

IBM Watson Health

# 100 Top Hospitals, 2017

Competitor Report

Prepared for Profiled Hospital  
City, ST

**TRUVEN**   
HEALTH ANALYTICS®  
IBM Watson Health™



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- Background and Approach
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## Background and Approach

- In this analysis, Sample Hospital performance and rate of improvement are compared to that of seven client-selected competitors, using the 100 Top Hospitals® measures and methodologies
- Measures included in the analysis\*
  - **Overall Score**
    - Inpatient Mortality
    - Complications
    - Mean 30-Day Mortality Rate
    - Mean 30-Day Readmission Rate
    - Average Length of Stay
    - Mean Emergency Department Throughput
    - Inpatient Expense per Discharge
    - Medicare Spend per Beneficiary
    - Operating Profit Margin
    - HCAHPS Score (Overall Hospital Rating)
- Results are displayed as the rank percentile of each hospital's performance and rate of improvement compared to all U.S. hospitals within each hospital's 100 Top peer group
  - Conversion to percentiles allows direct comparison of all selected hospitals, without regard to peer group

*\*Core Measures Mean Percent is included in the calculation of the Overall Score but is not reported because there are insufficient data years to trend*

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## Executive Summary

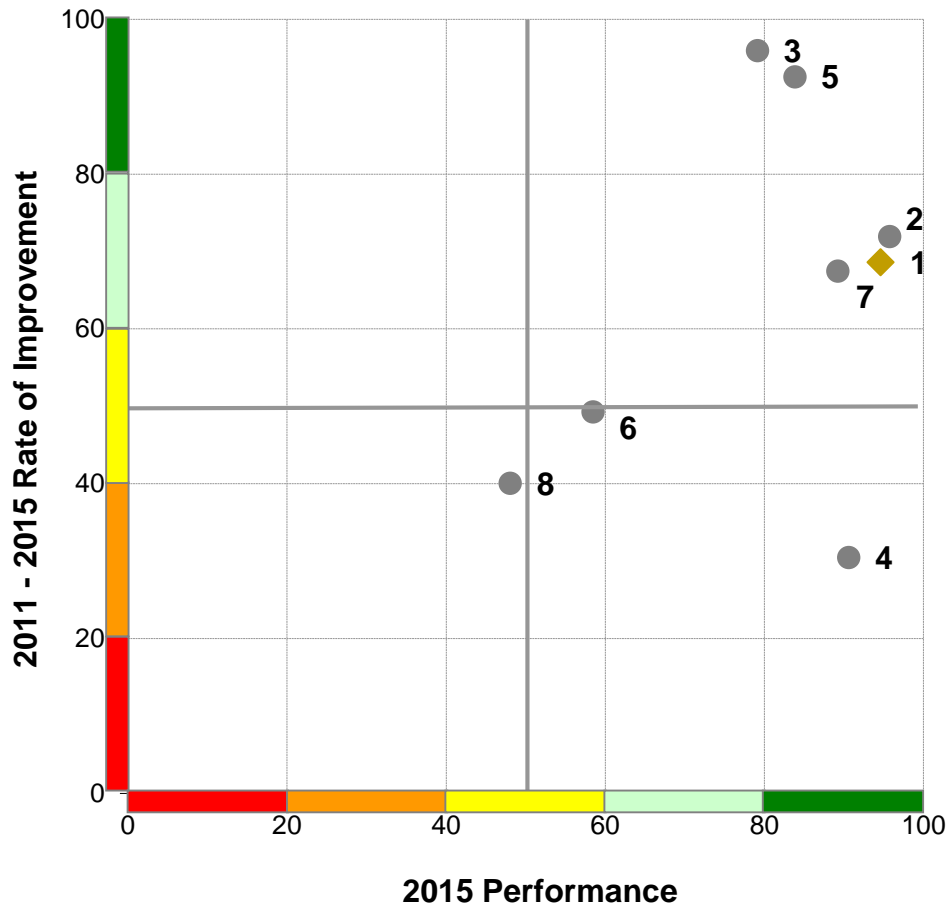
- Overall National Performance
- Performance compared to selected competitors
- Strengths and opportunities

