UC HEALTH

Clinical Quality Dashboard for University of California Medical Centers

Health Services Committee
August 13, 2019

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, CAUTI, CLABSI, HCAHPS, and Excess Bed Days through May 2019
  - ✓ Readmissions through April 2019
  - ✓ Use 2018 Risk Adjustment Model (AMC) & AHRQ Version 7.0.1

HSC August 13, 2019
Executive Summary:
Inpatient Quality Metrics

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Executive Summary: Inpatient (Q1 2019)

Institution	Inpatient Mortality	% 30 day Readmissions	CLABSI SIR	HCAHPS: Overall	HCAHPS: Physicians	HCAHPS: Nurses
UCD	0.82	12.78%	0.72	72.9%	82.7%	79.40%
UCI	0.91	12.13%	0.84	76.7%	82.9%	77.90%
UCLA - RR	0.69	11.86%	1.03	79.8%	87.7%	84.8%
UCLA - SM	0.55	11.80%	2.00	78.8%	84.6%	79.50%
UCSD	0.58	14.08%	0.77	77.6%	84.7%	80.6%
UCSF	0.86	12.73%	0.70	81.3%	85.8%	82.5%
UC Health	0.75	12.62%	0.87	77.4%	84.5%	80.7%

Median National Comparator Group	0.85	12.93%	1	72.2%	81.00%	80.20%

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

Based on the latest completed quarterly data (Q1 2019)
Prepared by UCLA – QIA

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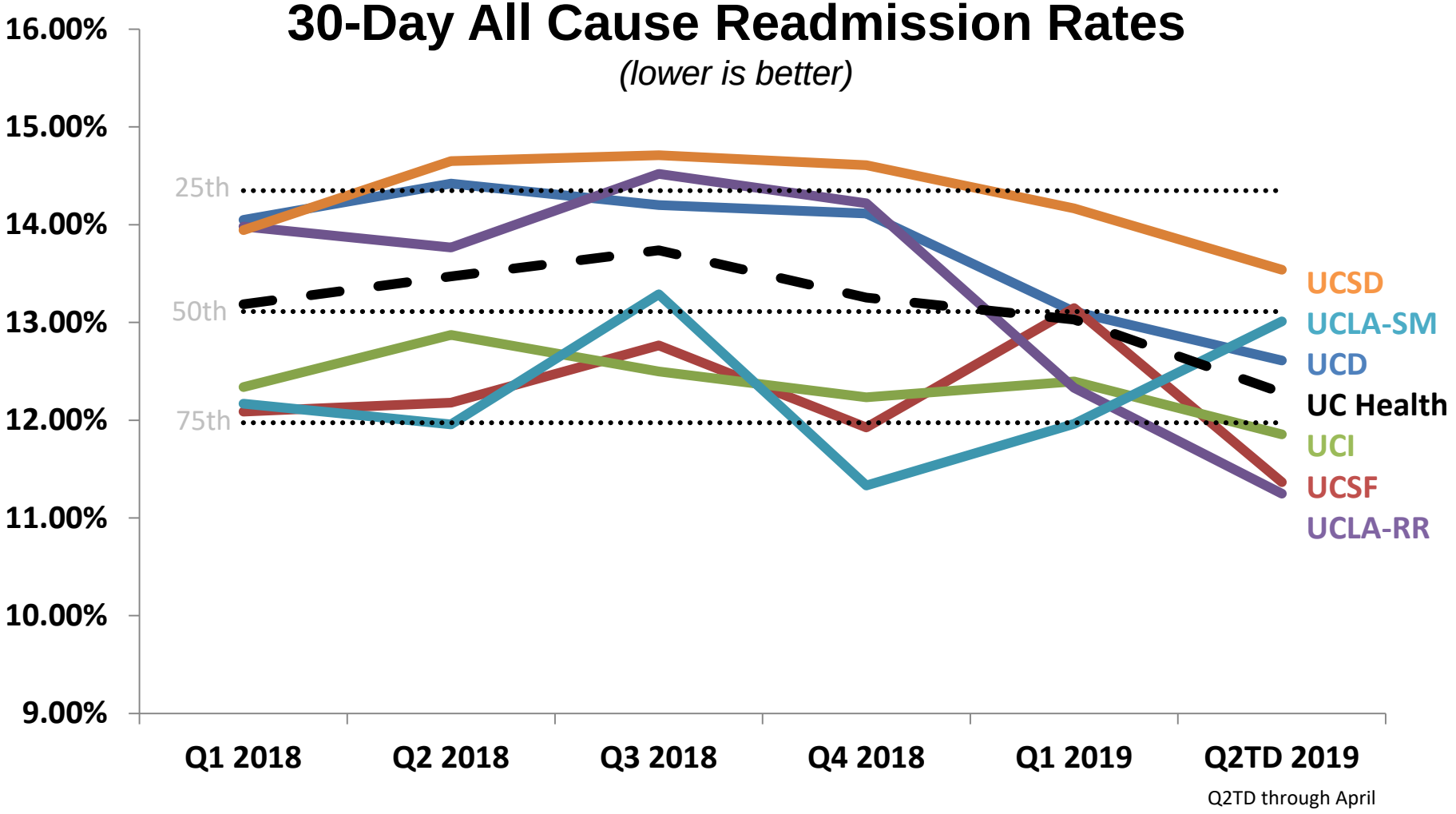
Inpatient Quality Metrics: 30-Day Readmissions

Patient Mortality | **Readmissions** | Patient Experience | Patient Safety

30-Day All Cause Readmission Rates

(lower is better)



5 Prepared by UCLA – QIA
25th-50th-75th percentiles based on last federal fiscal year (2017Q4-2018Q3) Vizient AMC data

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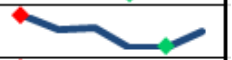
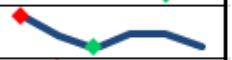
Source: Vizient Risk Model and University HealthSystem Consortium.
Definition: The 30 day all cause readmission rate for adult, non-OB patients is the % of patients who return to the hospital for any reason within 30 days of discharge from the prior (index) admission.
Standard restrictions: Early Death: Include All; Bad Data: Exclude All; Normal Newborn: Include All ;Nonviable Neonate: Exclude All; Medical Tourism: Include All; Prison Population: Include All ;Hospice: Exclude All; Readmit Type: All; Readmit Cases: Excludes Chemotherapy, Radiation Therapy, Rehabilitation, Death 1st Admit, Dialysis, Delivery/Birth, Mental Diseases/Alcohol & Drug Use. **Advanced restrictions**: age 18 or older; Vizient service lines: not in Neonatology, normal newborns, obstetrics

Summary and 6 Quarter Trend (through Q1 2019)

Institution	Inpatient Mortality Q1 2019	Q4 2017 - Q1 2019 Average	6 Quarter Trend
UCD	0.82	0.85	
UCI	0.91	0.89	
UCLA - RR	0.69	0.71	
UCLA - SM	0.55	0.57	
UCSD	0.58	0.74	
UCSF	0.86	0.90	
UC Health	0.75	0.79	

Institution	30d Readm Rate Q1 2019	Q4 2017 - Q1 2019 Average	6 Quarter Trend
UCD	12.78%	14.15%	
UCI	12.13%	12.25%	
UCLA - RR	11.86%	13.61%	
UCLA - SM	11.80%	12.14%	
UCSD	14.08%	14.33%	
UCSF	12.73%	12.51%	
UC Health	12.62%	13.31%	

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

Based on the latest completed quarterly data (Q1 2019)
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 Q1 2019)

