



50 TOP CARDIOVASCULAR HOSPITALS®

2025

National Benchmarks

Prepared for:

Sample Hospital

City, ST

CCN: 999999

Report Methodology Notes

COMPARISON GROUPS

So that we can compare your hospital with others most like it, we assign each hospital to one of three comparison groups according to size, teaching status, and residency/fellowship program involvement.

- Teaching hospitals with cardiovascular residency programs (CARDIO TEACHING).
- Teaching hospitals without cardiovascular residency programs (TEACHING).
- Community hospitals (COMMUNITY).

Comparison Group	Number of Winners
CARDIO TEACHING	20
TEACHING	20
COMMUNITY	10

BENCHMARK AND PEER GROUPS

In Premier's 50 Top Cardiovascular Hospitals® study, we select 50 **benchmark hospitals** (winners) based on overall performance in the most recent year of data available. Winners are selected by comparison group, as indicated in the table above.

Peer group hospitals include all U.S. hospitals in our study database, *excluding* benchmark hospitals.

In this report, we provide two types of comparisons: current year performance and multi-year (trend) performance:

- Current: Profiled hospital versus comparison group Benchmark and Peer hospitals.
- Trend: Profiled hospital versus comparison group Peer hospitals.

INCLUDED PATIENT GROUPS

The focus of the study is on hospitals that offer both medical and surgical treatment options for patients with two of the most common cardiovascular conditions — coronary atherosclerosis and heart failure. We include data for acute myocardial infarction (AMI), heart failure (HF), coronary artery bypass graft (CABG) and primary percutaneous coronary intervention (PCI) patients in our analysis. Patients are assigned to mutually exclusive groups, as follows:

- CABG patients (primary or secondary).
- PCI patients (excludes open chest coronary artery angioplasty).
- AMI patients (restricted to non-surgical).
- HF patients (restricted to non-surgical).

POA METHODOLOGY NOTES

Present on admission (POA) coding is used in risk models for inpatient mortality, complications, average LOS, and cost per case. Due to increasing numbers of diagnoses with invalid POA code '0', we made the following adjustments to the MEDPAR data:

- 1) Original, valid (Y, N, U, W, or 1) POA codes assigned to diagnoses were retained.
- 2) Where a POA code of '0' appeared, we took the next four steps:
 - a. We treated all principal diagnoses (dx) as 'present on admission'.
 - b. We treated all secondary dx on the CMS exempt list as 'exempt'.
 - c. We treated secondary diagnoses for which the POA code 'Y' or 'W' appeared more than 50 percent of the time in the all-payer database, as 'present on admission'.
 - d. All others were treated as 'not present'.

RANK WEIGHTS AND PUBLIC DATA SOURCES

Ranked Performance Metric	Rank Wt	Source
Risk-Adjusted IP Mortality (AMI, HF, CABG, PCI)	½ ea	MEDPAR FFY ¹ 2018-2023
Risk-Adjusted Complications (CABG, PCI)	¼ ea	MEDPAR FFY ¹ 2018-2023
30-Day Mortality Rate (AMI, HF, CABG)	⅙ ea	CMS Care Compare: 3-yr datasets ending Jun 30 in 2019*, 2021, 2022, 2023
30-Day Readmission Rate (AMI, HF, CABG)	⅙ ea	CMS Care Compare: 3-yr datasets ending Jun 30 in 2019*, 2021, 2022, 2023
Severity-Adjusted ALOS (AMI, HF, CABG, PCI)	¼ ea	MEDPAR FFY ¹ 2019-2023
Wage- and Severity-Adjusted Average Cost per Case (AMI, HF, CABG, PCI)	¼ ea	MEDPAR FFY ¹ 2019-2023
30-Day Episode Payment (AMI, HF)	½ ea	CMS Care Compare: 3-yr datasets ending Jun 30 in 2019*, 2021, 2022, 2023
HCAHPS	½	CMS Care Compare: FFY 2019, 2021, 2022, 2023, July 1-Dec 31, 2020**

¹Federal Fiscal Year is Oct 1 through Sep 30.
^{*}Two data points end in 2019 due to CMS removal of Q1 and Q2 2020 data from measure data sets, 2 ½ years of data in 2020 data point.
^{**}2020 data point has 6 months of data due to CMS removal of Q1 and Q2 2020 data from measure data sets.

FOR MORE INFORMATION

Refer to the 50 Top Cardiovascular Hospitals® Annual Report and 100 Top Hospitals® Program Methodology Guide for full details on performance measures, methods used and winner list at www.100tophospitals.com.

50 Top Cardiovascular Hospitals® Performance Matrix

INTEGRATED HOSPITAL PERFORMANCE COMPARISON

Premier's 50 Top Cardiovascular Hospitals® Performance Matrix, in a single view, compares your hospital's current level of performance achievement and five-year rate of improvement (trend) in percentiles. These percentiles are based on your hospital's rank, overall and by measure, within your comparison group. This integrated performance comparison provides insight into the success of hospital performance improvement strategies relative to other similar hospitals.

INTERPRETING HOSPITAL PERFORMANCE

Overall hospital performance is a composite score based on the sum of the ranks of individual measures. This sum is used to rank your hospital within your comparison group. The matrix "Overall" dot integrates your national rank percentile for current overall performance with your national rank percentile for multi-year (trend) overall rate of improvement. Rank percentiles for each individual measure are also graphed. Measures may fall into any one of four quadrants: Declining (lower left), Improving (upper left), Leading (upper right) or At Risk (lower right).

Premier's 50 Top Cardiovascular Hospitals® award winners are selected based on highest overall **current** performance. Winners fall into either the "Leading" or "At Risk" quadrants, depending on their multi-year rate of improvement performance. Those with a high rate of improvement will be "Leading" performers, and those who have fallen behind their comparison group median may be "At Risk" for falling behind peers in the future, if low rates of improvement continue.

Overall hospital performance on the multi-year (trend) rate of improvement is also a composite score based on the sum of the weighted ranks of individual measures on improvement. This sum is used to rank your hospital within your comparison group and produce your trend percentile.

PERFORMANCE MATRIX NOTES

Overall and HCAHPS Dots

Due to the number of individual measures in this study, two matrix graphs are provided to better visualize the performance of each measure. One graph shows the medical patient group measures (AMI and HF) and the other shows the surgical patient group measures (CABG and PCI). **However**, the "Overall" dot on each matrix graph represents the hospital overall current and trend performance based on **all** measures and patient groups, combined (AMI, HF, CABG, PCI). Therefore, its placement on both graphs is the same.

The HCAHPS measure is based on the top-box percent of the "Overall Rating" question, "How do patients rate the hospital overall?" This measure is at the hospital level (includes all patients) and not restricted to just the four patient groups. Therefore, the dot is included on both matrix graphs and its placement on both graphs is the same.

Missing Matrix Graphs

The matrix graphs will be missing if your hospital was excluded from the study or had too few years of trend data for all measures. A minimum of four years of data, including the current year, are required.

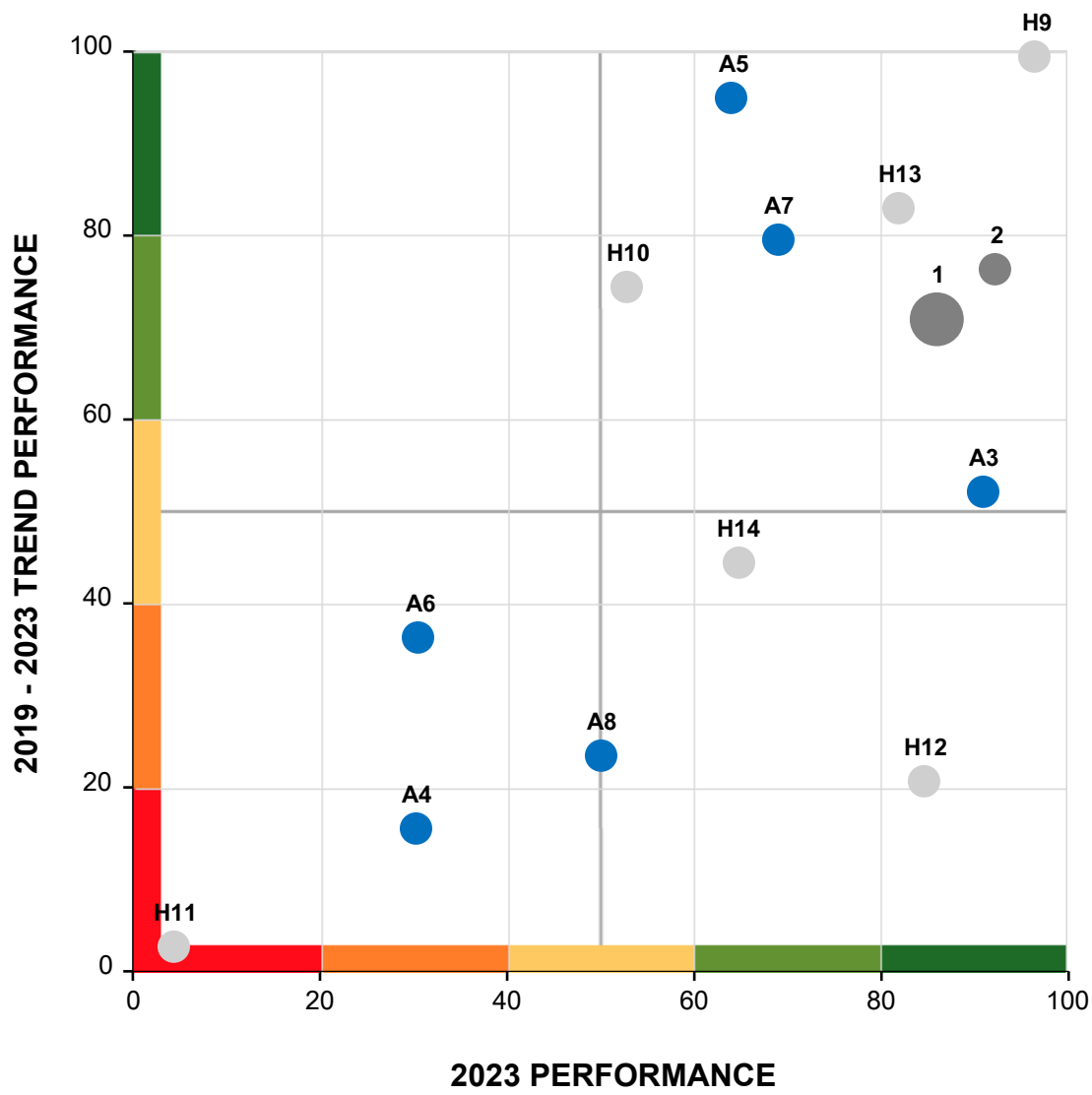
Missing Measure Dots

A measure dot will be missing from the matrix if your hospital had too few usable data points (after outlier exclusions) to calculate a regression line t-statistic, which is the ranked variable. If this occurs, the dot for the affected measure(s) will be missing on the matrix graph **and** there will be no "Overall" dot. In addition, data points will be missing from the affected trend measure graphs. Notes on excluded data points are in the Appendix page following the Performance Matrix graphs.

50 Top Cardiovascular Hospitals[®] Performance Comparison Group

Profiled hospital compared to Community hospitals

AMI and HF Patients: 2023 Performance and Five-Year Rate of Improvement Matrix



DATA POINT KEY

- 1** OVERALL*
- 2** HCAHPS*
- A3** AMI IP Mortality
- A4** AMI 30-Day Mort
- A5** AMI 30-Day Readmit
- A6** AMI Avg LOS
- A7** AMI Cost per Case
- A8** AMI 30-Day Payment

- H9** HF IP Mortality
- H10** HF 30-Day Mort
- H11** HF 30-Day Readmit
- H12** HF Avg LOS
- H13** HF Cost per Case
- H14** HF 30-Day Payment

QUINTILES

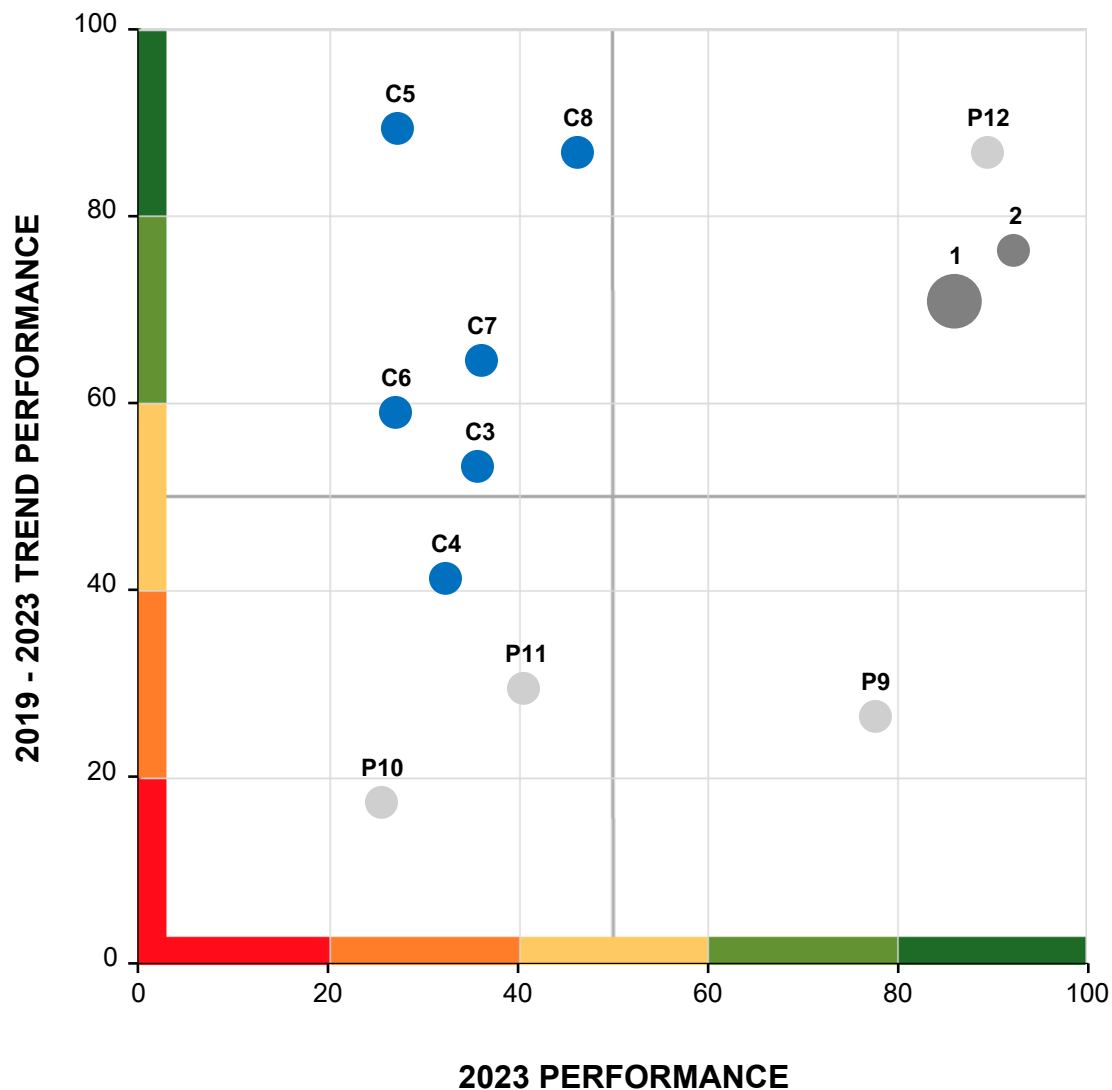
- 80 TO 100
- 60 TO 80
- 40 TO 60
- 20 TO 40
- 0 TO 20

*Overall measure includes all 4 patient groups of measures: AMI, HF, CABG, PCI; HCAHPS measure is at hospital level.

PROFILED HOSPITAL compared to:

2023 Community hospitals: n = 287
 2019 - 2023 Community hospitals: n = 273

CABG and PCI Patients: 2023 Performance and Five-Year Rate of Improvement Matrix



DATA POINT KEY

- 1** OVERALL*
- 2** HCAHPS*
- C3** CABG IP Mortality
- C4** CABG Complications
- C5** CABG 30-Day Mort
- C6** CABG 30-Day Readmit
- C7** CABG Avg LOS
- C8** CABG Cost per Case
- P9** PCI IP Mortality
- P10** PCI Complications
- P11** PCI Avg LOS
- P12** PCI Cost per Case

QUINTILES

- 80 TO 100
- 60 TO 80
- 40 TO 60
- 20 TO 40
- 0 TO 20

*Overall measure includes all 4 patient groups of measures: AMI, HF, CABG, PCI; HCAHPS measure is at hospital level.

PROFILED HOSPITAL compared to:

2023 Community hospitals: n = 287
2019 - 2023 Community hospitals: n = 273

Performance and Improvement – Rank Percentiles Graphs

UNDERSTANDING THE GRAPHS

2023 Performance Rank Percentiles

This bar graph shows your hospital's performance on each measure and overall, in the most current year of data we analyzed, reported as rank percentiles. The overall rank percentile is based on the sum of your individual measure ranks, and then re-ranked by comparison group. The overall rank sum is then converted into a percentile. The overall rank percentile is not the average of the individual measure percentiles. Individual measure percentiles are calculated by dividing your measure rank within your comparison group by the number of hospitals in the group and multiplying by 100.

Premier's 2025 50 Top Cardiovascular Hospitals® Benchmark Hospitals (winners) were selected based only on 2023 performance.