# Profiled Competitors

- **Profiled Hospital**
- Competitor 1
- Competitor 2
- Competitor 3
- Competitor 4
- Competitor 5
- Competitor 6
- Competitor 7

# Overall Comparison

## 2015 Performance and 2011-2015 Rate of Improvement



### HOSPITAL KEY

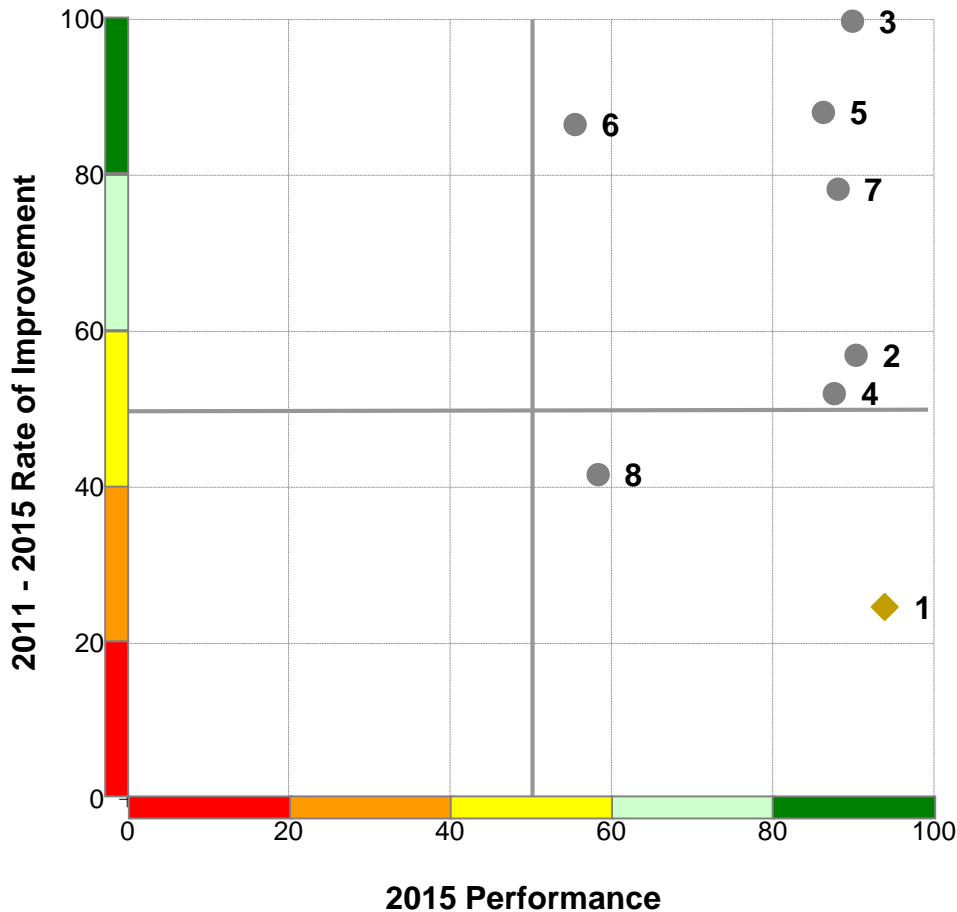
- 1 Profiled Hospital
- 2 Competitor 1
- 3 Competitor 2
- 4 Competitor 3
- 5 Competitor 4
- 6 Competitor 5
- 7 Competitor 6
- 8 Competitor 7

