

UC HEALTH

**Clinical Quality Dashboard for
University of California Medical Centers**

Health Services Committee

June 2019

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, CAUTI, CLABSI, HCAHPS, and Excess Bed Days through January 2019
 - ✓ Readmissions through December 2018
- ❖ UCSD January 2019 data is not available in Vizient

HSC June 2019 Executive Summary: Inpatient Quality Metrics

Executive Summary: Inpatient (Q4 2018)

| Institution | Inpatient Mortality | % 30 day Readmissions | CLABSI SIR | HCAHPS: Recommend | HCAHPS: Physicians | HCAHPS: Nurses |
|---|---------------------|-----------------------|------------|-------------------|--------------------|----------------|
| UCD | 0.82 | 13.82% | 0.95 | 78.7% | 81.5% | 79.9% |
| UCI | 0.78 | 12.19% | 0.16 | 80.9% | 83.5% | 78.3% |
| UCLA RR | 0.71 | 13.92% | 1.08 | 85.1% | 83.9% | 81.0% |
| UCLA SM | 0.53 | 11.26% | 0.70 | 85.8% | 84.4% | 85.9% |
| UCSD | 0.75 | * | 1.21 | 83.3% | 85.4% | 81.4% |
| UCSF | 0.88 | 11.71% | 0.91 | 86.7% | 84.9% | 81.2% |
| UC Health | 0.76 | 12.89% | 0.89 | 83.1% | 84.0% | 80.9% |
| Median National Comparator Group | 0.87 | 12.79% | 1 | 72.5% | 81.3% | 80.5% |

| | 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 |

Inpatient Quality Metrics: 30-Day Readmissions

Patient Mortality

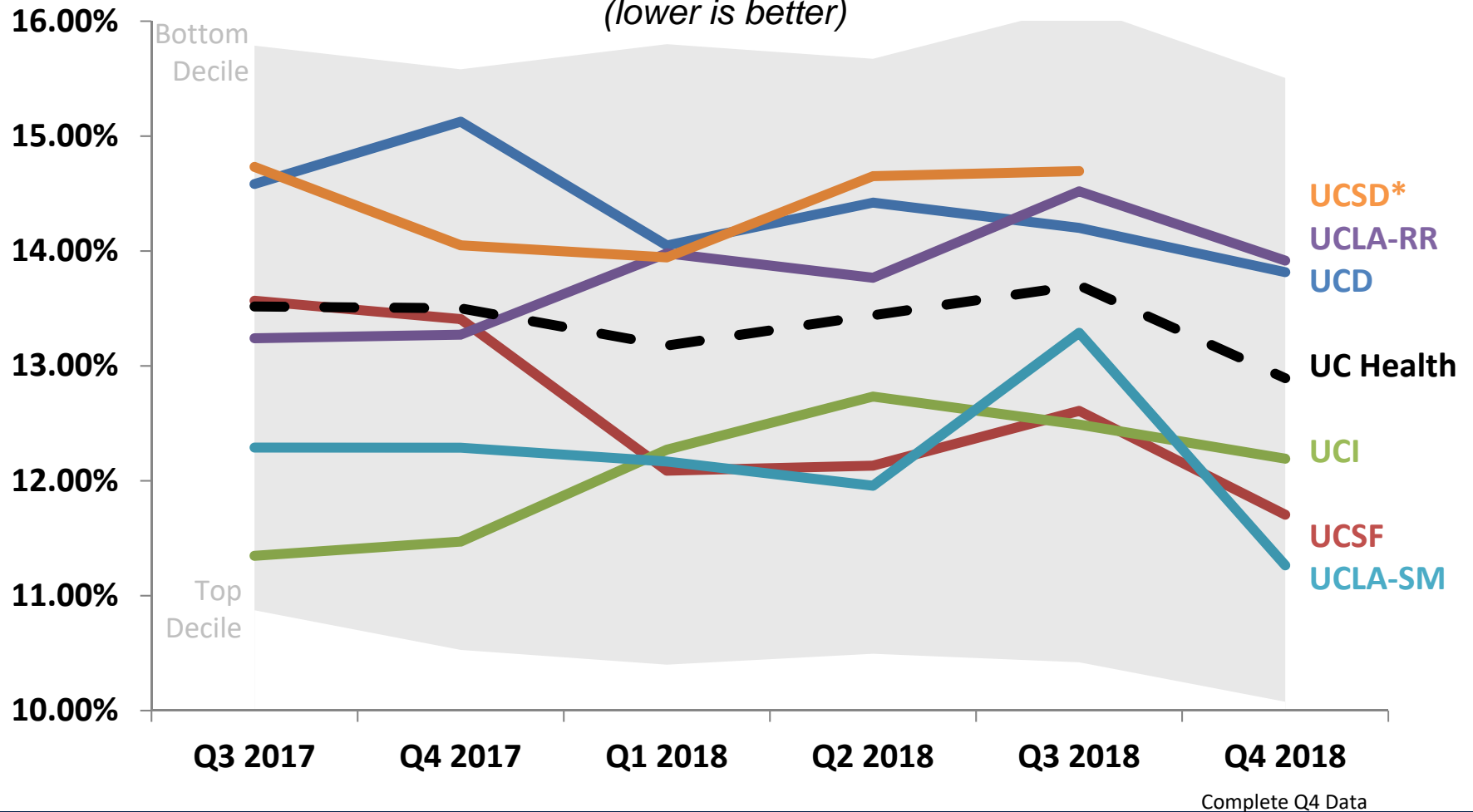
Readmissions

Patient Experience

Patient Safety

30-Day All Cause Readmission Rates

(lower is better)



5 Prepared by UCLA – QIA
UCSD December 2018 data is not available in Vizient

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: 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; 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

UC HEALTH

Summary and 6 Quarter Trend (through Q4 2018)

| Institution | Inpatient Mortality Q4 2018 | Q3 2017 - Q4 2018 Average | 6 Quarter Trend | Institution | 30d Readm Rate Q4 2018 | Q3 2017 - Q4 2018 Average | 6 Quarter Trend |
|-------------|-----------------------------|---------------------------|-----------------|-------------|------------------------|---------------------------|-----------------|
| UCD | 0.82 | 0.87 | | UCD | 13.82% | 14.38% | |
| UCI | 0.78 | 0.89 | | UCI | 12.19% | 12.08% | |
| UCLA - RR | 0.71 | 0.73 | | UCLA - RR | 13.92% | 13.79% | |
| UCLA - SM | 0.53 | 0.58 | | UCLA - SM | 11.26% | 12.21% | |
| UCSD | 0.75 | 0.79 | | UCSD | * | * | |
| UCSF | 0.88 | 0.90 | | UCSF | 11.71% | 12.59% | |
| UC Health | 0.76 | 0.80 | | UC Health | 12.89% | 13.38% | |

| 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 |

6 Based on the latest completed quarterly data (Q4 2018)
 Prepared by UCLA – QIA
 UCSD December 2018 data is not available in Vizient



Green Marker = Best performing Quarter within 6 Quarter Timeframe



Red Marker = Worst performing Quarter within 6 Quarter Timeframe



Summary and 6 Quarter Trend (through Q4 2018)

| Institution | CLABSI SIR Q4 2018 | Q3 2017 - Q4 2018 Average | 6 Quarter Trend | Institution | CLABSI counts Q4 2018 | Q3 2017 - Q4 2018 Average | 6 Quarter Trend |
|-------------|--------------------|---------------------------|-----------------|-------------|-----------------------|---------------------------|-----------------|
| UCD | 0.95 | 0.73 | | UCD | 7 | 6 | |
| UCI | 0.16 | 0.45 | | UCI | 1 | 3 | |
| UCLA - RR | 1.08 | 1.38 | | UCLA - RR | 10 | 13 | |
| UCLA - SM | 0.70 | 1.16 | | UCLA - SM | 1 | 2 | |
| UCSD | 1.21 | 0.99 | | UCSD | 9 | 12 | |
| UCSF | 0.91 | 1.02 | | UCSF | 7 | 8 | |
| UC Health | 0.89 | 0.96 | | UC Health | 35 | 43 | |

| Institution | CLABSI line days Q4 2018 | Q3 2017 - Q4 2018 Average | 6 Quarter Trend |
|-------------|--------------------------|---------------------------|-----------------|
| UCD | 5126 | 5930 | |
| UCI | 4608 | 4580 | |
| UCLA - RR | 8602 | 8701 | |
| UCLA - SM | 1365 | 1509 | |
| UCSD | 6115 | 10436 | |
| UCSF | 7268 | 7398 | |
| UC Health | 33084 | 38554 | |

