PERFORMANCE REPORT 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)

BENCHMARK AND PEER GROUPS
In the Truven Health Analytics 50 Top Cardiovascular Hospitals study, we select 50 Benchmark hospitals (winners) based on overall performance in the most recent year of data available:

- CARDIO TEACHING 15
- TEACHING 20
- COMMUNITY 15

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

Patients with both PCI and CABG are grouped as CABG. Patients with both AMI and HF are excluded.

POA METHODOLOGY NOTES
Present on Admission (POA) coding was used in the risk models for inpatient mortality, complications, average length of stay and cost per case. In addition, due to increasing numbers of diagnoses with missing POA coding, we made the following adjustments to the MEDPAR data in processing the study:

1) We treated all diagnosis codes on the CMS exempt list as ‘exempt’, regardless of POA coding
2) We treated all principal diagnoses as ‘present on admission’
3) We treated secondary diagnoses where POA code ‘Y’ or ‘W’ appeared more than 50 percent of the time in Truven’s all-payer database, as ‘present on admission’.

RANK WEIGHTS AND PUBLIC DATA SOURCES

<table>
<thead>
<tr>
<th>Ranked Performance Metric</th>
<th>Current Wt</th>
<th>Trend Wt</th>
<th>Source</th>
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<tr>
<td>Risk-Adjusted IP Mortality (AMI, HF, CABG, PCI)</td>
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<td>1/2 ea</td>
<td>MEDPAR FFY¹ 2010 - 2015</td>
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<tr>
<td>Risk-Adjusted Complications (CABG, PCI)</td>
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<td>1/4 ea</td>
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<td>Percent CABG Patient with IMA Use</td>
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<td>1/2</td>
<td>MEDPAR FFY¹ 2010 - 2015</td>
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<td>Severity-Adjusted ALOS (AMI, HF, CABG, PCI)</td>
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<td>MEDPAR FFY¹ 2011 - 2015</td>
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<tr>
<td>Wage- and Severity-Adjusted Average Cost per Case (AMI, HF, CABG, PCI)</td>
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<td>1/4 ea</td>
<td>MEDPAR FFY¹ 2011 - 2015</td>
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</tbody>
</table>

¹ Federal Fiscal year is Oct 1 through Sep 30.
² No trend data available for CABG 30-day mortality rates.
³ No trend data available for CABG 30-day readmission rates.

FOR MORE INFORMATION
For a Study Overview, with full details on performance measures, methods used and winner list, visit www.100tophospitals.com.
50 TOP CARDIO HOSPITALS PERFORMANCE MATRIX

INTEGRATED HOSPITAL PERFORMANCE COMPARISON

The 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 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

The matrix “Overall” dot displays your national rank percentile for current overall performance with your national rank percentile for five-year 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).

Overall hospital performance in the most current year is a composite score based on the weighted sum of the ranks of individual measures. This sum is used to rank your hospital within your comparison group and produce your 2015 Performance Percentile.

Overall hospital performance on five-year 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 2011-2015 Rate of Improvement Percentile.

PERFORMANCE MATRIX NOTES

Overall Dot

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 performance and rate of improvement based on all measures (AMI, HF, CABG, PCI). Therefore, it is identical on each matrix graph.

Missing Matrix Graphs

The matrix graphs will be missing if your hospital did not have enough years of data to be trended. A minimum of four years of data, including the most current year, are required. There also will be no Trend Profile section in the report.

If there were too few years of data for one or more measures, but not all, there will be no matrix graphs; but there will be a Trend Profile section with graphs for the measures that were not missing. Notes on excluded data points are in the Appendix following the Performance Matrix graph and the Trend Profile.

Missing Measure Dots

A measure dot will be missing from the matrix if your hospital had too few useable 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 measure graphs in the Trend Profile. Notes on excluded data points are in the Appendix following the Performance Matrix graph and the Trend Profile.
AMI AND HF PATIENTS
2015 PERFORMANCE AND 5-YEAR RATE OF IMPROVEMENT MATRIX

DATA POINT KEY
1 OVERALL*
A2 AMI IP Mortality
A3 AMI Avg LOS
A4 AMI Cost per Case
A5 AMI 30-Day Mort
A6 AMI 30-Day Readmit
H7 HF IP Mortality
H8 HF Avg LOS
H9 HF Cost per Case
H10 HF 30-Day Mort
H11 HF 30-Day Readmit

