UC HEALTH

Clinical Quality Dashboard for University of California Medical Centers

Health Services Committee
Q2 Dashboard, June 2023

UC HEALTH

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, Opportunity Bed Days, HCAHPS, CLABSI, and CAUTI through April 2023 (Q2TD 2023)
  - ✓ 30-Day All-Cause Readmissions through March 2023 (Q1 2023)
  - ✓ Updated benchmark to reflect most recent values October 2021-September 2022 (Q4 2021-Q3 2022)

CMO/CNO Group Q2 Dashboard, June 2023
Executive Summary: Quality Metrics

UC HEALTH

Executive Summary: Inpatient (Q1 2023)

Institution	Inpatient Mortality	%30 day All-Cause Readmissions	CLABSI SIR	HCAHPS: Overall Rating	LOS Index	Equity Measure / BP Control in Blacks or African Americans	Vizient Rank*
UCD	0.53	12.76%	0.79	69.5%	1.06	66.76%	32/112
UCI	0.53	9.97%	0.85	85.7%	1.05	52.59%	9/112
UCLA - RR	0.81	9.71%	0.62	77.1%	1.10	59.75%	11/112
UCLA - SM	0.70	11.59%	0.94	72.7%	1.01	NA	86/166
UCSD	0.57	13.83%	0.77	79.8%	1.02	67.51%	3/112
UCSF	0.50	11.23%	1.34	78.0%	1.06	60.31%	7/112
UC Health	0.59	11.76%	0.87	77.0%	1.05	61.73%	

	Mortality, Readmissions, HCAHPS & LOS	CLABSI	Equity Measure / BP Control in Blacks or African Americans
	90th percentile and above	95% confidence interval (CI) not crossing & below 1.0	90th percentile and above
	50th percentile – 89th percentile	95% confidence interval crosses 1.0	76th to 89th percentile
	Lower than 50th percentile	95% confidence interval not crossing & above 1.0	75th percentile and below

Based on the latest completed quarterly data (Q1 2023)
Readmission Based on the latest completed quarterly data (Q1 2023)
* Vizient Ranks are based on period of Q&A 2023 – Period 2 for the Comprehensive Academic Medical Center
** UCLA SMH is part of the Complex Care Medical Center cohort
Prepared by UCLA – PS&A

UC HEALTH

Interpreting the SIR, p-value, and 95% confidence interval

SIR = observed / predicted number of infections
p-value: tells if the observed number of infections is significantly different from what was predicted. A p-value<0.05 indicates statistical significance
95% Confidence Interval: tells the direction of the statistical significance

- If CI < 1, then the number of observed cases is significantly less than what was predicted.
- If CI > 1 (e.g., 1.08 to 2.09), then the number of observed cases is significantly more than what was predicted.
- If CI crosses 1 (e.g., 0.83 to 1.02), then the number of observed cases is not significantly different from what was predicted.

Blue if p-value < 0.05 and CI < 1 --- there were significantly less observed cases than what was predicted.
Orange if the p-value < 0.05 and CI > 1 --- there were significantly more observed cases than what was predicted.

CLABSI Q1 2023	Observed	Predicted	SIR	P-value	95% Confidence Interval
UCD	8	10.14	0.79	0.52	0.366, 1.498
UCSF	12	8.95	1.34	0.31	0.727, 2.280
UCI	5	5.90	0.85	0.76	0.310, 1.878
UCLA RR	6	9.65	0.62	0.24	0.252, 1.293
UCLA SM	2	2.14	0.94	1.00	0.157, 3.091
UCSD	7	9.11	0.77	0.51	0.336, 1.520
UC Health	40	45.69	0.87	0.39	0.631, 1.175

Based on the latest completed quarterly data (Q1 2023)

Prepared by UCLA – PS&A

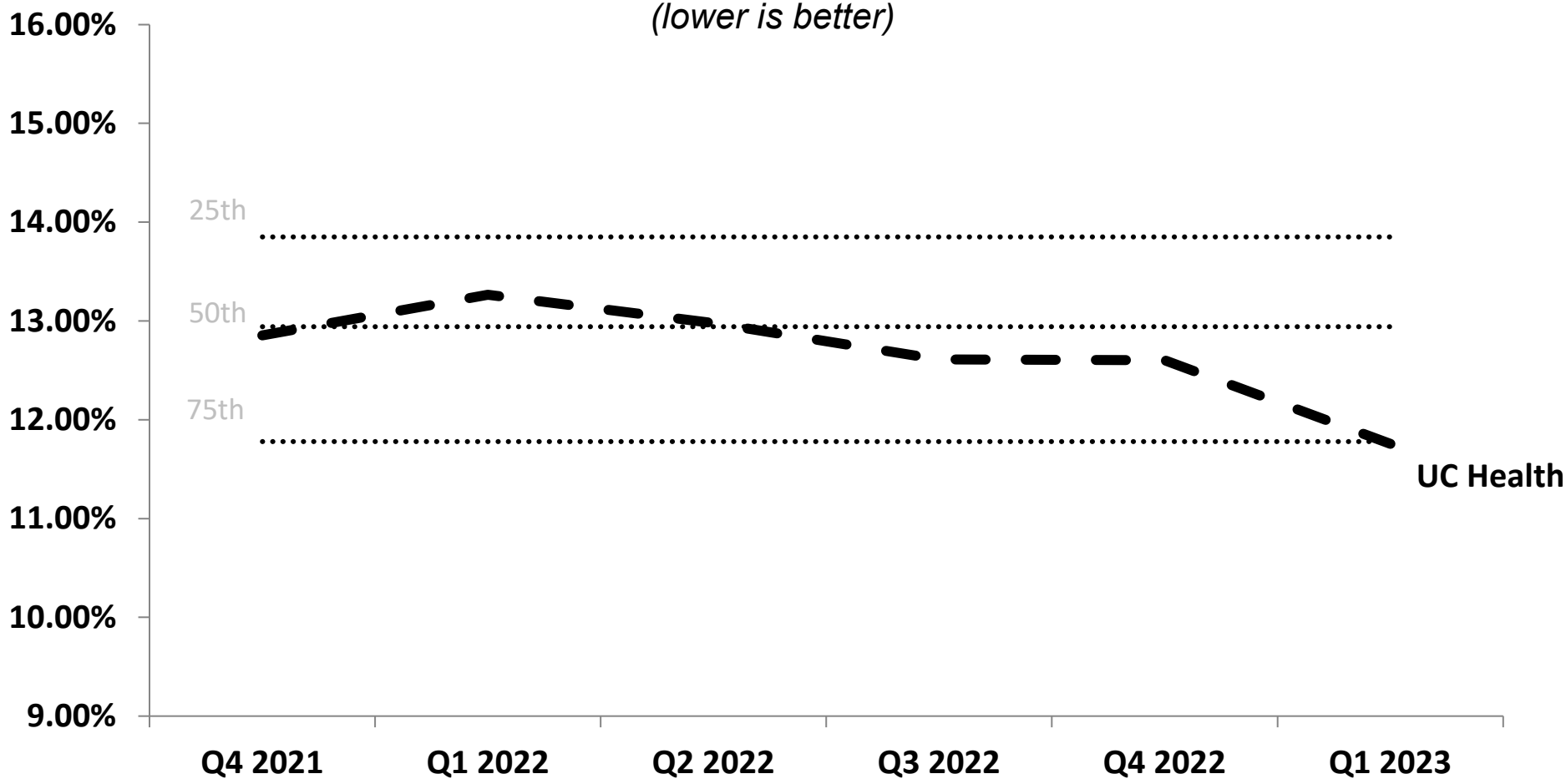
UC HEALTH

Inpatient Quality Metrics: 30-Day Readmissions

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

30-Day All Cause (Planned & Unplanned) Readmission Rates

(lower is better)



6 Prepared by UCLA – PS&A
25th-50th-75th percentiles based on last federal fiscal year (2021Q4-2022Q3) Vizient AMC data

UC HEALTH

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

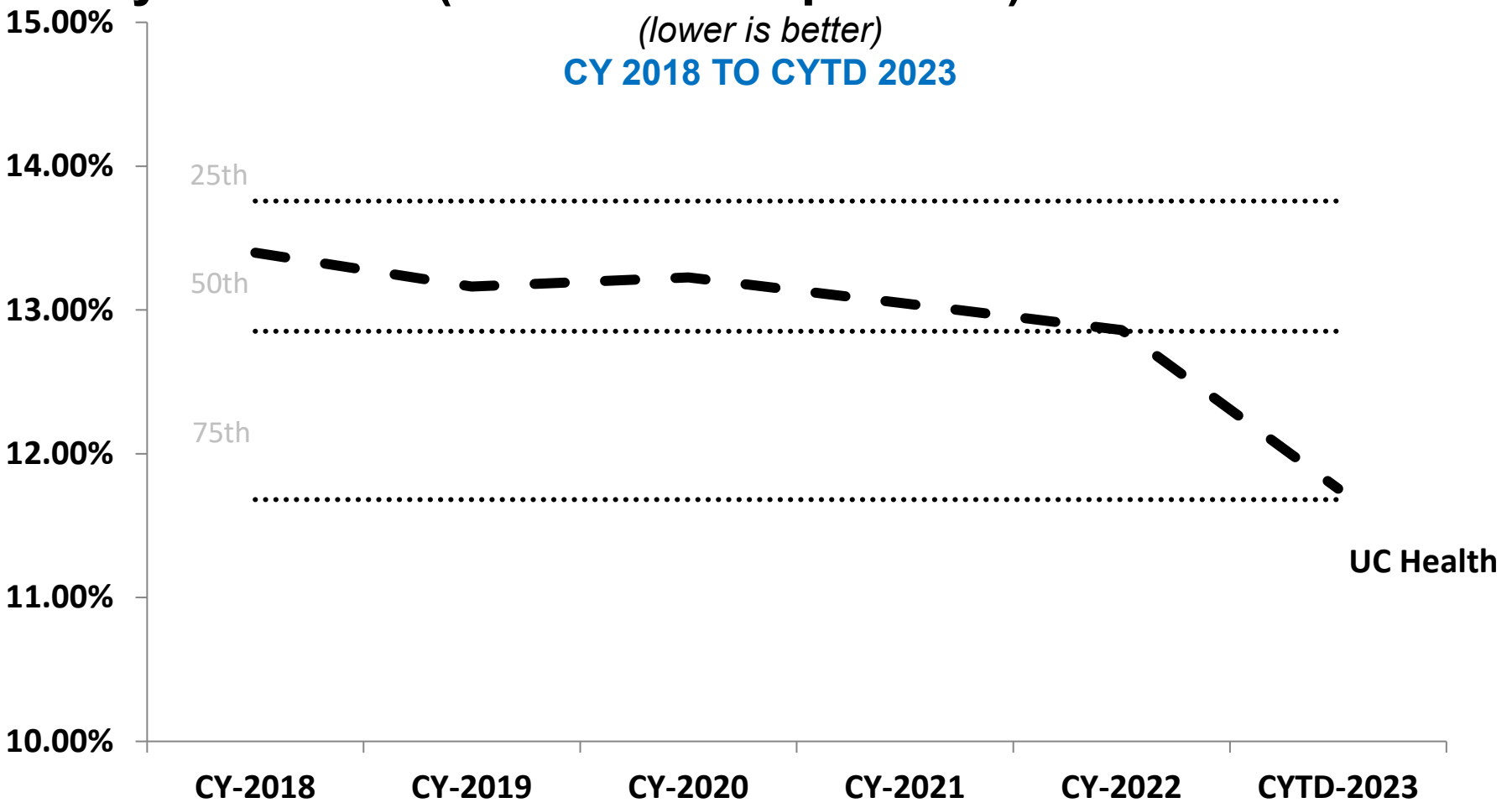
Inpatient Quality Metrics: 30-Day Readmissions