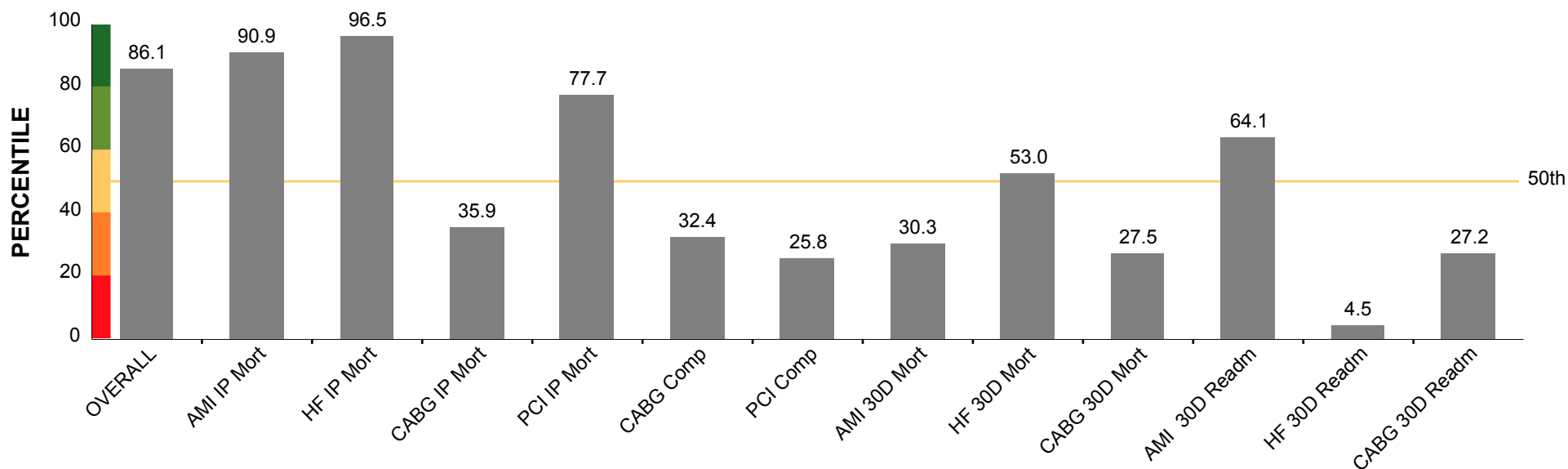
2019 - 2023 Rate of Improvement Rank Percentiles

This bar graph shows your hospital's rate of improvement (trend) on each measure and overall, reported as rank percentiles. Both the overall rank percentile and the individual measure percentiles are calculated as described above, but using trend measure data.

Measures with rank percentiles above the median are likely to move ahead of peers on performance in the future if those rates of improvement have continued.

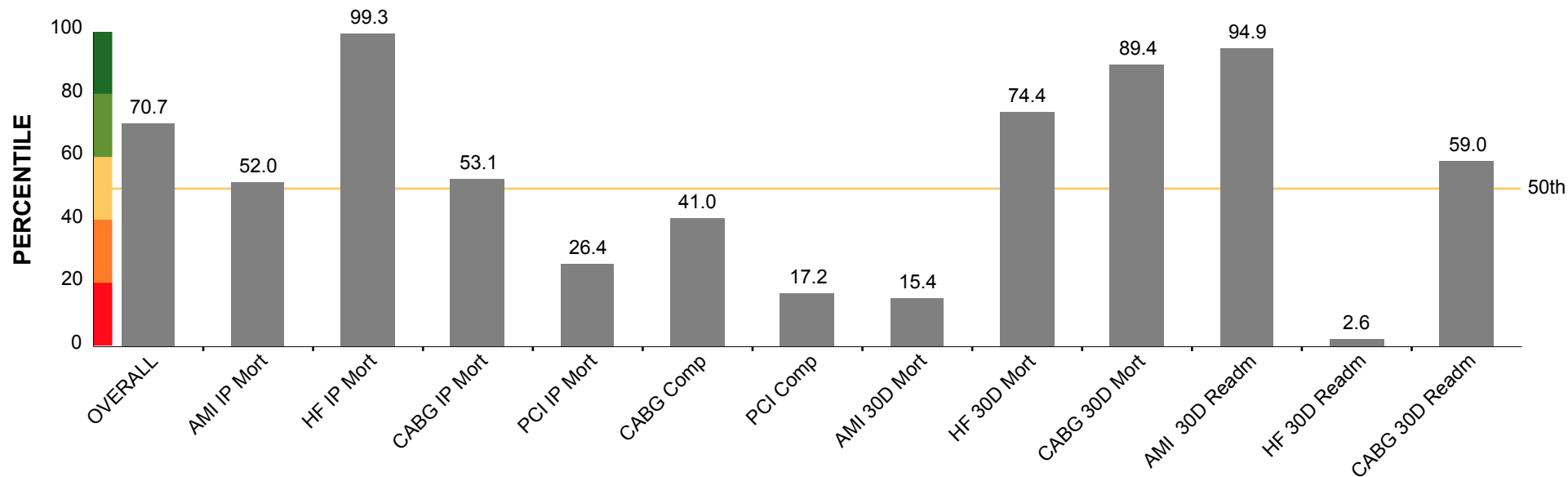
Hospitals with overall and measure-specific rank percentiles below the median are likely to fall behind peers on performance in the future if those low rates of improvement have continued. Winners with a low overall rate of improvement are at risk for dropping out of the winner circle entirely.

2023 Clinical Performance Rank Percentiles



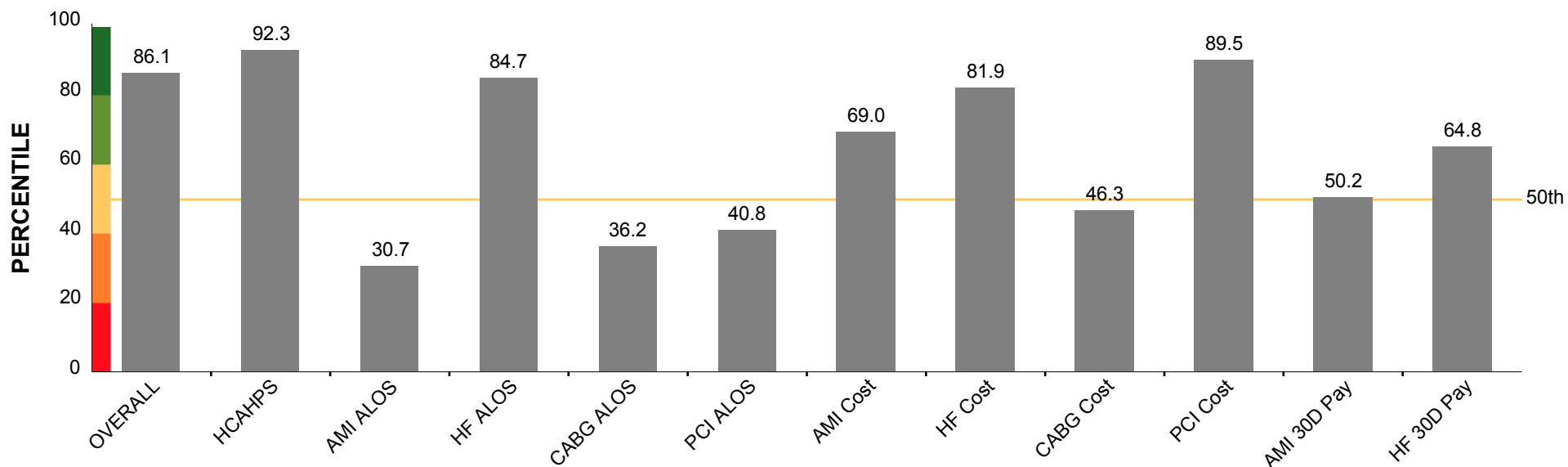
Profiled hospital compared to Community hospitals: n = 287

2019 - 2023 Clinical Performance Rank Percentiles



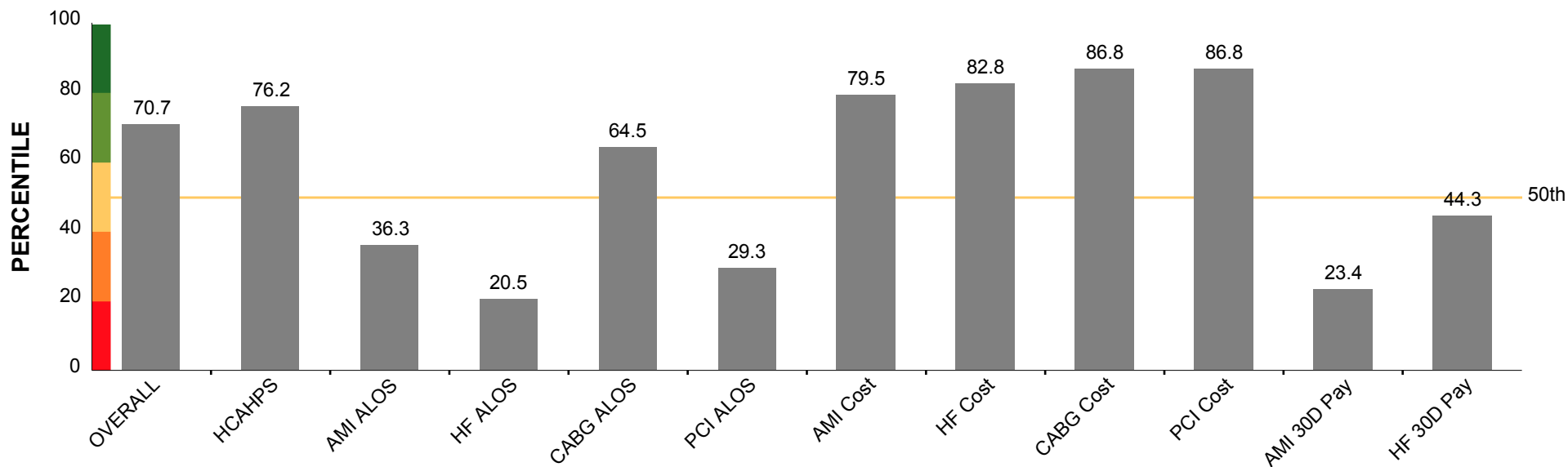
Profiled hospital compared to Community hospitals: n = 273

2023 Operational Performance Rank Percentiles



Profiled hospital compared to Community hospitals: n = 287

2019 - 2023 Operational Performance Rank Percentiles



Profiled hospital compared to Community hospitals: n = 273

50 Top Cardiovascular Hospitals® Current Profile Notes

CURRENT PROFILE

Premier's 50 Top Cardiovascular Hospitals® winners are selected based on performance in the most current year of the study (Current Profile).

The Current Profile analyzes your hospital's performance in the most recent year available, using a national balanced scorecard of critical performance metrics:

- Risk-Adjusted Inpatient Mortality Index (AMI, HF, PCI, CABG)
- Risk-Adjusted Complications Index (PCI, CABG)
- 30-Day Mortality Rate (AMI, HF, CABG)
- 30-Day Readmission Rate (AMI, HF, CABG)
- Severity-Adjusted Average Length of Stay (AMI, HF, PCI, CABG)
- Wage- and Severity-Adjusted Average Cost per Case (AMI, HF, PCI, CABG)
- 30-Day Episode Payment (AMI, HF)
- HCAHPS Top-Box Percent (Overall Hospital Rating)

Using this Profile, you can identify your hospital's level of performance achievement by individual measure and overall and target higher performance. In addition, the profile shows the median level of achievement of national award-winning (benchmark) hospitals and the median performance of non-winning (peer) hospitals in your comparison group.

UNDERSTANDING THE GRAPHS

Profiled Hospital Compared with Benchmark and Peer

The hospital's current performance is represented by individual bar graphs for each of the performance measures included in the 50 Top Cardiovascular Hospitals® balanced scorecard, organized by patient group. Each bar graph shows performance achievement levels for three groups: your hospital, the benchmark group median, and the peer group median.

Binomial Measures

The graphs for the binomial measures – inpatient mortality and complications – have a statistical significance note that indicates whether your hospital's performance is better than expected, as expected, or worse than expected (99% confidence).

For binomial measures, we rank your hospital on the z-score calculated from your observed and normalized expected values. Z-scores take statistical significance into account. If your note indicates your performance is "as expected," your performance is average regardless of how high or low the index value.

50 Top Cardiovascular Hospitals® Current Profile Notes

USE OF MEDIAN VALUES

When individual measures are missing or the reported value is insufficiently precise (patient count too low), we substitute class median values so your hospital can be ranked. This was done only for the following measures:

- 30-Day Mortality Rates (AMI, HF, CABG)
- 30-Day Readmission Rates (AMI, HF, CABG)

Note: Hospitals missing all 30-day mortality rates or all 30-day readmission rates are excluded from the study.

MISSING OR INCALCULABLE MEASURE VALUES

- No bar is displayed for your hospital if values were not reported or are incalculable.
- If a hospital was excluded from the study for missing or incalculable performance measures, the details are noted at the end of the graph section on the Current Profile Exclusions page.

WINNER EXCLUSIONS

A hospital was not eligible to be a winner if one of the following applied in the most current year:

- Statistically poor performance on any inpatient mortality or complications measure (99% confidence interval).
- One or more outliers for the cost per case measures (IQR methodology).
- Less than 11 cases in any of the patient groups (AMI, HF, CABG, PCI) in the most current year.
- One or more 30-day mortality measures missing.
- One or more 30-day readmission measures missing.

MEASURES FOR INFORMATION ONLY

We continue to include measures for information only in this report, to allow you to compare your performance relative to your peer and benchmark groups. These measures are **not** included in your overall performance rating and are not used to select the 50 Top award-winning hospitals. You will find these measures at the end of the report.

MORE INFORMATION ON STUDY FINDINGS AND METHODOLOGIES

The 50 Top Cardiovascular Hospitals® Annual Report provides key findings of the study results at the benchmark and peer hospital level for each comparison group as well as for all in-study hospitals. The 100 Top Hospitals® Program Methodology Guide provides details on the study methodology and the calculation of all performance measures. These documents can be found on the Premier 100 Top Hospitals® website: www.100tophospitals.com.

50 Top Cardiovascular Hospitals® Trend Profile Notes

TREND PROFILE

Premier's 50 Top Cardiovascular Hospitals® Trend analysis is intended to provide insight into progress toward performance improvement. Its results are **not** used to select winners.

The 50 Top Cardiovascular Hospitals® Trend Profile analyzes your hospital's rate of performance improvement over five years, using a balanced scorecard of critical performance metrics:

- Risk-Adjusted Inpatient Mortality Index (AMI, HF, PCI, CABG)
- Risk-Adjusted Complications Index (PCI, CABG)
- 30-Day Mortality Rate (AMI, HF, CABG)
- 30-Day Readmission Rate (AMI, HF, CABG)
- Severity-Adjusted Average Length of Stay (AMI, HF, PCI, CABG)
- Wage- and Severity-Adjusted Average Cost per Case (AMI, HF, PCI, CABG)
- 30-Day Episode Payment (AMI, HF)
- HCAHPS Top-Box Percent (Overall Hospital Rating)

Minimum Data Requirements for Ranking

We require a minimum of four (4) valid data points for each measure (including the most current year) to include a hospital in the Trend Profile ranking.

UNDERSTANDING THE GRAPHS

Multi-Year Trend Graphs – Profiled Hospital and Comparison Group Quintiles

Your hospital's rate of improvement for each of the individual performance measures is represented by graphs showing your hospital's actual data points for each year. These data points are displayed against a background of quintile ranges for the data points of all hospitals in your comparison group. Each range is color-coded to indicate level of performance, from dark green (best quintile) to red (worst quintile). You can use these graphs to see whether you are moving ahead of or falling behind other similar hospitals.

A statistical significance note is displayed for each graph, indicating whether your performance is **improving, not changing, or worsening** over the five years we analyzed (99 percent confidence for mortality and complications; 95 percent for all other measures). We rank each measure using the t-statistic of the regression line through the data points (slope/S.E.).

Use of Median Values

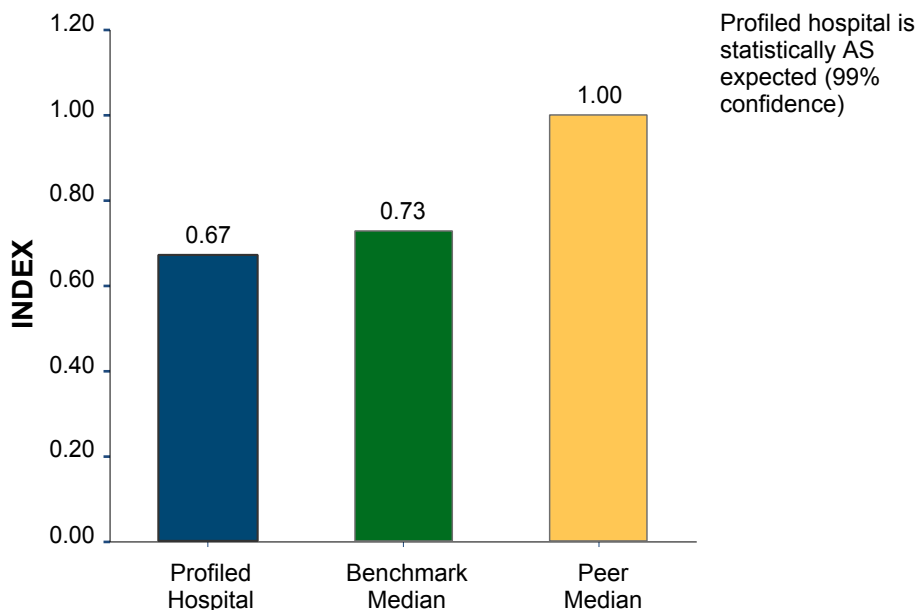
For each data year, when individual 30-day mortality or readmission measures are missing, the median value of your comparison group is substituted in order to display the 30-day value. However, if ALL individual 30-day mortality or readmission measures are missing for that data year, then median values are not used, and the data point will not be displayed on the color quintile graphs.

Data Point Time Periods

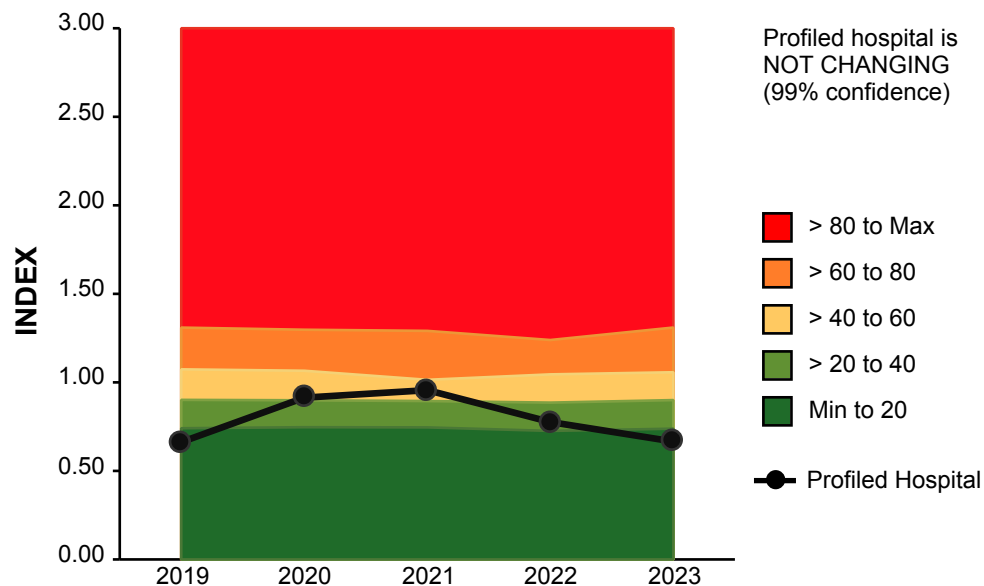
Data points on the graphs – labeled 2019, 2020, 2021, 2022, 2023 – represent various data periods. See Report Methodology Notes page, Rank Weights and Public Data Sources table for more details.