| 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 |



7 Based on the latest completed quarterly data (Q4 2018)
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 Q4 2018)

| Institution | HCAHPS: Recommend Q4 2018 | Q3 2017 - Q4 2018 Average | 6 Quarter Trend | Institution | HCAHPS: MD Commun Q4 2018 | Q3 2017 - Q4 2018 Average | 6 Quarter Trend |
|-------------|---------------------------|---------------------------|-----------------|-------------|---------------------------|---------------------------|-----------------|
| UCD | 78.7% | 78.9% | | UCD | 81.5% | 81.2% | |
| UCI | 80.9% | 78.6% | | UCI | 83.5% | 81.1% | |
| UCLA - RR | 85.1% | 86.1% | | UCLA - RR | 83.9% | 84.0% | |
| UCLA - SM | 85.8% | 84.4% | | UCLA - SM | 84.4% | 84.2% | |
| UCSD | 83.3% | 83.0% | | UCSD | 85.4% | 84.5% | |
| UCSF | 86.7% | 86.6% | | UCSF | 84.9% | 84.2% | |
| UC Health | 83.1% | 82.6% | | UC Health | 84.0% | 83.2% | |

| Institution | HCAHPS: Nurs Commun Q4 2018 | Q3 2017 - Q4 2018 Average | 6 Quarter Trend |
|-------------|-----------------------------|---------------------------|-----------------|
| UCD | 79.9% | 79.0% | |
| UCI | 78.3% | 77.1% | |
| UCLA - RR | 81.0% | 82.3% | |
| UCLA - SM | 85.9% | 82.2% | |
| UCSD | 81.4% | 81.2% | |
| UCSF | 81.2% | 81.9% | |
| UC Health | 80.9% | 80.5% | |

| 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 |



8 Based on the latest completed quarterly data (Q4 2018)
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

Inpatient Quality Metrics: Case Mix Index

Patient Mortality

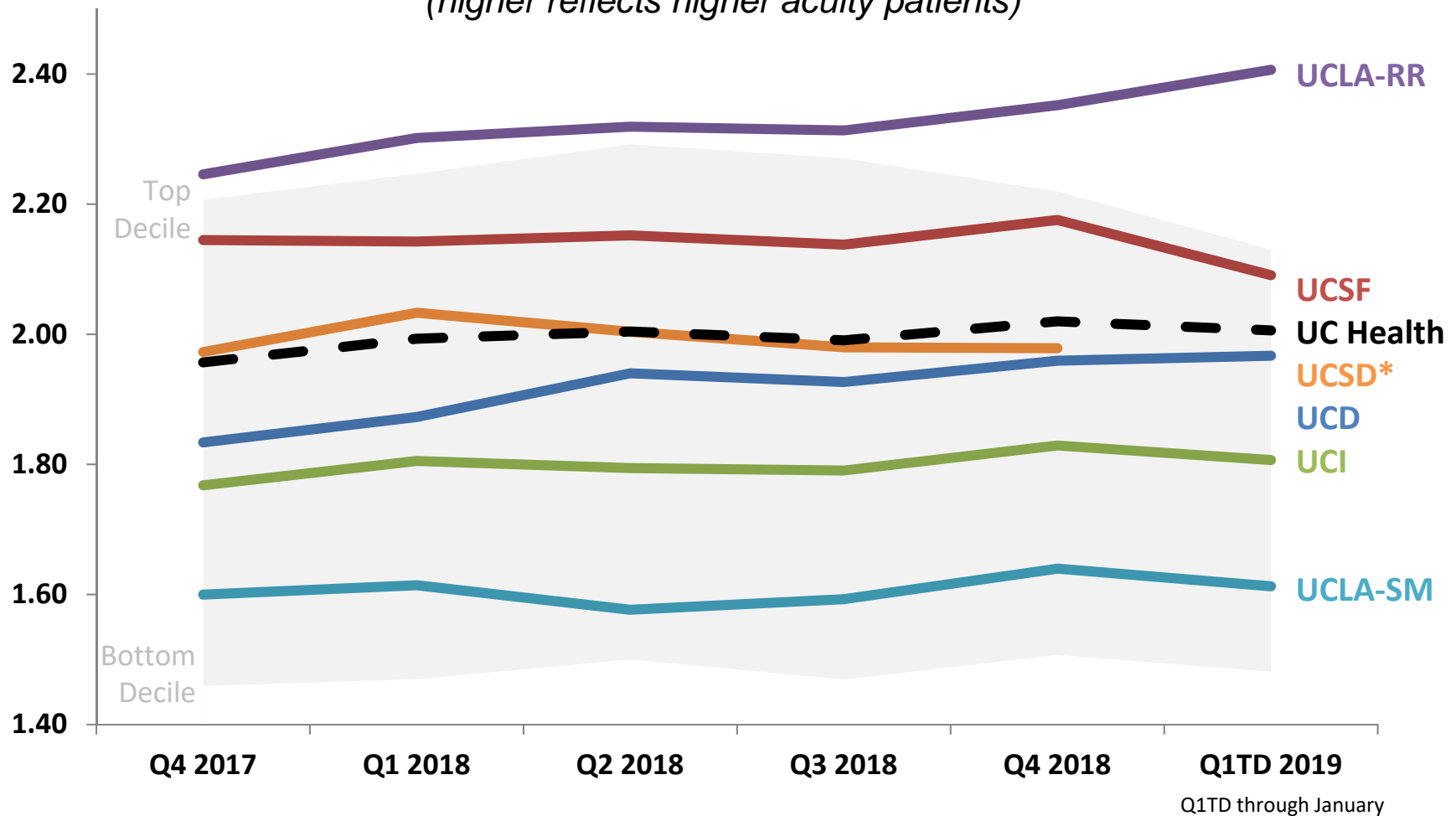
Readmissions

Patient Experience

Patient Safety

Case Mix Index

(higher reflects higher acuity patients)



10 Prepared by UCLA – QIA

UCSD January 2019 data is not available in Vizient

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.

UC HEALTH

Inpatient Quality Metrics: Inpatient Mortality

Patient Mortality

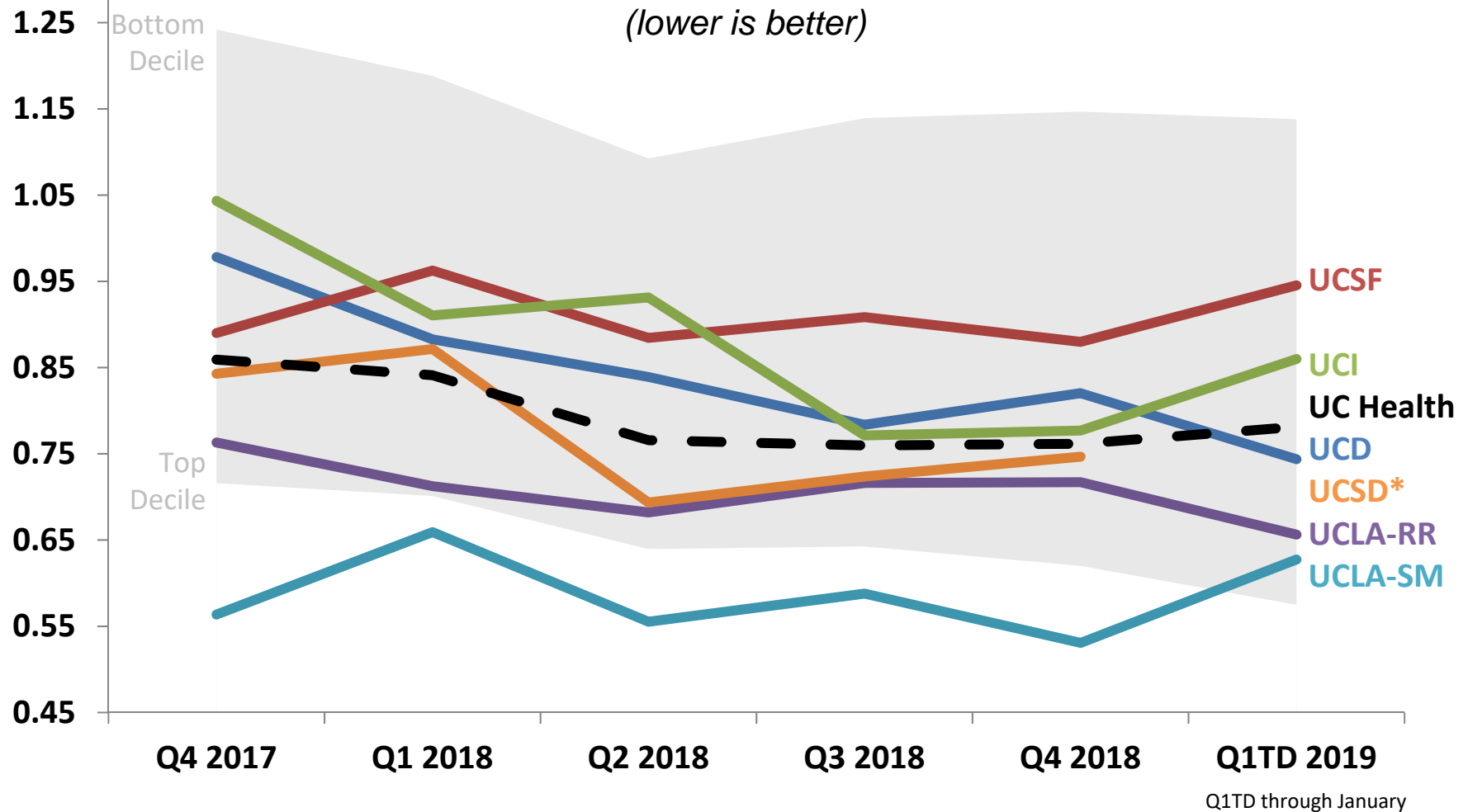
Readmissions

Patient Experience

Patient Safety

Inpatient Mortality Observed/Expected Ratio

(lower is better)