### Quintile Key

- > 80 to 100
- > 60 to 80
- > 40 to 60
- > 20 to 40
- > 0 to 20

# Inpatient Mortality

## 2015 Performance and 2011-2015 Rate of Improvement



### HOSPITAL KEY

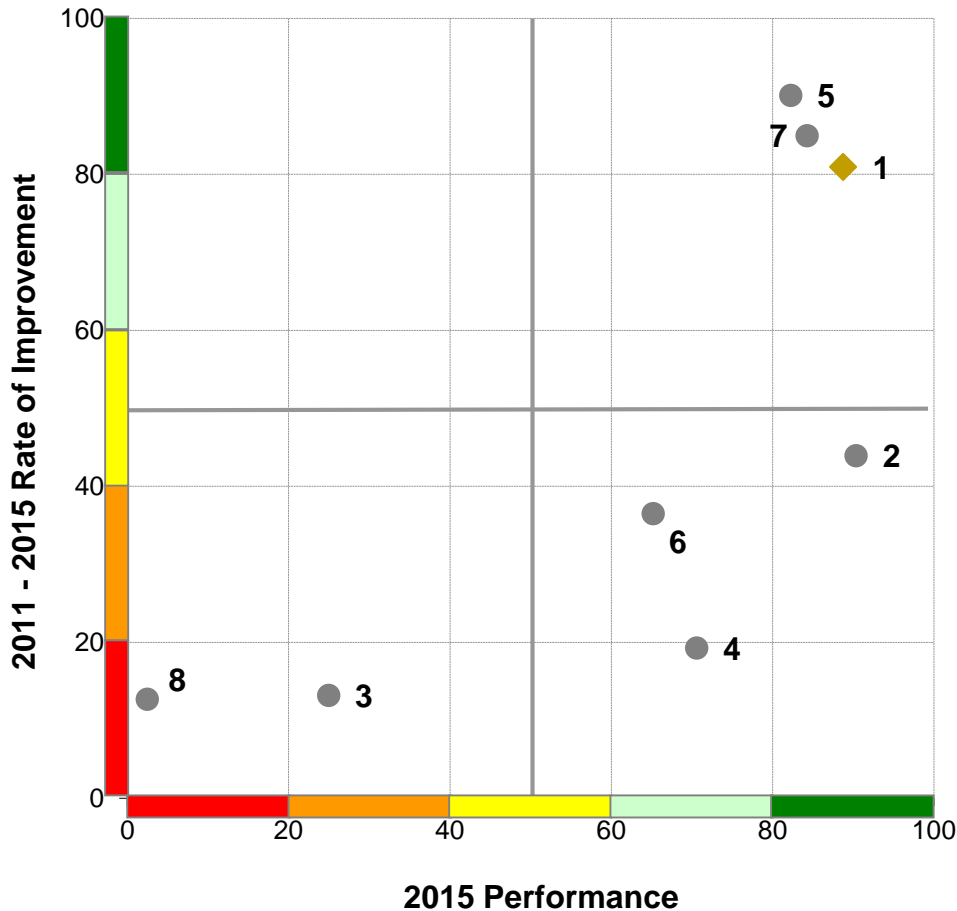
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# Complications