Institution	CLABSI SIR Q1 2019	Q4 2017 - Q1 2019 Average	6 Quarter Trend
UCD	0.72	0.65	
UCI	0.84	0.54	
UCLA - RR	1.03	1.38	
UCLA - SM	2.00	1.03	
UCSD	0.77	0.98	
UCSF	0.70	1.05	
UC Health	0.87	0.96	

Institution	CLABSI counts Q1 2019	Q4 2017 - Q1 2019 Average	6 Quarter Trend
UCD	2	6	
UCI	5	3	
UCLA - RR	9	12	
UCLA - SM	4	2	
UCSD	6	11	
UCSF	6	8	
UC Health	36	42	

Institution	CLABSI line days Q1 2019	Q4 2017 - Q1 2019 Average	6 Quarter Trend
UCD	3812	5785	
UCI	4690	4596	
UCLA - RR	8031	8605	
UCLA - SM	1908	1566	
UCSD	6728	9906	
UCSF	8114	7500	
UC Health	35309	38248	

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

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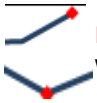
Based on the latest completed quarterly data (Q1 2019)
Prepared by UCLA – QIA

Green Marker = Best performing Quarter within 6 Quarter Timeframe



Red Marker = Worst performing Quarter within 6 Quarter Timeframe

Summary and 6 Quarter Trend (through Q1 2019)

Institution	HCAHPS: Recommend Q1 2019	Q4 2017 - Q1 2019 Average	6 Quarter Trend
UCD	80.0%	79.4%	
UCI	80.6%	79.2%	
UCLA - RR	83.4%	85.3%	
UCLA - SM	81.7%	83.7%	
UCSD	80.2%	82.5%	
UCSF	86.8%	86.5%	
UC Health	82.1%	82.5%	

Institution	HCAHPS: MD Commun Q1 2019	Q4 2017 - Q1 2019 Average	6 Quarter Trend
UCD	82.7%	81.4%	
UCI	82.9%	81.6%	
UCLA - RR	87.7%	84.5%	
UCLA - SM	84.6%	84.1%	
UCSD	84.7%	84.7%	
UCSF	85.8%	84.4%	
UC Health	84.5%	83.4%	

Institution	HCAHPS: Nurs Commun Q1 2019	Q4 2017 - Q1 2019 Average	6 Quarter Trend
UCD	79.4%	79.1%	
UCI	77.9%	77.5%	
UCLA - RR	84.8%	82.5%	
UCLA - SM	79.5%	81.7%	
UCSD	80.6%	81.0%	
UCSF	82.5%	82.0%	
UC Health	80.7%	80.5%	

	Mortality, Readmissions & HCAHPS	CLABSI
	90th percentile and above	95% confidence interval (CI) not crossing & below 1.0
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	Lower than 50th percentile	95% confidence interval not crossing & above 1.0

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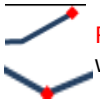
Based on the latest completed quarterly data (Q1 2019)
Prepared by UCLA – QIA

Green Marker = Best performing Quarter within 6 Quarter Timeframe



Red Marker = Worst performing Quarter within 6 Quarter Timeframe

Inpatient Quality Metrics

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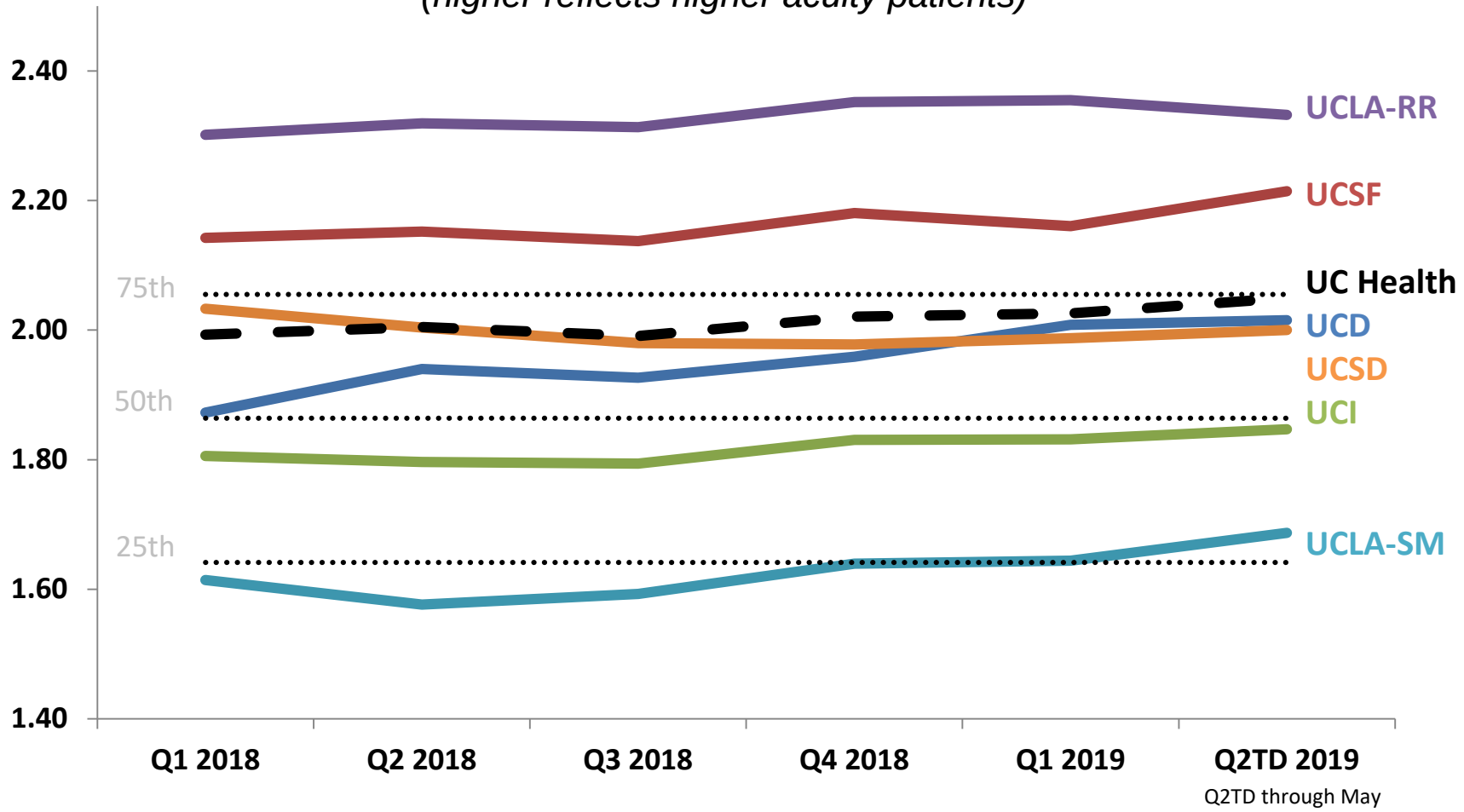
Inpatient Quality Metrics: Case Mix Index

Case Mix Index

(higher reflects higher acuity patients)



Prepared by UCLA – QIA

25th-50th-75th percentiles based on last federal fiscal year (2017Q4-2018Q3) Vizient AMC data