AMI Patients: Risk-Adjusted Inpatient Mortality Index

2023 IP MORTALITY PERFORMANCE



2019 - 2023 IP MORTALITY TREND



▼ Desired Direction

Benchmark hospitals are the winners in the comparison group: n = 10

Peer hospitals are the non-winners in the comparison group: n = 277

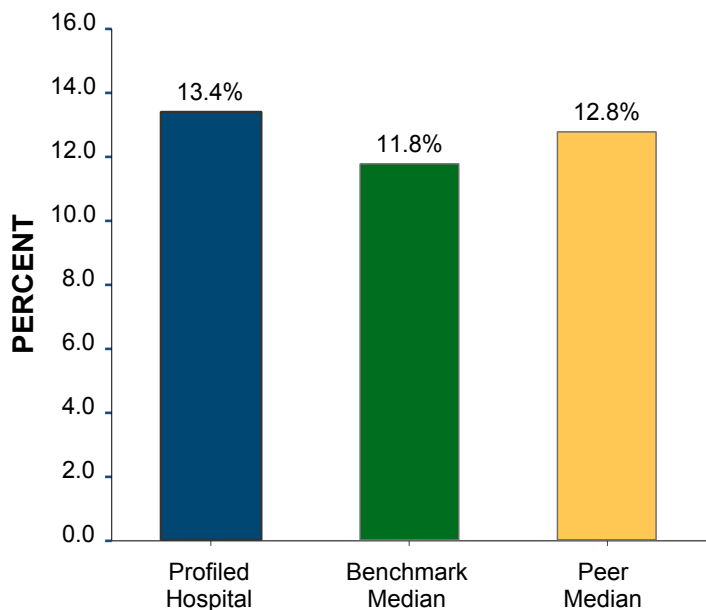
Note: 2023 values on the current and trend graphs will not match due to different norm factors used to normalize the expected values.

Hospital performance compared to peer hospital quintiles n = 273

PERCENTILE POINTS ►		HOSPITAL COMPARISON GROUP				PROFILED HOSPITAL		
		20th	40th	60th	80th	Value	Upper CI	Lower CI
YEARS	2019	0.74	0.90	1.07	1.31	0.66	1.99	0.13
	2020	0.75	0.90	1.07	1.30	0.91	2.29	0.26
	2021	0.75	0.89	1.01	1.29	0.96	2.15	0.33
	2022	0.73	0.89	1.05	1.24	0.78	1.75	0.27
	2023	0.74	0.90	1.06	1.31	0.67	1.57	0.21

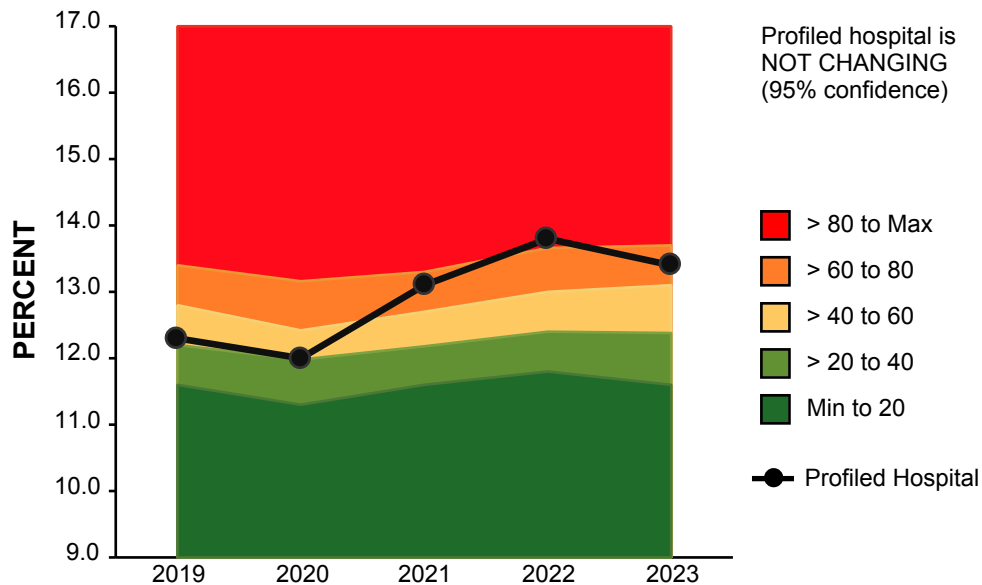
AMI Patients: 30-Day Mortality Rate

2023 30D MORTALITY PERFORMANCE



No different than CMS national rate (95% confidence)

2019 - 2023 30D MORTALITY TREND



Profiled hospital is NOT CHANGING (95% confidence)

▼ Desired Direction

Benchmark hospitals are the winners in the comparison group: n = 10

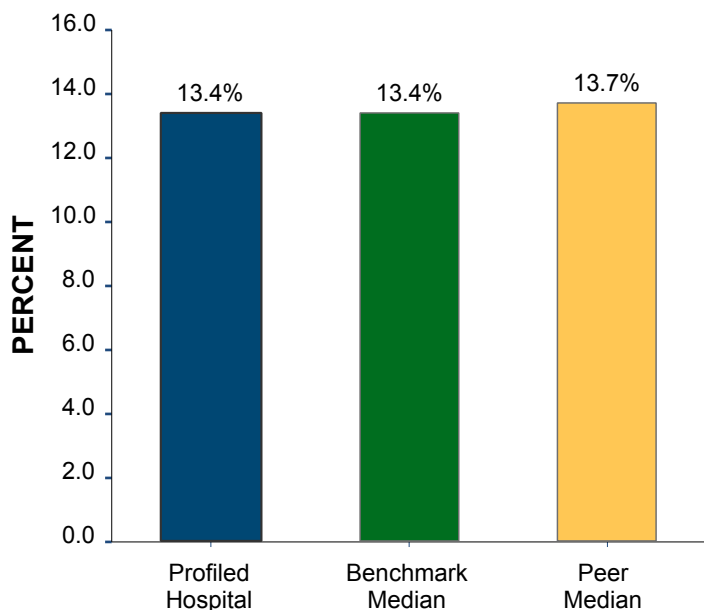
Peer hospitals are the non-winners in the comparison group: n = 277

Hospital performance compared to peer hospital quintiles n = 273

PERCENTILE POINTS ►		HOSPITAL COMPARISON GROUP				PROFILED HOSPITAL
		20th	40th	60th	80th	Value
YEARS	2019	11.6	12.2	12.8	13.4	12.3
	2020	11.3	12.0	12.4	13.2	12.0
	2021	11.6	12.2	12.7	13.3	13.1
	2022	11.8	12.4	13.0	13.7	13.8
	2023	11.6	12.4	13.1	13.7	13.4

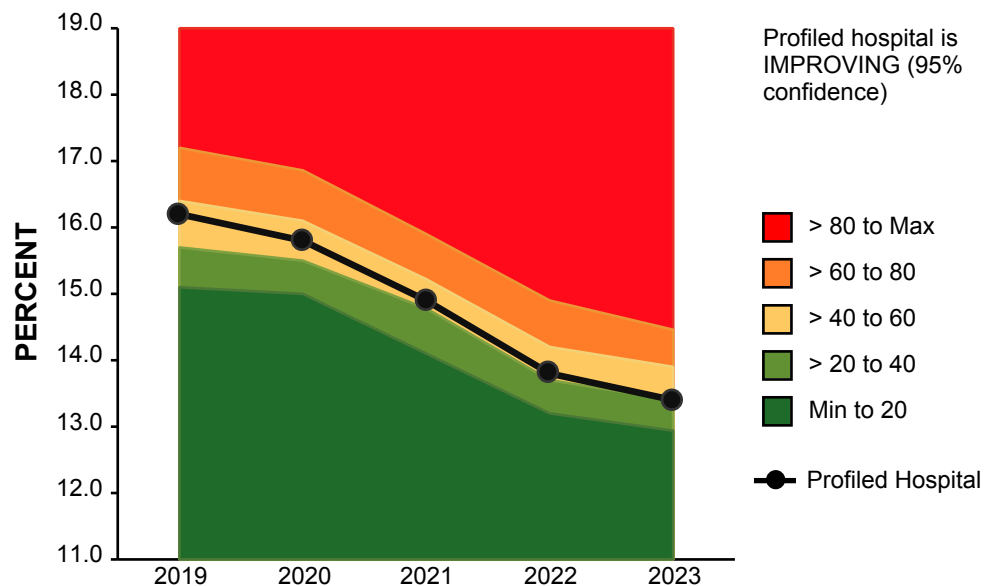
AMI Patients: 30-Day Readmission Rate

2023 30D READMISSION PERFORMANCE



No different than CMS national rate (95% confidence)

2019 - 2023 30D READMISSION TREND



▼ Desired Direction

Benchmark hospitals are the winners in the comparison group: n = 10

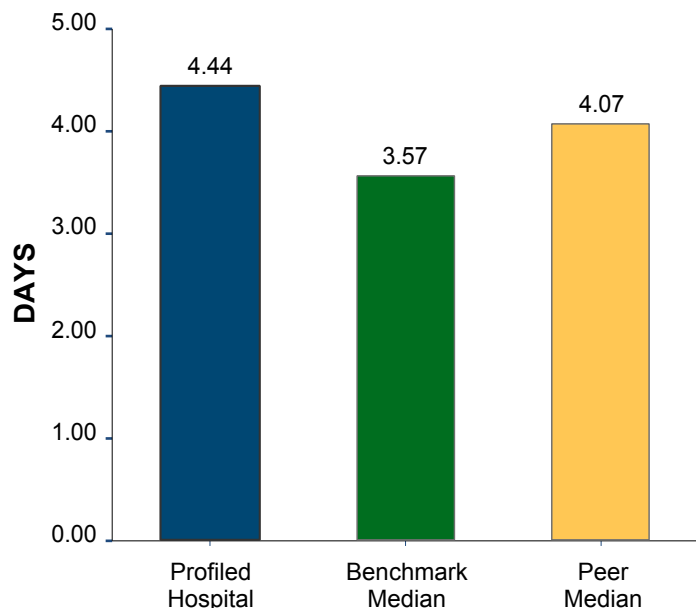
Peer hospitals are the non-winners in the comparison group: n = 277

Hospital performance compared to peer hospital quintiles n = 273

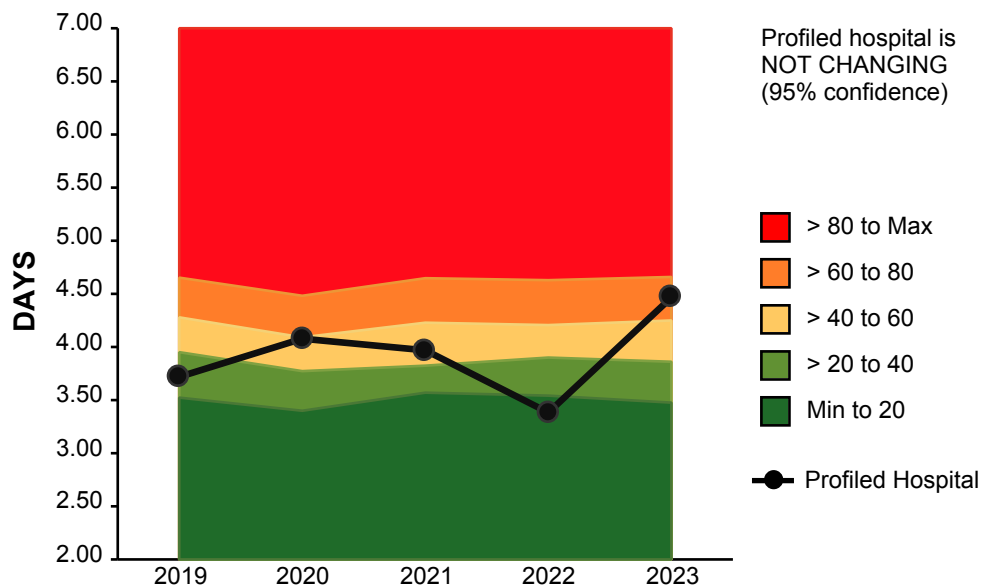
PERCENTILE POINTS ►		HOSPITAL COMPARISON GROUP				PROFILED HOSPITAL
		20th	40th	60th	80th	Value
YEARS	2019	15.1	15.7	16.4	17.2	16.2
	2020	15.0	15.5	16.1	16.9	15.8
	2021	14.1	14.8	15.2	15.9	14.9
	2022	13.2	13.7	14.2	14.9	13.8
	2023	12.9	13.4	13.9	14.5	13.4

AMI Patients: Severity-Adjusted Average Length of Stay (ALOS)

2023 ALOS PERFORMANCE



2019 - 2023 ALOS TREND



▼ Desired Direction

Benchmark hospitals are the winners in the comparison group: $n = 10$

Peer hospitals are the non-winners in the comparison group: $n = 277$

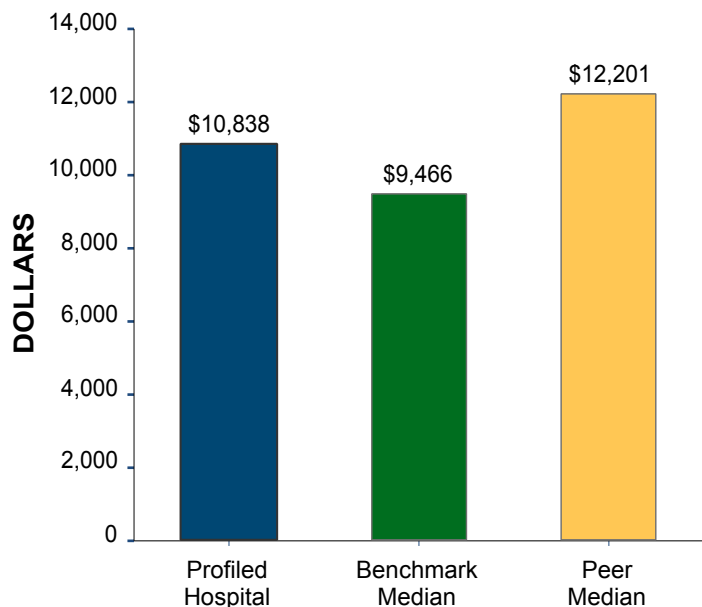
Note: 2023 values on the current and trend graphs will not match due to different norm factors used to normalize the expected values.

Hospital performance compared to peer hospital quintiles $n = 273$

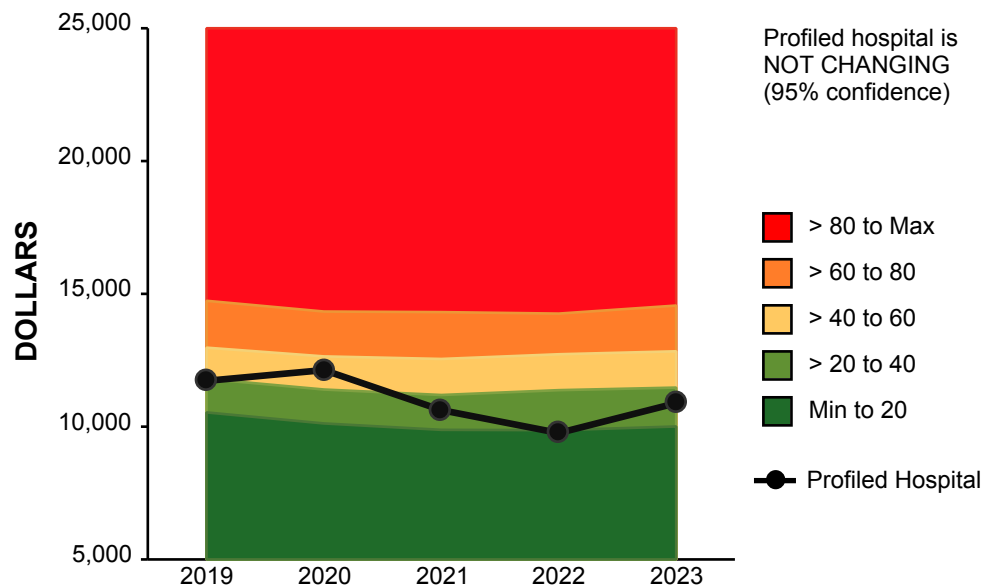
PERCENTILE POINTS ►		HOSPITAL COMPARISON GROUP				PROFILED HOSPITAL
		20th	40th	60th	80th	Value
YEARS	2019	3.52	3.95	4.28	4.65	3.72
	2020	3.40	3.77	4.09	4.48	4.08
	2021	3.57	3.82	4.23	4.65	3.97
	2022	3.54	3.90	4.21	4.63	3.38
	2023	3.48	3.86	4.25	4.66	4.47

AMI Patients: Wage- and Severity-Adjusted Cost per Case

2023 COST PER CASE PERFORMANCE



2019 - 2023 COST PER CASE TREND



▼ Desired Direction

Benchmark hospitals are the winners in the comparison group: n = 10

Peer hospitals are the non-winners in the comparison group: n = 277

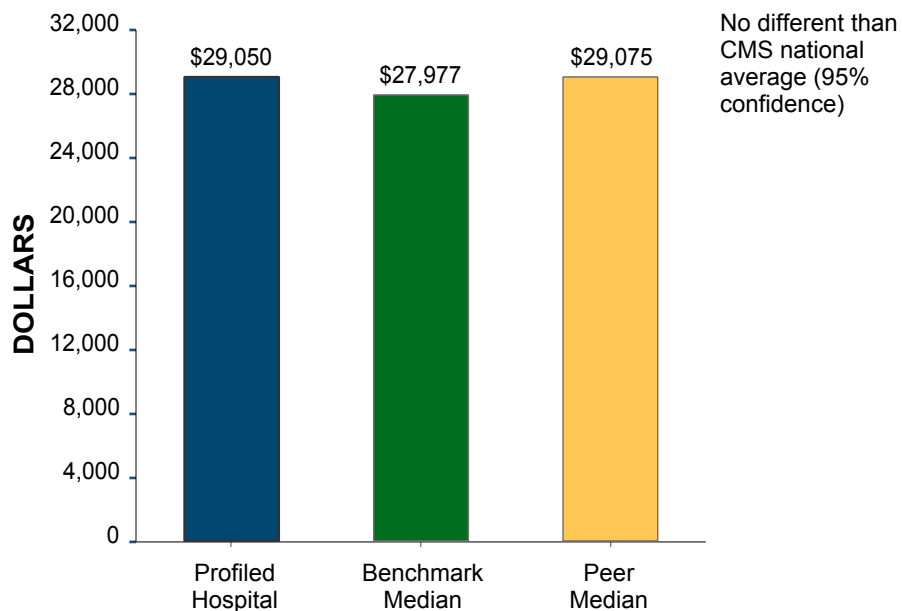
Note: 2023 values on the current and trend graphs will not match due to different norm factors used to normalize the expected values.

