are the fourth most common type of healthcare-associated infection, with an estimated 93,300 UTIs in acute care hospitals in 2011 and account for more than 12% of infections reported by acute care hospitals. Virtually all healthcare-associated UTIs are caused by instrumentation of the urinary tract.
- As of 2014, catheter-associated urinary tract infections (CAUTIs) have not changed nationally since 2009. However, there was progress in non-ICU settings between 2009 and 2014, progress in all settings between 2013 and 2014, and even more progress in all settings towards the end of 2014.
- Reducing CAUTI among critical care patients is a special concern because these infections drive antibiotic use. While antibiotics are essential for treating bacterial infections, they also increase patients' risk for complications. One potentially deadly complication is severe diarrhea caused by the bacteria *Clostridium difficile*.
- HHS set a goal of reducing CAUTIs nationally by 25 percent by the end of 2013. The new HHS proposed targets for December 2020 will use calendar year 2015 data reported to CDC's National Healthcare Safety Network (NHSN) as the baseline.

CLABSI (Central Line Associated Bloodstream Infection):

- An estimated 30,100 central line-associated bloodstream infections (CLABSI) occur in intensive care units and wards of U.S. acute care facilities each year. CLABSIs are serious infections typically causing a prolongation of hospital stay and increased cost and risk of mortality.
- As of 2014, CLABSIs are down nationally by 50 percent since 2008. These encouraging findings reflect the work of care teams, individual practitioners, and facilities; local, state, and federal government; and cross-cutting partnership groups that have taken on CLABSI prevention efforts. We hope that all states and healthcare facilities will be motivated to continue and strengthen efforts to prevent CLABSIs.
- HHS set a goal of reducing CLABSIs nationally by 50 percent by the end of 2013. In 2014, CLABSI in acute care hospitals reached this goal, decreasing 50 percent between 2008 and 2014. The new HHS proposed targets for December 2020 will use calendar year 2015 data reported to CDC's National Healthcare Safety Network (NHSN) as the baseline.

If the number of predicted infections (numPred) is not greater than or equal to 1, then the SIR will not be calculated for that time period.

Brief Summary of NHSN Baseline Changes (2015 Baseline)

- The infection metric graphs presented this month are based on NHSN's 2015 baseline, introduced 1/1/2017.
 - Data gathered after 12/31/2016 can only be analyzed using the 2015 baseline.
 - The transition has been problematic and accurate data have been difficult to extract from NHSN, thus the delay in transitioning this report to the 2015 baseline.
 - The data extraction specs for this report match those used by Vizient in anticipation of adding that benchmark when available.
- "Rebaselining" refers to the National Healthcare Safety Network's (NHSN) revision of its risk models and referent data time period.
 - All metric analyses utilize baseline data collected in 2015. Previous baseline data for CLABSI and CAUTI were collected 2006-2008, and 2009 respectively.
 - Significant changes to infection definitions in 2015 and substantial increase in the quantity and variety of participants in the system made previous baseline data obsolete.
- Mathematical models used to calculate predicted numbers of infections were revised to account for nursing unit type, facility bed size and medical school affiliation. Previous models considered only nursing unit type.
- CLABSI SIR now excludes cases that meet mucosal barrier injury criteria (CLAMBI). The criteria were developed to capture likely bacterial translocation in immune compromised patients and as such, this subset of CLABSI is not significantly affected by the usual prevention methods.
- The majority of Vizient members had a **higher** SIR (worse) for the new baseline compared to the old baseline.
 - CAUTI – 86% had a higher SIR
 - CLABSI – 79% had a higher SIR
- Vizient reports 2015 data demonstrate that Academic Medical Centers (AMCs) had a **higher** SIR with the new baseline than Community hospitals.
 - CAUTI:
 - 97% of AMCs have a higher SIR with the new baseline
 - 80% Community hospitals with a higher SIR
 - CLABSI:
 - 92% of AMCs have a higher SIR with the new baseline
 - 70% Community hospitals with a higher SIR

● = significantly high
● = significantly low

Executive Summary: Color Guide

Metrics in the Executive Summary are color coded based on current quarter's performance in comparison to external competitors.

Metric	External Comparison Group	Color Coding
- Inpatient Mortality % 30-day Readmissions - Length of Stay - Vizient & Equity Rank	Vizient Quality & Accountability Comprehensive Academic Medical Centers (2020)	90th percentile and above 50th - 89th percentile Lower than 50th percentile
CLABSI	NHSN	95% CI that does not cross 1.00; above 1.00 95% CI that crosses 1.00 95% CI that does not cross 1.00; below 1.00
- HCAHPS: Overall Rating - HCAHPS: Communication with Physicians - HCAHPS: Communication with Nurses	Press Ganey's National Client Database	90th percentile and above 50th - 89th percentile Lower than 50th percentile