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

PROFILED HOSPITAL compared to:
2015 Teaching hospitals: n = 306
2011 - 2015 Teaching hospitals: n = 299
**CABG AND PCI PATIENTS**

**2015 PERFORMANCE AND 5-YEAR RATE OF IMPROVEMENT MATRIX**

**DATA POINT KEY**

1. **OVERALL***
   - C2: CABG IP Mortality
   - C3: CABG Complications
   - C4: CABG w IMA
   - C5: CABG Avg LOS
   - C6: CABG Cost per Case
   - P7: PCI IP Mortality
   - P8: PCI Complications
   - P9: PCI Avg LOS
   - P10: 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*

**PROFILED HOSPITAL compared to:**

- 2015 Teaching hospitals: n = 306
- 2011 - 2015 Teaching hospitals: n = 299
50 TOP CARDIO HOSPITALS TREND PROFILE

TREND PROFILE

New this year to the 50 Top Cardiovascular study is the Trend Profile. The Trend analysis is intended to provide insight into progress toward performance improvement. It is 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
- Risk-Adjusted Complications
- Percent CABG Patient with IMA Use
- 30-Day Mortality Rate (AMI, HF)
- 30-Day Readmission Rate (AMI, HF)
- Severity-Adjusted Average Length of Stay
- Wage- and Severity-Adjusted Average Cost Per Case

UNDERSTANDING THE GRAPHS

Trend Percentile Bar Graph – Individual Measures

This bar graph shows your hospital’s performance on each measure, reported as percentiles. Individual measure percentiles are based on your measure rank within your comparison group.

Five Year Trend Graphs – Profiled Hospital and Comparison Group Quintiles

This section of the Profile contains graphs for each individual performance measure 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.

Missing Data Points

Data points will be missing from a trend graph if one or more of the following conditions apply:
- Measure data for a specific year was missing in the source data file (CMS Hospital Compare; HCRIS hospital cost reports)
- Measure was incalculable due to insufficient MEDPAR POA coding (impacts inpatient mortality, complications, avg. los, cost per case)
- Measure was excluded from trend analysis as a high or low outlier. We apply an interquartile range methodology to identify high and low outlier trim points. (Impacts cost per case measures)
- Measure was based on 11 or fewer patient records (HIPAA exclusion)

Measure Data Periods

<table>
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<th>Measure</th>
<th>Data Point</th>
<th>Data Period</th>
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<tr>
<td>30-Day Mortality and Readmissions</td>
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<td>July 1, 2011-June 30, 2014</td>
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<td>July 1, 2008-June 30, 2011</td>
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Note: Profiled hospital compared to Teaching Hospitals: n = 299
AMI PATIENTS
2011 - 2015 RATE OF IMPROVEMENT QUINTILES

RISK-ADJUSTED INPATIENT MORTALITY INDEX

Profiled hospital is NOT CHANGING (99% confidence)

<table>
<thead>
<tr>
<th>YEARS</th>
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<th>60th</th>
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Note: Profiled hospital compared to Teaching Hospitals: n = 299
AMI PATIENTS
2011 - 2015 RATE OF IMPROVEMENT QUINTILES

30-DAY MORTALITY RATE

PERCENTILES
- 80th to Max
- 60th to 80th
- 40th to 60th
- 20th to 60th
- Min to 20th

Profiled hospital is IMPROVING (95% confidence)

<table>
<thead>
<tr>
<th>YEARS</th>
<th>HOSPITAL COMPARISON GROUP</th>
<th>PROFILED HOSPITAL</th>
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30-DAY READMISSION RATE

Profiled hospital is IMPROVING (95% confidence)

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Note: Profiled hospital compared to Teaching Hospitals: n = 299
AMI PATIENTS
2011 - 2015 RATE OF IMPROVEMENT QUINTILES

SEVERITY-ADJUSTED AVERAGE LENGTH OF STAY

WAGE- AND SEVERITY-ADJUSTED COST PER CASE

Profiled hospital is IMPROVING (95% confidence)

Profiled hospital is NOT CHANGING (95% confidence)

Note: Profiled hospital compared to Teaching Hospitals: n = 299
HF PATIENTS
2011 - 2015 RATE OF IMPROVEMENT QUINTILES

RISK-ADJUSTED INPATIENT MORTALITY INDEX

Profiled hospital is IMPROVING (99% confidence)

Note: Profiled hospital compared to Teaching Hospitals: n = 299
**HF PATIENTS**
**2011 - 2015 RATE OF IMPROVEMENT QUINTILES**