Hospital performance compared to peer hospital quintiles n = 273

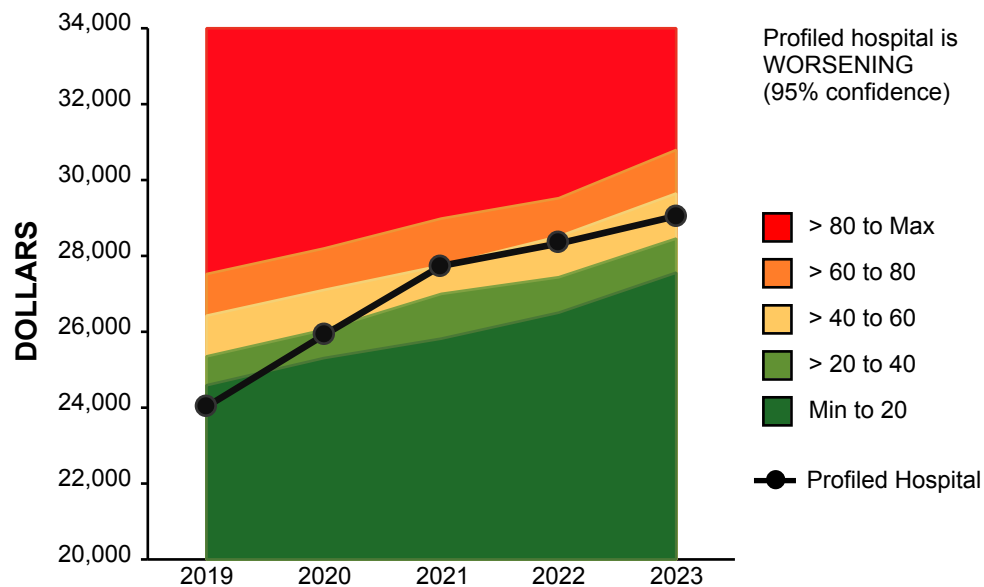
PERCENTILE POINTS ►		HOSPITAL COMPARISON GROUP				PROFILED HOSPITAL
		20th	40th	60th	80th	Value
YEARS	2019	10,536	11,799	12,974	14,738	11,724
	2020	10,121	11,398	12,645	14,334	12,130
	2021	9,880	11,192	12,549	14,313	10,622
	2022	9,867	11,374	12,726	14,257	9,760
	2023	10,007	11,471	12,838	14,559	10,885

AMI Patients: 30-Day Episode of Payment

2023 30D EPISODE PAYMENT PERFORMANCE



2019 - 2023 30D EPISODE PAYMENT TREND



▼ Desired Direction

Benchmark hospitals are the winners in the comparison group: n = 10

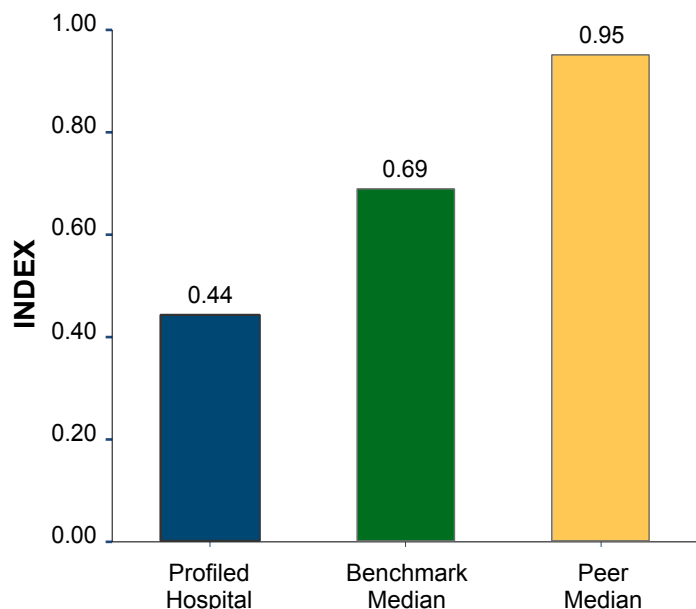
Peer hospitals are the non-winners in the comparison group: n = 277

Hospital performance compared to peer hospital quintiles n = 273

PERCENTILE POINTS ►		HOSPITAL COMPARISON GROUP				PROFILED HOSPITAL
		20th	40th	60th	80th	Value
YEARS	2019	24,591	25,352	26,425	27,522	24,026
	2020	25,308	26,053	27,102	28,196	25,914
	2021	25,820	27,000	27,745	28,984	27,738
	2022	26,505	27,438	28,512	29,521	28,327
	2023	27,559	28,457	29,646	30,793	29,050

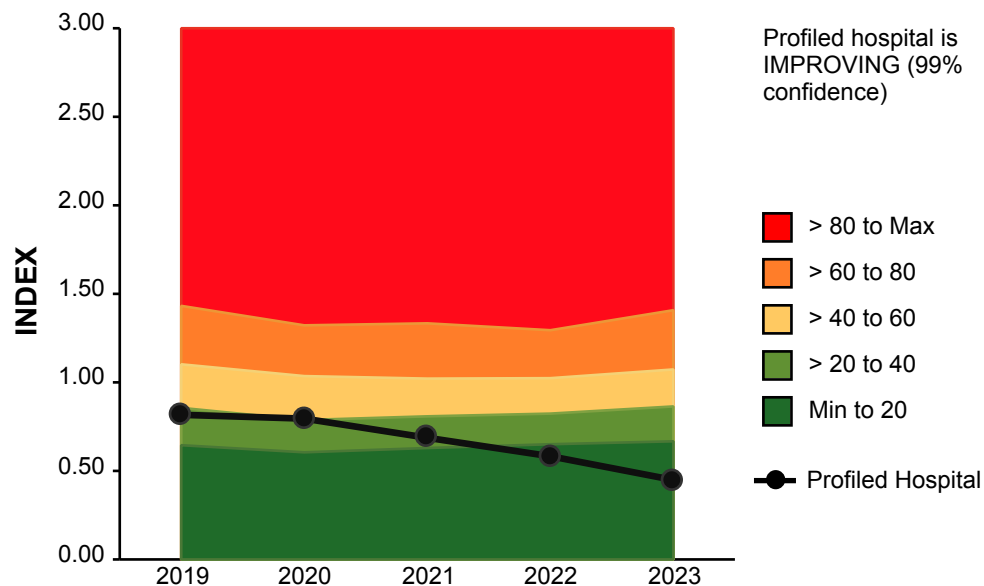
HF Patients: Risk-Adjusted Inpatient Mortality Index

2023 IP MORTALITY PERFORMANCE



Profiled hospital is statistically **BETTER THAN** expected (99% confidence)

2019 - 2023 IP MORTALITY TREND



▼ Desired Direction

Benchmark hospitals are the winners in the comparison group: n = 10

Peer hospitals are the non-winners in the comparison group: n = 277

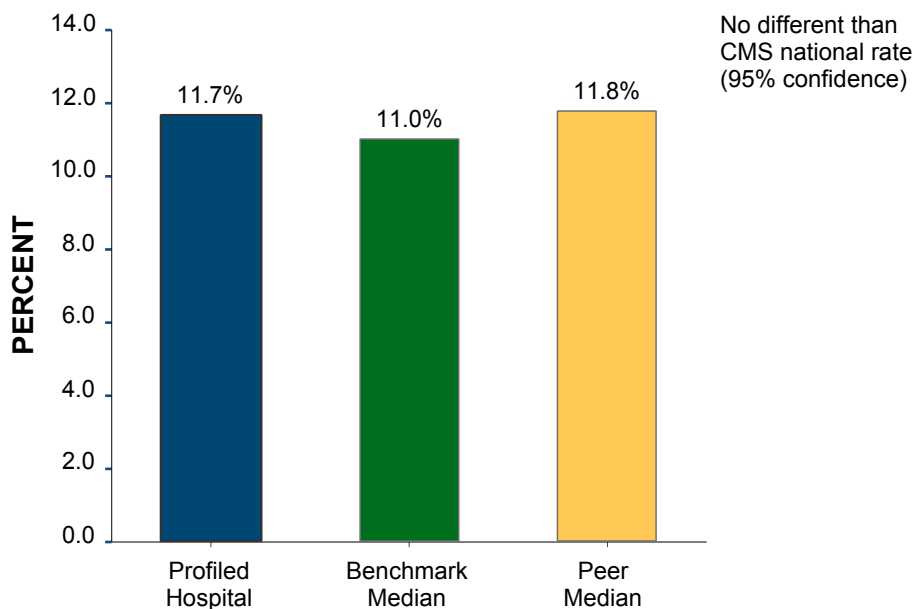
Note: 2023 values on the current and trend graphs will not match due to different norm factors used to normalize the expected values.

Hospital performance compared to peer hospital quintiles n = 273

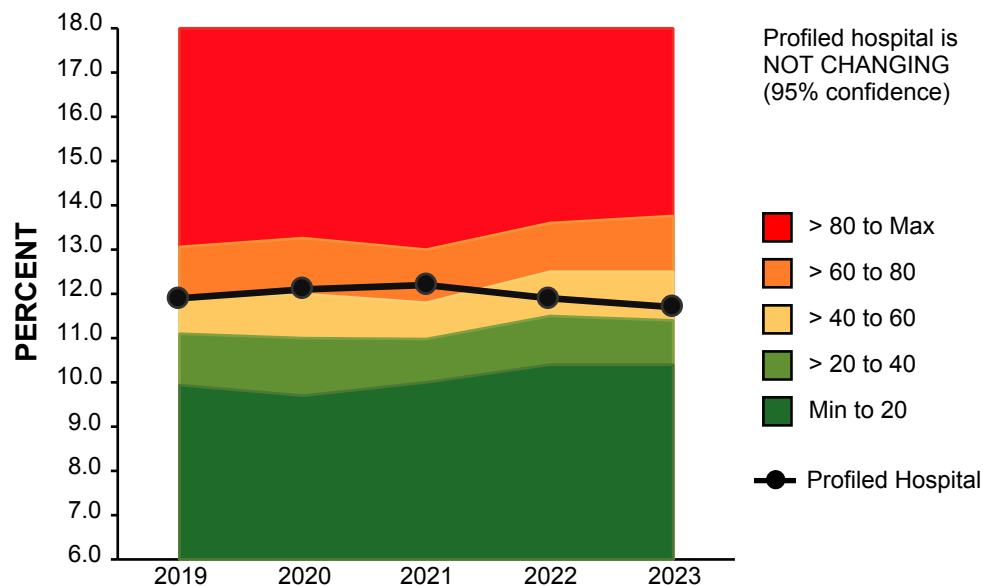
PERCENTILE POINTS ►		HOSPITAL COMPARISON GROUP				PROFILED HOSPITAL		
		20th	40th	60th	80th	Value	Upper CI	Lower CI
YEARS	2019	0.65	0.86	1.10	1.43	0.82	1.53	0.38
	2020	0.61	0.79	1.04	1.32	0.80	1.39	0.41
	2021	0.63	0.81	1.02	1.33	0.69	1.24	0.34
	2022	0.65	0.82	1.02	1.29	0.58	1.12	0.26
	2023	0.67	0.86	1.07	1.41	0.45	0.91	0.19

HF Patients: 30-Day Mortality Rate

2023 30D MORTALITY PERFORMANCE



2019 - 2023 30D MORTALITY TREND



▼ Desired Direction

Benchmark hospitals are the winners in the comparison group: n = 10

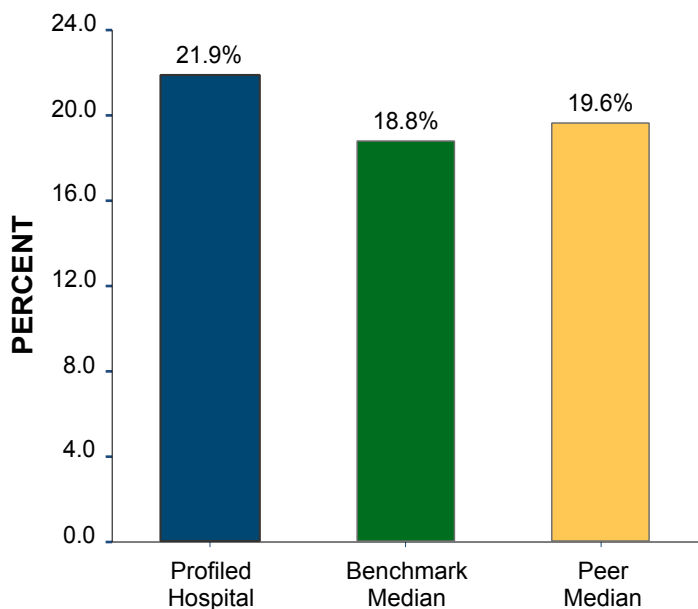
Peer hospitals are the non-winners in the comparison group: n = 277

Hospital performance compared to peer hospital quintiles n = 273

PERCENTILE POINTS ►		HOSPITAL COMPARISON GROUP				PROFILED HOSPITAL
		20th	40th	60th	80th	Value
YEARS	2019	9.9	11.1	11.9	13.1	11.9
	2020	9.7	11.0	12.0	13.3	12.1
	2021	10.0	11.0	11.8	13.0	12.2
	2022	10.4	11.5	12.5	13.6	11.9
	2023	10.4	11.4	12.5	13.8	11.7

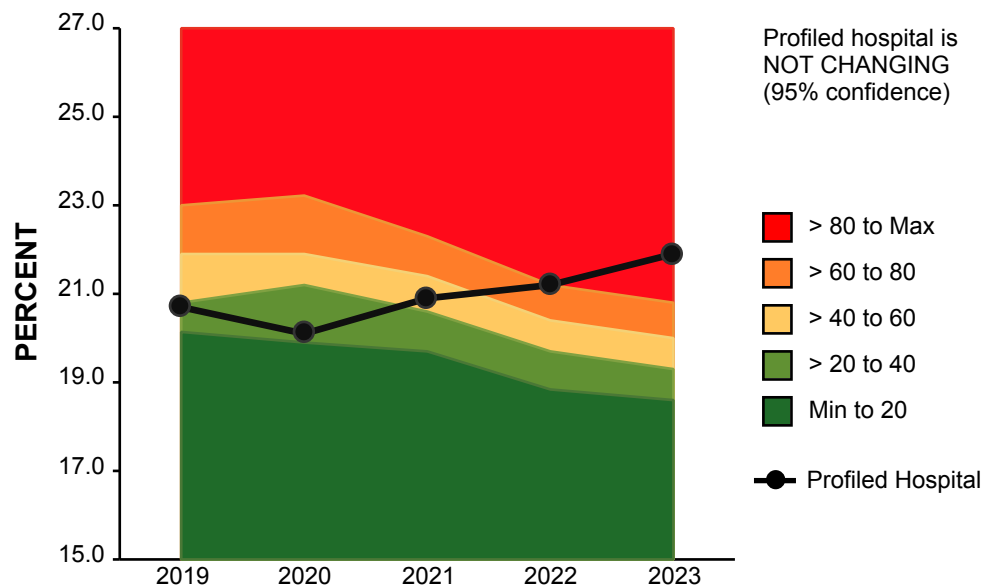
HF Patients: 30-Day Readmission Rate

2023 30D READMISSION PERFORMANCE



No different than CMS national rate (95% confidence)

2019 - 2023 30D READMISSION TREND



▼ Desired Direction

Benchmark hospitals are the winners in the comparison group: n = 10

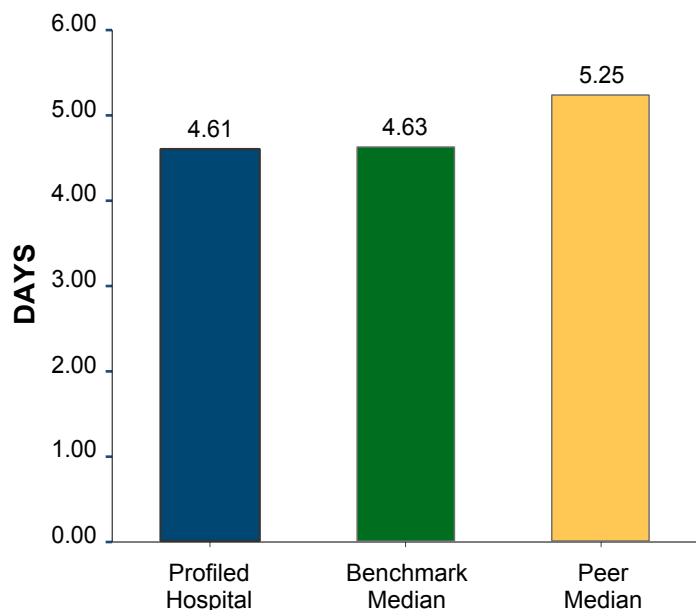
Peer hospitals are the non-winners in the comparison group: n = 277