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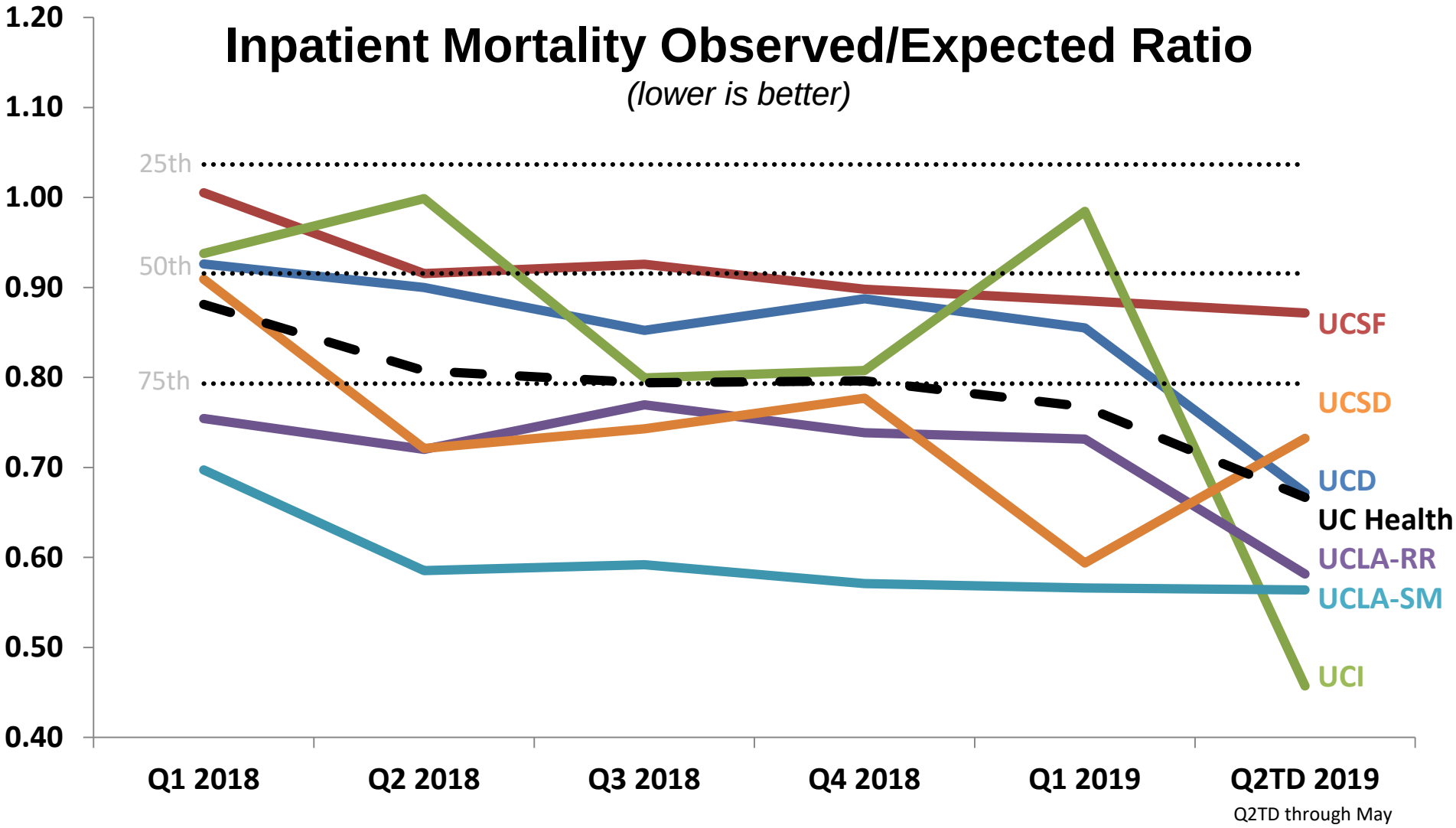
Source: Vizient / UHC Risk Model . UHC: University HealthSystem Consortium.
Definition: A relative value assigned to treat the mix of inpatients.
Notes: the higher the CMI, the sicker its patients and the more resources patients required during treatment
Standard Restrictions: LOS Outlier: Include All; Early Death: Include All; Bad Data: Exclude All; Normal Newborn: Include All ;Nonviable Neonate: Exclude All; Medical Tourism: Include All ;Prison Population: Include All ;Hospice: Exclude All.

Inpatient Quality Metrics: Inpatient Mortality

Patient Mortality | Readmissions | Patient Experience | Patient Safety



11 Prepared by UCLA – QIA
25th-50th-75th percentiles based on last federal fiscal year (2017Q4-2018Q3) Vizient AMC data

UC HEALTH

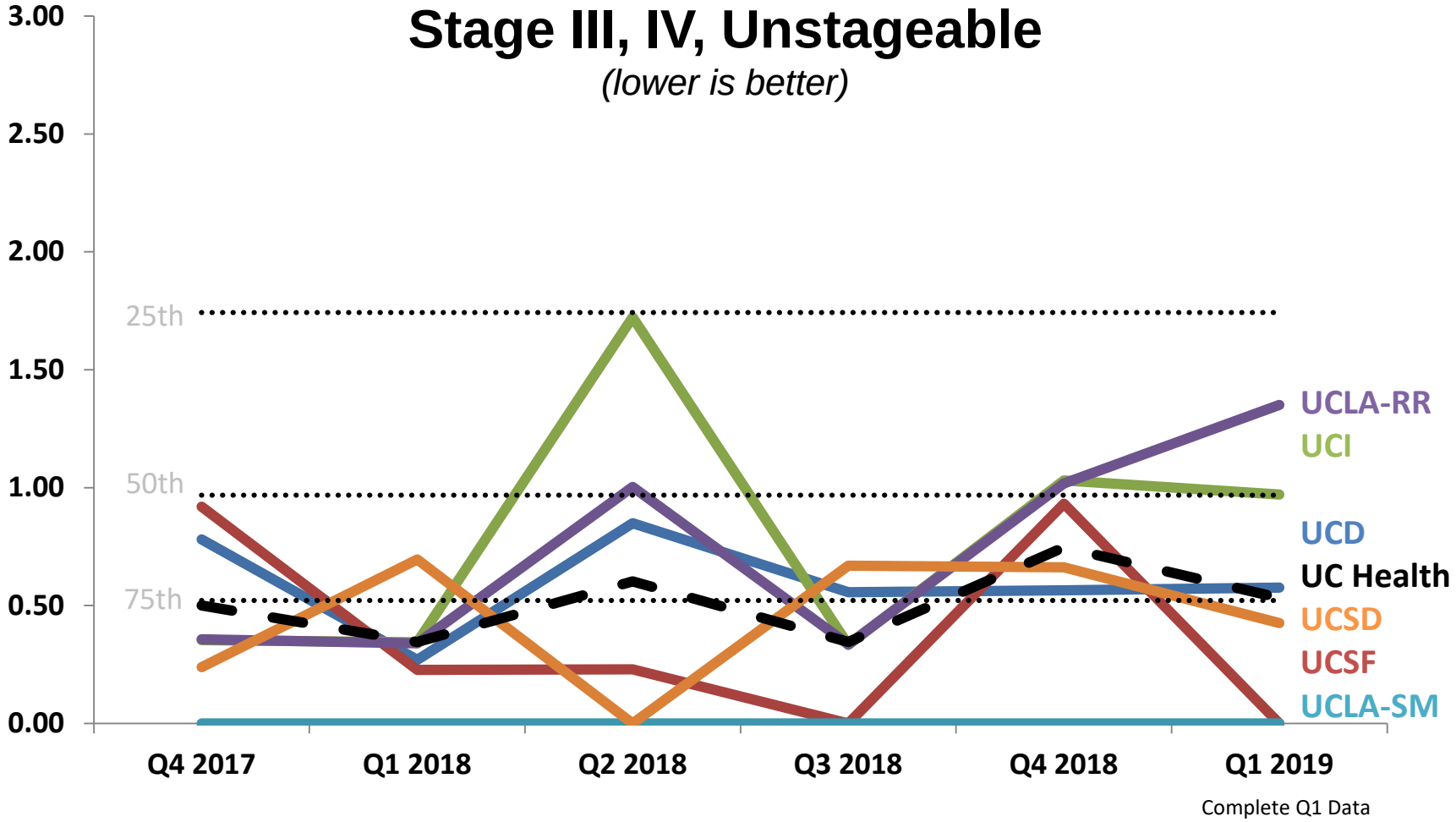
Source: Vizient / UHC Risk Model . UHC: University HealthSystem Consortium.
Definition: The total inpatient mortality index represents all inpatient cases that had a discharge status of "expired" (observed mortality rate divided by expected mortality rate).
Notes: A value higher than 1.0 means the rate 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; Medical Tourism: Include All ;Prison Population: 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)