11 Prepared by UCLA – QIA
UCSD January 2019 data is not available in Vizient

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.

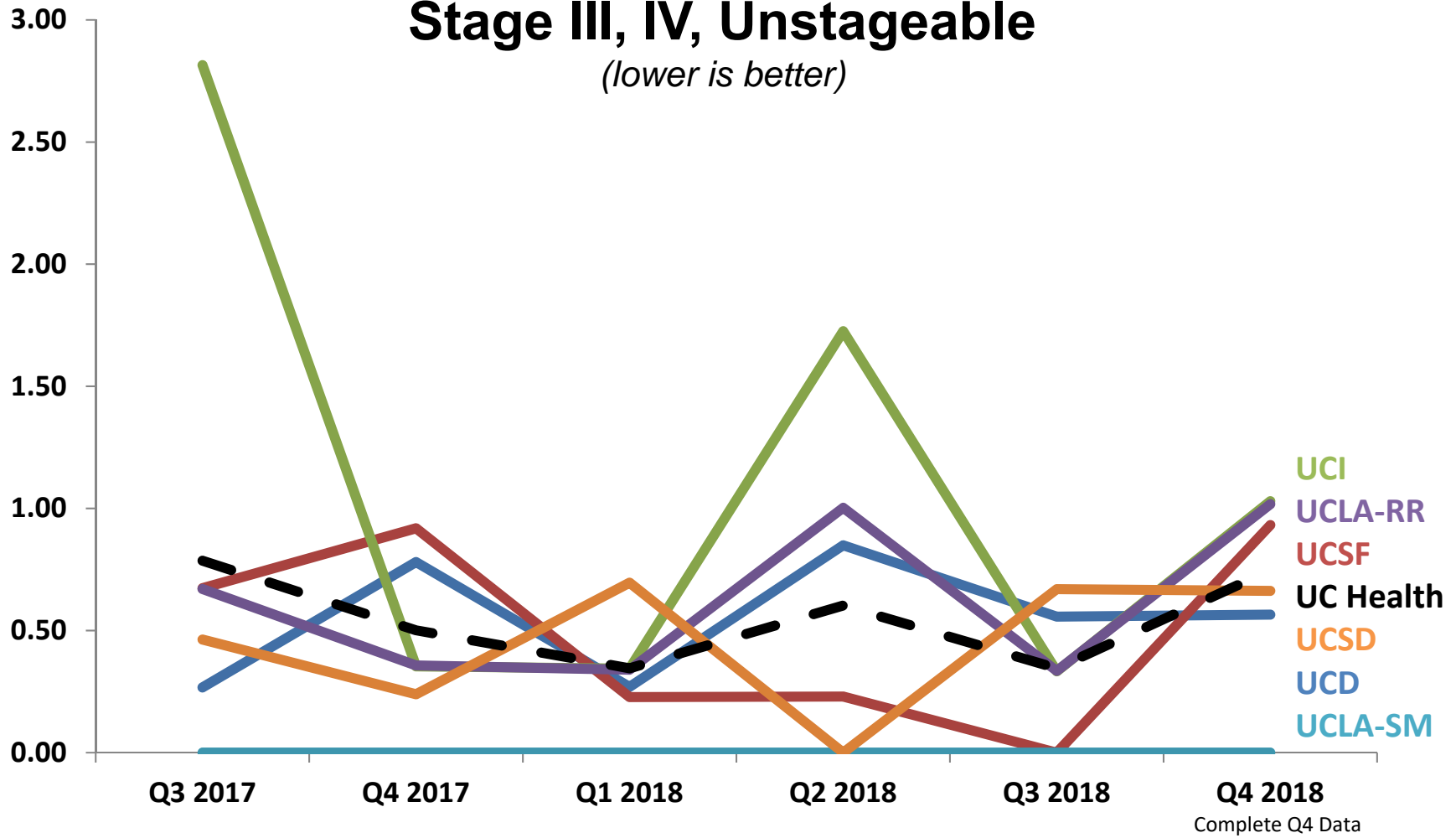
Standard Restrictions: LOS Outlier: Include All; Early Death: Include All; Bad Data: Exclude All; Normal Newborn: Include All ;Nonviable Neonate: Exclude All; Medical Tourism: Include All ;Prison Population: Include All ;Hospice: Exclude All.

UC HEALTH

Inpatient Quality Metrics: HAPU

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

(lower is better)



Complete Q4 Data

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

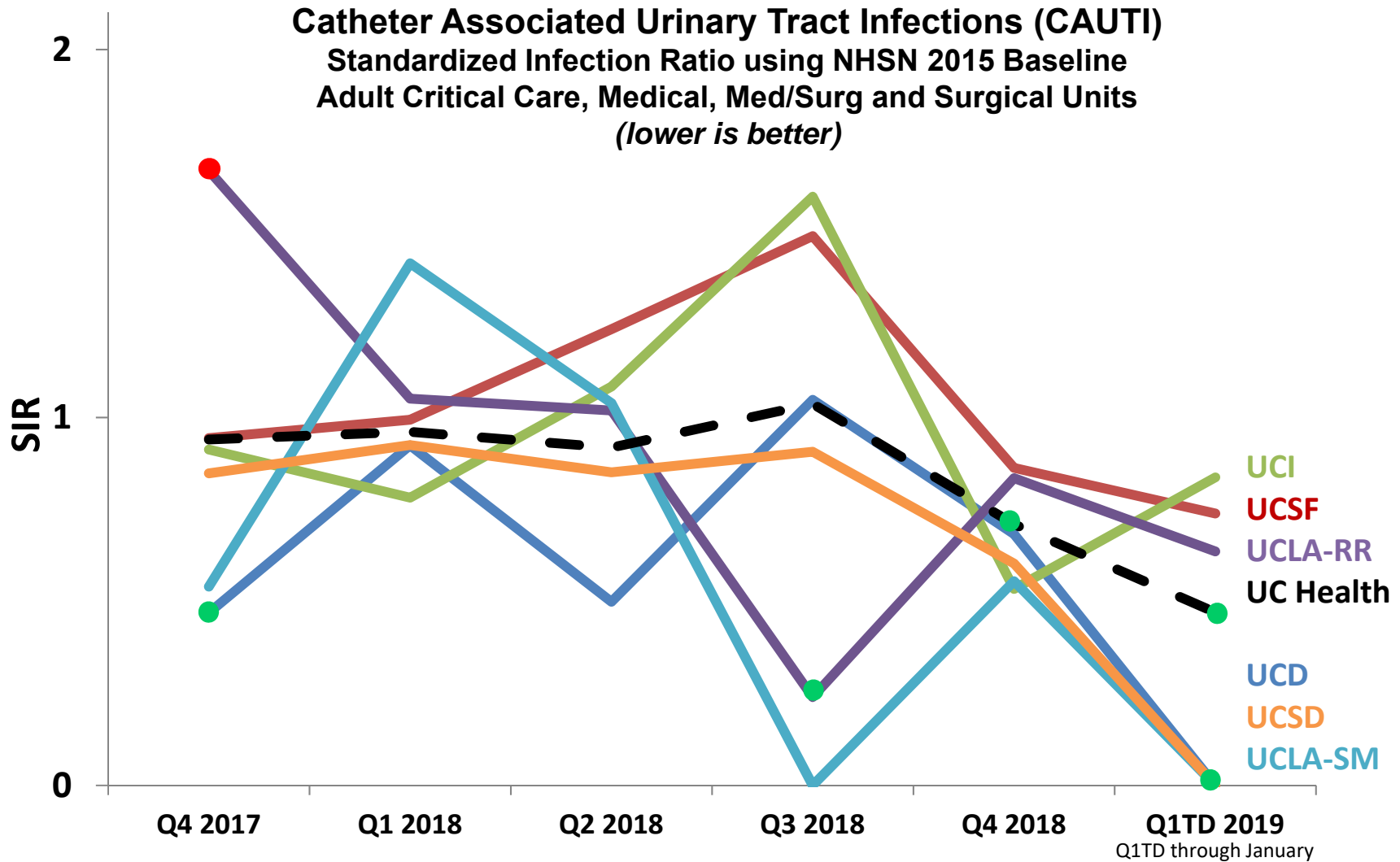
Inpatient Quality Metrics: CAUTI

Patient Mortality

Readmissions

Patient Experience

Patient Safety



13 Prepared by UCLA – QIA
 UCLA-SM Q1TD 2019 Predicted Infection < 1

- 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.