Hospital performance compared to peer hospital quintiles n = 273

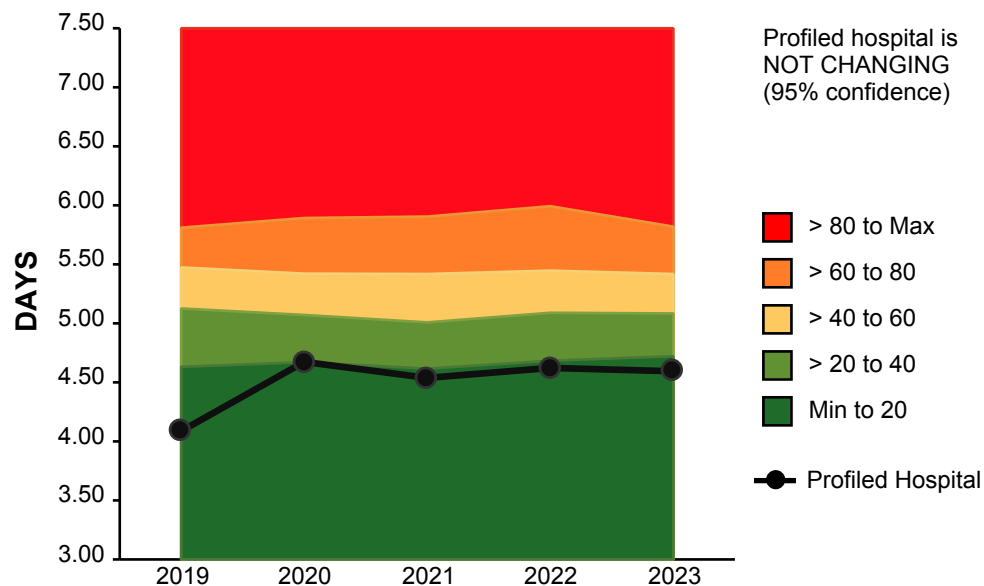
PERCENTILE POINTS ►		HOSPITAL COMPARISON GROUP				PROFILED HOSPITAL
		20th	40th	60th	80th	Value
YEARS	2019	20.1	20.8	21.9	23.0	20.7
	2020	19.9	21.2	21.9	23.2	20.1
	2021	19.7	20.6	21.4	22.3	20.9
	2022	18.8	19.7	20.4	21.2	21.2
	2023	18.6	19.3	20.0	20.8	21.9

HF Patients: Severity-Adjusted Average Length of Stay (ALOS)

2023 ALOS PERFORMANCE



2019 - 2023 ALOS TREND



▼ Desired Direction

Benchmark hospitals are the winners in the comparison group: n = 10

Peer hospitals are the non-winners in the comparison group: n = 277

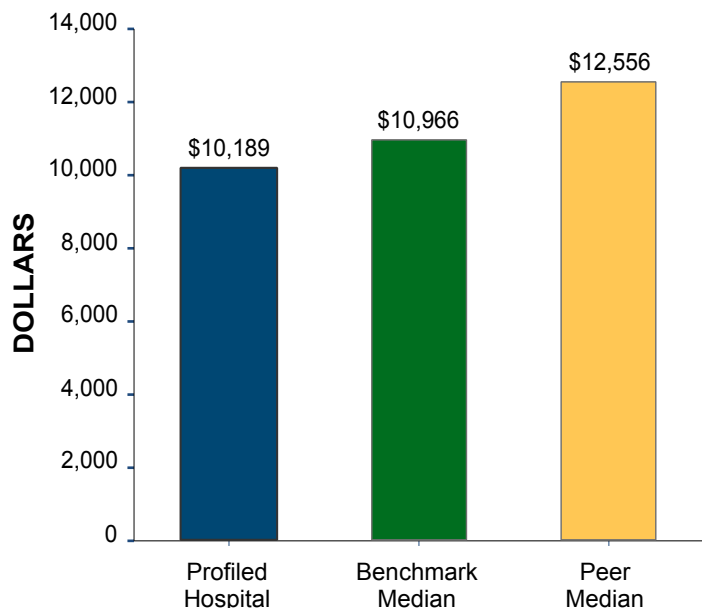
Note: 2023 values on the current and trend graphs will not match due to different norm factors used to normalize the expected values.

Hospital performance compared to peer hospital quintiles n = 273

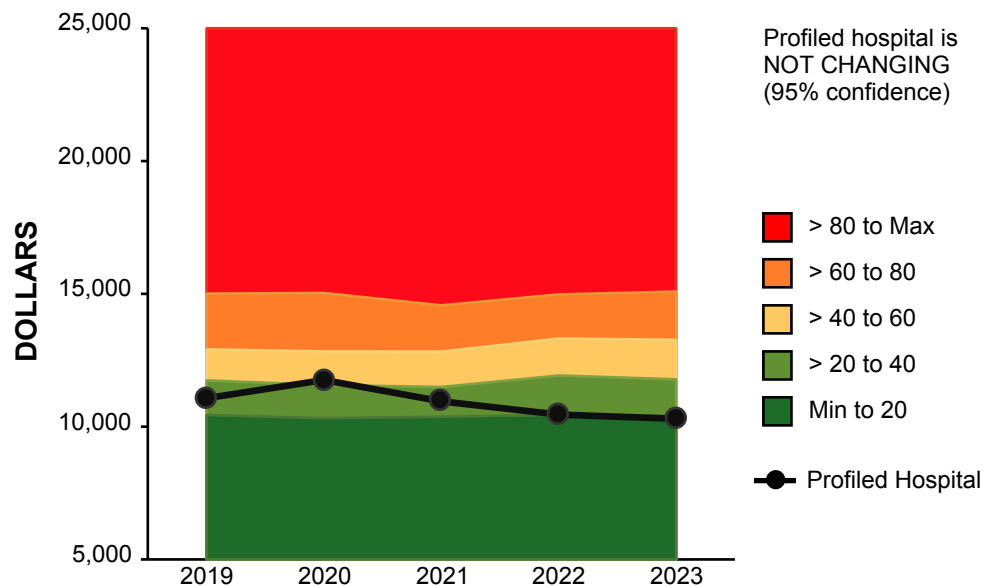
PERCENTILE POINTS ►		HOSPITAL COMPARISON GROUP				PROFILED HOSPITAL
		20th	40th	60th	80th	Value
YEARS	2019	4.63	5.13	5.47	5.81	4.09
	2020	4.67	5.07	5.42	5.89	4.67
	2021	4.62	5.01	5.42	5.90	4.54
	2022	4.68	5.09	5.45	5.99	4.62
	2023	4.72	5.08	5.42	5.82	4.59

HF Patients: Wage- and Severity-Adjusted Cost per Case

2023 COST PER CASE PERFORMANCE



2019 - 2023 COST PER CASE TREND



▼ Desired Direction

Benchmark hospitals are the winners in the comparison group: n = 10

Peer hospitals are the non-winners in the comparison group: n = 277

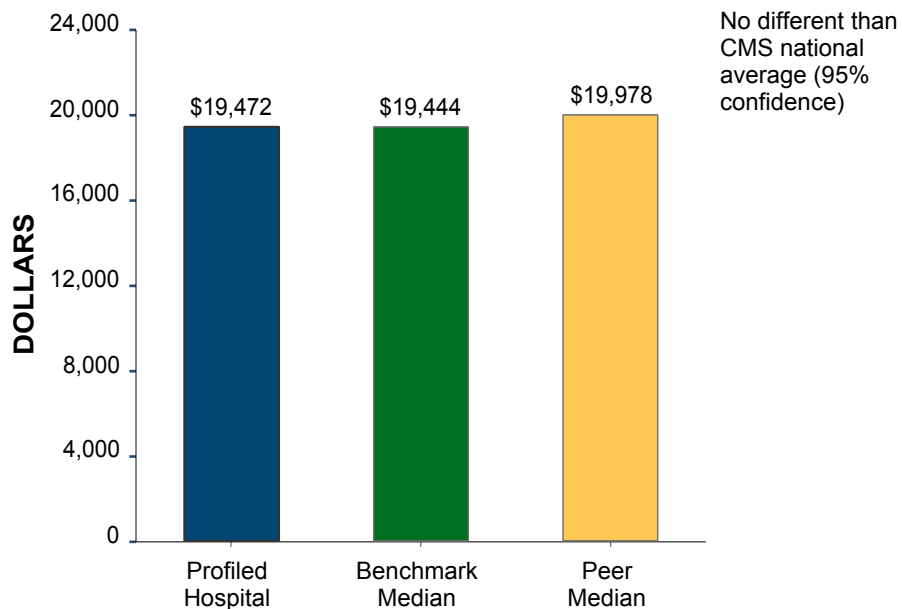
Note: 2023 values on the current and trend graphs will not match due to different norm factors used to normalize the expected values.

Hospital performance compared to peer hospital quintiles n = 273

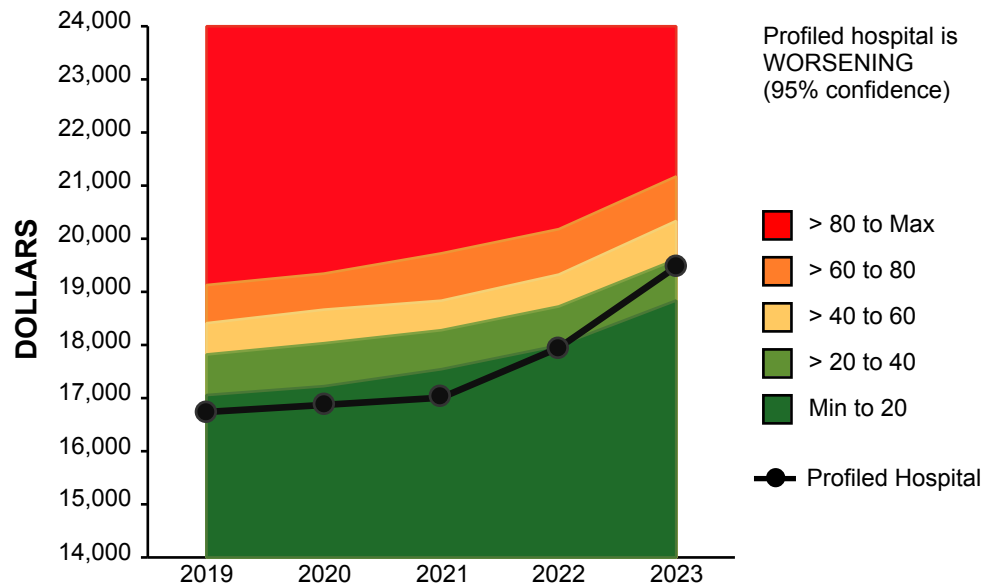
PERCENTILE POINTS ►		HOSPITAL COMPARISON GROUP				PROFILED HOSPITAL
		20th	40th	60th	80th	Value
YEARS	2019	10,440	11,740	12,908	15,009	11,071
	2020	10,318	11,570	12,832	15,032	11,755
	2021	10,375	11,494	12,824	14,567	10,954
	2022	10,442	11,925	13,317	14,979	10,454
	2023	10,408	11,783	13,271	15,086	10,296

HF Patients: 30-Day Episode of Payment

2023 30D EPISODE PAYMENT PERFORMANCE



2019 - 2023 30D EPISODE PAYMENT TREND



▼ Desired Direction

Benchmark hospitals are the winners in the comparison group: n = 10

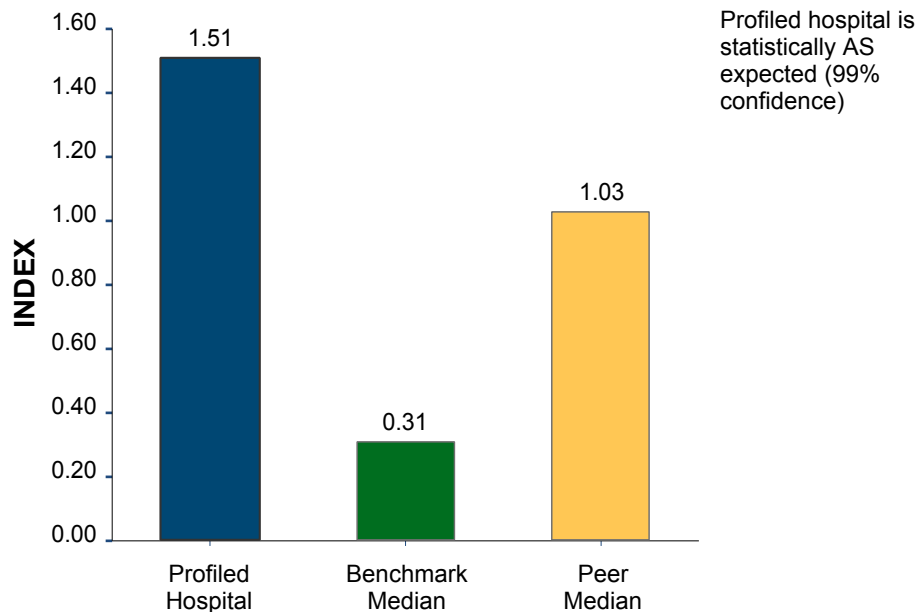
Peer hospitals are the non-winners in the comparison group: n = 277

Hospital performance compared to peer hospital quintiles n = 273

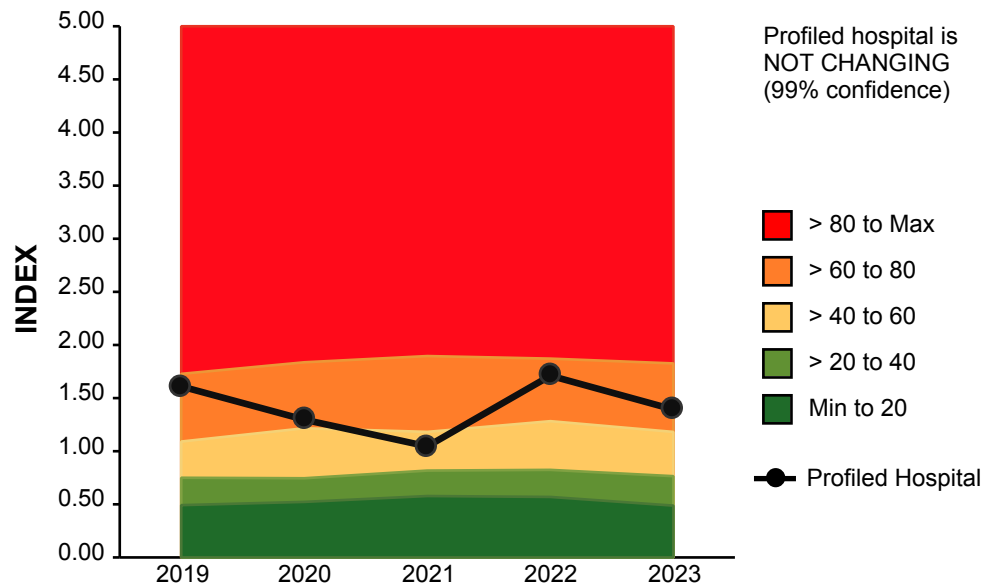
PERCENTILE POINTS ►		HOSPITAL COMPARISON GROUP				PROFILED HOSPITAL
		20th	40th	60th	80th	Value
YEARS	2019	17,057	17,821	18,410	19,128	16,738
	2020	17,224	18,033	18,665	19,344	16,871
	2021	17,543	18,278	18,834	19,725	17,008
	2022	17,993	18,725	19,325	20,181	17,947
	2023	18,838	19,611	20,335	21,173	19,472

CABG Patients: Risk-Adjusted Inpatient Mortality Index

2023 IP MORTALITY PERFORMANCE



2019 - 2023 IP MORTALITY TREND



▼ Desired Direction

Benchmark hospitals are the winners in the comparison group: n = 10

Peer hospitals are the non-winners in the comparison group: n = 277

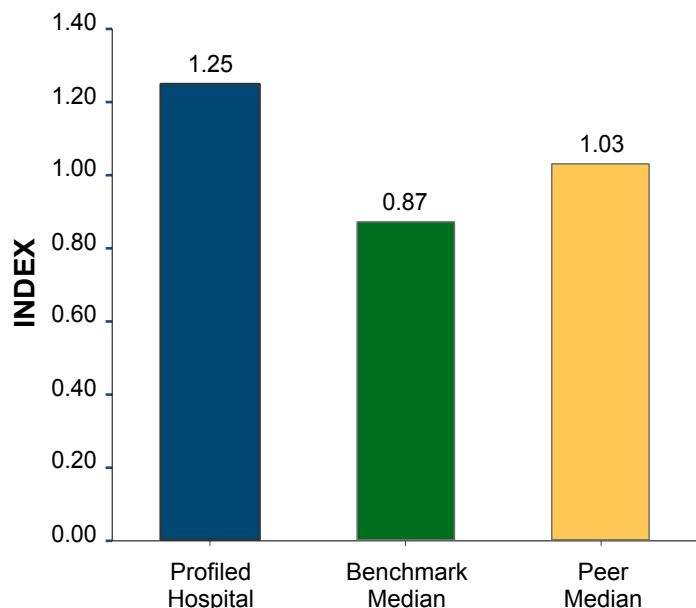
Note: 2023 values on the current and trend graphs will not match due to different norm factors used to normalize the expected values.