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

30-Day All Cause (Planned & Unplanned) Readmission Rates

(lower is better)

CY 2018 TO CYTD 2023



Through March 2023

7 Prepared by UCLA – PS&A
25th-50th-75th percentiles based on overall period (2020Q1-2023Q1) Vizient AMC data

UC HEALTH

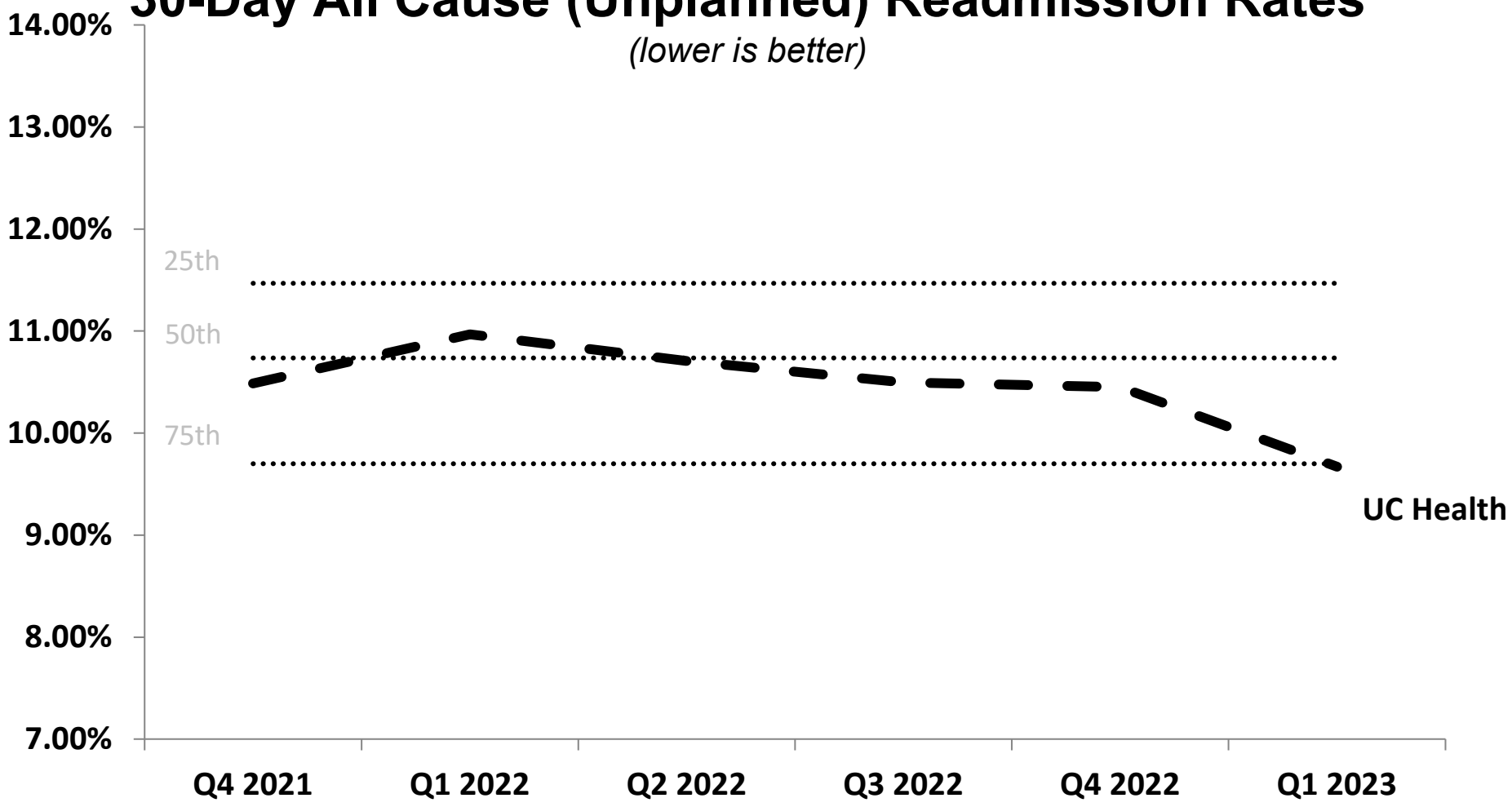
Source: Vizient and University HealthSystem Consortium.
Definition: The 30 day all cause readmission rate for adult, non-OB patients is the % of patients who return to the hospital for any reason within 30 days of discharge from the prior (index) admission.
Standard restrictions: Early Death: Include 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

Inpatient Quality Metrics: 30-Day Readmissions

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

30-Day All Cause (Unplanned) Readmission Rates

(lower is better)



Prepared by UCLA – PS&A

25th-50th-75th percentiles based on last federal fiscal year (2021Q4-2022Q3) Vizient AMC data

UC HEALTH

Source: Vizient and University HealthSystem Consortium.

Definition: The 30-day unplanned readmission rate is the percent of patients who return to the hospital due to acute clinical event that requires re-hospitalization 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; Pediatric Age: Exclude All; Medical Tourism: Include All; Prison Population: Include All; Hospice: Exclude All; Readmission Type: Unrelated and Related; Readmit Cases Excludes: Rehabilitation, Dialysis, Mental Diseases/Alcohol & Drug use

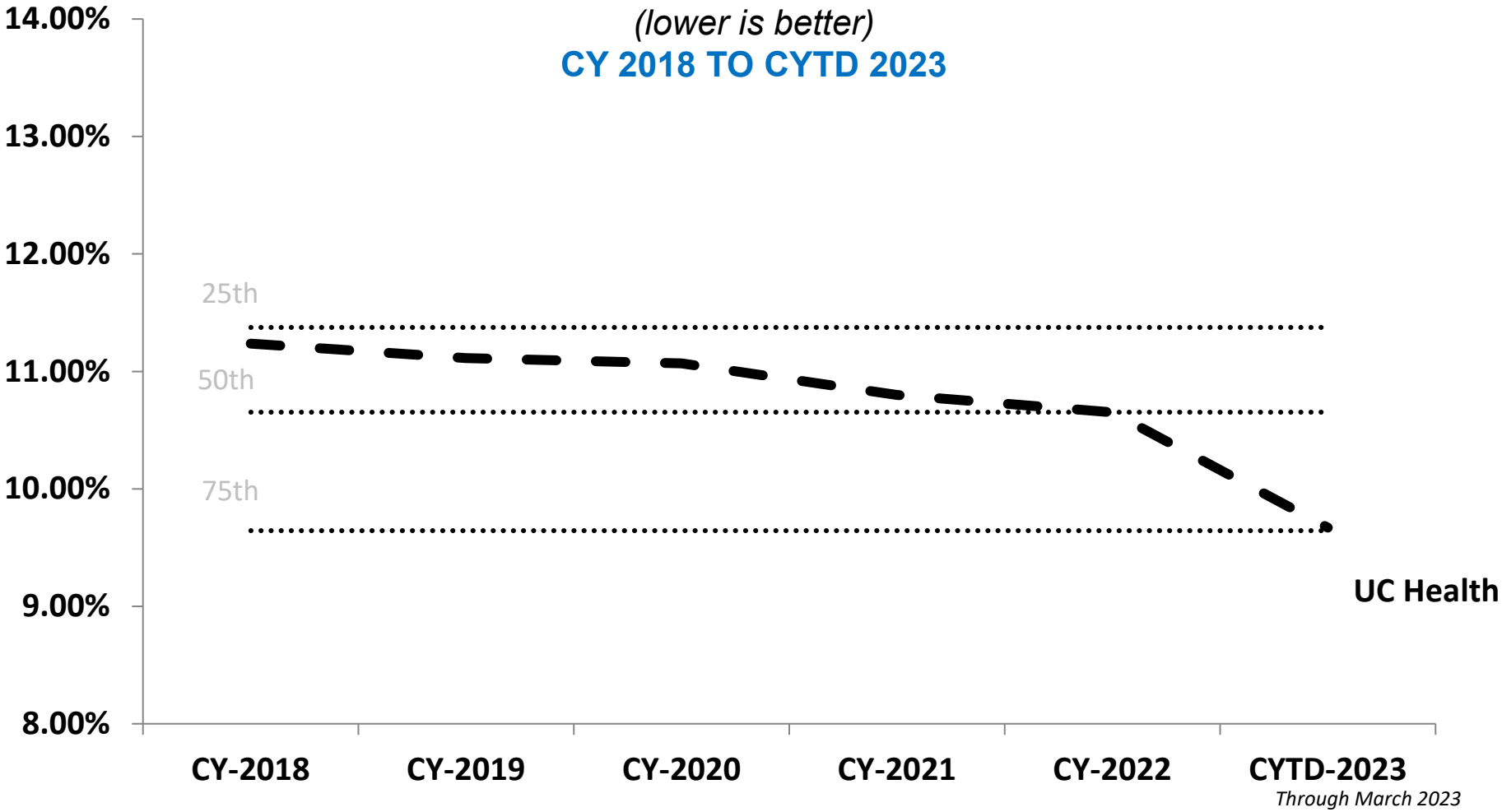
Advanced restrictions: See Page 3 of Glossary for restrictions based on Principal CCS Diagnosis and Discharge Status

Inpatient Quality Metrics: 30-Day Readmissions

30-Day All Cause (Unplanned) Readmission Rates

(lower is better)

CY 2018 TO CYTD 2023



9 Prepared by UCLA – PS&A
25th-50th-75th percentiles based on overall period (2020Q1-2023Q1) Vizient AMC data

UC HEALTH

Source: Vizient and University HealthSystem Consortium.
Definition: The 30-day unplanned readmission rate is the percent of patients who return to the hospital due to acute clinical event that requires re-hospitalization 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; Pediatric Age: Exclude All; Medical Tourism: Include All; Prison Population: Include All; Hospice: Exclude All; Readmission Type: Unrelated and Related; Readmit Cases Excludes: Rehabilitation, Dialysis, Mental Diseases/Alcohol & Drug use
Advanced restrictions: See Page 3 of Glossary for restrictions based on Principal CCS Diagnosis and Discharge Status

Summary and 6 Quarter Trend (Q1 2023)

Institution	Inpatient Mortality Q1 2023	Q4 2021 - Q1 2023 Average	6 Quarter Trend
UCD	0.53	0.57	
UCI	0.53	0.52	
UCLA - RR	0.81	0.77	
UCLA - SM	0.70	0.70	
UCSD	0.57	0.59	
UCSF	0.50	0.60	
UC Health	0.59	0.62	

Institution	30d All-Cause Readm Rate Q1 2023	Q4 2021 - Q1 2023 Average	6 Quarter Trend
UCD	12.76%	13.75%	
UCI	9.97%	11.73%	
UCLA - RR	9.71%	11.60%	
UCLA - SM	11.59%	12.65%	
UCSD	13.83%	13.92%	
UCSF	11.23%	11.75%	
UC Health	11.76%	12.68%	

	Mortality, Readmissions, HCAHPS & LOS
	90th percentile and above
	50th percentile – 89th percentile
	Lower than 50th percentile

Mortality Based on the latest completed quarterly data (Q1 2023)
Readmission Based on the latest completed quarterly data (Q1 2023)

Prepared by UCLA – PS&A

UC HEALTH

Blue Marker = Best performing Quarter within 6 Quarter Timeframe

Orange Marker = Worst performing Quarter within 6 Quarter Timeframe

Summary and 6 Quarter Trend (Q1 2023)