Prepared by UCLA – QIA

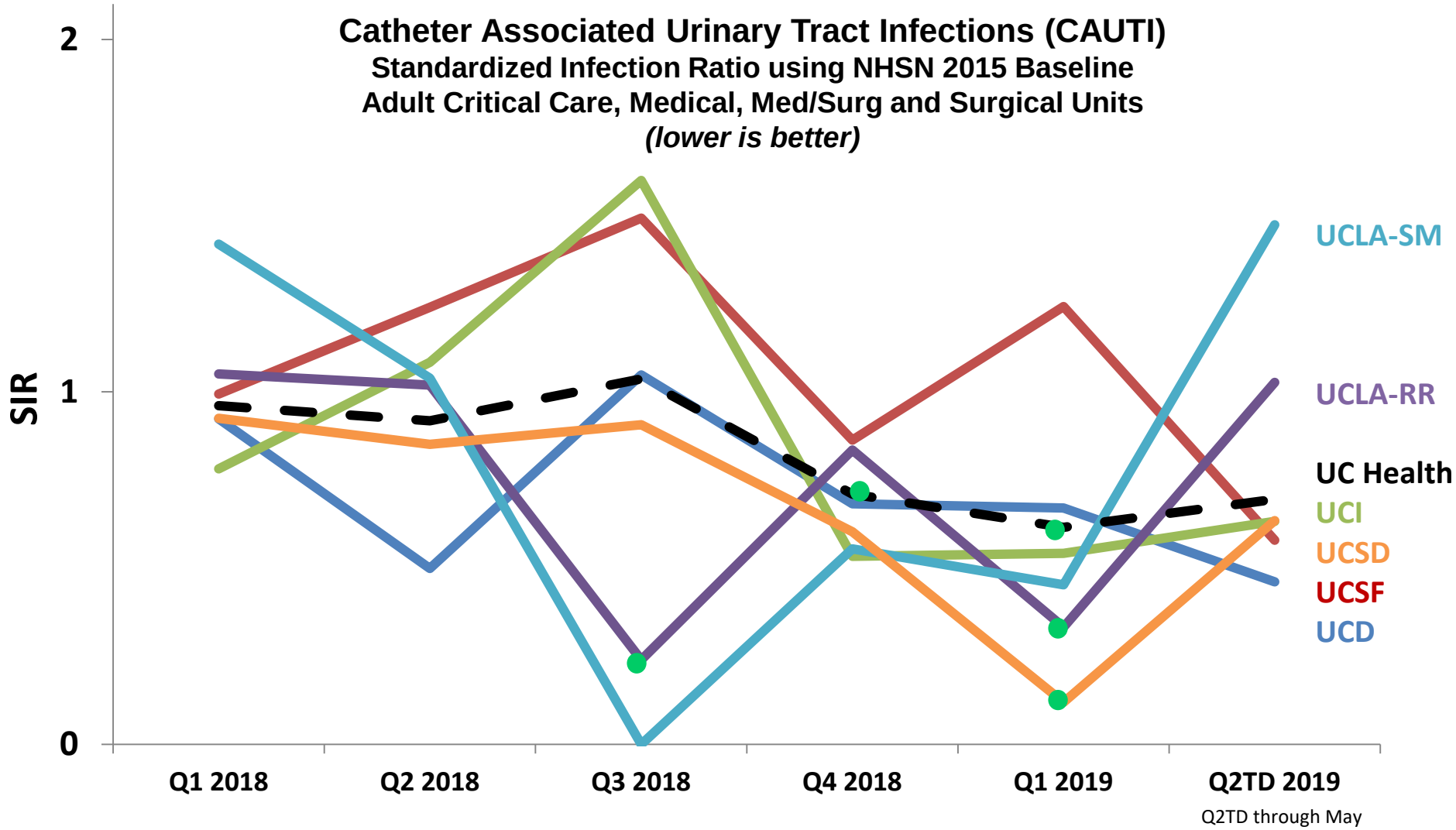
25th-50th-75th percentiles based on last federal fiscal year (2017Q4-2018Q3) Vizient AMC data

UC HEALTH

Source: Vizient / UHC Risk Model . 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.
Advanced Restriction: Safety Indicator: 03 Pressure Ulcer-Prior 20074 Decubitus Ulcer

Inpatient Quality Metrics: CAUTI

Patient Mortality | Readmissions | Patient Experience | **Patient Safety**



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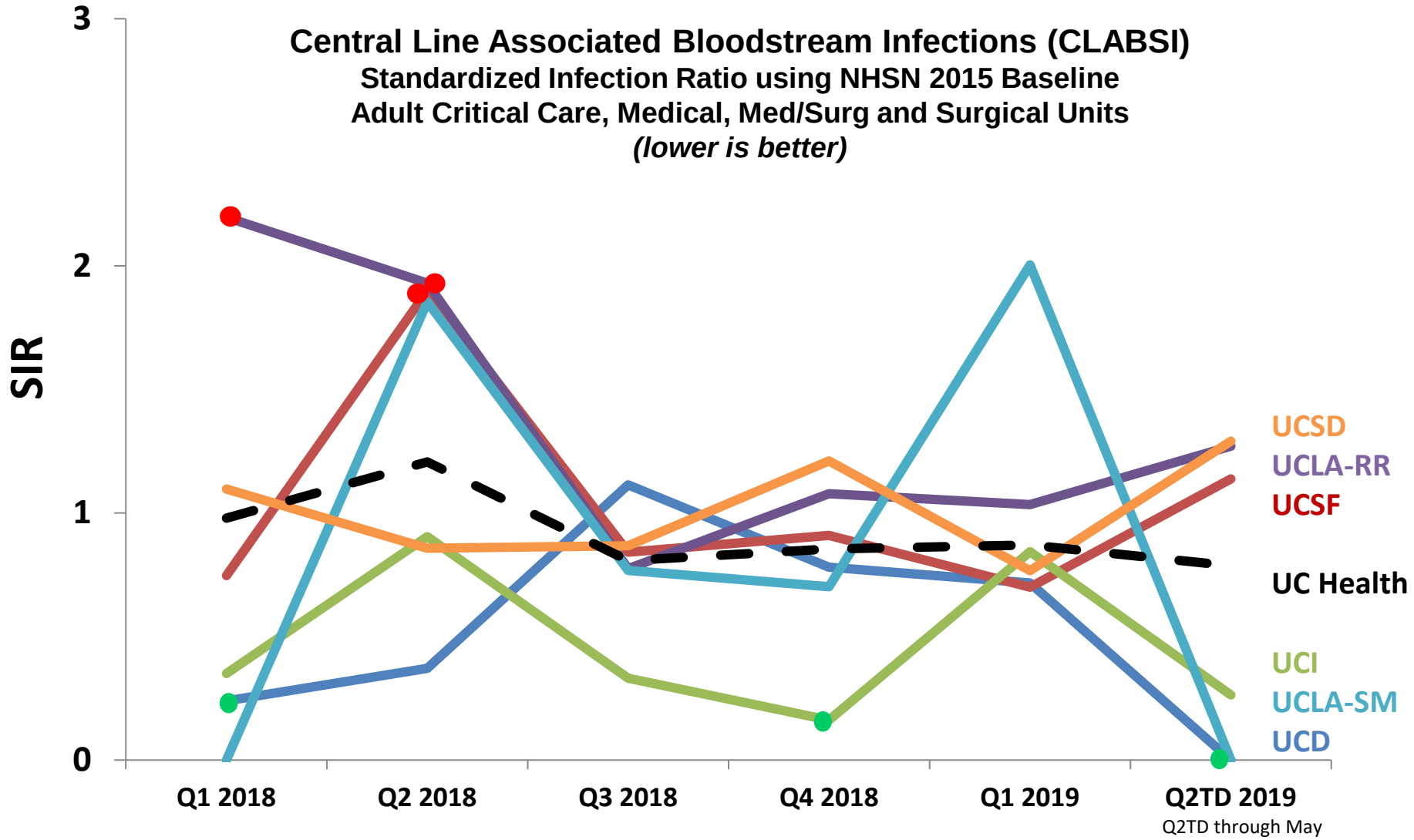
● Significantly low
● Significantly high