UC HEALTH

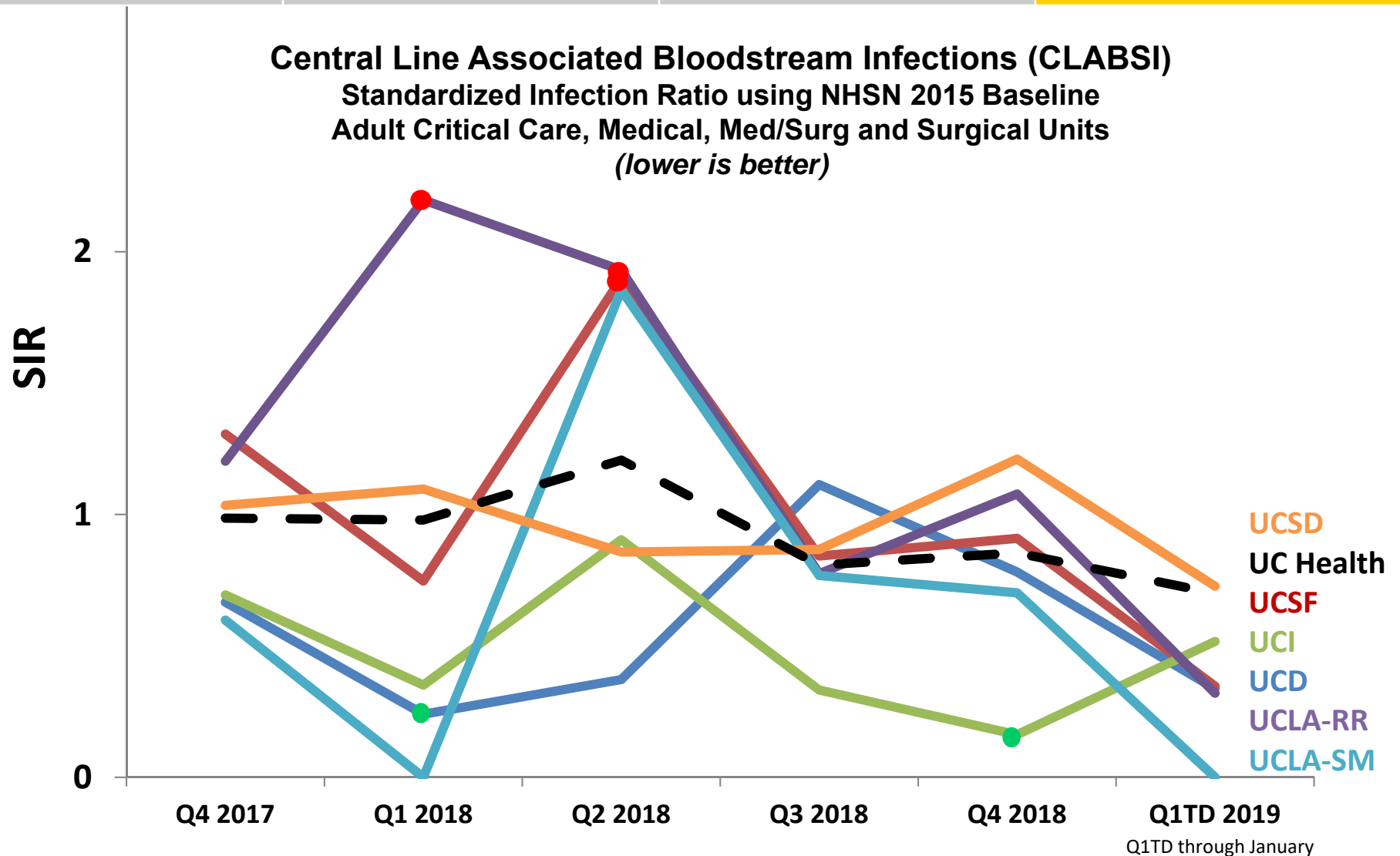
Inpatient Quality Metrics: CLABSI

Patient Mortality

Readmissions

Patient Experience

Patient Safety



14 Prepared by UCLA – QIA
 UCLA-SM Q1TD 2019 Predicted Infection < 1

- 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.

UC HEALTH

Inpatient Quality Metrics: HCAHPS

Patient Mortality

Readmissions

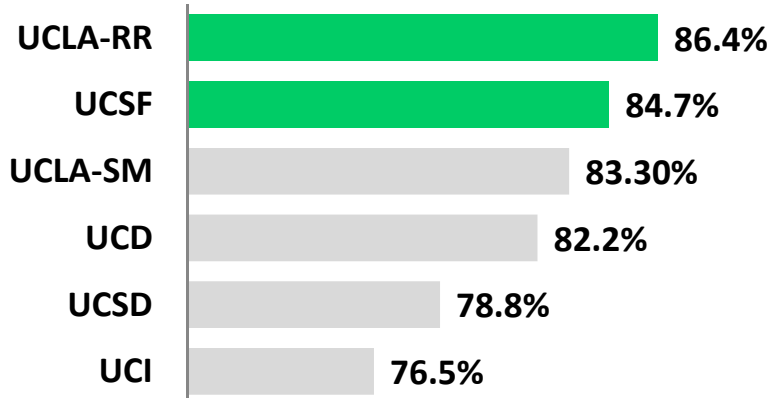
Patient Experience

Patient Safety

Patient Experience

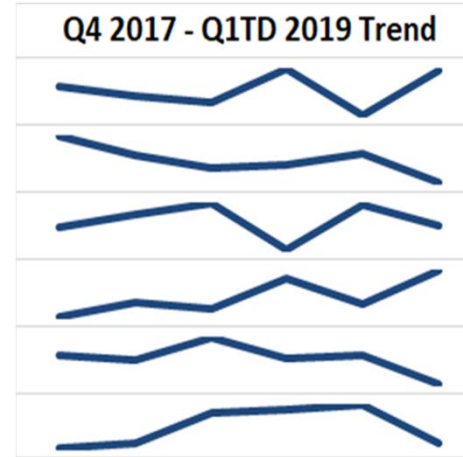
Would Recommend Hospital

Q1TD 2019 Performance



Q1TD through January

Q4 2017 - Q1TD 2019 Trend

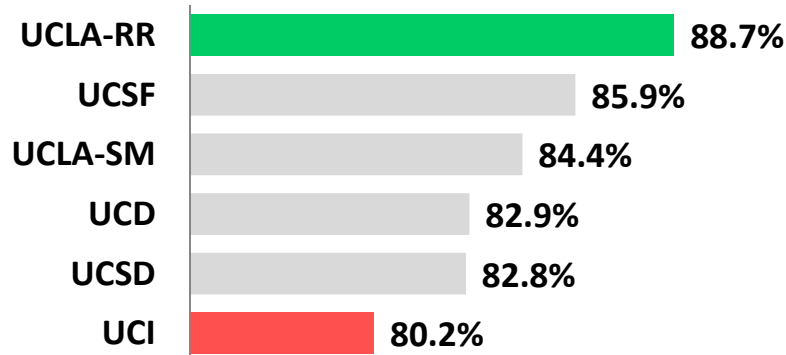


- HCAHPS data pulled by discharge date for all campuses.