Hospital performance compared to peer hospital quintiles n = 273

PERCENTILE POINTS ►		HOSPITAL COMPARISON GROUP				PROFILED HOSPITAL		
		20th	40th	60th	80th	Value	Upper CI	Lower CI
YEARS	2019	0.49	0.75	1.09	1.73	1.61	4.82	0.32
	2020	0.52	0.75	1.22	1.84	1.30	4.48	0.18
	2021	0.58	0.82	1.18	1.90	1.05	7.09	0.01
	2022	0.57	0.82	1.28	1.87	1.71	5.91	0.24
	2023	0.49	0.76	1.18	1.83	1.39	6.02	0.10

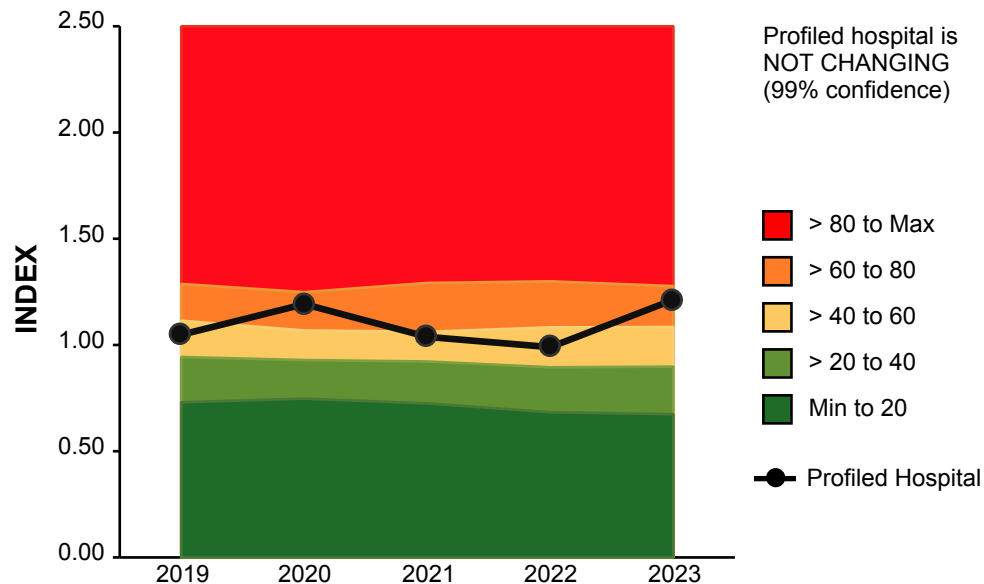
CABG Patients: Risk-Adjusted Complications Index

2023 COMPLICATIONS PERFORMANCE



Profiled hospital is statistically AS expected (99% confidence)

2019 - 2023 COMPLICATIONS TREND



Profiled hospital is NOT CHANGING (99% confidence)

▼ Desired Direction

Benchmark hospitals are the winners in the comparison group: n = 10

Peer hospitals are the non-winners in the comparison group: n = 277

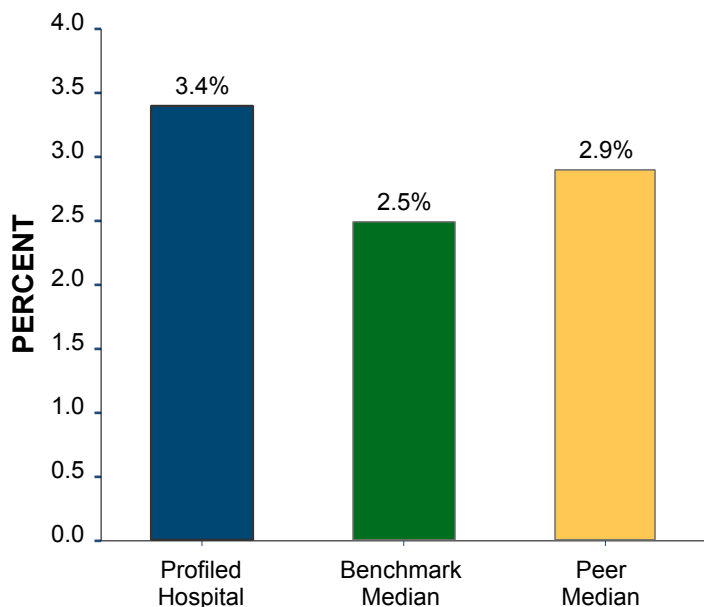
Note: 2023 values on the current and trend graphs will not match due to different norm factors used to normalize the expected values.

Hospital performance compared to peer hospital quintiles n = 273

PERCENTILE POINTS ►		HOSPITAL COMPARISON GROUP				PROFILED HOSPITAL		
		20th	40th	60th	80th	Value	Upper CI	Lower CI
YEARS	2019	0.73	0.94	1.11	1.29	1.05	1.61	0.64
	2020	0.75	0.93	1.07	1.25	1.19	1.83	0.73
	2021	0.73	0.92	1.06	1.29	1.04	1.69	0.59
	2022	0.68	0.90	1.08	1.30	0.99	1.55	0.59
	2023	0.67	0.90	1.08	1.28	1.21	1.90	0.72

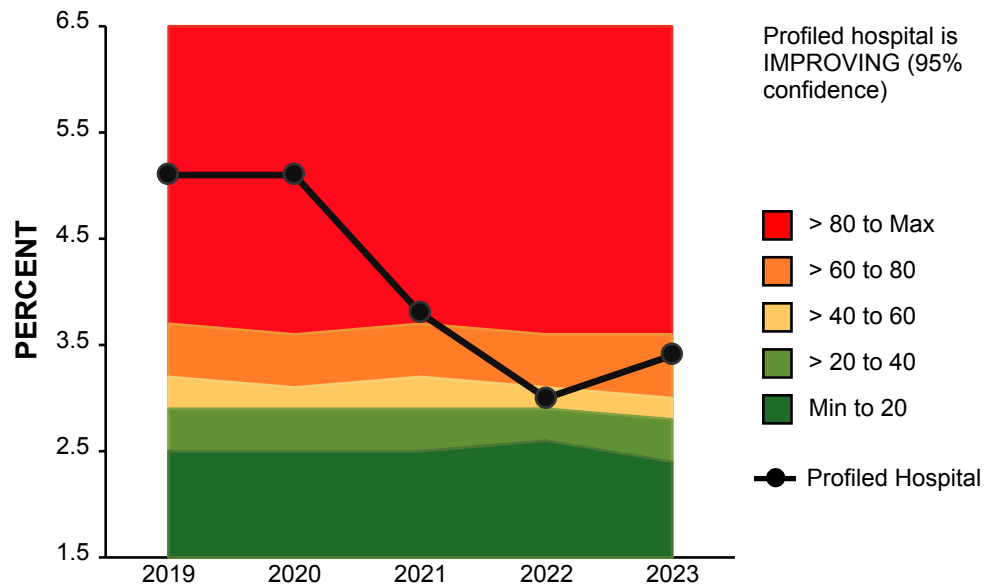
CABG Patients: 30-Day Mortality Rate

2023 30D MORTALITY PERFORMANCE



No different than CMS national rate (95% confidence)

2019 - 2023 30D MORTALITY TREND



▼ Desired Direction

Benchmark hospitals are the winners in the comparison group: n = 10

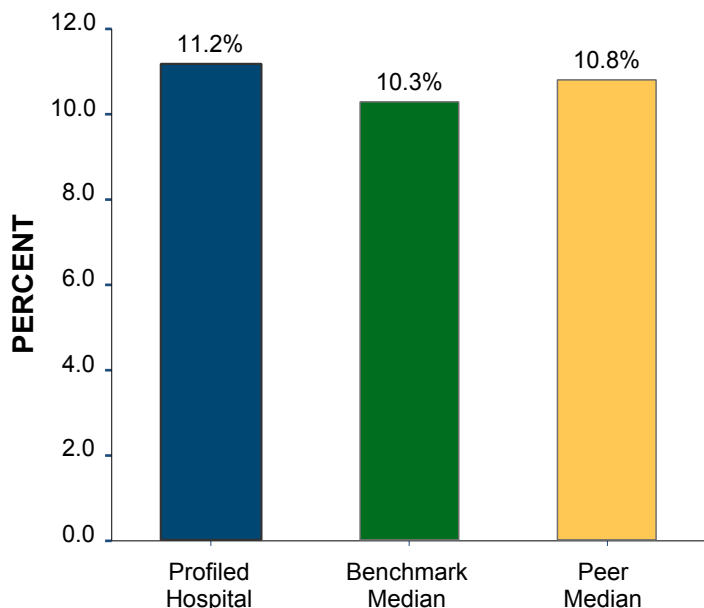
Peer hospitals are the non-winners in the comparison group: n = 277

Hospital performance compared to peer hospital quintiles n = 273

PERCENTILE POINTS ►		HOSPITAL COMPARISON GROUP				PROFILED HOSPITAL
		20th	40th	60th	80th	Value
YEARS	2019	2.5	2.9	3.2	3.7	5.1
	2020	2.5	2.9	3.1	3.6	5.1
	2021	2.5	2.9	3.2	3.7	3.8
	2022	2.6	2.9	3.1	3.6	3.0
	2023	2.4	2.8	3.0	3.6	3.4

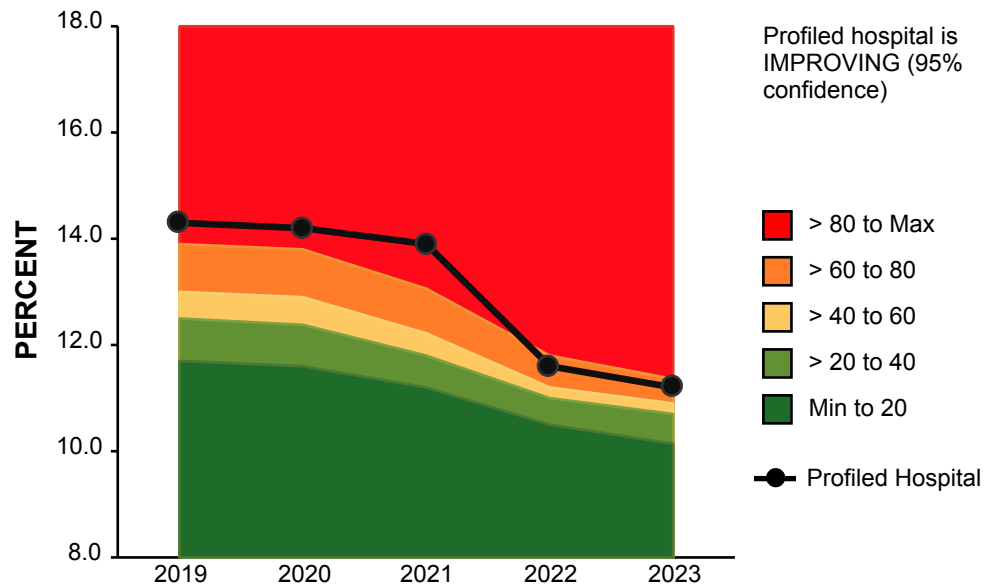
CABG Patients: 30-Day Readmission Rate

2023 30D READMISSION PERFORMANCE



No different than CMS national rate (95% confidence)

2019 - 2023 30D READMISSION TREND



▼ Desired Direction

Benchmark hospitals are the winners in the comparison group: n = 10

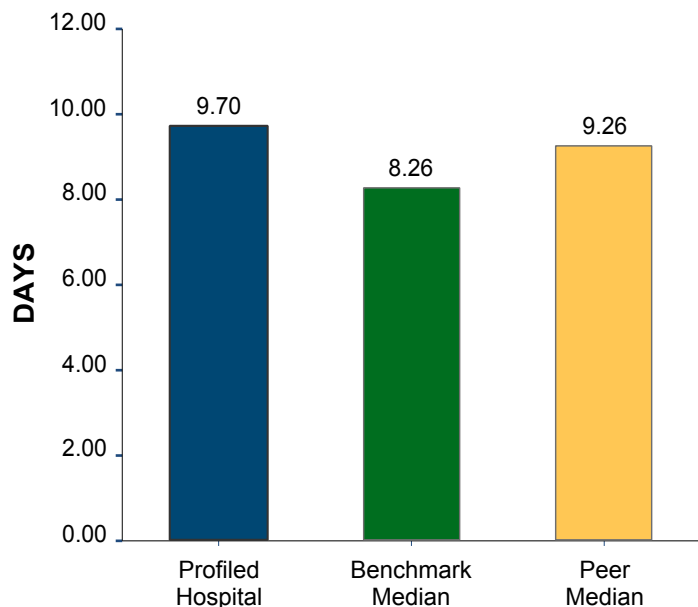
Peer hospitals are the non-winners in the comparison group: n = 277

Hospital performance compared to peer hospital quintiles n = 273

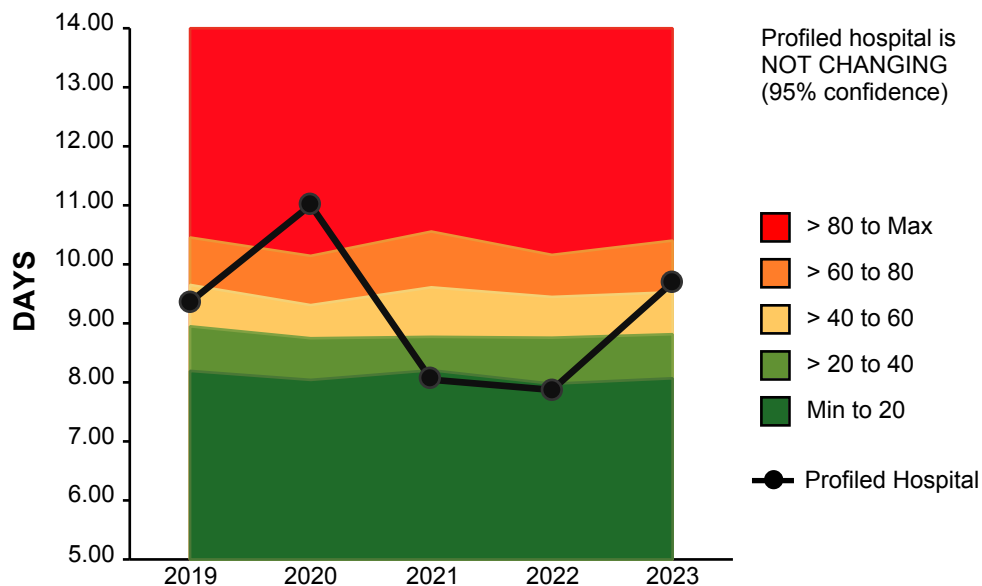
PERCENTILE POINTS ►		HOSPITAL COMPARISON GROUP				PROFILED HOSPITAL
		20th	40th	60th	80th	Value
YEARS	2019	11.7	12.5	13.0	13.9	14.3
	2020	11.6	12.4	12.9	13.8	14.2
	2021	11.2	11.8	12.2	13.1	13.9
	2022	10.5	11.0	11.2	11.8	11.6
	2023	10.1	10.7	10.9	11.4	11.2

CABG Patients: Severity-Adjusted Average Length of Stay (ALOS)

2023 ALOS PERFORMANCE



2019 - 2023 ALOS TREND



▼ Desired Direction

Benchmark hospitals are the winners in the comparison group: n = 10

Peer hospitals are the non-winners in the comparison group: n = 277

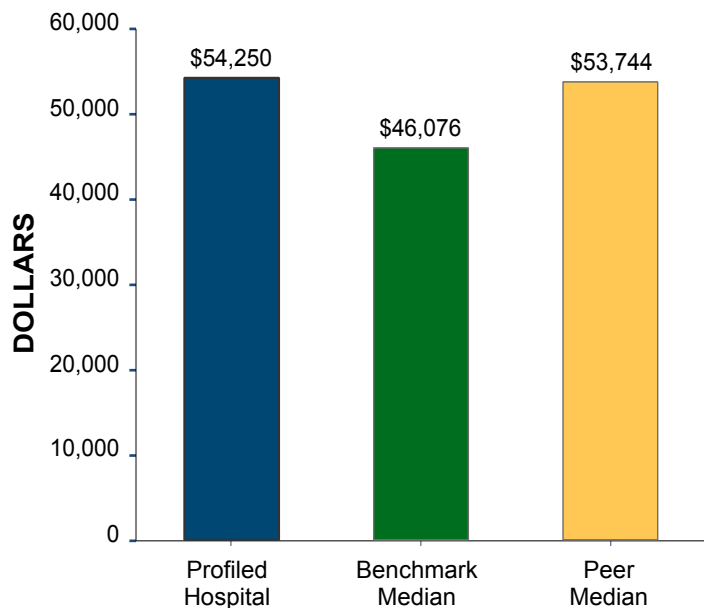
Note: 2023 values on the current and trend graphs will not match due to different norm factors used to normalize the expected values.

Hospital performance compared to peer hospital quintiles n = 273

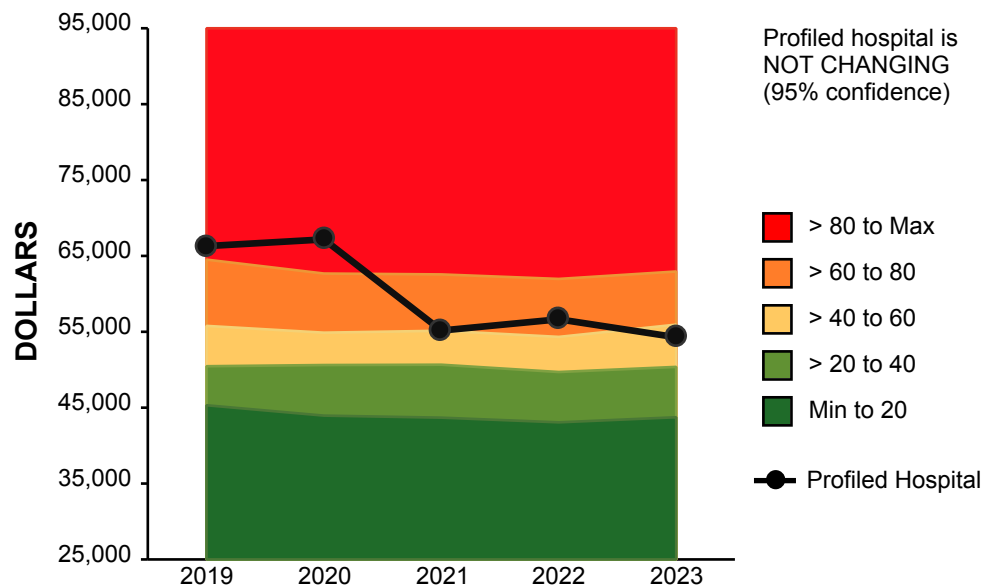
PERCENTILE POINTS ►		HOSPITAL COMPARISON GROUP				PROFILED HOSPITAL
		20th	40th	60th	80th	Value
YEARS	2019	8.19	8.95	9.65	10.45	9.36
	2020	8.04	8.75	9.31	10.14	11.01
	2021	8.21	8.77	9.61	10.56	8.05
	2022	7.98	8.76	9.45	10.16	7.87
	2023	8.07	8.82	9.53	10.40	9.69

CABG Patients: Wage- and Severity-Adjusted Cost per Case

2023 COST PER CASE PERFORMANCE



2019 - 2023 COST PER CASE TREND



▼ Desired Direction

Benchmark hospitals are the winners in the comparison group: n = 10

Peer hospitals are the non-winners in the comparison group: n = 277

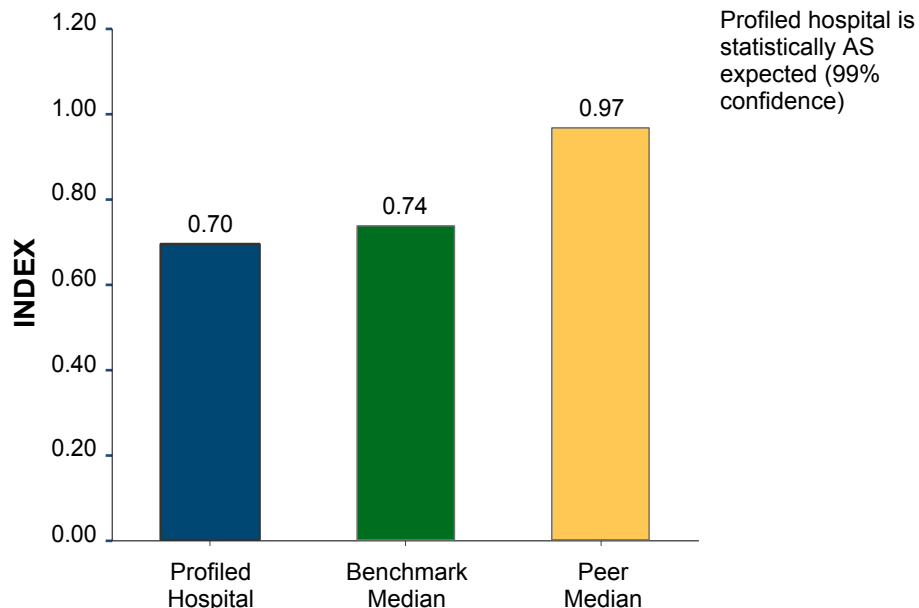
Note: 2023 values on the current and trend graphs will not match due to different norm factors used to normalize the expected values.