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**



UC HEALTH

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Source: National Healthcare Safety Network (NHSN) CMS/Hospital IQR Report using 2015 baseline.
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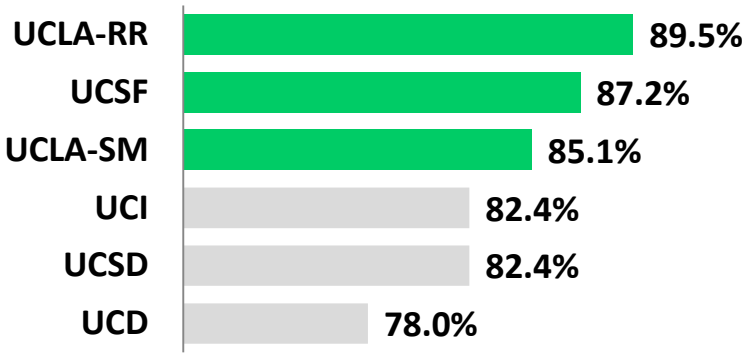
Inpatient Quality Metrics: HCAHPS

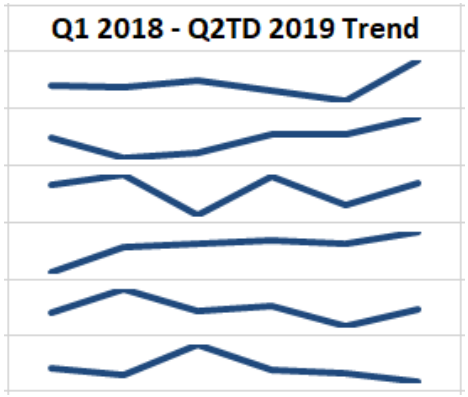
Patient Experience

Would Recommend Hospital

Q2TD 2019 Performance

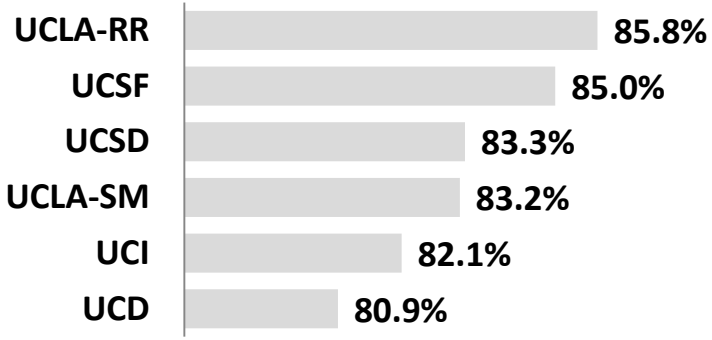


Q2TD 2019 through May

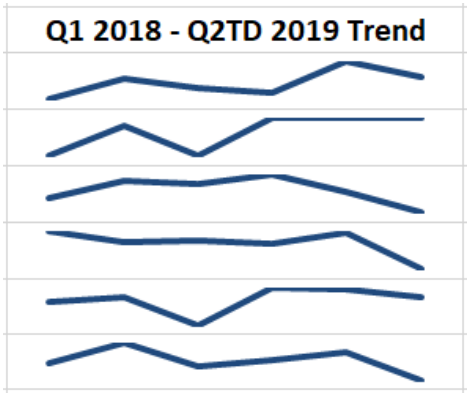


Communication with Physicians

Q2TD 2019 Performance



Q2TD 2019 through May



- **HCAHPS data pulled by discharge date for all campuses.**

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

Prepared by UCLA - PEX
Percentile ranking is based on the rolling 3 months data

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

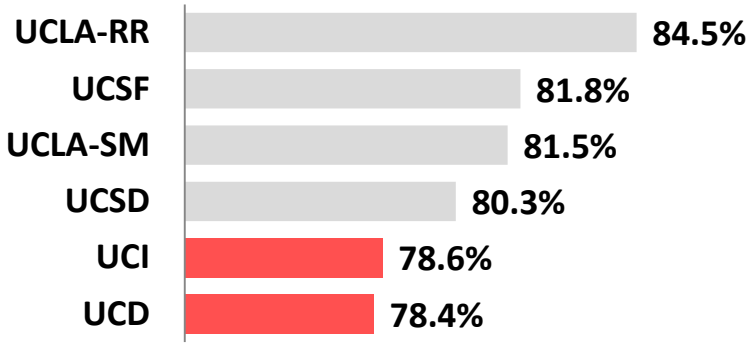
- indicates performance above the 90th percentile
- indicates performance between 50th and 90th percentile
- indicates performance below the 50th percentile