**30-DAY MORTALITY RATE**

**30-DAY READMISSION RATE**

**Profiled hospital is NOT changing (95% confidence)**

**Profiled hospital is IMPROVING (95% confidence)**

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**PERCENTILES**
- 80th to Max
- 60th to 80th
- 40th to 60th
- 20th to 60th
- Min to 20th
- Profiled Hospital

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<tr>
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*Note: Profiled hospital compared to Teaching Hospitals: n = 299*
HF PATIENTS
2011 - 2015 RATE OF IMPROVEMENT QUINTILES

SEVERITY-ADJUSTED AVERAGE LENGTH OF STAY

<table>
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WAGE- AND SEVERITY-ADJUSTED COST PER CASE

PROFILED hospital is NOT CHANGING (95% confidence)

Note: Profiled hospital compared to Teaching Hospitals: n = 299
CABG PATIENTS
2011 - 2015 RATE OF IMPROVEMENT QUINTILES

RISK-ADJUSTED INPATIENT MORTALITY INDEX

RISK-ADJUSTED COMPLICATIONS INDEX

Profiled hospital is NOT CHANGING (99% confidence)

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Note: Profiled hospital compared to Teaching Hospitals: n = 299
CABG PATIENTS
2011 - 2015 RATE OF IMPROVEMENT QUINTILES

CABG WITH INTERNAL MAMMARY ARTERY USE (%)

PERCENTILES
- 80th to Max
- 60th to 80th
- 40th to 60th
- 20th to 40th
- Min to 20th

Profiled hospital is NOT CHANGING (95% confidence)

<table>
<thead>
<tr>
<th>PERCENTILE POINTS</th>
<th>20th</th>
<th>40th</th>
<th>60th</th>
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<td>93.0</td>
<td>94.7</td>
<td>96.8</td>
<td>98.4</td>
</tr>
<tr>
<td>2013</td>
<td>90.5</td>
<td>93.4</td>
<td>95.2</td>
<td>97.2</td>
<td>98.5</td>
</tr>
<tr>
<td>2014</td>
<td>90.8</td>
<td>93.4</td>
<td>95.3</td>
<td>97.0</td>
<td>98.2</td>
</tr>
<tr>
<td>2015</td>
<td>91.0</td>
<td>93.8</td>
<td>95.5</td>
<td>97.2</td>
<td>97.9</td>
</tr>
</tbody>
</table>

Note: Profiled hospital compared to Teaching Hospitals: n = 299
CABG PATIENTS
2011 - 2015 RATE OF IMPROVEMENT QUINTILES

SEVERITY-ADJUSTED AVERAGE LENGTH OF STAY

WAGE- AND SEVERITY-ADJUSTED COST PER CASE

**Profiled hospital is IMPROVING (95% confidence)**

**Profiled hospital is NOT CHANGING (95% confidence)**

**Note: Profiled hospital compared to Teaching Hospitals: n = 299**
PCI PATIENTS
2011 - 2015 RATE OF IMPROVEMENT QUINTILES

RISK-ADJUSTED INPATIENT MORTALITY INDEX

RISK-ADJUSTED COMPLICATIONS INDEX

Profiled hospital is IMPROVING (99% confidence)

Profiled hospital is IMPROVING (99% confidence)

Note: Profiled hospital compared to Teaching Hospitals: n = 299
PCI PATIENTS
2011 - 2015 RATE OF IMPROVEMENT QUINTILES

SEVERITY-ADJUSTED AVERAGE LENGTH OF STAY

WAGE- AND SEVERITY-ADJUSTED COST PER CASE

Profiled hospital is NOT CHANGING (95% confidence)

Note: Profiled hospital compared to Teaching Hospitals: n = 299
50 TOP CARDIO HOSPITALS CURRENT PROFILE

CURRENT PROFILE

The 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
• Risk-Adjusted Complications Index
• Percent CABG Patient with IMA Use
• 30-Day Mortality Rate (AMI, HF, CABG)
• 30-Day Readmission Rate (AMI, HF, CABG)
• Severity-Adjusted Average Length of Stay
• Wage- and Severity-Adjusted Average Cost Per Case

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

Current Percentile Bar Graph – Individual Measures

This bar graph shows your hospital’s current performance on each measure, reported as percentiles. Individual measure percentiles are based on your measure rank within your comparison group.