Institution	CLABSI SIR Q1 2023	Q1 2022 - Q2TD 2023 Average	6 Quarter Trend
UCD	0.79	0.77	
UCI	0.85	0.66	
UCLA - RR	0.62	0.42	
UCLA - SM	0.94	0.83	
UCSD	0.77	0.42	
UCSF	1.34	0.97	
UC Health	0.87	0.69	

Institution	CLABSI counts Q1 2023	Q1 2022 - Q2TD 2023 Average	6 Quarter Trend
UCD	8	7	
UCI	5	3	
UCLA - RR	6	3	
UCLA - SM	2	2	
UCSD	7	4	
UCSF	12	7	
UC Health	40	27	

Institution	CLABSI line days Q1 2023	Q1 2022 - Q2TD 2023 Average	6 Quarter Trend
UCD	7692	6494	
UCI	4673	4008	
UCLA - RR	8961	7754	
UCLA - SM	2053	2180	
UCSD	7744	6245	
UCSF	8614	7021	
UC Health	39737	34550	

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

UC HEALTH

Based on the latest completed quarterly data (Q1 2023)
Prepared by UCLA – PS&A

Blue Marker = Best performing Quarter within 6 Quarter Timeframe

Orange Marker = Worst performing Quarter within 6 Quarter Timeframe

Summary and 6 Quarter Trend (Q1 2023)

Institution	HCAHPS: Recommend Q1 2023	Q4 2021 - Q1 2023 Average	6 Quarter Trend
UCD	76.4%	75.2%	
UCI	85.7%	81.5%	
UCLA - RR	84.3%	83.7%	
UCLA - SM	75.9%	81.2%	
UCSD	82.6%	82.8%	
UCSF	82.6%	83.6%	
UC Health	81.5%	81.8%	

Institution	HCAHPS: MD Commun Q1 2023	Q4 2021 - Q1 2023 Average	6 Quarter Trend
UCD	79.1%	79.9%	
UCI	84.1%	81.3%	
UCLA - RR	85.5%	83.9%	
UCLA - SM	77.7%	80.8%	
UCSD	84.4%	84.1%	
UCSF	86.6%	86.6%	
UC Health	83.9%	83.8%	

Institution	HCAHPS: Nurs Commun Q1 2023	Q4 2021 - Q1 2023 Average	6 Quarter Trend
UCD	76.6%	78.0%	
UCI	81.8%	77.7%	
UCLA - RR	82.4%	79.8%	
UCLA - SM	75.6%	78.4%	
UCSD	81.5%	81.3%	
UCSF	83.8%	82.9%	
UC Health	81.2%	80.7%	

Mortality, Readmissions, HCAHPS & LOS

	90th percentile and above
	50th percentile – 89th percentile
	Lower than 50th percentile

UC HEALTH

Based on the latest completed quarterly data (Q1 2023)
Prepared by UCLA – PS&A

Blue Marker = Best performing Quarter within 6 Quarter Timeframe

Orange Marker = Worst performing Quarter within 6 Quarter Timeframe

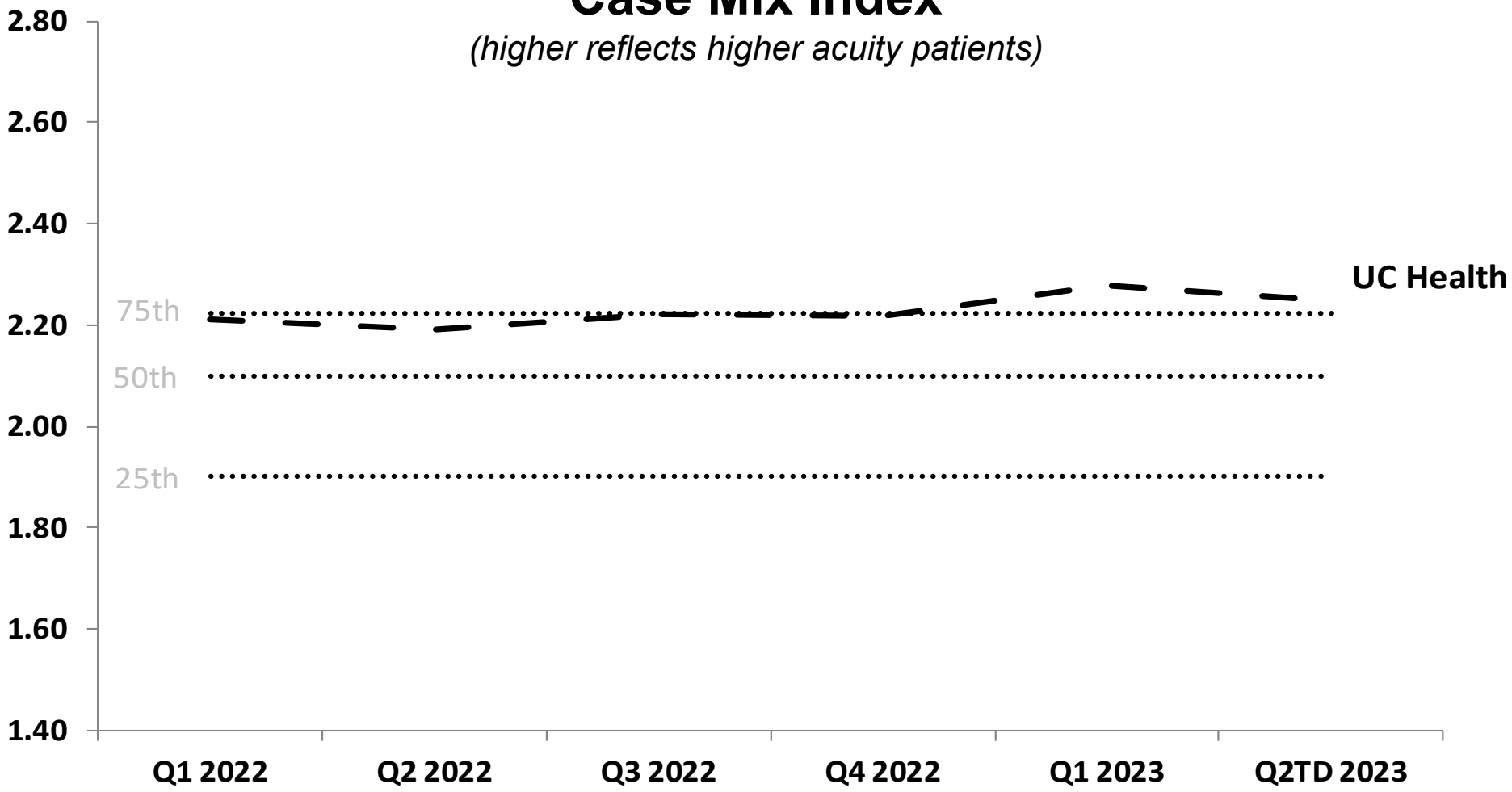
Inpatient Quality Metrics

UC HEALTH

Inpatient Quality Metrics: Case Mix Index

Case Mix Index

(higher reflects higher acuity patients)



Through April 2023

Prepared by UCLA – PS&A

25th-50th-75th percentiles based on last federal fiscal year (2021Q4-2022Q3) Vizient AMC data

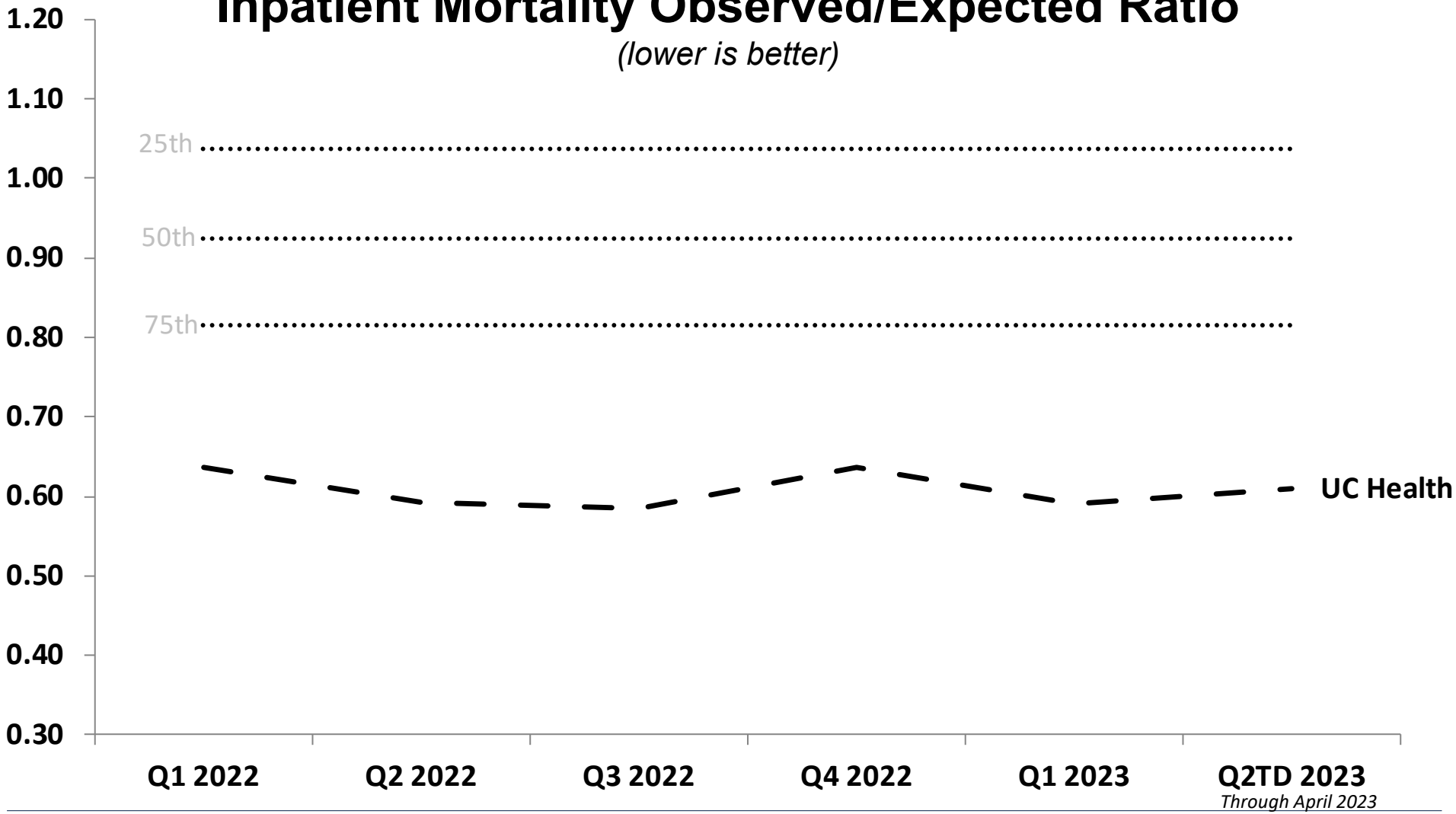
UC HEALTH

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

Inpatient Mortality Observed/Expected Ratio

(lower is better)



15 Prepared by UCLA – PS&A

25th-50th-75th percentiles based on last federal fiscal year (2021Q4-2022Q3) Vizient AMC data