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

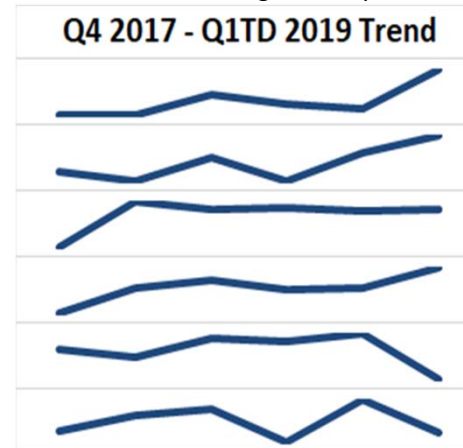
Communication with Physicians

Q1TD 2019 Performance



Q1TD through January

Q4 2017 - Q1TD 2019 Trend



15 Prepared by UCLA - PE
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 percentile
- indicates performance below the 50th percentile

UC HEALTH

Inpatient Quality Metrics: HCAHPS

Patient Mortality

Readmissions

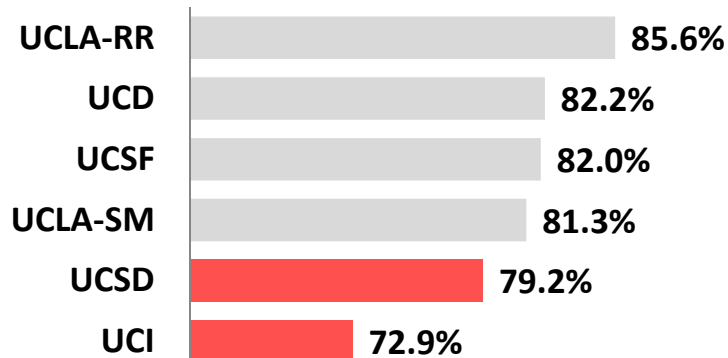
Patient Experience

Patient Safety

Patient Experience

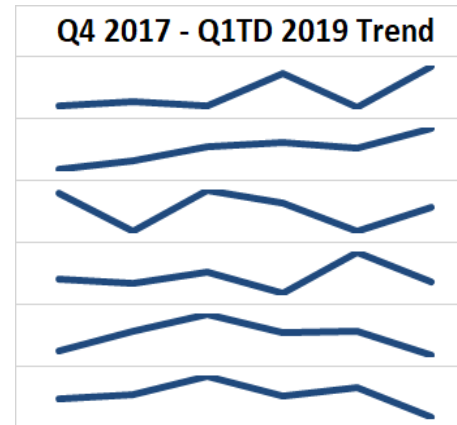
Communication with Nurses

Q1TD 2019 Performance



Q1TD through January

Q4 2017 - Q1TD 2019 Trend



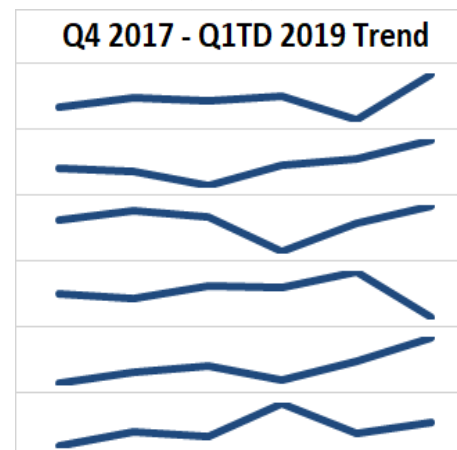
Transition of Care

Q1TD 2019 Performance



Q1TD through January

Q4 2017 - Q1TD 2019 Trend



16 Prepared by UCLA – PE
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 percentile
- indicates performance below the 50th percentile

Inpatient Quality Metrics: Excess Bed Days - CEMRP

Coordinating Care/Patient Flow

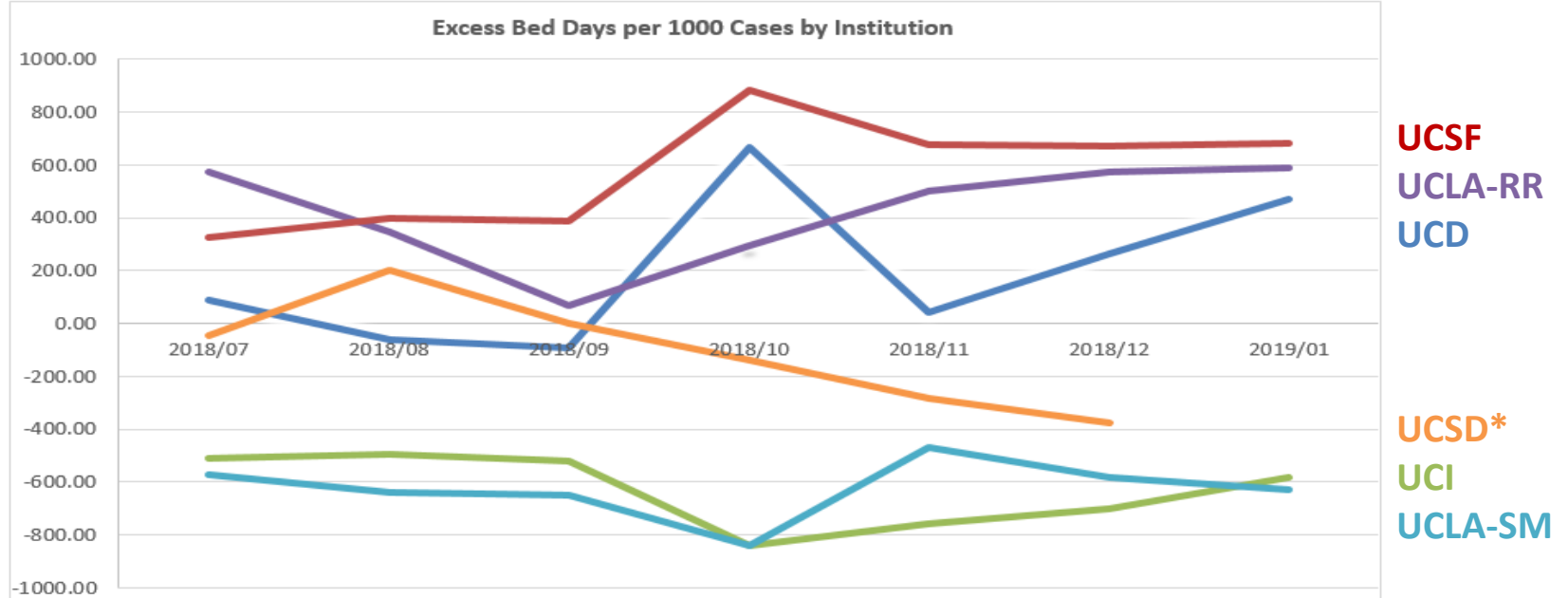
Readmissions

Patient Experience

Patient Safety

Excess Bed Days/1000 Cases (based on 2017 Risk Model_AMC)

| Hospital | 2018/07 | 2018/08 | 2018/09 | 2018/10 | 2018/11 | 2018/12 | 2019/01 | 2019/02 | 2019/03 | 2019/04 | Baseline FY18 (201707-201804) | FY19YTD (201807-201904) | Diff (FY19YTD vs. Baseline) | 4% Reduction |
|-----------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------------------------------|-------------------------|-----------------------------|--------------|
| UCDAVIS | 87.18 | -63.81 | -92.05 | 668.53 | 40.60 | 262.73 | 470.24 | | | | 23.0 | 193.10 | 741.1% | 0 |
| UCIRVINE | -511.53 | -494.42 | -522.50 | -842.50 | -760.23 | -700.09 | -582.09 | | | | -490.5 | -628.22 | -28.1% | 1 |
| UCLA-RONALD_REAGAN | 572.01 | 345.38 | 68.92 | 294.42 | 501.31 | 570.83 | 589.38 | | | | 611.7 | 421.98 | -31.0% | 1 |
| UCLA-SANTA_MONICA | -573.89 | -638.47 | -651.92 | -843.77 | -467.86 | -581.57 | -627.57 | | | | -597.9 | -627.09 | -4.9% | 1 |
| UCSD | -43.68 | 203.58 | -1.93 | -140.14 | -283.14 | -378.34 | | | | | -92.5 | * | * | * |
| UCSF | 325.07 | 398.05 | 385.00 | 885.58 | 678.09 | 669.94 | 684.22 | | | | 416.2 | 574.31 | 38.0% | 0 |
| # of Institutions improved | | | | | | | | | | | | | 3 | |



Success for this goal will be: A 4% "Excess Bed Days" measure reduction from the corresponding group's baseline over July 1, 2017 - April 30, 2018. Goal achievement will be:

- **Threshold:** 3 out of 6 grouped medical centers achieve a 4% reduction in excess bed days.
- **Target:** 4 out of 6 grouped medical centers achieve a 4% reduction in excess bed days.
- **Maximum:** 5 out of 6 grouped medical centers achieve a 4% reduction in excess bed days.