Profiled Hospital Compared with Benchmark and Peer

This section contains 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 ‘normal’, regardless of how high or low the index value.

Missing Bar

Your performance bar will be missing from a graph if one or more of the following conditions apply:

• Measure data for a specific year was missing in the source data file (CMS Hospital Compare; HCRIS hospital cost reports)
• Measure was incalculable due to insufficient MEDPAR POA coding (impacts inpatient mortality, complications, avg. los, cost per case)
• Measure was based on fewer than 11 patient records (HIPAA)

Measure Data Periods

<table>
<thead>
<tr>
<th>Measure</th>
<th>Data Period Used for 2015 Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Mortality, Complications and % CABG w IMA</td>
<td>FFY 2014-2015</td>
</tr>
<tr>
<td>30-Day Mortality and Readmissions</td>
<td>July 1, 2012-June 30, 2015</td>
</tr>
<tr>
<td>ALOS; Cost per Case</td>
<td>FFY 2015</td>
</tr>
</tbody>
</table>

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50 TOP CARDIO HOSPITALS CURRENT PROFILE

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 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.

CMS did not publish 30-day rates for Maryland hospitals in the Hospital Compare dataset used in the current profile of this study. For this reason, all Maryland hospitals were excluded from the study.

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% conf).
• 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.

NEW MEASURES FOR INFORMATION ONLY
We are including a number of new measures 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 in a separate section of this Current Profile.

MORE INFORMATION ON METHODOLOGIES
The Methodology and Appendix sections of the 50 Top Cardiovascular Hospitals Study Overview provide more detail on the calculation of each performance measure. The Overview also describes the methodology used to calculate IQR outliers and to determine statistically poor performance on the inpatient mortality and complications measures.

2015 PERFORMANCE RANK PERCENTILES

PERCENTILE
0
20
40
60
80
100
AMI IP Mort
HF IP Mort
PCI IP Mort
CABG IP Mort
PCI Comp
CABG Comp
CABG IMA
AMI ALOS
HF ALOS
PCI ALOS
CABG ALOS
AMI Cost
HF Cost
PCI Cost
CABG Cost
AMI 30Day Mort
HF 30Day Mort
PCI 30Day Mort
CABG 30Day Mort
AMI 30Day Readmit
HF 30Day Readmit
PCI 30Day Readmit
CABG 30Day Readmit

Note: Profiled hospital compared to Teaching Hospitals: n = 306
AMI PATIENTS
2015 PERFORMANCE COMPARED TO BENCHMARK\textsuperscript{1} AND PEER\textsuperscript{2} HOSPITALS

RISK-ADJUSTED INPATIENT MORTALITY INDEX

<table>
<thead>
<tr>
<th>INDEX</th>
<th>Profiled Hospital</th>
<th>Benchmark Median</th>
<th>Peer Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDEX</td>
<td>0.83</td>
<td>0.79</td>
<td>1.05</td>
</tr>
</tbody>
</table>

Profiled hospital is statistically AS expected (99% confidence).

DESIRED DIRECTION

30-DAY READMISSION RATE

<table>
<thead>
<tr>
<th>PERCENT</th>
<th>Profiled Hospital</th>
<th>Benchmark Median</th>
<th>Peer Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERCENT</td>
<td>14.4%</td>
<td>15.9%</td>
<td>16.7%</td>
</tr>
</tbody>
</table>

DESIRED DIRECTION

30-DAY MORTALITY RATE

<table>
<thead>
<tr>
<th>PERCENT</th>
<th>Profiled Hospital</th>
<th>Benchmark Median</th>
<th>Peer Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERCENT</td>
<td>11.6%</td>
<td>12.8%</td>
<td>14.0%</td>
</tr>
</tbody>
</table>

DESIRED DIRECTION

Note: Profiled hospital compared to Teaching Hospitals

\textsuperscript{1} Benchmark Hospitals are the winners in the comparison group: n=20

\textsuperscript{2} Peer Hospitals are the non-winners in the comparison group: n=286
AMI PATIENTS
2015 PERFORMANCE COMPARED TO BENCHMARK\(^1\) AND PEER\(^2\) HOSPITALS

SEVERITY-ADJUSTED AVERAGE LENGTH OF STAY

<table>
<thead>
<tr>
<th>DAYS</th>
<th>Profiled Hospital</th>
<th>Benchmark Median</th>
<th>Peer Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0</td>
<td>4.00</td>
<td>3.99</td>
<td>4.39</td>
</tr>
</tbody>
</table>