UC HEALTH

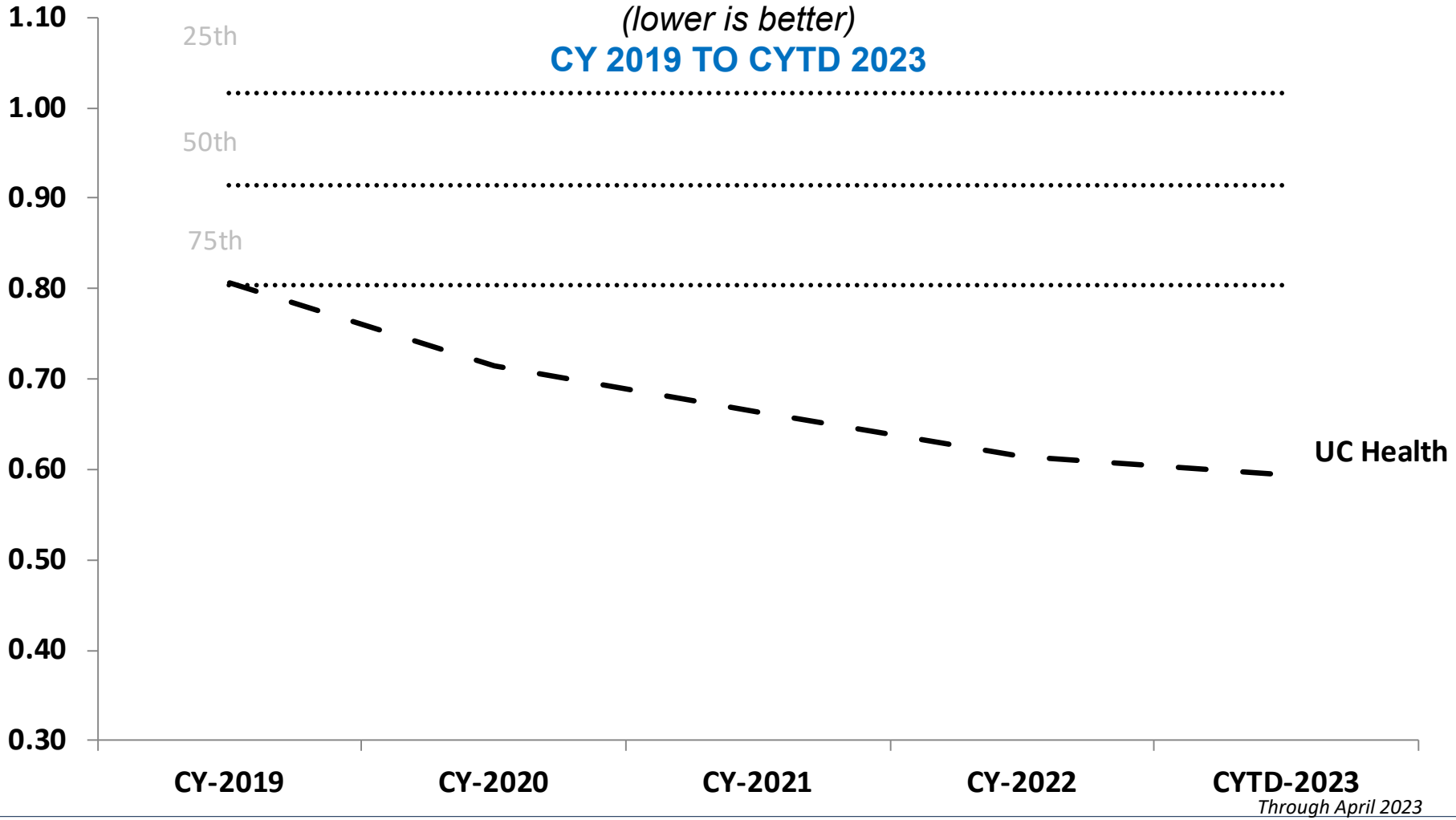
Source: Vizient / UHC: University HealthSystem Consortium.
Definition: The total inpatient mortality index represents all inpatient cases that had a discharge status of "expired" (observed mortality rate divided by expected mortality rate).
Notes: A value higher than 1.0 means the rate was higher than 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: Inpatient Mortality

Inpatient Mortality Observed/Expected Ratio

(lower is better)

CY 2019 TO CYTD 2023



Through April 2023

Prepared by UCLA – PS&A

25th-50th-75th percentiles based on overall period (2020Q1-2023Q2TD) Vizient AMC data

UC HEALTH

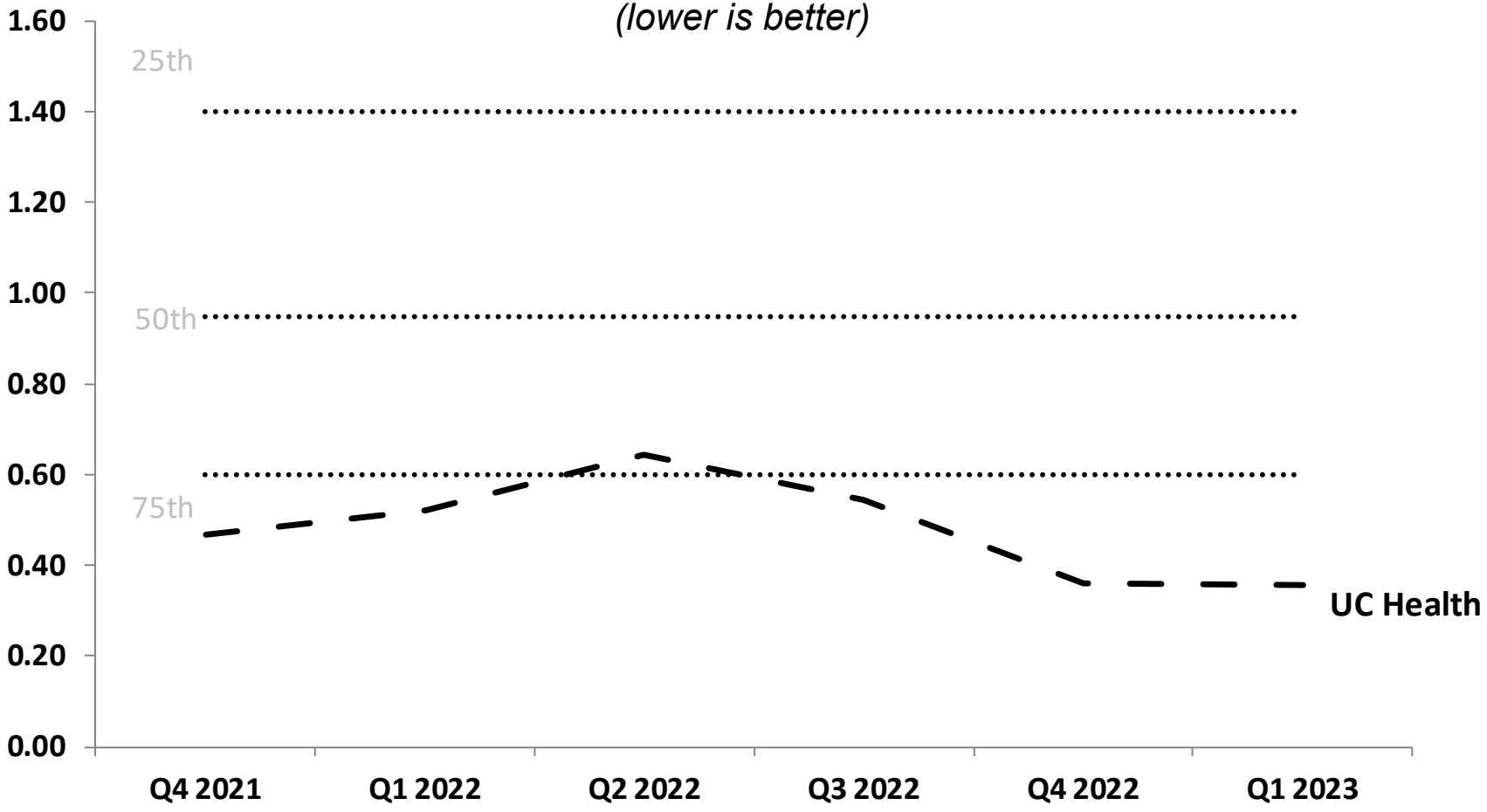
Source: Vizient / UHC: University HealthSystem Consortium.
Definition: The total inpatient mortality index represents all inpatient cases that had a discharge status of "expired" (observed mortality rate divided by expected mortality rate).
Notes: A value higher than 1.0 means the rate was higher than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



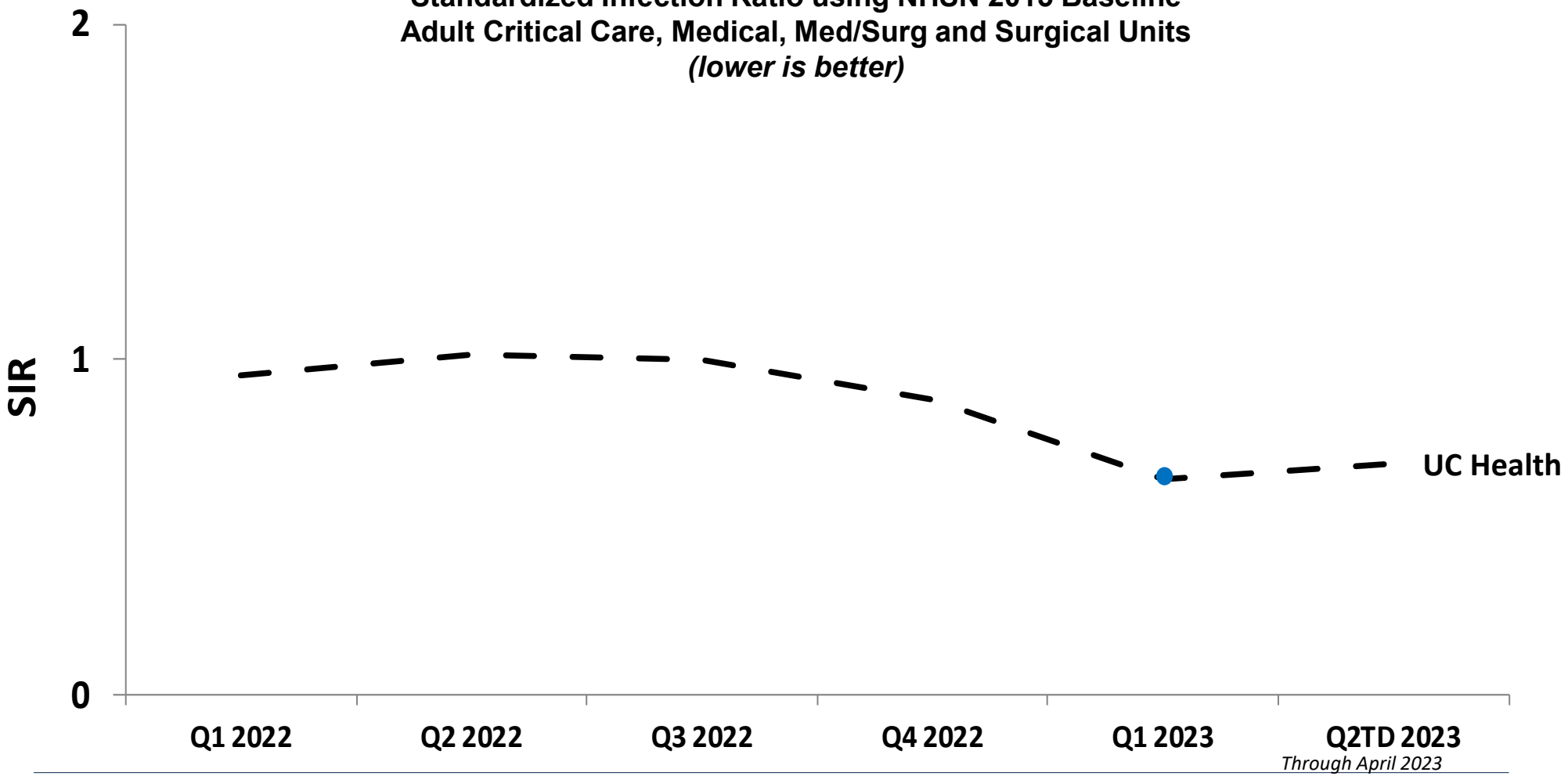
Prepared by UCLA – PS&A
25th-50th-75th percentiles based on last federal fiscal year (2021Q4-2022Q3) Vizient AMC data

UC HEALTH

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

Catheter Associated Urinary Tract Infections (CAUTI)
Standardized Infection Ratio using NHSN 2015 Baseline
Adult Critical Care, Medical, Med/Surg and Surgical Units
(lower is better)



 Prepared by UCLA – PS&A

*: SIR is only calculated if number of predicted cases is >=1.