Inpatient Quality Metrics: HCAHPS

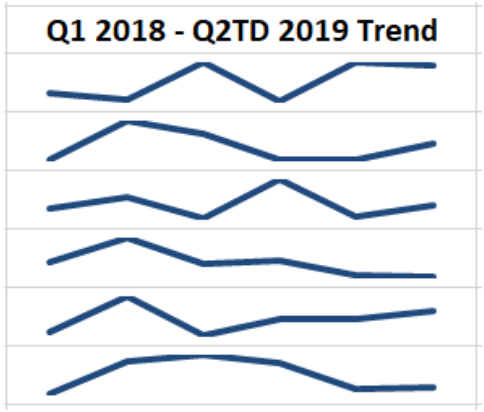
Patient Experience

Communication with Nurses

Q2TD 2019 Performance



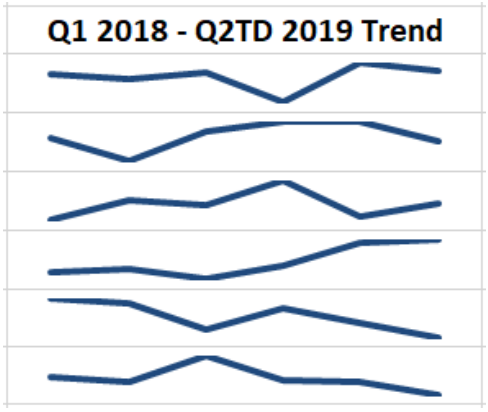
Q2TD 2019 through May



Transition of Care

Q2TD 2019 Performance

Q2TD 2019 through May



Prepared by UCLA – PEX
Percentile ranking is based on the rolling 3 months data

UC HEALTH

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

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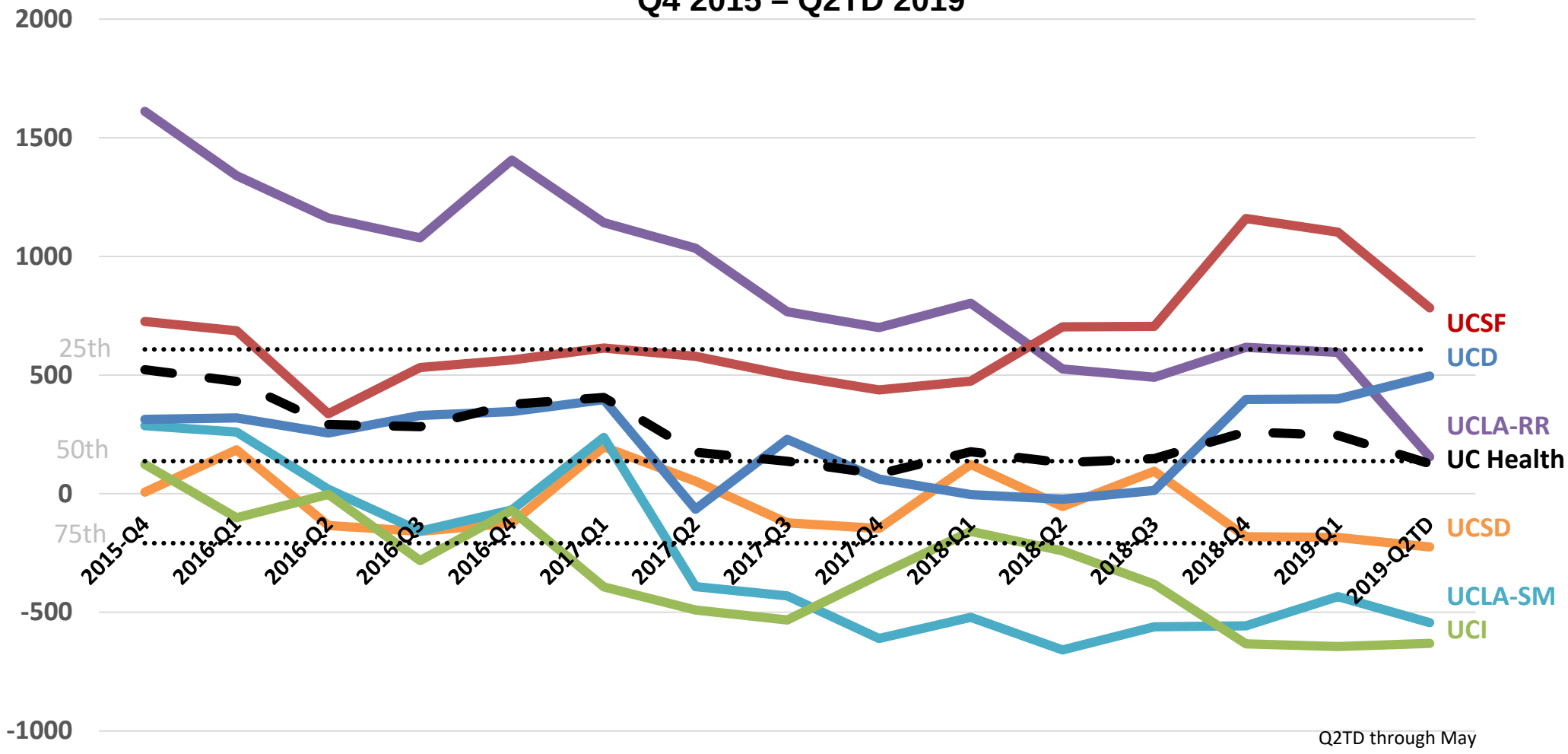
- indicates performance between 50th and 90th percentile
- indicates performance below the 50th percentile

Inpatient Quality Metrics: Excess Days (cont'd)

Excess Bed Days per K Case by Institution by Quarter

Q4 2015 – Q2TD 2019



Prepared by UCLA – QIA

25th-50th-75th percentiles based on last federal fiscal year (2017Q4-2018Q3) Vizient AMC data

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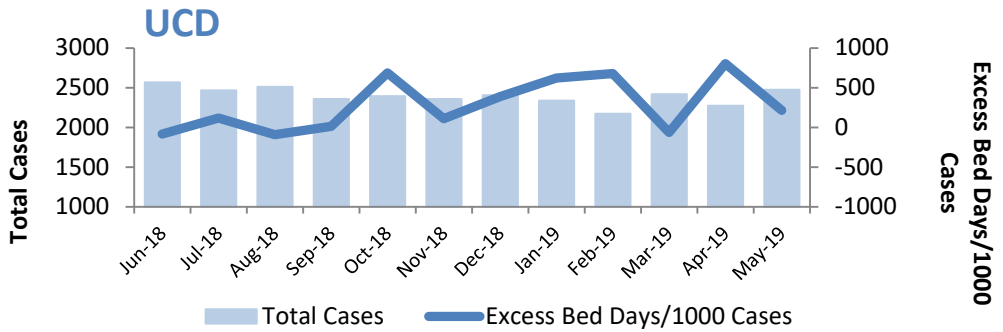
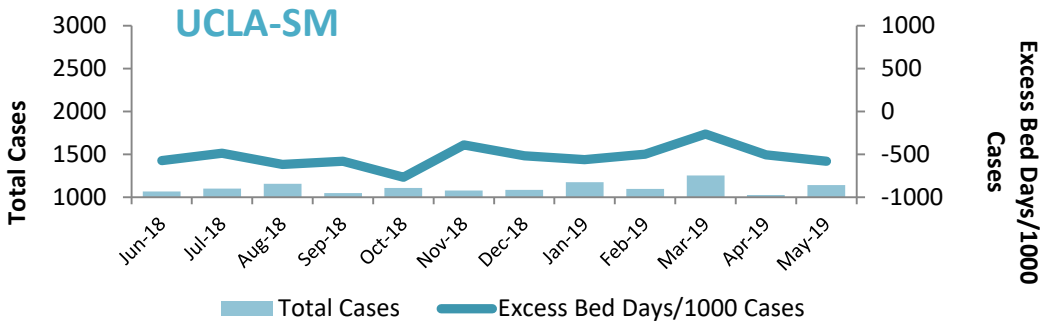
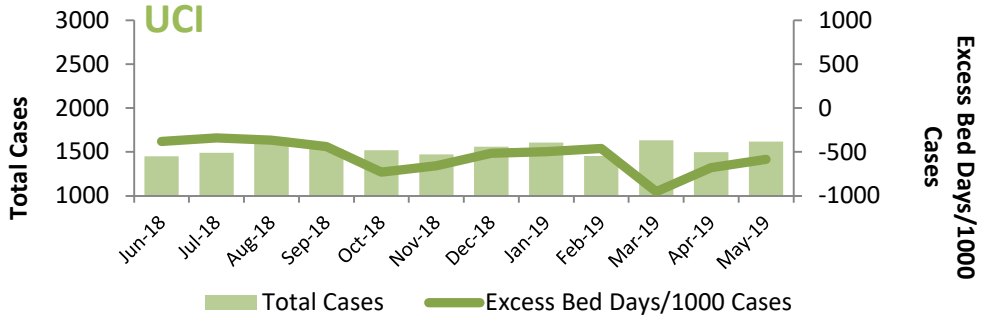
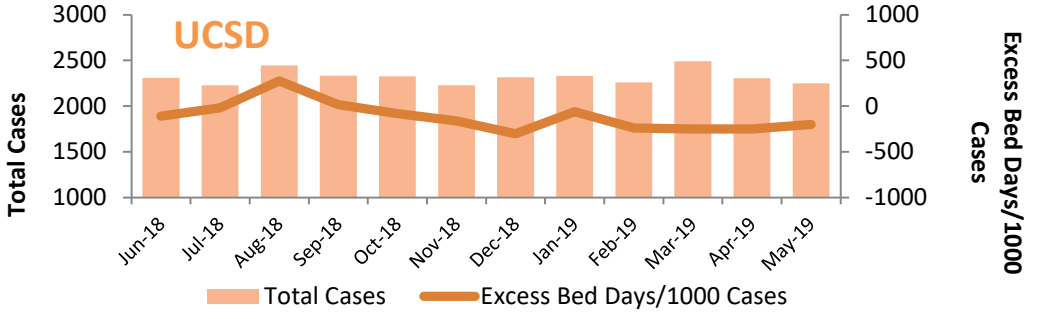
Source: Vizient / UHC Risk Model . UHC: University HealthSystem Consortium.
Definition: Excess bed days per 1000 cases= (Sum(Observed LOS - Expected LOS) of all discharges)/total number of discharges * 1,000
Standard Restrictions: LOS Outlier: Include All; Early Death: Include All; Bad Data: Exclude All; Normal Newborn: Include All; Nonviable Neonate: Exclude All; Medical Tourism: Include All; Prison Population: Include All; Hospice: Exclude All; Rehabilitation: exclude All
Advanced Restrictions: Vizient Service Line: Not (Neonatology,Obstetrics,Psychiatry,Rehabilitation)