▼ DESIRED DIRECTION

WAGE- AND SEVERITY-ADJUSTED COST PER CASE

<table>
<thead>
<tr>
<th>DOLLARS</th>
<th>Profiled Hospital</th>
<th>Benchmark Median</th>
<th>Peer Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0</td>
<td>$8,268</td>
<td>$8,999</td>
<td>$9,981</td>
</tr>
</tbody>
</table>

▼ DESIRED DIRECTION

Note: Profiled hospital compared to Teaching Hospitals

\(^1\) Benchmark Hospitals are the winners in the comparison group: \(n=20\)

\(^2\) Peer Hospitals are the non-winners in the comparison group: \(n=286\)

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**HF PATIENTS**

**2015 PERFORMANCE COMPARED TO BENCHMARK**\(^1\) **AND PEER**\(^2\) **HOSPITALS**

---

**RISK-ADJUSTED INPATIENT MORTALITY INDEX**

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

- **DESIRED DIRECTION**

---

**30-DAY READMISSION RATE**

- **DESIRED DIRECTION**

---

**30-DAY MORTALITY RATE**

- **DESIRED DIRECTION**

---

\(^1\) **Benchmark Hospitals** are the winners in the comparison group: *n=20*

\(^2\) **Peer Hospitals** are the non-winners in the comparison group: *n=286*

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HF PATIENTS
2015 PERFORMANCE COMPARED TO BENCHMARK¹ AND PEER² HOSPITALS

SEVERITY-ADJUSTED AVERAGE LENGTH OF STAY

Note: Profiled hospital compared to Teaching Hospitals

¹ Benchmark Hospitals are the winners in the comparison group: n=20
² Peer Hospitals are the non-winners in the comparison group: n=286

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CABG PATIENTS
2015 PERFORMANCE COMPARED TO BENCHMARK\(^1\) AND PEER\(^2\) HOSPITALS

**RISK-ADJUSTED INPATIENT MORTALITY INDEX**

<table>
<thead>
<tr>
<th>INDEX</th>
<th>Profiled Hospital</th>
<th>Benchmark Median</th>
<th>Peer Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.59</td>
<td>0.44</td>
<td>1.00</td>
<td></td>
</tr>
</tbody>
</table>

Profiled hospital is statistically AS expected (99% confidence).

\[\downarrow\text{DESIRED DIRECTION}\]

**30-DAY MORTALITY RATE**

<table>
<thead>
<tr>
<th>PERCENT</th>
<th>Profiled Hospital</th>
<th>Benchmark Median</th>
<th>Peer Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5%</td>
<td>2.8%</td>
<td>3.3%</td>
<td></td>
</tr>
</tbody>
</table>

\[\downarrow\text{DESIRED DIRECTION}\]

**RISK-ADJUSTED COMPLICATIONS INDEX**

<table>
<thead>
<tr>
<th>INDEX</th>
<th>Profiled Hospital</th>
<th>Benchmark Median</th>
<th>Peer Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.74</td>
<td>0.68</td>
<td>0.89</td>
<td></td>
</tr>
</tbody>
</table>

Profiled hospital is statistically AS expected (99% confidence).

\[\downarrow\text{DESIRED DIRECTION}\]

**30-DAY READMISSION RATE**

<table>
<thead>
<tr>
<th>PERCENT</th>
<th>Profiled Hospital</th>
<th>Benchmark Median</th>
<th>Peer Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.0%</td>
<td>13.8%</td>
<td>14.4%</td>
<td></td>
</tr>
</tbody>
</table>

\[\downarrow\text{DESIRED DIRECTION}\]

Note: Profiled hospital compared to Teaching Hospitals

\(^1\) Benchmark Hospitals are the winners in the comparison group: \(n=20\)

\(^2\) Peer Hospitals are the non-winners in the comparison group: \(n=286\)
CABG PATIENTS
2015 PERFORMANCE COMPARED TO BENCHMARK\(^1\) AND PEER\(^2\) HOSPITALS

SEVERITY-ADJUSTED AVERAGE LENGTH OF STAY

<table>
<thead>
<tr>
<th></th>
<th>Profiled Hospital</th>
<th>Benchmark Median</th>
<th>Peer Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAYS</td>
<td>7.61</td>
<td>7.86</td>
<td>9.30</td>
</tr>
</tbody>
</table>

\[ \text{\textbullet{} DESIRED DIRECTION} \]