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.

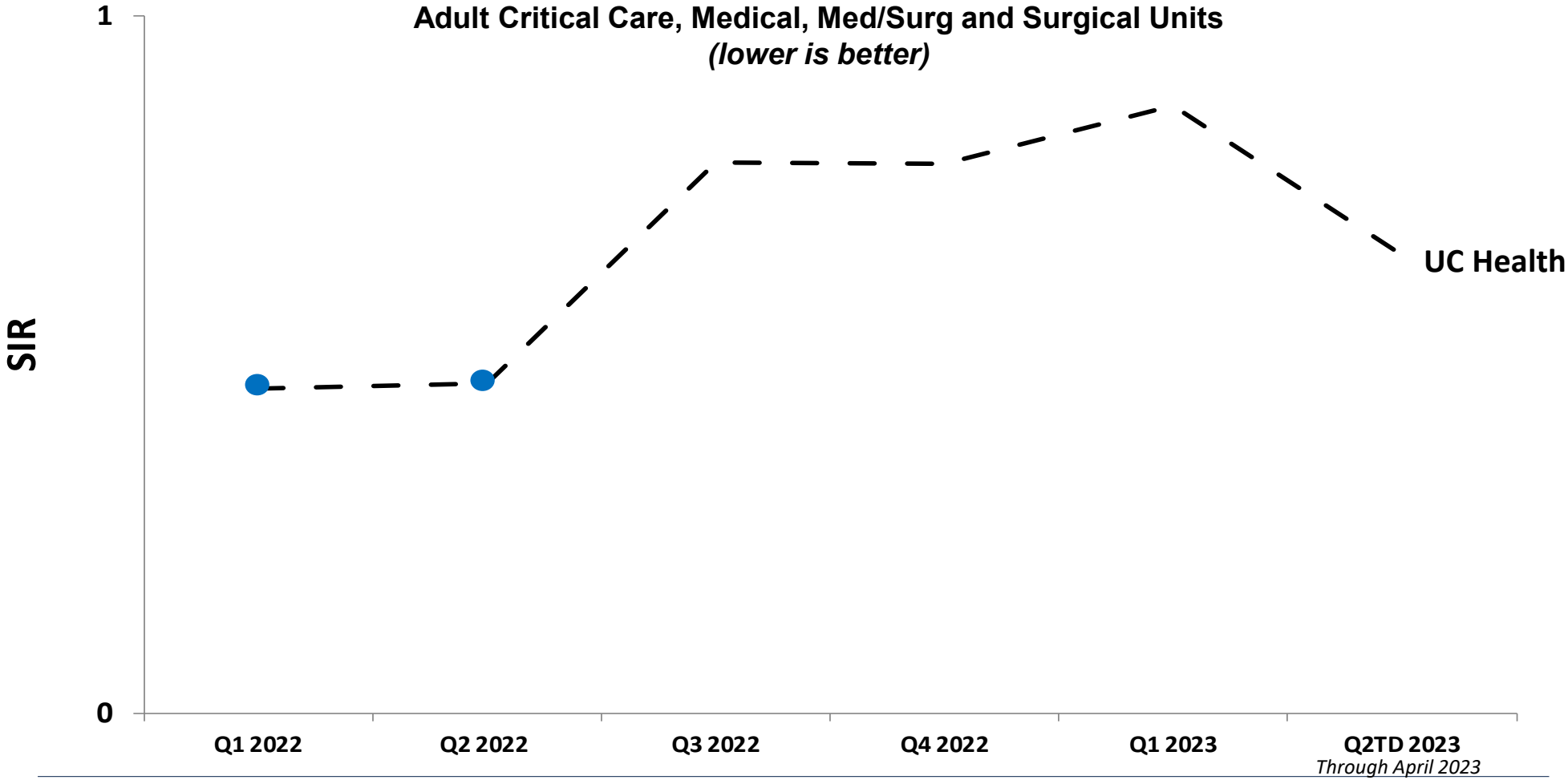
Inpatient Quality Metrics: CLABSI

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)



 Prepared by UCLA – PS&A

*: SIR is only calculated if number of predicted cases is >=1.

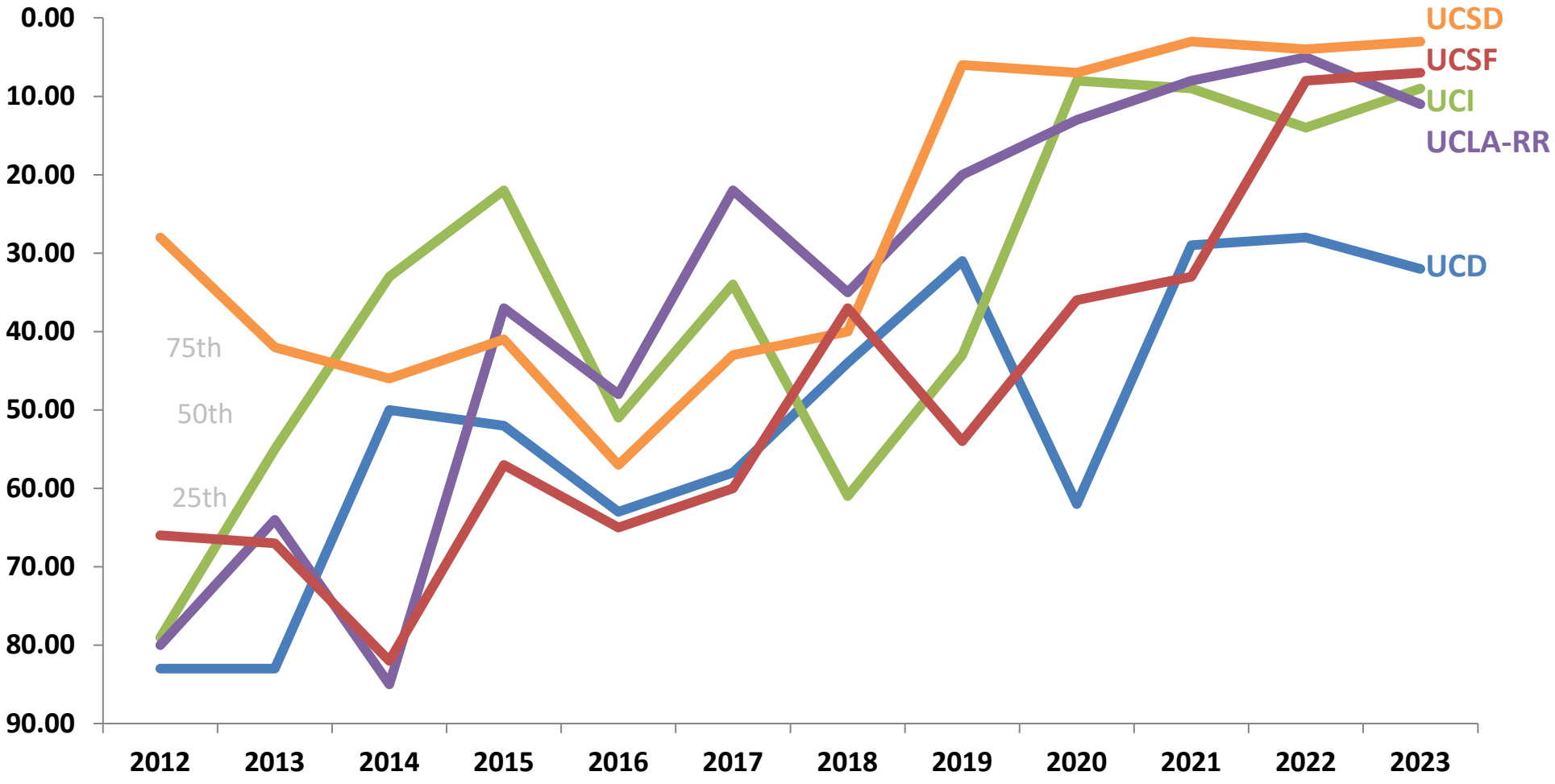
UC HEALTH

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: Vizient Ranking



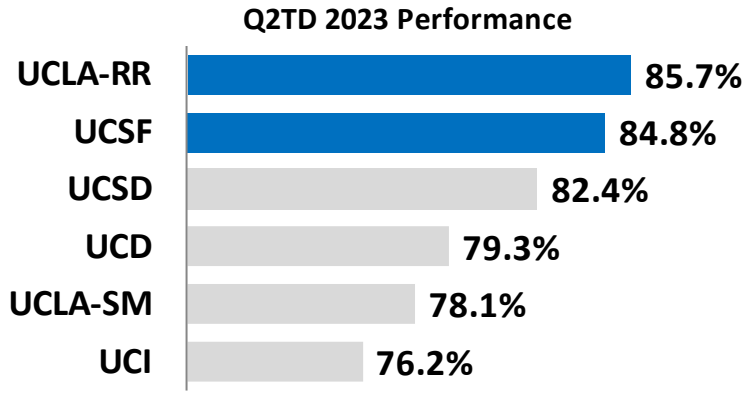
UC HEALTH

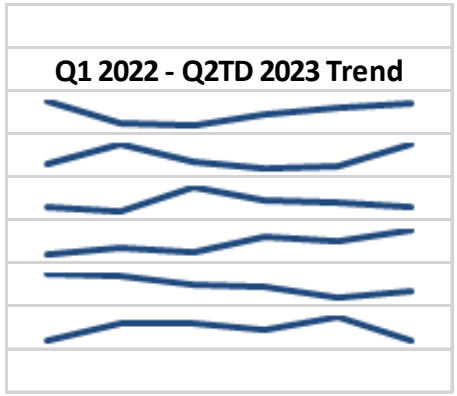
Source: Vizient Quality & Accountability Calculator