17 Prepared by UCLA – QIA

UCSD January 2019 data is not available in Vizient

UCHEALTH

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)

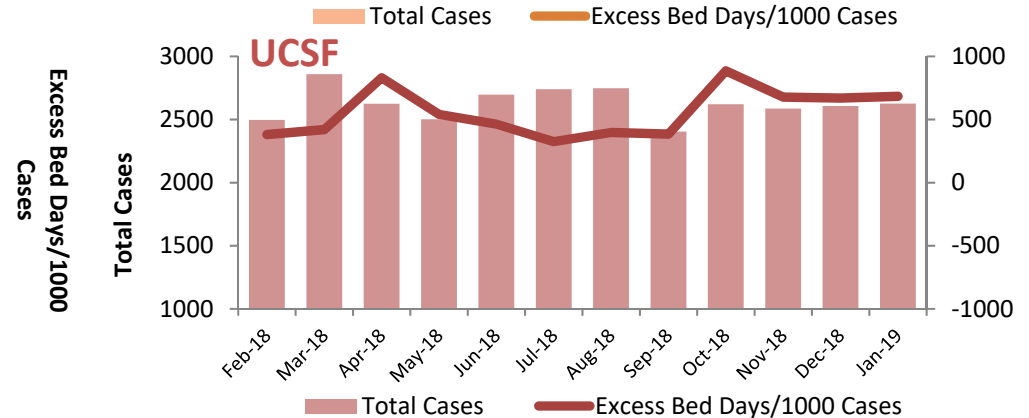
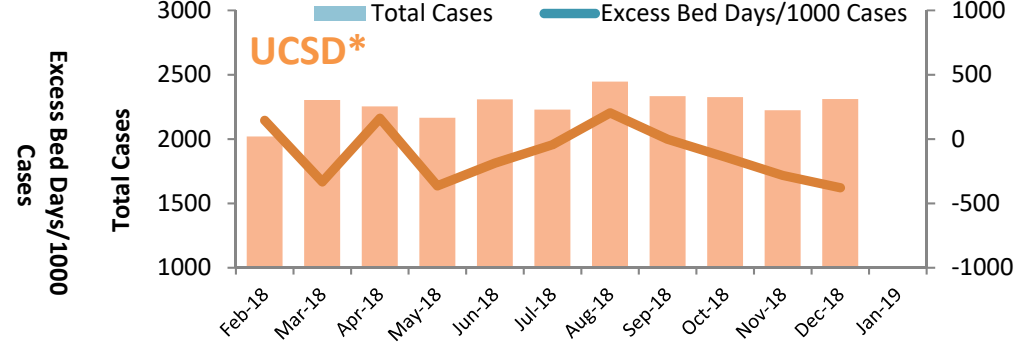
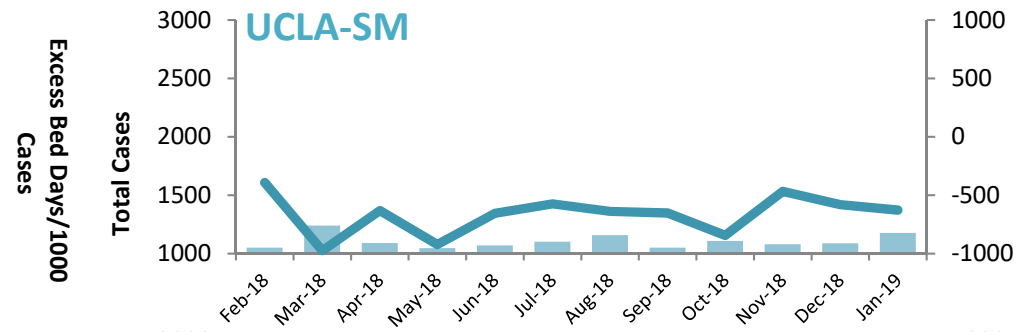
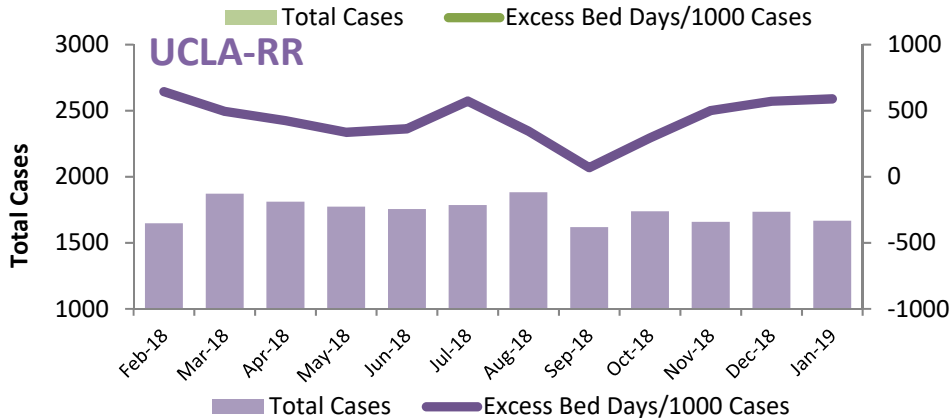
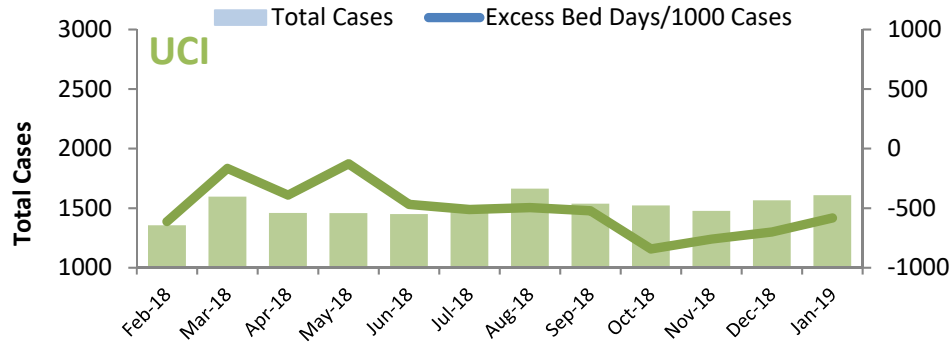
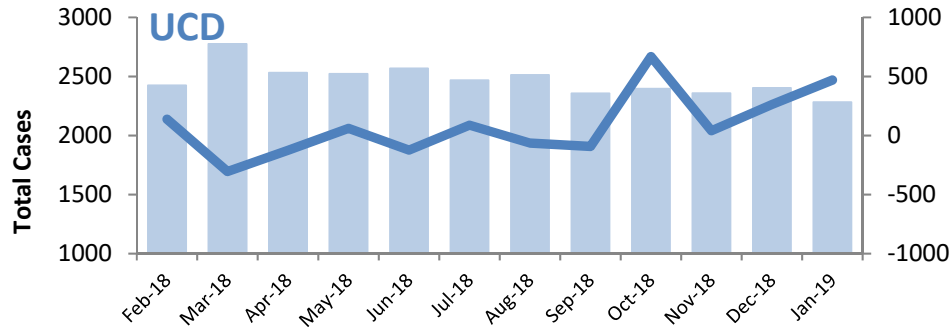
Inpatient Quality Metrics: Excess Days (cont'd)

Coordinating Care/Patient Flow

Readmissions

Patient Experience

Patient Safety



18 Prepared by UCLA – QIA
UCSD January 2019 data is not available in Vizient

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)