Hospital performance compared to peer hospital quintiles n = 273

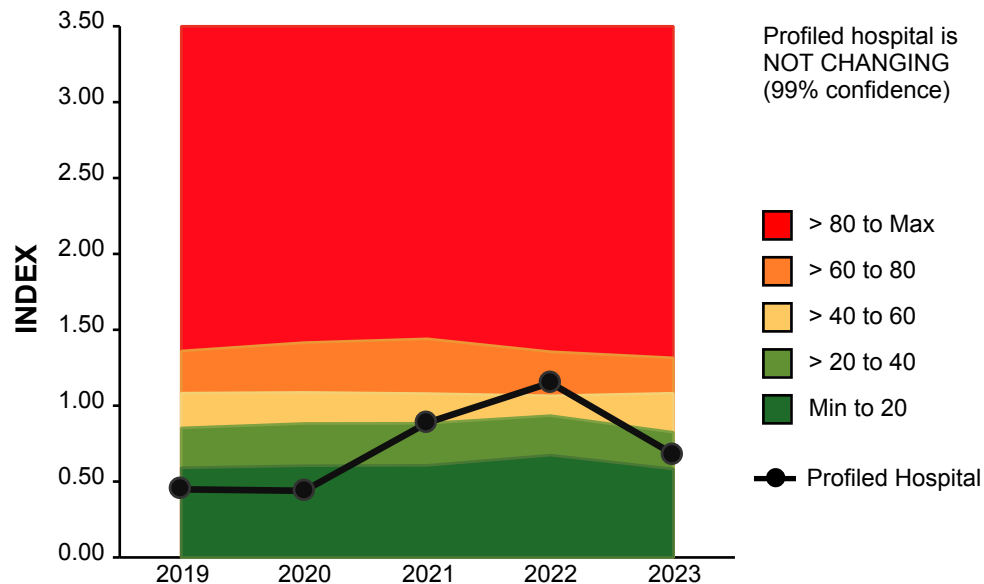
PERCENTILE POINTS ►		HOSPITAL COMPARISON GROUP				PROFILED HOSPITAL
		20th	40th	60th	80th	Value
YEARS	2019	45,320	50,461	55,778	64,512	66,292
	2020	43,955	50,620	54,886	62,677	67,177
	2021	43,684	50,662	55,139	62,562	55,166
	2022	43,067	49,700	54,328	61,966	56,647
	2023	43,738	50,374	55,943	62,949	54,281

PCI Patients: Risk-Adjusted Inpatient Mortality Index

2023 IP MORTALITY PERFORMANCE



2019 - 2023 IP MORTALITY TREND



▼ Desired Direction

Benchmark hospitals are the winners in the comparison group: n = 10

Peer hospitals are the non-winners in the comparison group: n = 277

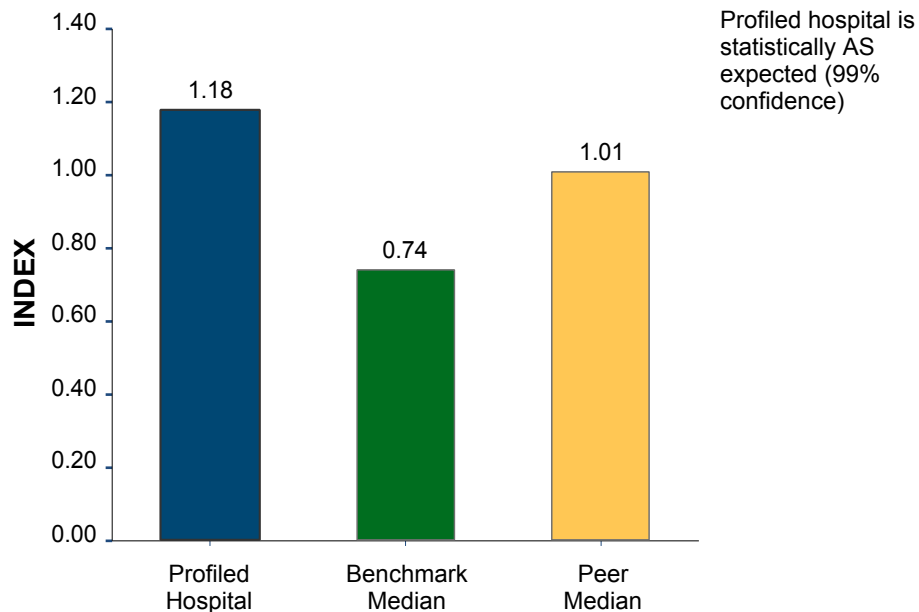
Note: 2023 values on the current and trend graphs will not match due to different norm factors used to normalize the expected values.

Hospital performance compared to peer hospital quintiles n = 273

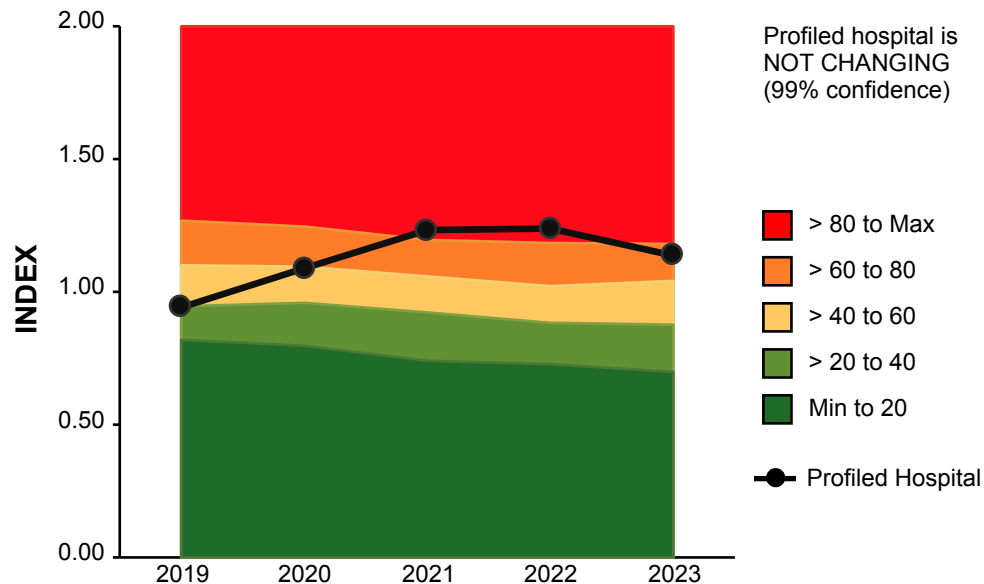
PERCENTILE POINTS ►		HOSPITAL COMPARISON GROUP				PROFILED HOSPITAL		
		20th	40th	60th	80th	Value	Upper CI	Lower CI
YEARS	2019	0.59	0.85	1.08	1.36	0.45	1.94	0.03
	2020	0.60	0.88	1.09	1.42	0.44	1.90	0.03
	2021	0.61	0.88	1.08	1.44	0.89	2.41	0.22
	2022	0.67	0.93	1.07	1.36	1.15	2.89	0.33
	2023	0.58	0.82	1.08	1.32	0.68	1.84	0.17

PCI Patients: Risk-Adjusted Complications Index

2023 COMPLICATIONS PERFORMANCE



2019 - 2023 COMPLICATIONS TREND



▼ Desired Direction

Benchmark hospitals are the winners in the comparison group: n = 10

Peer hospitals are the non-winners in the comparison group: n = 277

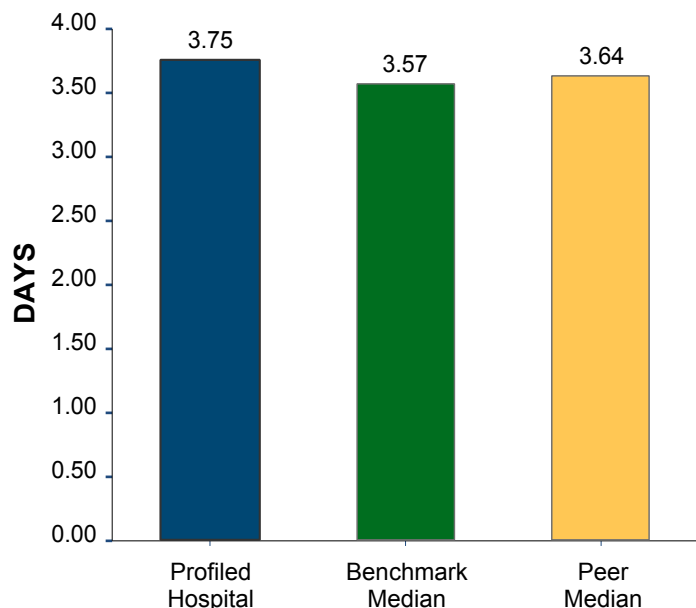
Note: 2023 values on the current and trend graphs will not match due to different norm factors used to normalize the expected values.

Hospital performance compared to peer hospital quintiles n = 273

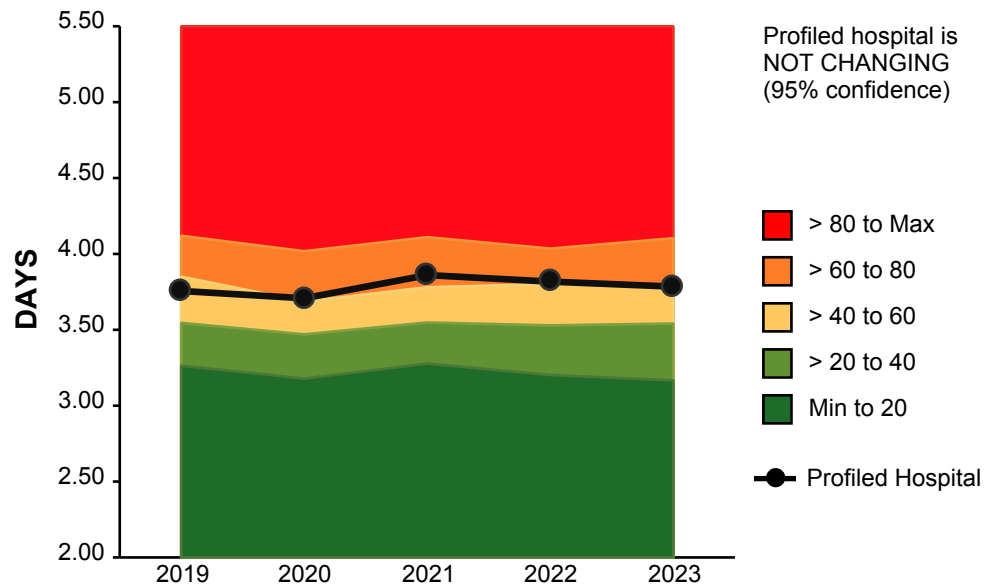
PERCENTILE POINTS ►		HOSPITAL COMPARISON GROUP				PROFILED HOSPITAL		
		20th	40th	60th	80th	Value	Upper CI	Lower CI
YEARS	2019	0.82	0.95	1.10	1.27	0.94	1.52	0.54
	2020	0.80	0.96	1.09	1.25	1.09	1.69	0.66
	2021	0.74	0.92	1.06	1.20	1.23	1.86	0.77
	2022	0.73	0.88	1.02	1.18	1.24	1.87	0.78
	2023	0.70	0.88	1.04	1.18	1.14	1.70	0.72

PCI Patients: Severity-Adjusted Average Length of Stay (ALOS)

2023 ALOS PERFORMANCE



2019 - 2023 ALOS TREND



▼ Desired Direction

Benchmark hospitals are the winners in the comparison group: n = 10

Peer hospitals are the non-winners in the comparison group: n = 277

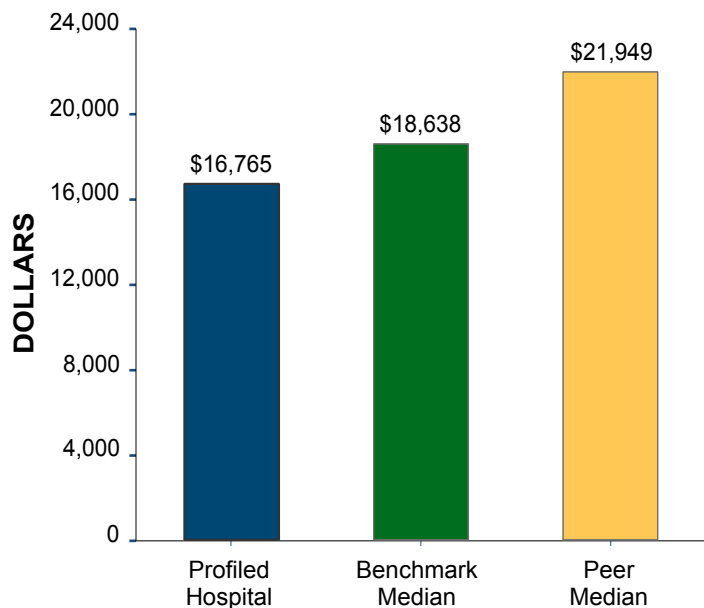
Note: 2023 values on the current and trend graphs will not match due to different norm factors used to normalize the expected values.

Hospital performance compared to peer hospital quintiles n = 273

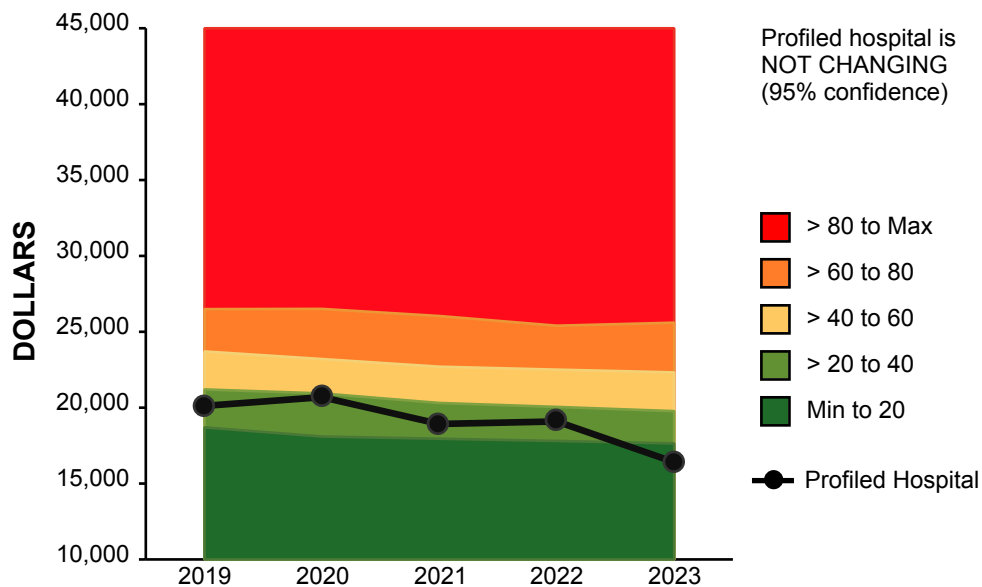
PERCENTILE POINTS ►		HOSPITAL COMPARISON GROUP				PROFILED HOSPITAL
		20th	40th	60th	80th	Value
YEARS	2019	3.26	3.55	3.85	4.12	3.76
	2020	3.18	3.47	3.69	4.02	3.71
	2021	3.28	3.55	3.78	4.11	3.86
	2022	3.20	3.53	3.80	4.03	3.82
	2023	3.17	3.54	3.79	4.10	3.78

PCI Patients: Wage- and Severity-Adjusted Cost per Case

2023 COST PER CASE PERFORMANCE



2019 - 2023 COST PER CASE TREND



▼ Desired Direction

Benchmark hospitals are the winners in the comparison group: n = 10

Peer hospitals are the non-winners in the comparison group: n = 277

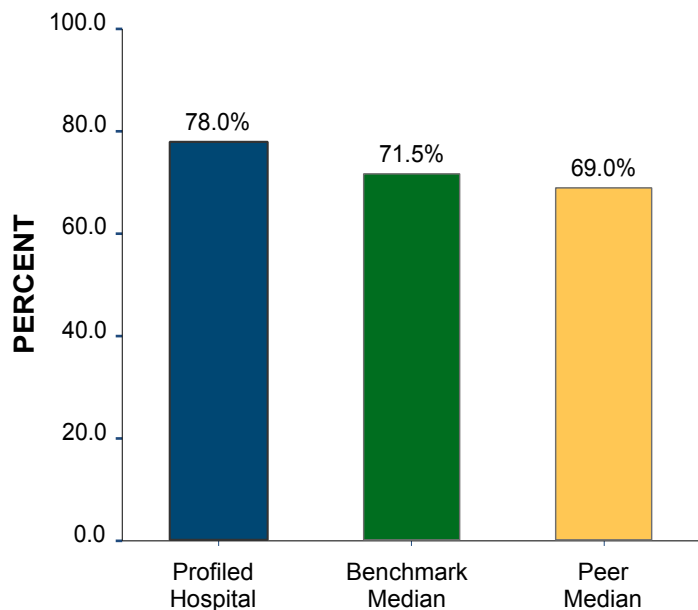
Note: 2023 values on the current and trend graphs will not match due to different norm factors used to normalize the expected values.