Inpatient Quality Metrics: HCAHPS

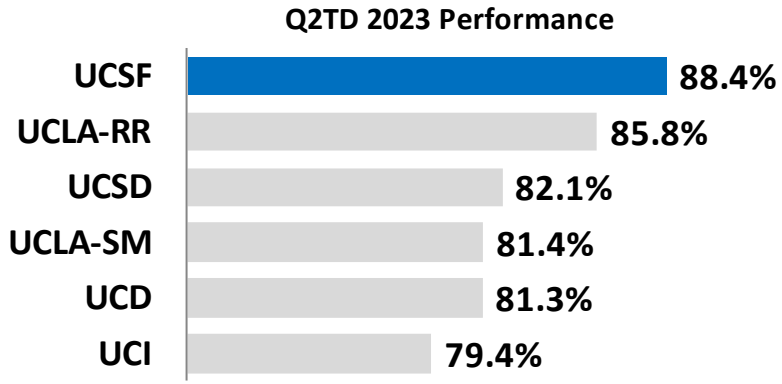
Patient Experience

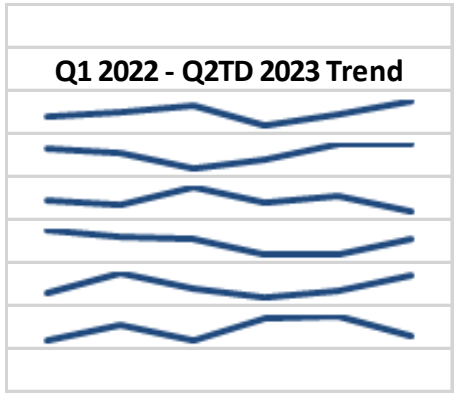
Would Recommend Hospital





Communication with Physicians





- 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

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

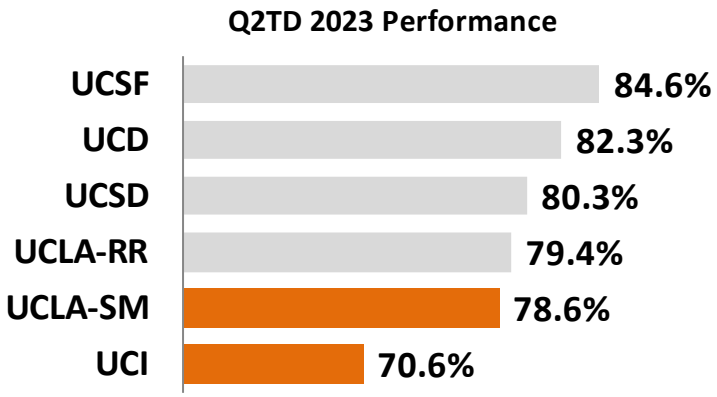
- Indicates performance above the 90th percentile
- Indicates performance between 50th and 90th percentiles
- Indicates performance below the 50th percentile

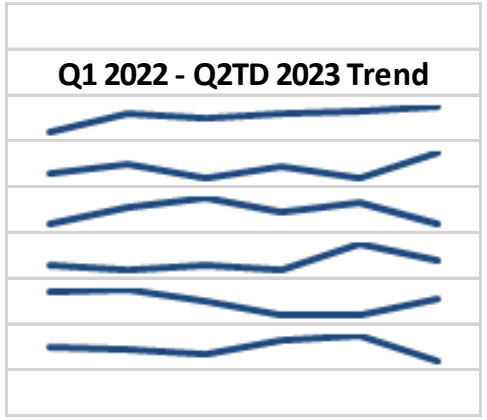
UC HEALTH

Inpatient Quality Metrics: HCAHPS

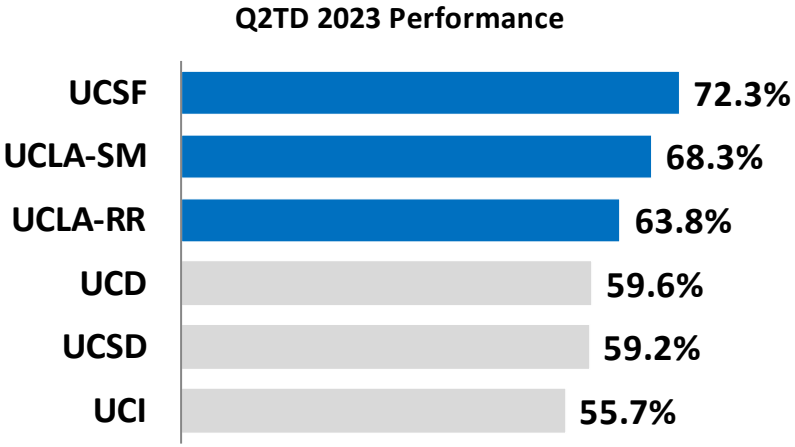
Patient Experience

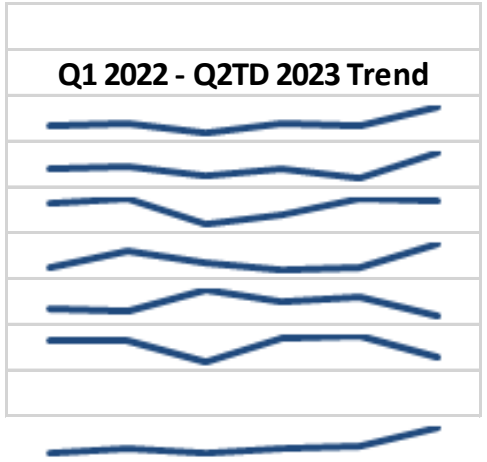
Communication with Nurses





Transition of Care





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

UC HEALTH

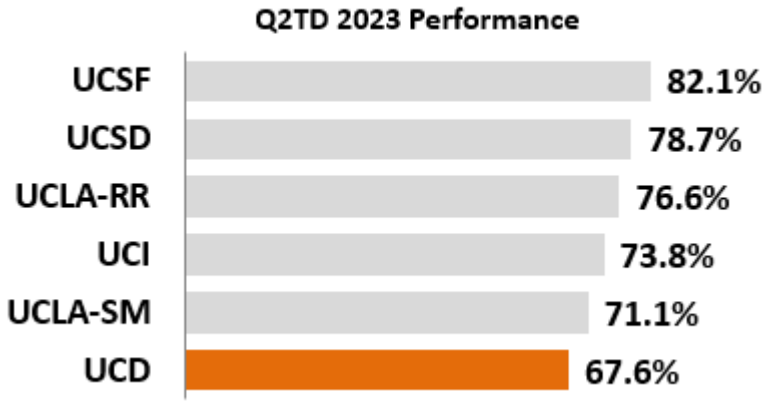
Benchmarks: Performance either above or below Press Ganey's National Client Database are indicated.

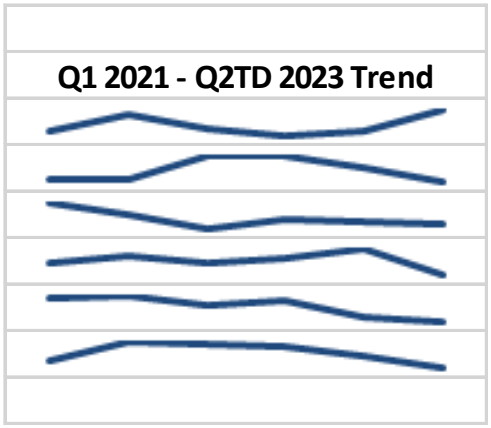
- Indicates performance above the 90th percentile
- Indicates performance between 50th and 90th percentiles
- Indicates performance below the 50th percentile

Inpatient Quality Metrics: HCAHPS

Patient Experience

Overall Rating





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

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

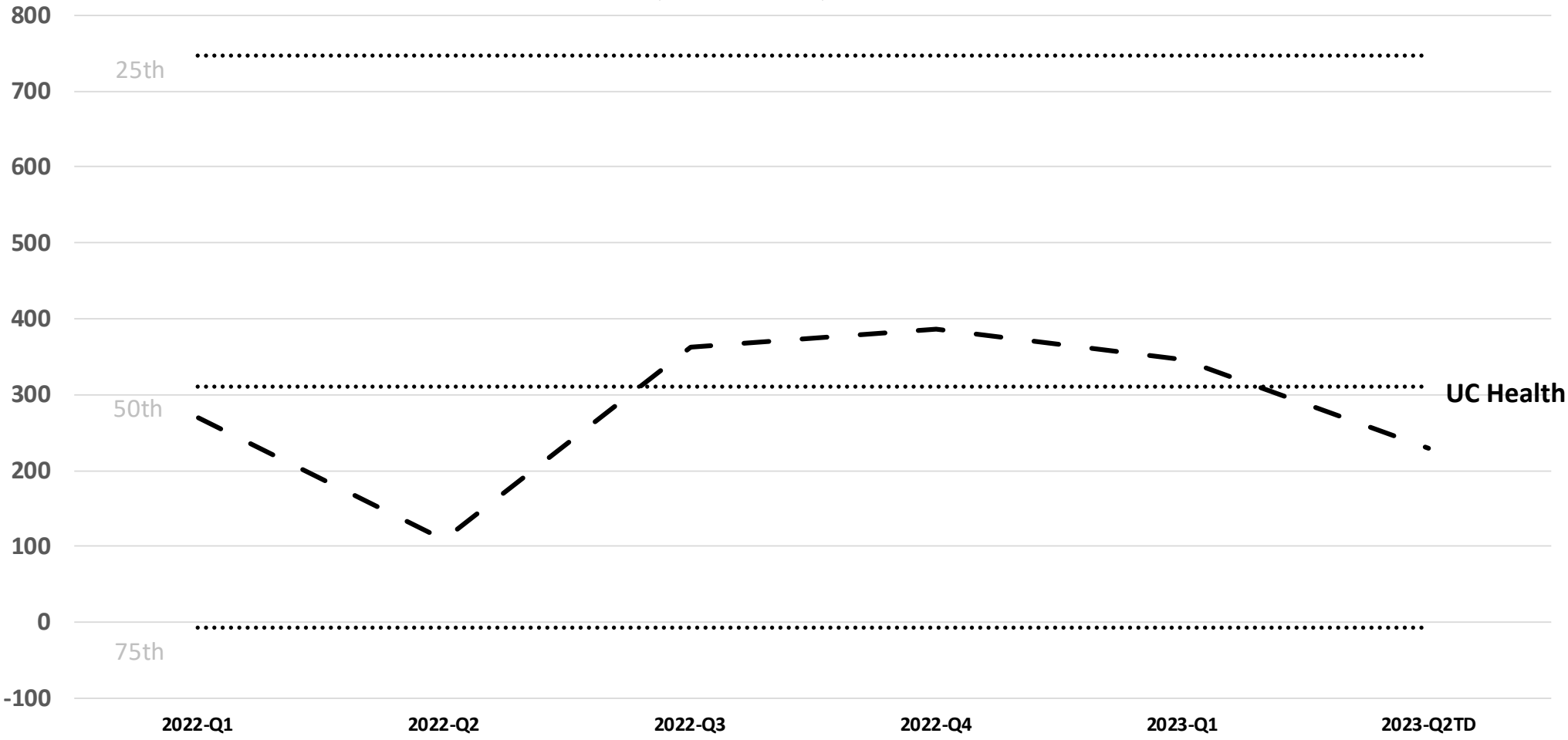
- Indicates performance above the 90th percentile
- Indicates performance between 50th and 90th percentiles
- Indicates performance below the 50th percentile

UC HEALTH

Inpatient Quality Metrics: Opportunity Bed Days

Coordinating Care/Patient Flow | Readmissions | Patient Experience | Patient Safety