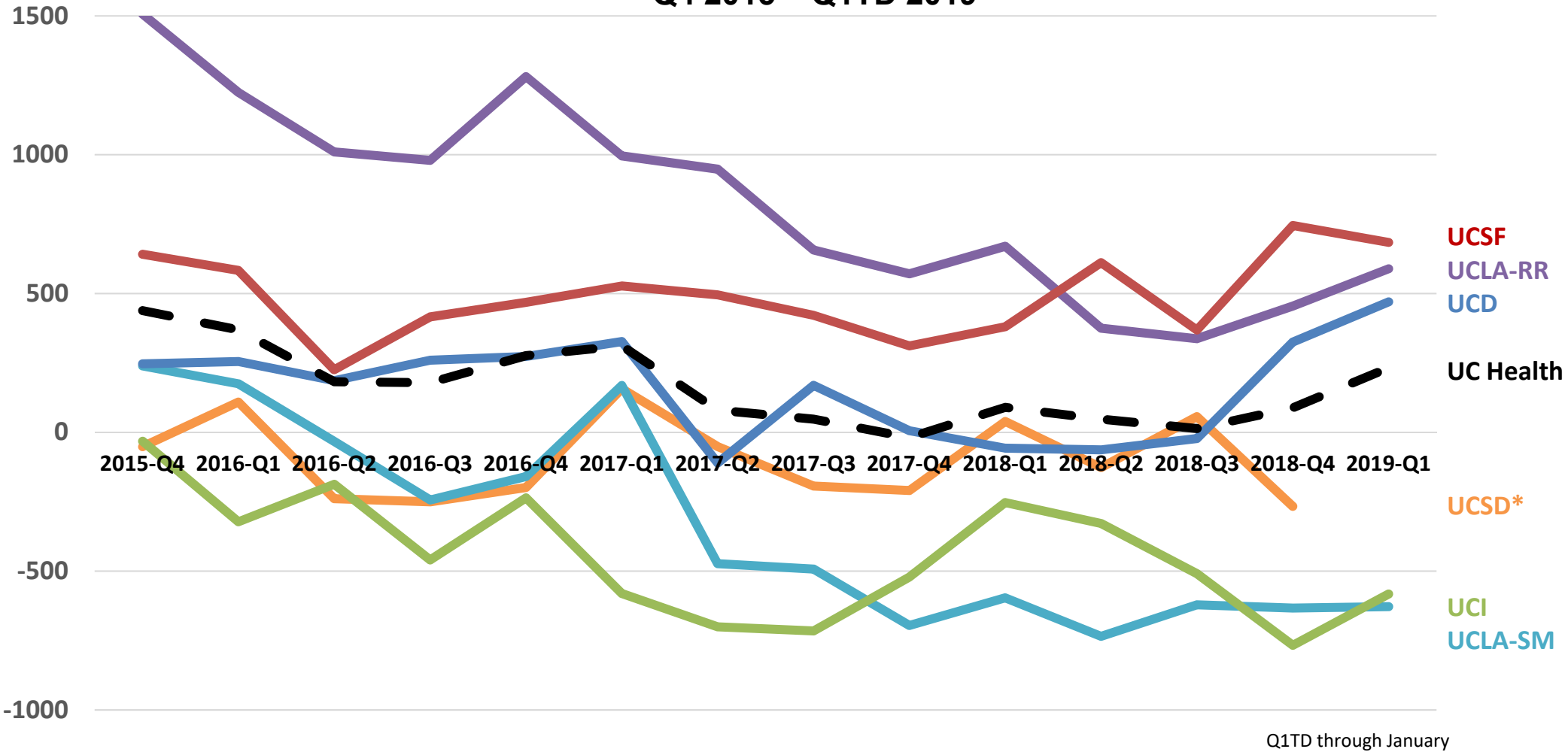
Coordinating Care/Patient Flow

Readmissions

Patient Experience

Patient Safety

Excess Bed Days per K Case by Institution by Quarter Q4 2015 – Q1TD 2019



19 Prepared by UCLA – QIA
UCSD January 2019 data is not available in Vizient



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)

HSC June 2019 Executive Summary: Ambulatory Quality Metrics

Executive Summary: PRIME (Q3 2018)

| | 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 | 2.1.5 - PC-02 Cesarean Section *lower is better | Goal Achieved |
|------------------|--|--|--|---------------------------------------|---|------------------|
| UC Davis | 19.49% (29.07%) | 76.69% (64.87%) | 97.84% (97.14%) | 81.26% (71.69%) | 24.94% (24.84%) | 4 of 5 |
| UC Irvine | 26.19% (29.07%) | 64.66% (62.79%) | 97.17% (97.14%) | 73.30% (68.93%) | 20.50% (22.00%) | 5 of 5 |
| UC Los Angeles | 11.54% (29.07%) | 60.90% (60.23%) | 93.92% (96.16%) | 71.51% (70.20%) | 24.79% (26.16%) | 4 of 5 |
| UC San Diego | 20.89% (29.07%) | 81.11% (64.87%) | 97.69% (97.14%) | 75.32% (71.69%) | 20.85% (22.00%) | 5 of 5 |
| UC San Francisco | 20.98% (29.07%) | 75.76% (64.87%) | 96.87% (96.53%) | 75.67% (71.69%) | 21.19% (22.00%) | 5 of 5 |
| UC Health | 20.12% | 69.90% | 95.87% | 75.73% | 21.74% | 23 of 25 |

Achieves or maintains (target%)

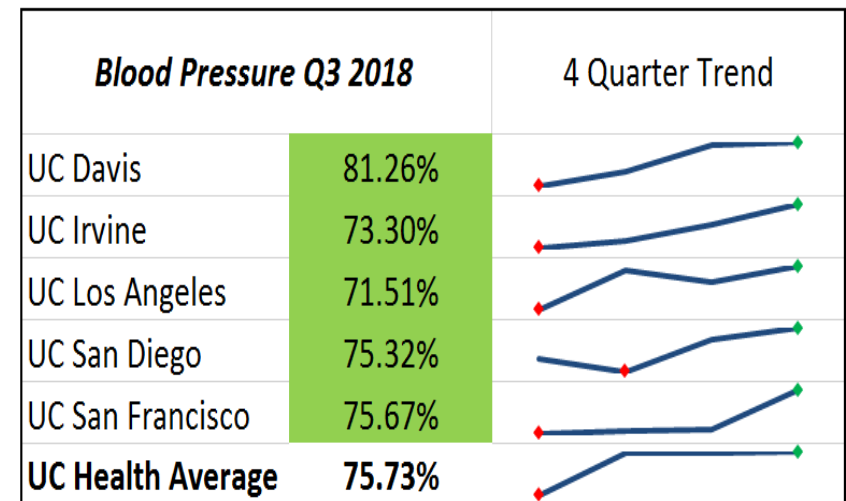
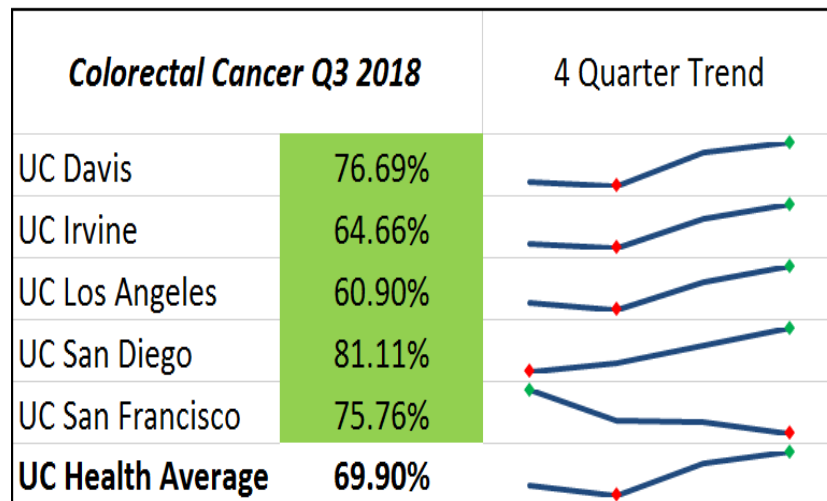
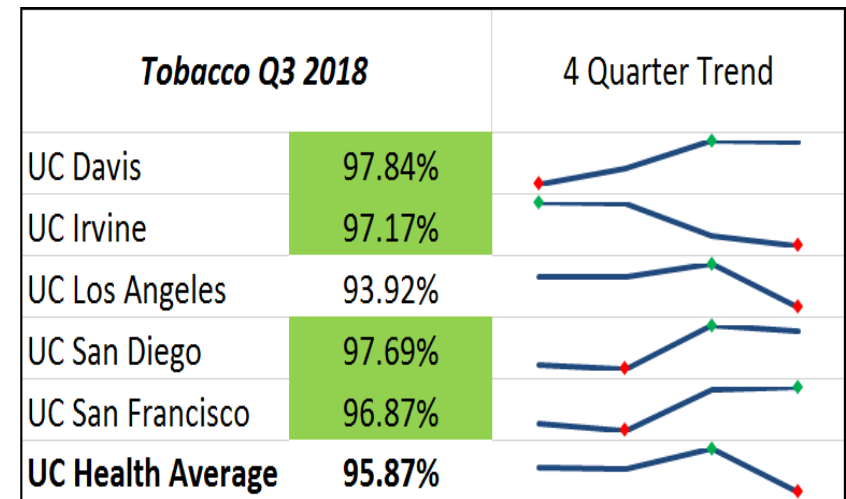
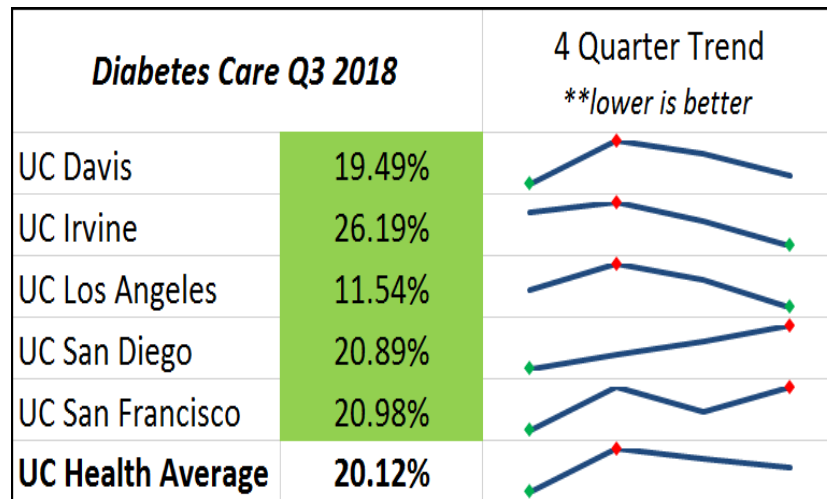
| UC Goal Achieved | | |
|------------------|----------|----------|
| Threshold | Target | Max |
| 16 of 25 | 18 of 25 | 20 of 25 |

Prepared by UCLA - QIA
21

Table shows raw scores (completed Q3 2018) 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.