## 2015 Performance and 2011-2015 Rate of Improvement



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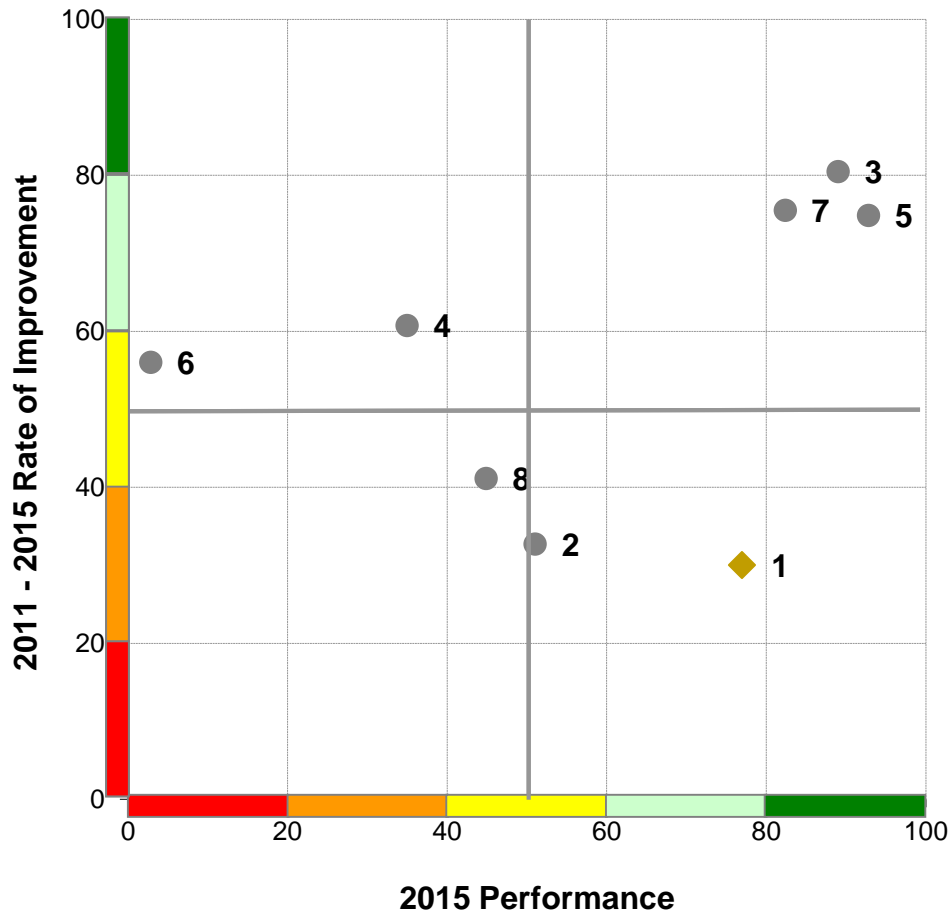
### Quintile Key

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# 30-Day Mortality

## 2015 Performance and 2011-2015 Rate of Improvement



### HOSPITAL KEY

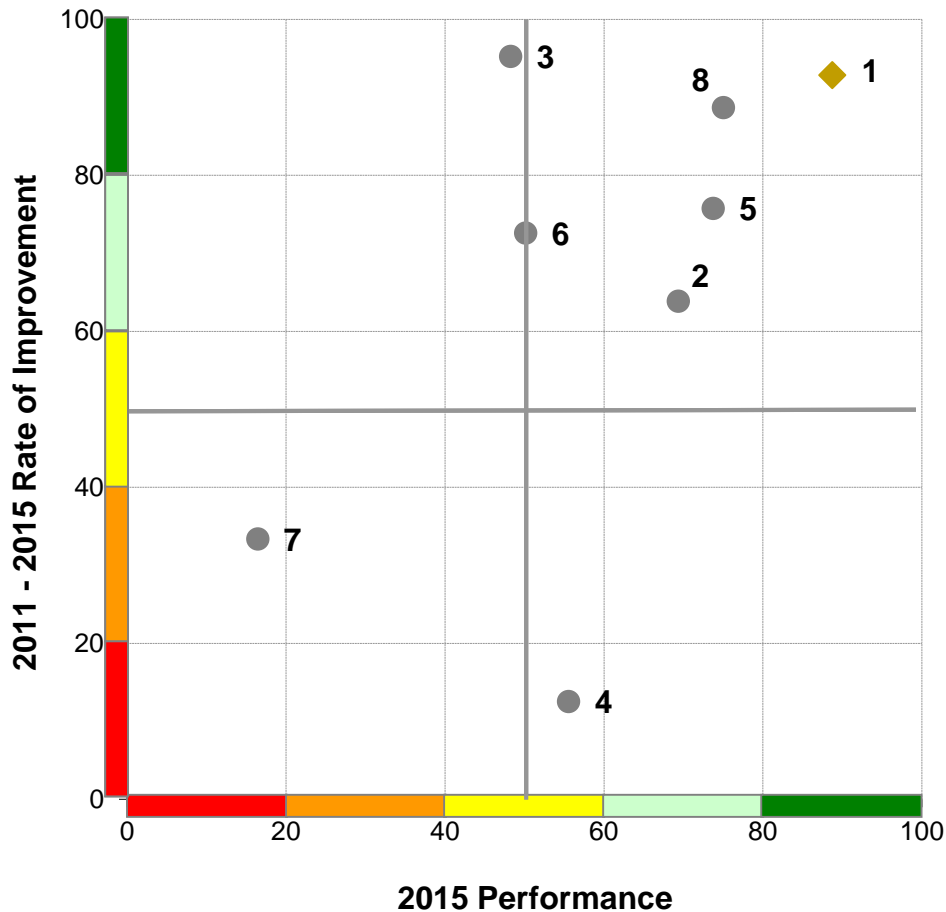
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# 30-Day Readmissions