Excess Bed Days per K Case by Institution by Quarter
Q1 2022 – Q2TD 2023



Through April 2023

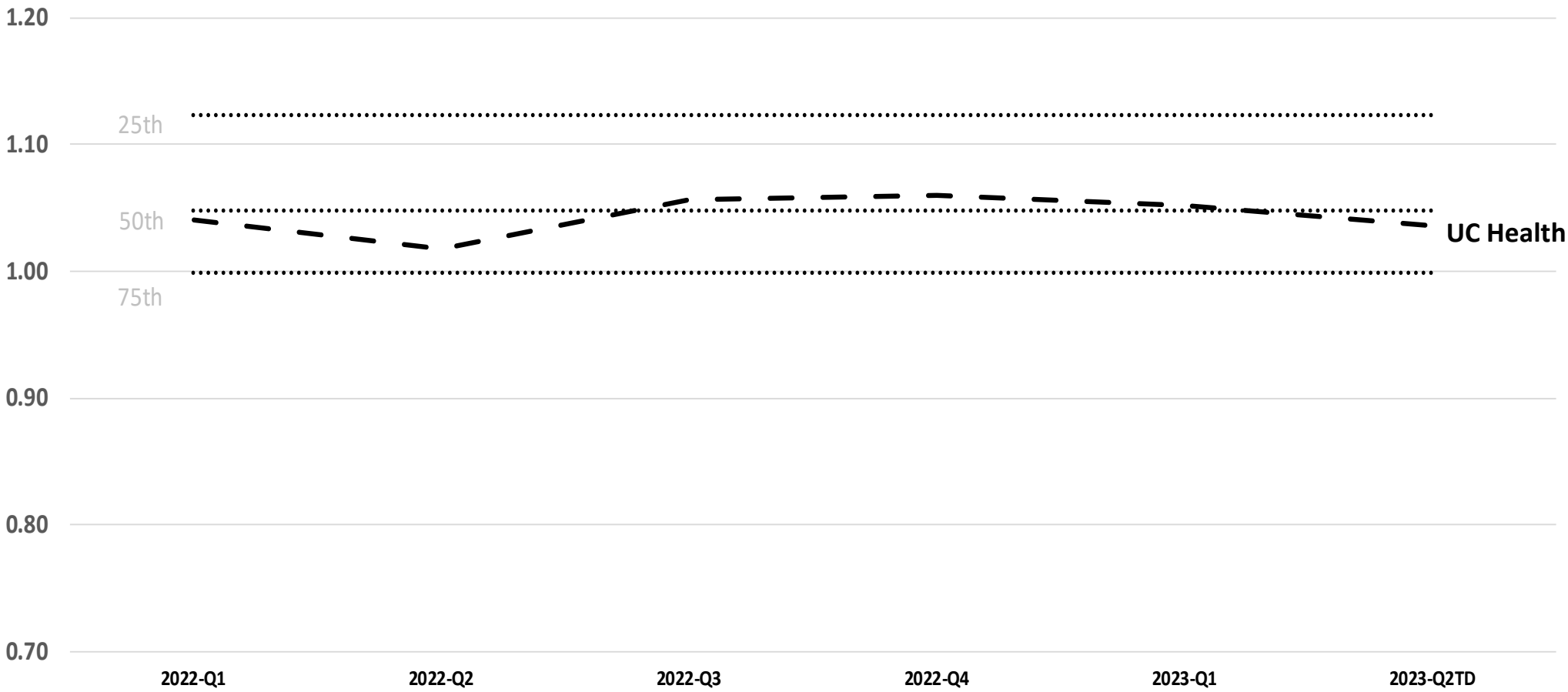
24 Prepared by UCLA – PS&A
25th-50th-75th percentiles based on last federal fiscal year (2021Q4-2022Q3) Vizient AMC data

UC HEALTH

Source: Vizient / UHC: University HealthSystem Consortium.
Definition: Opportunity 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

LOS Index by Institution by Quarter
Q1 2022 – Q2TD 2023



Through April 2023

25 Prepared by UCLA – PS&A
25th-50th-75th percentiles based on last federal fiscal year (2021Q4-2022Q3) Vizient AMC data

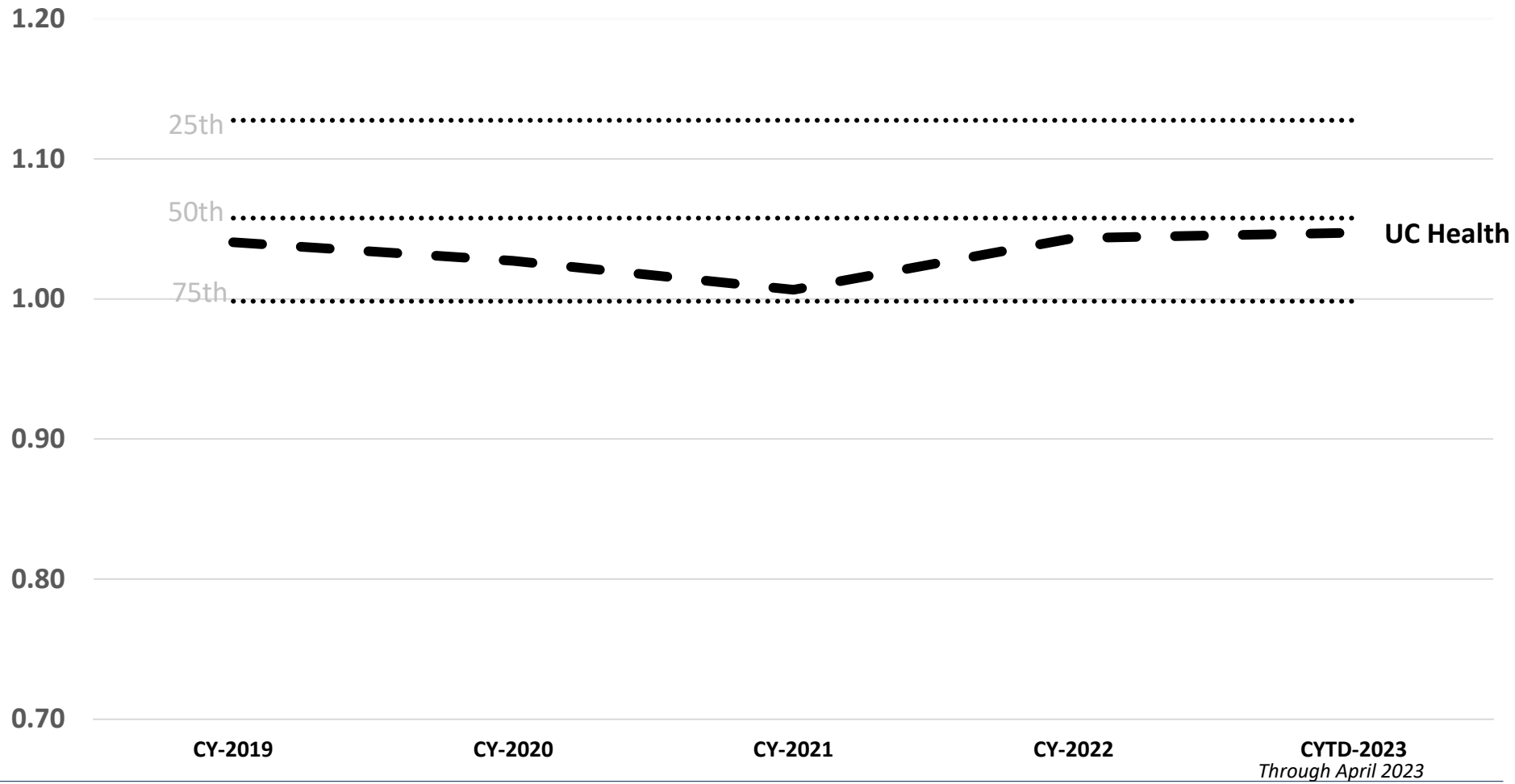
UC HEALTH

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: Length of Stay

LOS Index by Institution by Year

CY 2019 – CYTD 2023



Prepared by UCLA – PS&A
25th-50th-75th percentiles based on overall period (2020Q1-2023Q2TD) Vizient AMC data

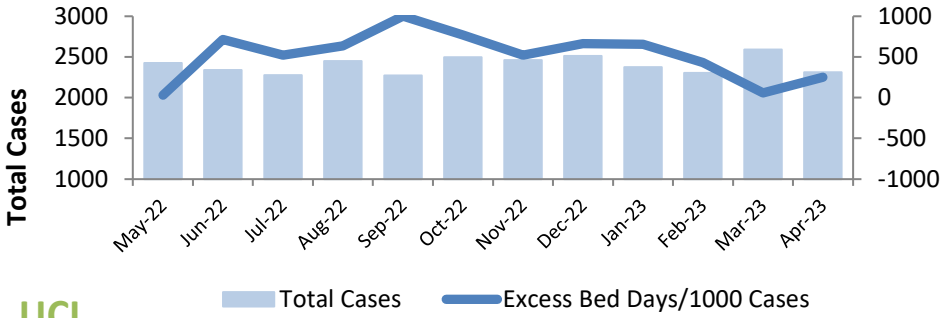
UC HEALTH

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)

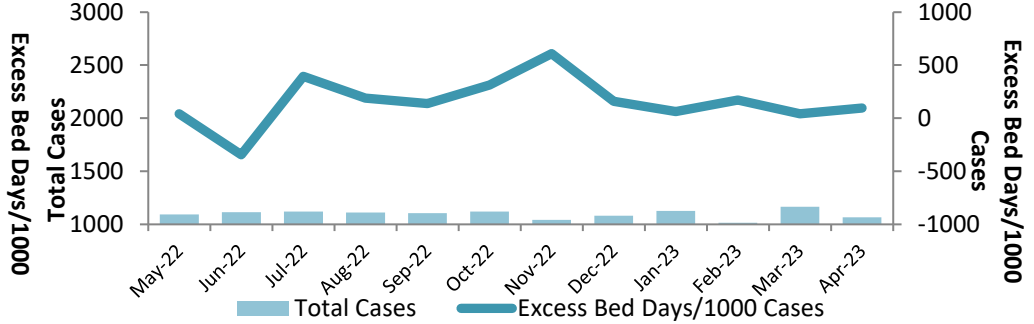
Inpatient Quality Metrics: Opportunity Bed Days

Coordinating Care/Patient Flow | Readmissions | Patient Experience | Patient Safety