CABG WITH INTERNAL MAMMARY ARTERY USE (%)

<table>
<thead>
<tr>
<th></th>
<th>Profiled Hospital</th>
<th>Benchmark Median</th>
<th>Peer Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERCENT</td>
<td>97.9%</td>
<td>96.8%</td>
<td>94.4%</td>
</tr>
</tbody>
</table>

\[ \text{\textbullet{} DESIRED DIRECTION} \]

WAGE- AND SEVERITY-ADJUSTED COST PER CASE

<table>
<thead>
<tr>
<th></th>
<th>Profiled Hospital</th>
<th>Benchmark Median</th>
<th>Peer Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOLLARS</td>
<td>$31,876</td>
<td>$33,567</td>
<td>$39,004</td>
</tr>
</tbody>
</table>

\[ \text{\textbullet{} DESIRED DIRECTION} \]

\( ^1 \) Benchmark Hospitals are the winners in the comparison group: \( n=20 \)

\( ^2 \) Peer Hospitals are the non-winners in the comparison group: \( n=286 \)
PCI PATIENTS
2015 PERFORMANCE COMPARED TO BENCHMARK\(^1\) AND PEER\(^2\) HOSPITALS

**RISK-ADJUSTED INPATIENT MORTALITY INDEX**

<table>
<thead>
<tr>
<th></th>
<th>Profiled Hospital</th>
<th>Benchmark Median</th>
<th>Peer Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index</td>
<td>0.56</td>
<td>0.66</td>
<td>0.97</td>
</tr>
</tbody>
</table>

Profiled hospital is statistically as expected (99% confidence).

**SEVERITY-ADJUSTED AVERAGE LENGTH OF STAY**

<table>
<thead>
<tr>
<th></th>
<th>Profiled Hospital</th>
<th>Benchmark Median</th>
<th>Peer Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Days</td>
<td>3.40</td>
<td>3.33</td>
<td>3.61</td>
</tr>
</tbody>
</table>

**RISK-ADJUSTED COMPLICATIONS INDEX**

<table>
<thead>
<tr>
<th></th>
<th>Profiled Hospital</th>
<th>Benchmark Median</th>
<th>Peer Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index</td>
<td>0.85</td>
<td>0.74</td>
<td>0.96</td>
</tr>
</tbody>
</table>

Profiled hospital is statistically as expected (99% confidence).

**WAGE- AND SEVERITY-ADJUSTED COST PER CASE**

<table>
<thead>
<tr>
<th></th>
<th>Profiled Hospital</th>
<th>Benchmark Median</th>
<th>Peer Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dollars</td>
<td>$14,582</td>
<td>$14,599</td>
<td>$17,209</td>
</tr>
</tbody>
</table>

**Note:** Profiled hospital compared to Teaching Hospitals

\(^1\) Benchmark Hospitals are the winners in the comparison group: \(n=20\)

\(^2\) Peer Hospitals are the non-winners in the comparison group: \(n=286\)
NEW METRICS UNDER CONSIDERATION

This section of your report contains measures that we are currently considering for future inclusion in the study.

- Episode of Care Payment Measures
  - 30-day episode payment for AMI patients
  - 30-day episode payment for HF patients

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.
AMI AND HF PATIENTS
2015 PERFORMANCE COMPARED TO BENCHMARK\(^1\) AND PEER\(^2\) HOSPITALS

AMI 30-DAY EPISODE PAYMENT

<table>
<thead>
<tr>
<th></th>
<th>DOLLARS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profiled Hospital</td>
<td>$21,671</td>
</tr>
<tr>
<td>Benchmark Median</td>
<td>$23,095</td>
</tr>
<tr>
<td>Peer Median</td>
<td>$22,987</td>
</tr>
</tbody>
</table>

**DESIRED DIRECTION**

HF 30-DAY EPISODE PAYMENT

<table>
<thead>
<tr>
<th></th>
<th>DOLLARS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profiled Hospital</td>
<td>$15,964</td>
</tr>
<tr>
<td>Benchmark Median</td>
<td>$16,505</td>
</tr>
<tr>
<td>Peer Median</td>
<td>$16,214</td>
</tr>
</tbody>
</table>

**DESIRED DIRECTION**

Note: Profiled hospital compared to Teaching Hospitals

\(^1\) Benchmark Hospitals are the winners in the comparison group: \(n=20\)

\(^2\) Peer Hospitals are the non-winners in the comparison group: \(n=286\)