## 2015 Performance and 2011-2015 Rate of Improvement



### HOSPITAL KEY

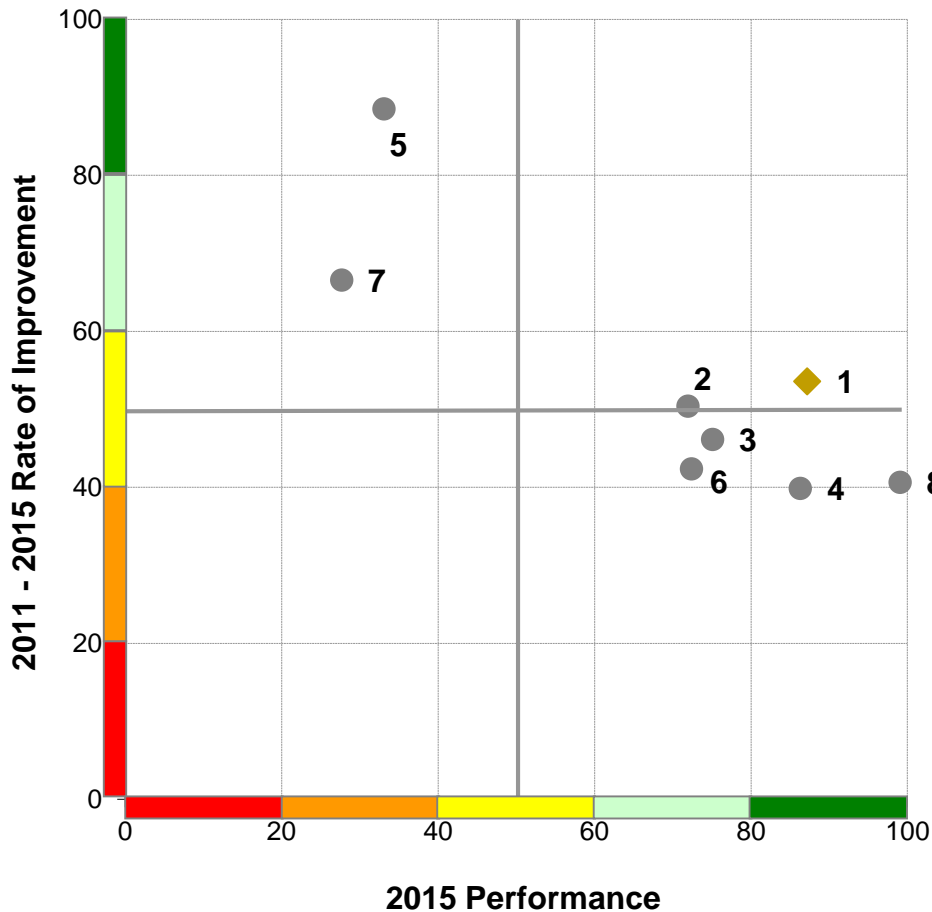
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# Average Length of Stay