Hospital performance compared to peer hospital quintiles n = 273

PERCENTILE POINTS ►		HOSPITAL COMPARISON GROUP				PROFILED HOSPITAL
		20th	40th	60th	80th	Value
YEARS	2019	18,702	21,203	23,704	26,494	20,118
	2020	18,099	20,940	23,205	26,509	20,692
	2021	17,954	20,310	22,700	26,039	18,928
	2022	17,808	20,051	22,507	25,403	19,092
	2023	17,643	19,772	22,325	25,601	16,412

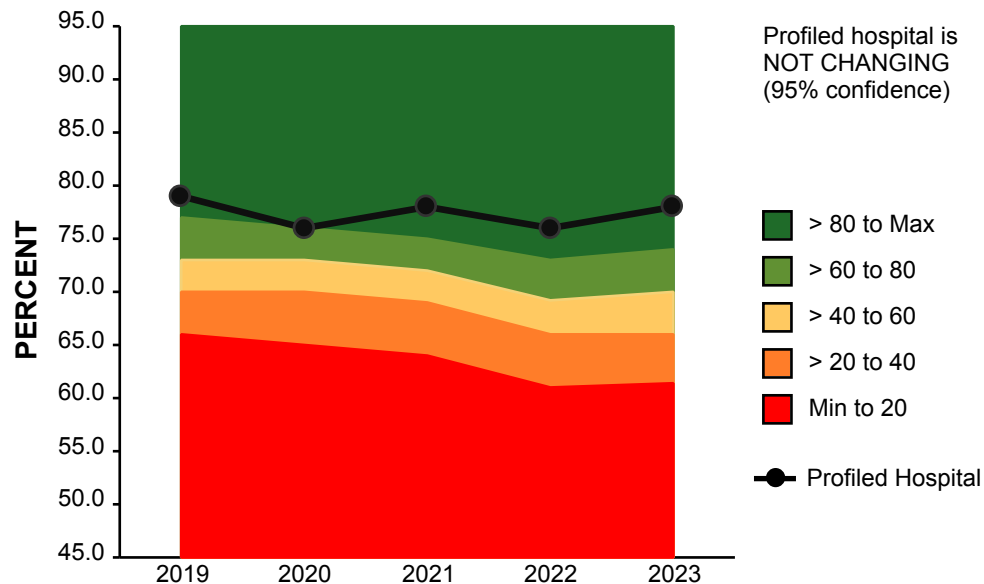
HCAHPS: Overall Rating Question

2023 HCAHPS TOP-BOX PERFORMANCE



QUESTION KEY:
Overall rating: How do patients rate the hospital overall?

2019 - 2023 HCAHPS TOP-BOX TREND



▲ Desired Direction

Benchmark hospitals are the winners in the comparison group: n = 10

Peer hospitals are the non-winners in the comparison group: n = 277

Hospital performance compared to peer hospital quintiles n = 273

PERCENTILE POINTS ►		HOSPITAL COMPARISON GROUP				PROFILED HOSPITAL
		20th	40th	60th	80th	Value
YEARS	2019	66.0	70.0	73.0	77.0	79.0
	2020	65.0	70.0	73.0	76.0	76.0
	2021	64.0	69.0	72.0	75.0	78.0
	2022	61.0	66.0	69.2	73.0	76.0
	2023	61.4	66.0	70.0	74.0	78.0

Supplemental Information-Only Measures

This section of your report contains measures that we are profiling only for informational purposes; they were not included in ranking or determination of winners. We welcome your comments and feedback on the usefulness and relevance of these measures in assessing leadership's ability to drive high-level, balanced performance.

- **Excess days in acute care (EDAC) measures:**
 - 30-day excess days in acute care for AMI patients
 - 30-day excess days in acute care for HF patients

As defined by the Centers for Medicare & Medicaid Services (CMS), the “EDAC measures capture excess days that a hospital’s patients spent in acute care within 30 days after discharge.”

The values of these measures are the number of risk-adjusted days a hospital’s patients spend in an emergency department (ED), a hospital observation unit, or a hospital inpatient unit (“days in acute care”) during the 30 days following a hospitalization for AMI or HF.

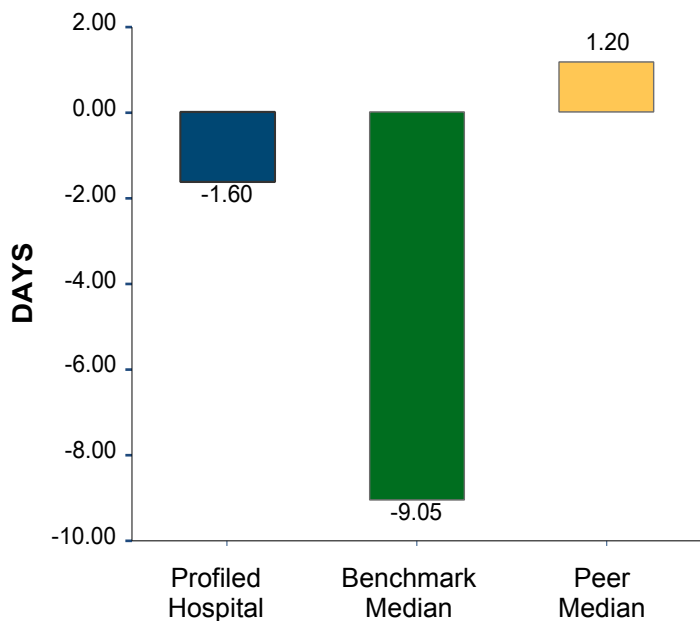
The measures report the difference (“excess”) between each hospital’s average days in acute care (“predicted days”) and the number of days in acute care that each hospital’s patients would have been expected to spend if discharged from an average-performing hospital (“expected days”). The measure is reported as excess days per 100 discharges.

- **HCAHPS**

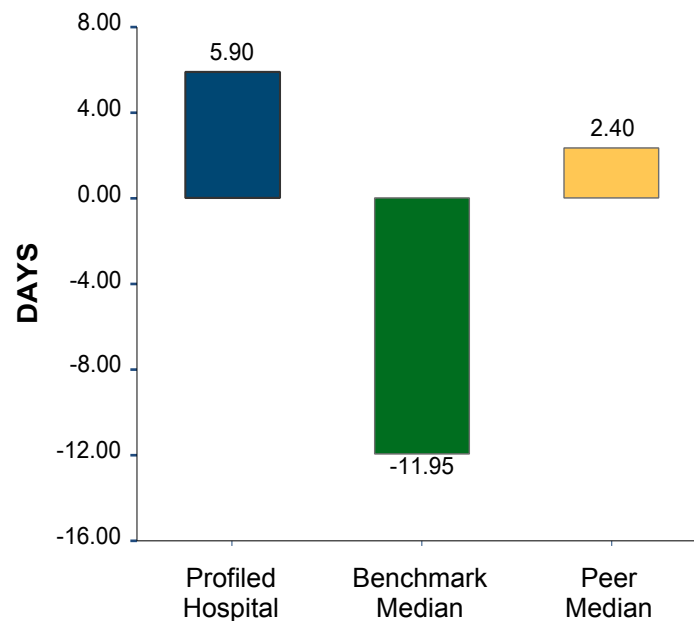
The ranked measure is the overall hospital rating question. The individual detailed survey questions are displayed for information only.

AMI and HF Patients: 30-Day Excess Days in Acute Care (EDAC)

2023 30D EDAC PERFORMANCE FOR AMI



2023 30D EDAC PERFORMANCE FOR HF



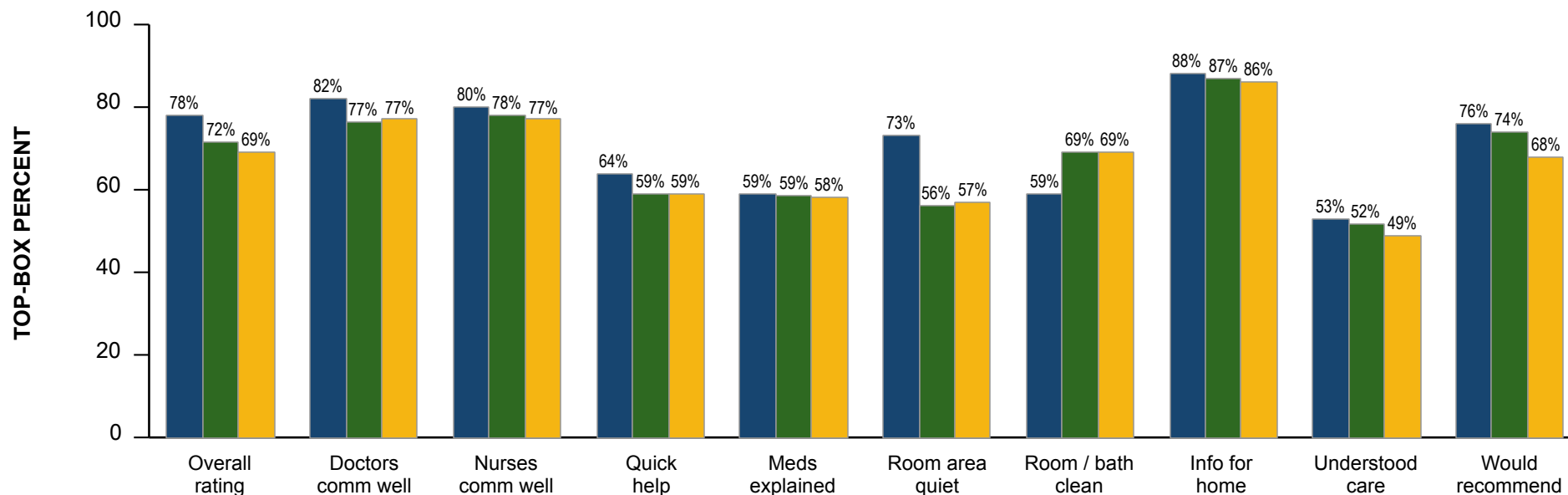
▼ Desired Direction

Benchmark hospitals are the winners in the comparison group: n = 10

Peer hospitals are the non-winners in the comparison group: n = 277

HCAHPS Questions – Only Overall Rating Used in Ranking

2023 HCAHPS PERFORMANCE



QUESTION KEY

Overall rating	How do patients rate the hospital overall?
Doctors comm well	How often did doctors communicate well with patients?
Nurses comm well	How often did nurses communicate well with patients?
Quick help	How often did patients receive help quickly from hospital staff?
Meds explained	How often did staff explain about medicines before giving them to patients?
Room area quiet	How often was the area around patients rooms kept quiet at night?
Room / bath clean	How often were the patients rooms and bathrooms kept clean?
Info for home	Were patients given information about what to do during their recovery at home?
Understood care	How often did patients understand their care at discharge?
Would recommend	Would patients recommend the hospital to friends and family?

▲ Desired Direction

■ Profiled Hospital

■ Benchmark Median

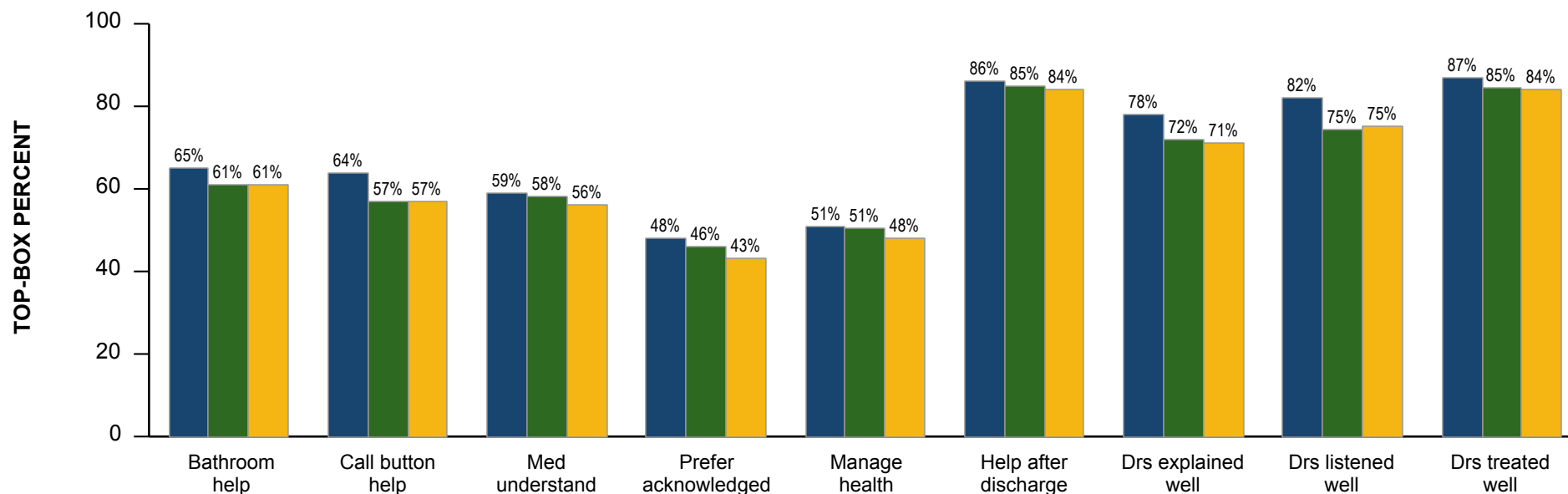
■ Peer Median

Benchmark hospitals are the winners in the comparison group: n = 10

Peer hospitals are the non-winners in the comparison group: n = 277

HCAHPS Questions, cont.

2023 HCAHPS PERFORMANCE



QUESTION KEY

- Bathroom help: How often did patients receive bathroom help as soon as they wanted?
- Call button help: How often did patients receive help after using the call button as soon as they wanted?
- Med understand: How often did patients understand the purpose of their medications when leaving the hospital?
- Prefer acknowledged: How often did the staff take patients' preferences into account when determining health care needs?
- Manage health: How often did patients understand their responsibilities in managing their health?
- Help after discharge: How often did patients discuss whether they would need help after discharge?
- Drs explained well: How often did doctors explain things in a way patients could understand?
- Drs listened well: How often did doctors listen carefully to patients?
- Drs treated well: How often did doctors treat patients with courtesy and respect?

▲ Desired Direction

■ Profiled Hospital

■ Benchmark Median

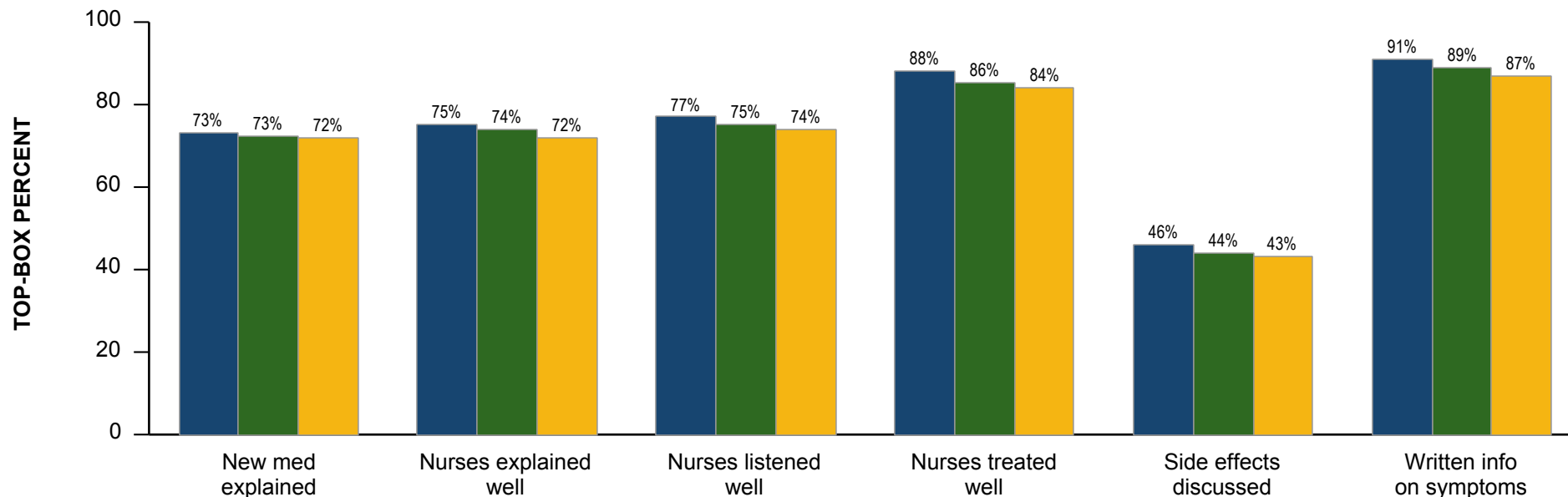
■ Peer Median

Benchmark hospitals are the winners in the comparison group: n = 10

Peer hospitals are the non-winners in the comparison group: n = 277

HCAHPS Questions, cont.

2023 HCAHPS PERFORMANCE



QUESTION KEY

- New med explained: How often did staff communicate what the new medication was for?
- Nurses explained well: How often did nurses explain things in a way patients could understand?
- Nurses listened well: How often did nurses listen carefully to patients?
- Nurses treated well: How often did nurses treat patients with courtesy and respect?
- Side effects discussed: How often did staff discuss possible side effects when receiving a new medication?
- Written info on symptoms: Did patients receive written information about possible symptoms to look out for after discharge?

- ▲ Desired Direction
- Profiled Hospital
- Benchmark Median
- Peer Median

Benchmark hospitals are the winners in the comparison group: n = 10

Peer hospitals are the non-winners in the comparison group: n = 277

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