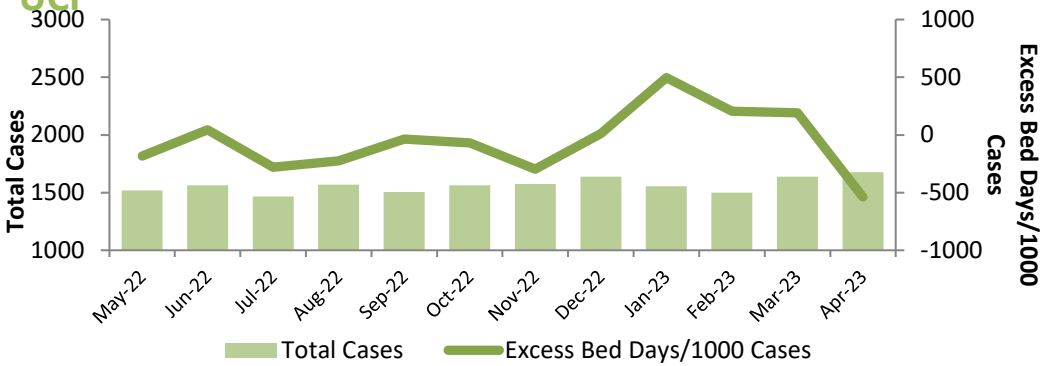
UCD



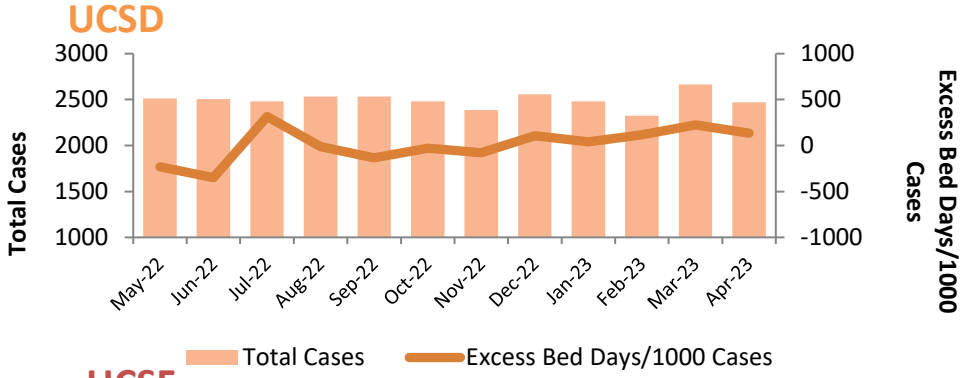
UCLA-SM



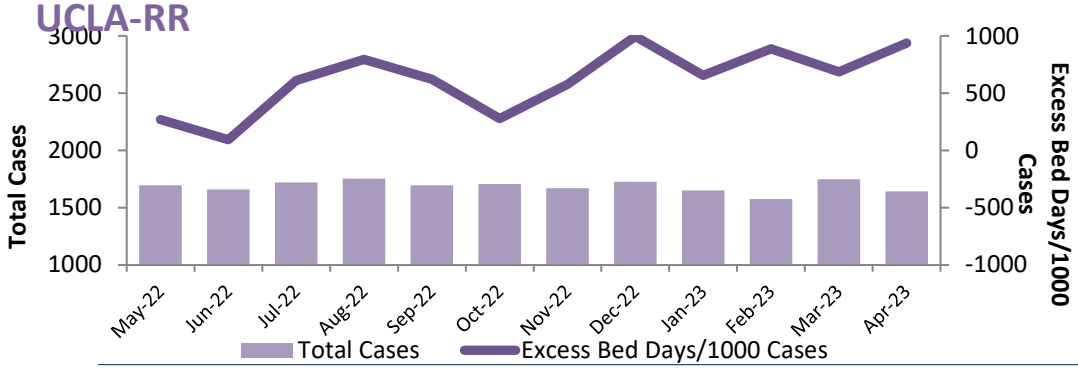
UCI



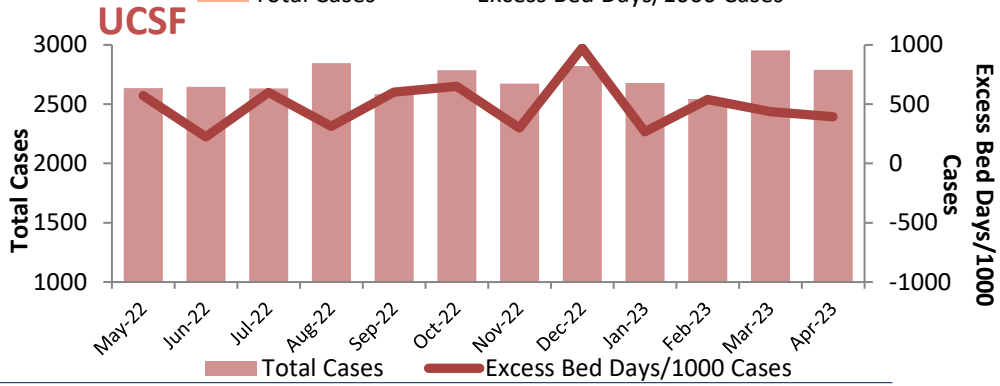
UCSD



UCLA-RR



UCSF



UC HEALTH

Source: Vizient / UHC: University HealthSystem Consortium.
Definition: Opportunity 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)

Appendix:
Glossary

Glossary (1 of 9)

Mortality Index: (2022 Risk Adjustment Model (AMC), AHRQ Version V2022)

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: (2022 Risk Adjustment Model (AMC), AHRQ Version V2022)

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.

Opportunity Bed Days / per 1,000 Cases: (2022 Risk Adjustment Model (AMC), AHRQ Version V2022)

- Opportunity beds days per 1,000 cases= Sum{Observed LOS - Expected LOS} of all discharges/total number of discharges * 1,000
- 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)

Length of Stay Index: (2022 Risk Adjustment Model (AMC), AHRQ Version V2022)

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

Glossary (2 of 9)

All-cause Readmissions Index:(2022 Risk Adjustment Model (AMC), AHRQ Version V2022) **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, Hospice flag (admitted from hospice, on a hospice care plan)
  - *Numerator-only exclusions:* Rehabilitation, Dialysis, 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 9)

Unplanned Readmissions Index:(2022 Risk Adjustment Model (AMC), AHRQ Version V2022)

The 30-day unplanned readmission rate is the percent of patients who return to the hospital due to *acute clinical event* that requires re-hospitalization within 30 days of discharge from the prior (index) admission.

- **Numerator:** Total number of readmissions (unplanned) 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, Hospice flag (admitted from hospice, on a hospice care plan);
  - *Numerator-only exclusions:* Rehabilitation, Dialysis, 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)
- **Advanced Restrictions:**
  - **Principal CCS Diagnosis NOT** (254 Rehabilitation care, fitting of prostheses, and adjustment of devices; 650 Adjustment disorders; 651 Anxiety disorders; 652 Attention-deficit, conduct, and disruptive behavior disorders; 654 Developmental disorders, 655 Disorders usually diagnosed in infancy, childhood, or adolescence; 656 Impulse control disorders, NEC; 657 Mood disorders; 658 Personality disorders; 659 Schizophrenia and other psychotic disorders; 662 Suicide and intentional self-inflected injury; 670 Miscellaneous disorders)
  - **Discharge Status NOT** (Discharged/transferred to another short-term general hospital for inpatient care; Discharged/transferred to a designated cancer center or children's hospital; Left against medical advice or discontinued care; Expired (all in-hospital deaths except for Medicare or CHAMPUS hospice patients); Discharge/transferred to a federal hospital; Discharged/transferred to a Critical Access Hospital (CAH); Discharged/transferred to another short-term general hospital for inpatient care with a planned acute care hospital inpatient readmission; Discharged/transferred to a Children's Hospital or Cancer Center with a planned acute hospital care hospital inpatient readmission; Discharged/transferred to a federal hospital with a planned acute hospital inpatient readmission; Discharged/transferred to a Critical Access Hospital (CAH) with a planned acute care hospital inpatient readmission)

Glossary (4 of 9)

Unplanned Readmissions Index (continued):

- **Pros of Proposed Methodology:**
  - Aligns with the Vizient Q&A Scorecard, which is based on the 2020 Hospital-Wide Readmission (HWR) Measure Updates and Specific Report – Version 9.0
  - Advanced Restrictions mimic the CMS (HWR) metric
- **Cons of Proposed Methodology:**
  - Includes:
    - All readmission types (related and unrelated)
    - Obstetric patients
    - Non-surgery/gynecology, cardiorespiratory, cardiovascular, neurology & medicine

Glossary (5 of 9)

Vizient Ranking & Equity:

Data Source: Vizient Quality and Accountability Scorecard

Metric	Time Period by Domain	Cohort

• **Vizient Performance Rank**: Ranking of current year's cumulative overall score among respective cohort
 	
Each domain's weighted score is added together for an overall score, and each institution is assigned a rank based on the overall score. The overall ranking includes a full year of the most recently available data (from the CDB/RM, the Core Measures Data Base, NHSN and HCAHPS) in these six domains: Mortality, Equity, Effectiveness, Patient Centeredness, Safety and Efficiency
	• 2021 Period 2:
	  • *CY2020 Q4*: Mortality, Equity, Efficiency, Safety (except for THK Complication & NHSN data).
	  • *Oct – Dec 2020:* Effectiveness (Readmission, Excess Days)
	  • *CY2020 Q3:* Patient centeredness; Safety (NHSN data & THK Complication)
	• 2021 Period 3:
	  • *CY2021 Q1*: Mortality, Efficiency, Safety (except NHSN data), Effectiveness (Sepsis lactate, Transfusion, OP Procedure Revisits)
	  • *Jan – Mar 2021:* Effectiveness (Readmission, Excess Days)
	  • *CY2020 Q4*: Patient Centeredness; Safety (NHSN data)
	• 2021 Period 4 (Annual):
	  • *CY2021 Q2*: Mortality, Equity, Efficiency, Safety (except for NHSN data).
	  • *Apr – May 2021:* Effectiveness (Readmission, Excess Days)
	  • *CY2021 Q1:* Patient centeredness; Safety (NHSN data)
	• 2022 Period 1:
	  • *CY2021 Q3*: Mortality, Equity, Efficiency, Safety (except for NHSN data).
	  • *July – Sept 2021:* Effectiveness (Readmission, Excess Days)
	  • *CY2021 Q2:* Patient centeredness; Safety (NHSN data)
	• 2022 Period 2:
	  • *CY2021 Q4*: Mortality, Equity, Efficiency, Safety (except for THK Complication & NHSN data).
	  • *Oct – Dec 2021:* Effectiveness (Readmission, Excess Days)
	  • *CY2021 Q3:* Patient centeredness; Safety (NHSN data & THK Complication)
		Academic Medical Centers: UCLA Ronald Reagan, UCSD, UCSF, UCI, and UCD
		
		Complex Care Medical Center: UCLA Santa Monica

Glossary (6 of 10)

Vizient Ranking & Equity (continued):

Metric	Time Period by Domain	Cohort
• **Equity Domain Rank:** Ranking of current year's cumulative domain score among respective cohort • **Equity Domain Score:** Current year's cumulative domain score among respective cohort. This score is a sum of percentages awarded for each metric performance within the equity domain. Equity Domain makes up 5% of overall Vizient score in Annual, Period 1, Period 2, and Period 3. Equity examines the following by race, gender, and socioeconomic status: Sepsis lactate timing, Sepsis mortality O/E, N-STEMI Troponin Timing, N-STEMI Mortality, Maternal Hemoglobin Change, Maternal Transfusion Rate, HF BNP Improvement, HF Mortality O/E	• 2021 Period 3: CY2021 Q1 • 2021 Period 4 (Annual): CY2021 Q2 • 2022 Period 1: CY2021 Q3 • 2022 Period 2: CY2020 Q4 • 2022 Period 3: CY2022 Q1 • 2022 Period 4: CY2022 Q2 • 2023 Period 1: CY2022 Q3 • 2023 Period 2: CY2023 Q4	**Academic Medical Centers**: UCLA Ronald Reagan, UCSD, UCSF, UCI, and UCD **Complex Care Medical Center:** UCLA Santa Monica

Glossary (7 of 9)

HCAHPS Data Source:

- Starting with Q4 2020 data: All UCs, except for UCI, are extracting data from Press Ganey's database, and UCI is extracting data from NRC Health's database. Before Q4 2020, all UCs extracted data from Press Ganey.

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 (8 of 9)

Hospital Acquired Pressure Ulcers (HAPU), PSI 03:

Risk Adjustment Model: 2022 Risk Model (AMC)

AHRQ Version: V2022 (Pediatric) / V2022 (Quality) / V2022 (Safety)

- **Definition:** Cases of pressure ulcer per 1,000 discharges with a length of stay of three days or more.
- **Numerator:** Discharges with any secondary ICD-10CM code for pressure ulcer stage III or IV (or unstageable) 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 three days
  - Principal diagnosis of pressure ulcer
  - Secondary diagnosis of stage III or IV (or unstageable) pressure ulcer present on admission
  - Any ICD-10-CM diagnosis code for severe burns (>20% body surface area)
  - Any ICD-10-CM diagnosis code for exfoliative disorders of the skin (>20% body surface area)
  - Any MDC 14 (pregnancy, childbirth, and puerperium)
  - An ungroupable DRG (DRG=999)
  - With missing gender (SEX = missing), age (AGE = missing), quarter (DQTR = missing), year (YEAR = missing), or principal diagnosis (DX1 = missing)

Glossary (9 of 9)

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

UC HEALTH

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 Quality & Accountability Comprehensive Academic Medical Centers (2021)	90th percentile and above 50th - 89th percentile Lower than 50th percentile
• BP Control in Blacks or African Americans	Integrated Healthcare Association (IHA)	90th percentile and above 76th to 89th percentile 75th percentile and below
• 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

UC HEALTH