2015 Performance and 2011-2015 Rate of Improvement



**HOSPITAL KEY**

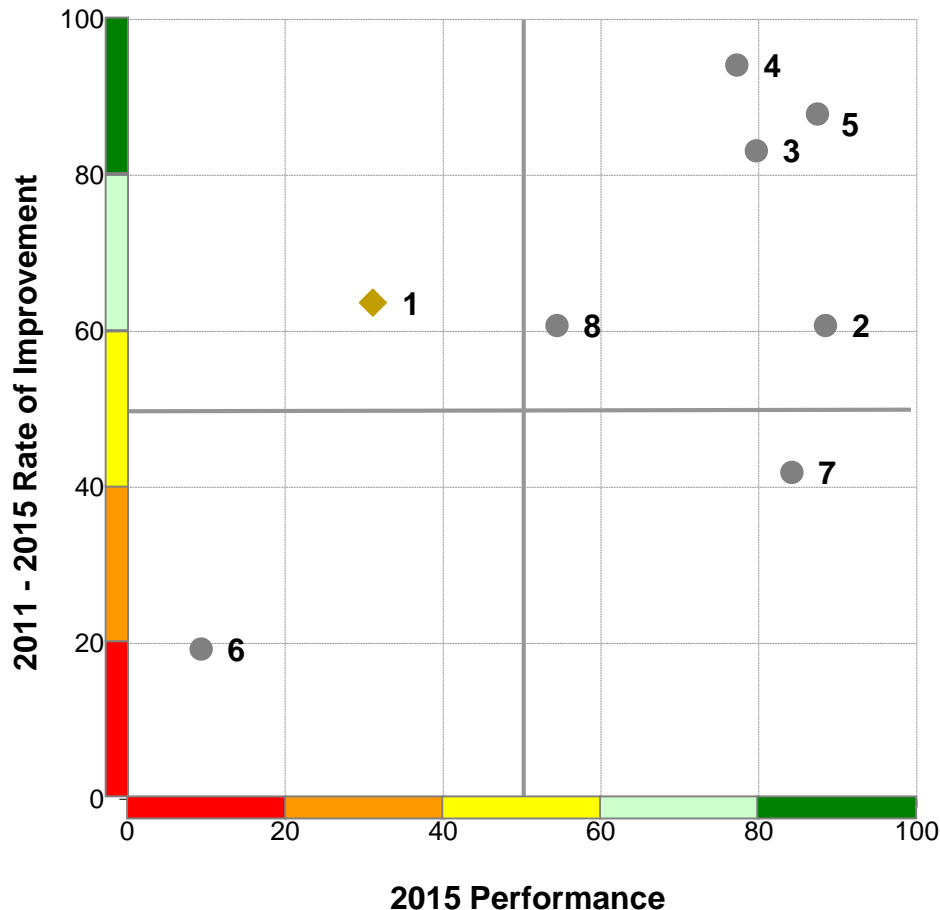
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# Mean Emergency Department Throughput