UC HEALTH

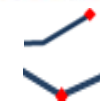
Summary and 4 Quarter Trend (through Q3 2018)



Achieves or maintains (target%)

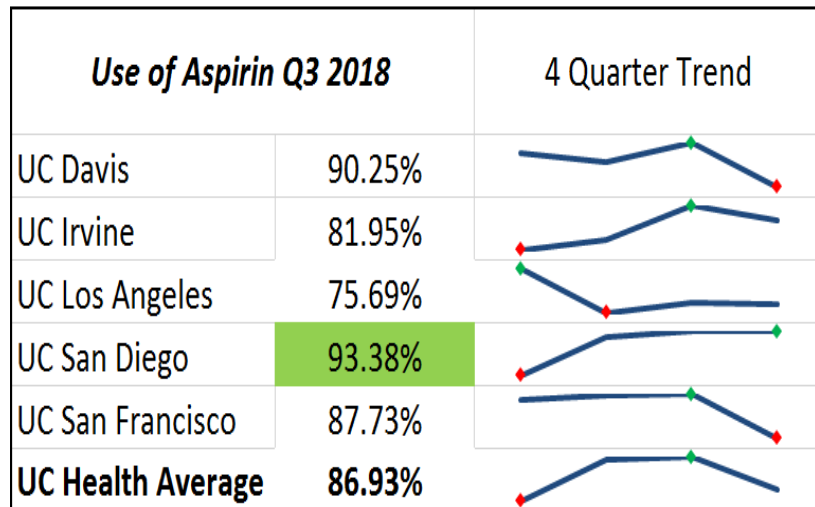
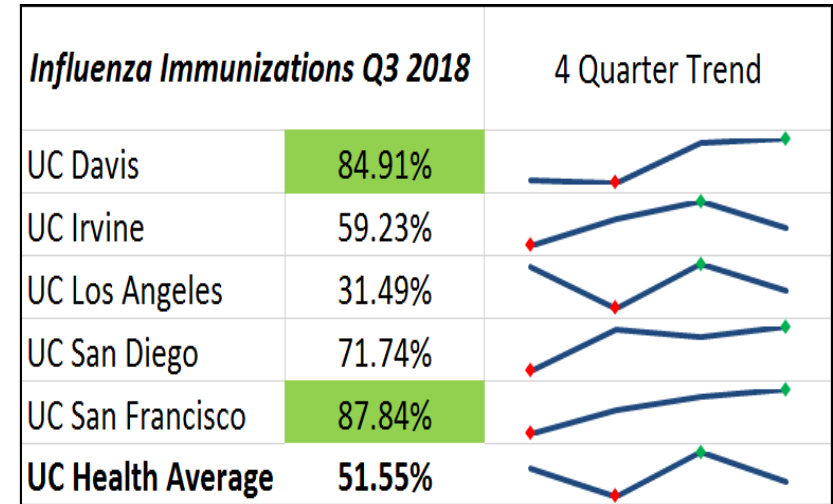
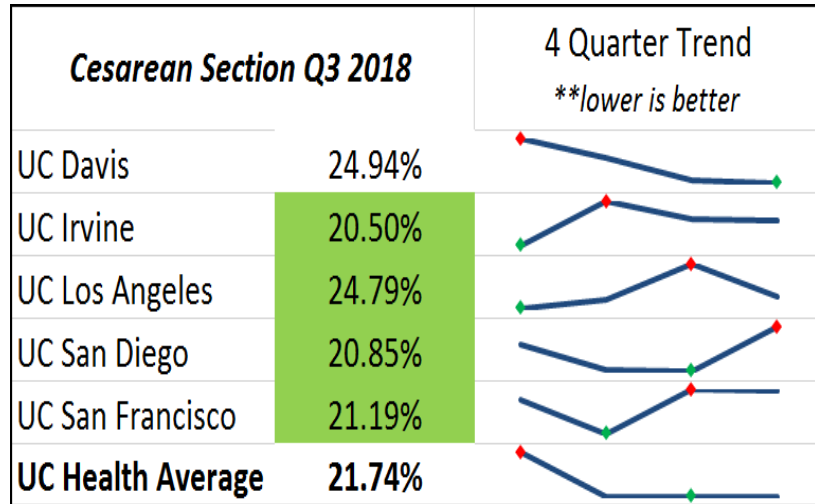


Green Marker = Best performing Quarter within 4 Quarter Timeframe



Red Marker = Worst performing Quarter within 4 Quarter Timeframe

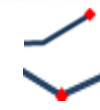
Summary and 4 Quarter Trend (through Q3 2018)



Achieves or maintains (target%)



Green Marker = Best performing Quarter within 4 Quarter Timeframe



Red Marker = Worst performing Quarter within 4 Quarter Timeframe

Appendix: Glossary

Glossary (1 of 5)

Mortality Index: (2017 Risk Adjustment Model (AMC), AHRQ Version 6.0.2)

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: (The UC Health System CEMRP Proposal FY2017 V2.4 documentation) (2017 Risk Adjustment Model (AMC), AHRQ Version 6.0.2)

- 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= $\text{Sum}\{\text{Observed LOS} - \text{Expected LOS}\}$ of all discharges/total number of discharges * 1,000

Case Mix Index: (2017 Risk Adjustment Model (AMC), AHRQ Version 6.0.2)

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.

Readmissions Index:(2017 Risk Adjustment Model (AMC), AHRQ Version 6.0.2)

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)

Glossary (2 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 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.

Glossary (3 of 5)

Hospital Acquired Pressure Ulcers (HAPU), PSI 03:

Risk Adjustment Model: 2017 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)

Glossary (4 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.

Glossary (5 of 5)

| 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 2017 | 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: <ul style="list-style-type: none"> • 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. |
| 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 |

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

PRIME Measure (non-CEMRP goal)

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
- 2.1.5 – PC-02 Cesarean Section

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

Goal Achieved:

THRESHOLD – Complete at least 16 out of 25 goals

TARGET – Complete at least 18 out of 25 goals

MAX – Complete at least 20 goals out of 25 goals

UC Goal Achieved

| Threshold | Target | Max |
|-----------|----------|----------|
| 16 of 25 | 18 of 25 | 20 of 25 |

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.

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 | <div style="background-color: #4CAF50; color: white; padding: 2px;"><i>90th percentile and above</i></div> <div style="background-color: #f0f0f0; padding: 2px;"><i>51st - 89th percentile</i></div> <div style="background-color: #F44336; color: white; padding: 2px;"><i>50th percentile and below</i></div> |
| % 30 day Readmissions | Vizient Group A Hospitals | |
| CLABSI | NHSN | <div style="background-color: #F44336; color: white; padding: 2px;"><i>95% CI that does not cross 1.00; above 1.00</i></div> <div style="background-color: #f0f0f0; padding: 2px;"><i>95% CI that crosses 1.00</i></div> <div style="background-color: #4CAF50; color: white; padding: 2px;"><i>95% CI that does not cross 1.00; below 1.00</i></div> |
| HCAHPS: Likelihood to Recommend | Press Ganey's National Client Database | <div style="background-color: #4CAF50; color: white; padding: 2px;"><i>90th percentile and above</i></div> <div style="background-color: #f0f0f0; padding: 2px;"><i>51st - 89th percentile</i></div> <div style="background-color: #F44336; color: white; padding: 2px;"><i>50th percentile and below</i></div> |
| HCAHPS: Communication with Physicians | Press Ganey's National Client Database | |
| HCAHPS: Communication with Nurses | Press Ganey's National Client Database | |