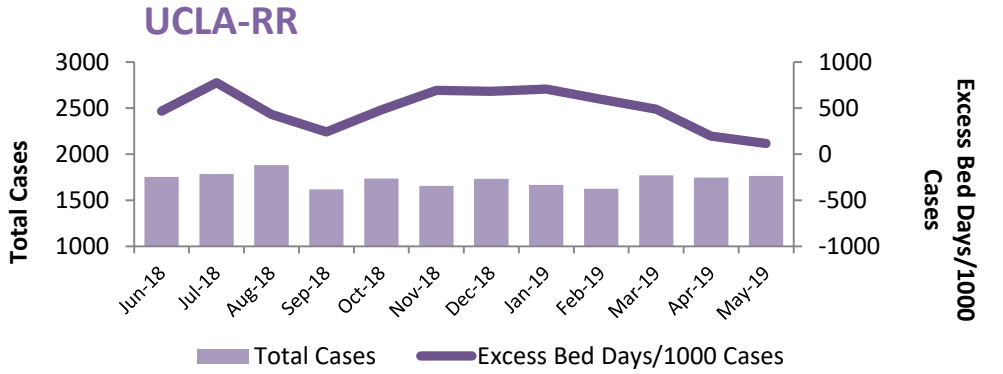
Inpatient Quality Metrics: Excess Days (cont'd)

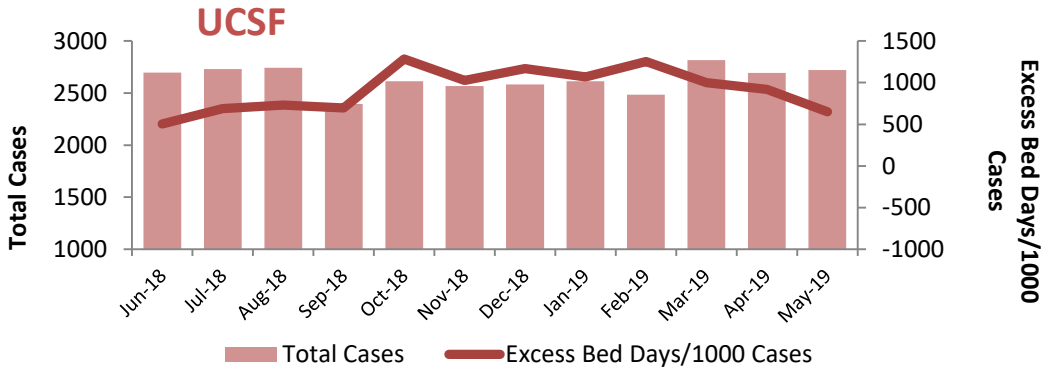












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Standard Restrictions: LOS Outlier: Include All; Early Death: Include All; Bad Data: Exclude All; Normal Newborn: Include All; Nonviable Neonate: Exclude All; Medical Tourism: Include All; Prison Population: Include All; Hospice: Exclude All; Rehabilitation: exclude All
Advanced Restrictions: Vizient Service Line: Not (Neonatology,Obstetrics,Psychiatry,Rehabilitation)

HSC August 13, 2019
Executive Summary:
Ambulatory Quality Metrics

UC HEALTH

Executive Summary: PRIME (Q1 2019)

	1.1.3 and 1.2.4 - Diabetes Care: HbA1c (>9.0%) *lower is better	1.2.3 - Colorectal Cancer Screening	1.1.6 and 1.2.14 - Tobacco Assessment and Counseling	1.2.5 - Controlling Blood Pressure	1.3.3 - Influenza Immunization
UC Davis	18.84% (29.07%)	75.79% (64.87%)	97.98% (97.14%)	81.42% (71.69%)	71.34% (82.52%)
UC Irvine	28.71% (29.07%)	68.90% (62.79%)	96.55% (97.14%)	71.46% (68.93%)	71.61% (70.69%)
UC Los Angeles	14.40% (29.07%)	60.19% (60.23%)	96.59% (96.16%)	64.77% (70.20%)	61.73% (62.67%)
UC San Diego	21.49% (29.07%)	81.81% (64.87%)	98.13% (97.14%)	73.75% (71.69%)	83.34% (72.25%)
UC San Francisco	22.85% (29.07%)	75.52% (64.87%)	97.36% (96.53%)	75.81% (71.69%)	83.16% (86.35%)
UC Health	19.08%	69.18%	97.25%	72.22%	67.96%

Achieves or maintains (target%)

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Table shows raw scores with target in parentheses.
Population: Rolling 12-month PRIME denominator as of the end of the reporting quarter
Frequency: Quarterly, with 90-day claims lag.