2015 Performance and 2011-2015 Rate of Improvement



**HOSPITAL KEY**

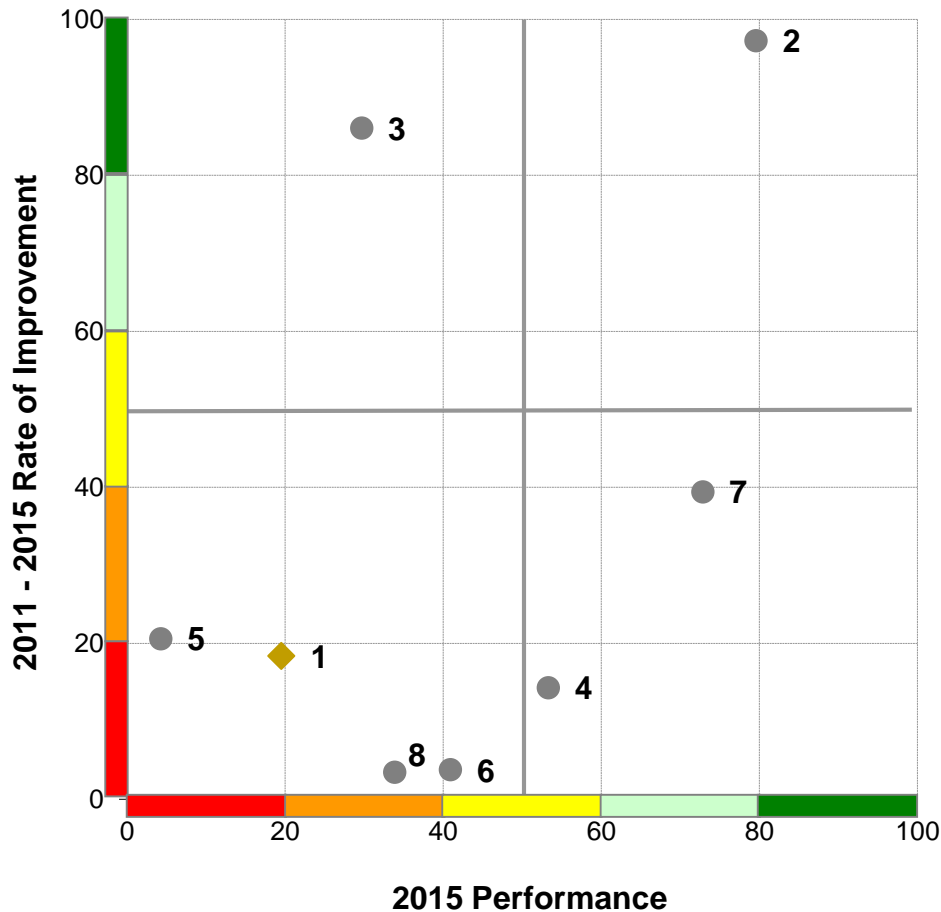
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# Inpatient Expense per Discharge

2015 Performance and 2011-2015 Rate of Improvement



**HOSPITAL KEY**

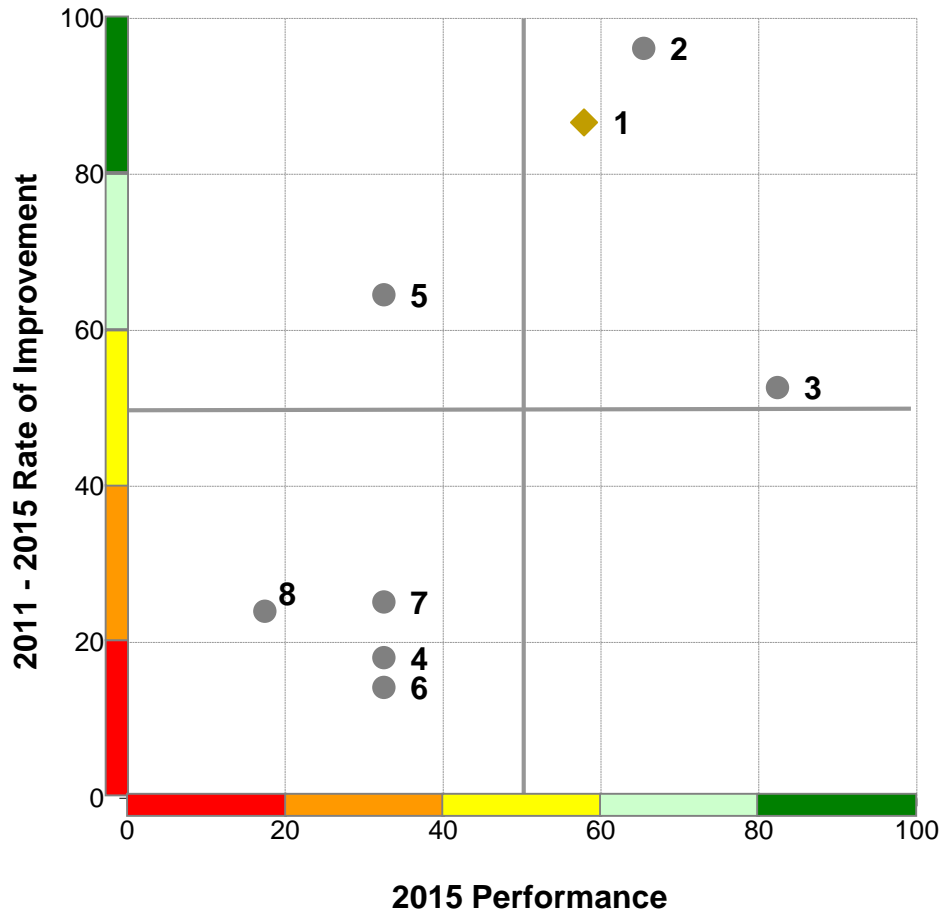
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# Medicare Spend per Beneficiary