Summary and 4 Quarter Trend (through Q1 2019)

Diabetes Care Q1 2019		4 Quarter Trend **lower is better*
UC Davis	18.84%	
UC Irvine	28.71%	
UC Los Angeles	14.40%	
UC San Diego	21.49%	
UC San Francisco	22.85%	
UC Health Average	**19.08%**	

Tobacco Q1 2019		4 Quarter Trend
UC Davis	97.98%	
UC Irvine	96.55%	
UC Los Angeles	96.59%	
UC San Diego	98.13%	
UC San Francisco	97.36%	
UC Health Average	**97.25%**	

Colorectal Cancer Q1 2019		4 Quarter Trend
UC Davis	75.79%	
UC Irvine	68.90%	
UC Los Angeles	60.19%	
UC San Diego	81.81%	
UC San Francisco	75.52%	
UC Health Average	**69.18%**	

Prepared by UCLA – QIA

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Achieves or maintains (target%)

Green Marker = Best performing Quarter within 4 Quarter Timeframe

Red Marker = Worst performing Quarter within 4 Quarter Timeframe

Summary and 4 Quarter Trend (through Q1 2019)

Blood Pressure Q1 2019		4 Quarter Trend
UC Davis	81.42%	
UC Irvine	71.46%	
UC Los Angeles	64.77%	
UC San Diego	73.75%	
UC San Francisco	75.81%	
UC Health Average	**72.22%**	

Influenza Immunizations Q1 2019		4 Quarter Trend
UC Davis	71.34%	
UC Irvine	71.61%	
UC Los Angeles	61.73%	
UC San Diego	83.34%	
UC San Francisco	83.16%	
UC Health Average	**67.96%**	

Prepared by UCLA – QIA

Achieves or maintains (target%)

Green Marker = Best performing Quarter within 4 Quarter Timeframe

Red Marker = Worst performing Quarter within 4 Quarter Timeframe

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Appendix:
Glossary

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Mortality Index: (2018 Risk Adjustment Model (AMC), AHRQ Version 7.0.1)

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)

Excess Bed Days / per 1,000 *Cases*: (2018 Risk Adjustment Model (AMC), AHRQ Version 7.0.1)

- Standard restrictions: include all LOS outlier, early death, normal newborn, 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= Sum{Observed LOS - Expected LOS} of all discharges/total number of discharges * 1,000

Case Mix Index: (2018 Risk Adjustment Model (AMC), AHRQ Version 7.0.1)

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.

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All-cause Readmissions Index:(2018 Risk Adjustment Model (AMC), AHRQ Version 7.0.1) **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:**
  - *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)
  - *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)

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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 Hospital Rating item, "Definitely yes" for the Recommend the Hospital item, and "Strongly agree" for the Care Transition composite.

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.

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Hospital Acquired Pressure Ulcers (HAPU), PSI 03:

Risk Adjustment Model: 2018 Risk Model (AMC)

AHRQ Version: 7.0.1 (Pediatric) / 7.0.1 (Quality) / 7.0.1 (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)

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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 2011and 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.

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

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PRIME Measures				
METRIC CATEGORY	**METRIC TITLE**	**Specification Source**	**Denominator**	**Numerator**
Chronic Condition Management	Comprehensive Diabetes Care: HbA1c Poor Control (>9.0%)	NQF	Patients 18-75 years of age by the end of the measurement period who had a diagnosis of diabetes (type 1 or type 2) during the measurement period or the year prior to the measurement period.	Patients whose most recent HbA1c level is greater than 9.0% or is missing a result, or for whom an HbA1c test was not done during the measurement period. The outcome is an out of range result of an HbA1c test, indicating poor control of diabetes.
	Controlling Blood Pressure	HEDIS 2018	Patients 18 to 85 years of age by the end of the measurement period who had at least one outpatient encounter with a diagnosis of hypertension (HTN) during the first six months of the measurement period.	The number of patients in the denominator whose BP was adequately controlled during the measurement period based on the following criteria: • Individuals ages 18 to 59 whose BP was <140/90 mm Hg • Individuals ages 60 to 85 with a diagnosis of diabetes whose BP was <140/90 mm Hg • Individuals ages 60 to 85 without a diagnosis of diabetes whose BP was <150/90 mm Hg
Preventive Care and Screening	Tobacco Assessment and Counseling	NQF	All patients aged 18 years and older.	Patients who were screened for tobacco use at least once during the two-year measurement period AND who received tobacco cessation counseling intervention if identified as a tobacco user (e.g.: referral to Fontana center, pharmacotherapy)
	Colorectal Cancer Screening	NQF	Patients 51–75.99 years of age as of the end of the measurement period.	Patients 50-75 years of age who had appropriate screening for colorectal cancer.
Specialty Care	Influenza Immunization	NQF	All patients aged 6 months and older seen for a visit between October 1 and March 31	Patients who received an influenza immunization OR who reported previous receipt of an influenza immunization
Perinatal	PC-02 Cesarean Section	Joint Commission National Quality Measures	Patients with cesarean sections as defined by diagnosis code set developed by the Joint Commission	Nulliparous women who delivered a live term (≥37 weeks GA), singleton newborn in the vertex position

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PRIME Measure

Five projects selected:

- 1.1.3 and 1.2.4 - Diabetes Care: HbA1c (>9.0%)
- 1.2.3 - Colorectal Cancer Screening
- 1.1.6 and 1.2.14 - Tobacco Assessment and Counseling
- 1.2.5 - Controlling Blood Pressure
- 1.3.3 - Influenza Immunization

Achieves or maintains (target%)

A measure is "complete" if the UC medical Center:

- Achieves the 25th percentile, if the baseline measure was initially below that threshold
- Achieves the 10% Closure Gap if the baseline measure was between the 25th and 90th percentile
- Achieves or maintains the 90th percentile

The measures will be reported quarterly as a 12-month rolling average in July, October, January, and April

Target Goal % Calculation:

- Step 1: Subtract previous demonstration year's score from 90th percentile score
- Step 2: Multiply result by 0.1 to get the 10% gap
- Step 3: Add the 10% gap to previous demonstration year's score to obtain target goal for the current year

Frequency: Quarterly, with 90-day lag. Starting point will be Q4 2016. Reporting time frames:

Q1 – run in early June, reported June 30
Q2 – run in early Sept, reported Sept 30
Q3 – run in early Dec, reported Dec 30
Q4 – run in early March, reported March 30

Population: Rolling 12-month PRIME denominator as of the end of the reporting quarter

Spec versions: each site should specify which version they used for each quarter.

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HSC Executive Summary

Four measures selected:

- Risk-adjusted Mortality
- All-cause 30-day Readmissions
- CLABSI SIR
- HCAHPS Overall Rating scores

Achieves or maintains (target%)

Improvement Measure:

The UC Health Quality Dashboard visually represents the raw score for each of the 4 measures across the six UC Medical Center sites, and whether the each of those 24 measures is above the 90th percentile (green), between the 50th and 89th percentile (white), and below the 50th percentile (red). The Vizient 2018 risk model is currently used to determine these benchmarks and may be updated for FY20.

Success for this goal:

Success will be determined by evaluating the results for 4 out of the 5 best Quality Dashboard results presented at the HSC meetings in FY20 (anticipated in August, October, December, February, and April; June will likely be excluded in order to report out the final validated results no later than June 15th, 2020). Each of the 24 measures will be assigned points: 0 point for below the 50th percentile (red); 1 points for 50th to 89th percentile (white); and 2 points for 90th percentile and above (green). The average of the best four out of five reporting periods will be used to determine threshold, target, and maximum as follows:

Frequency: Based on the latest completed quarterly data, except Readmissions, which has a one quarter lag.

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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	Vizient Group A Hospitals	*90th percentile and above* *51st - 89th percentile* *50th percentile and below*
% 30 day Readmissions	Vizient Group A Hospitals	
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: Likelihood to Recommend	Press Ganey's National Client Database	*90th percentile and above* *51st - 89th percentile* *50th percentile and below*
HCAHPS: Communication with Physicians	Press Ganey's National Client Database	
HCAHPS: Communication with Nurses	Press Ganey's National Client Database	

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