## 2015 Performance and 2011-2015 Rate of Improvement



### HOSPITAL KEY

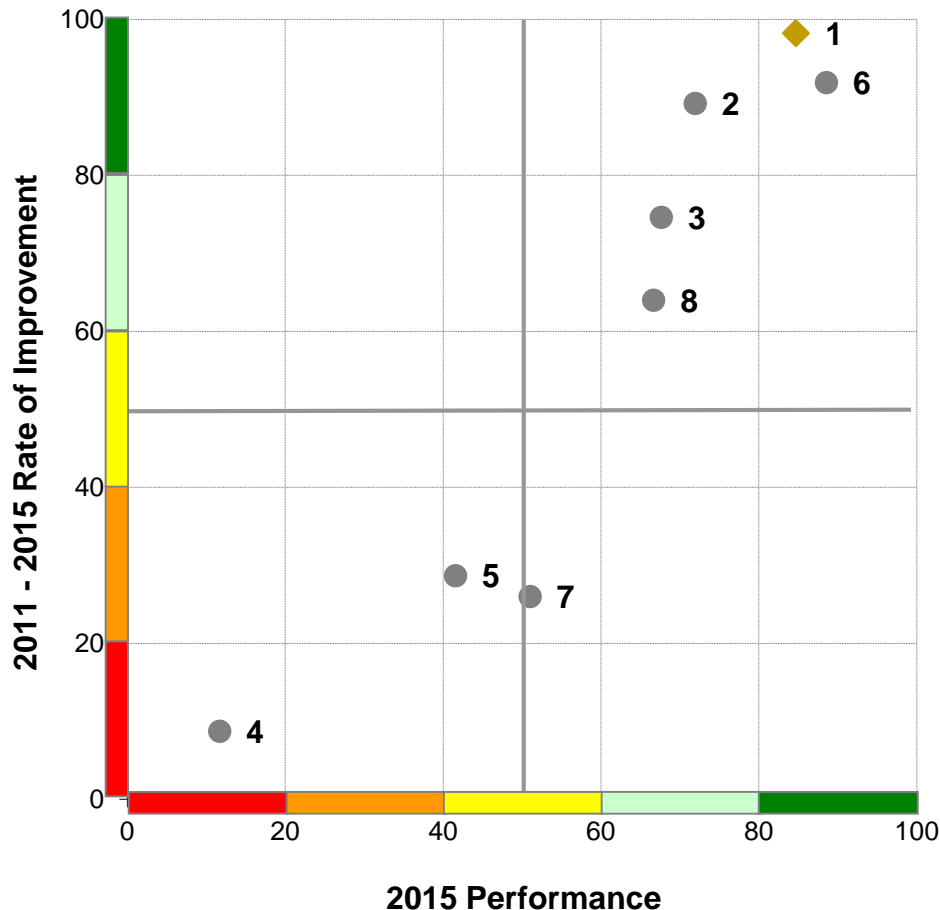
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# Operating Profit Margin

## 2015 Performance and 2011-2015 Rate of Improvement



### HOSPITAL KEY

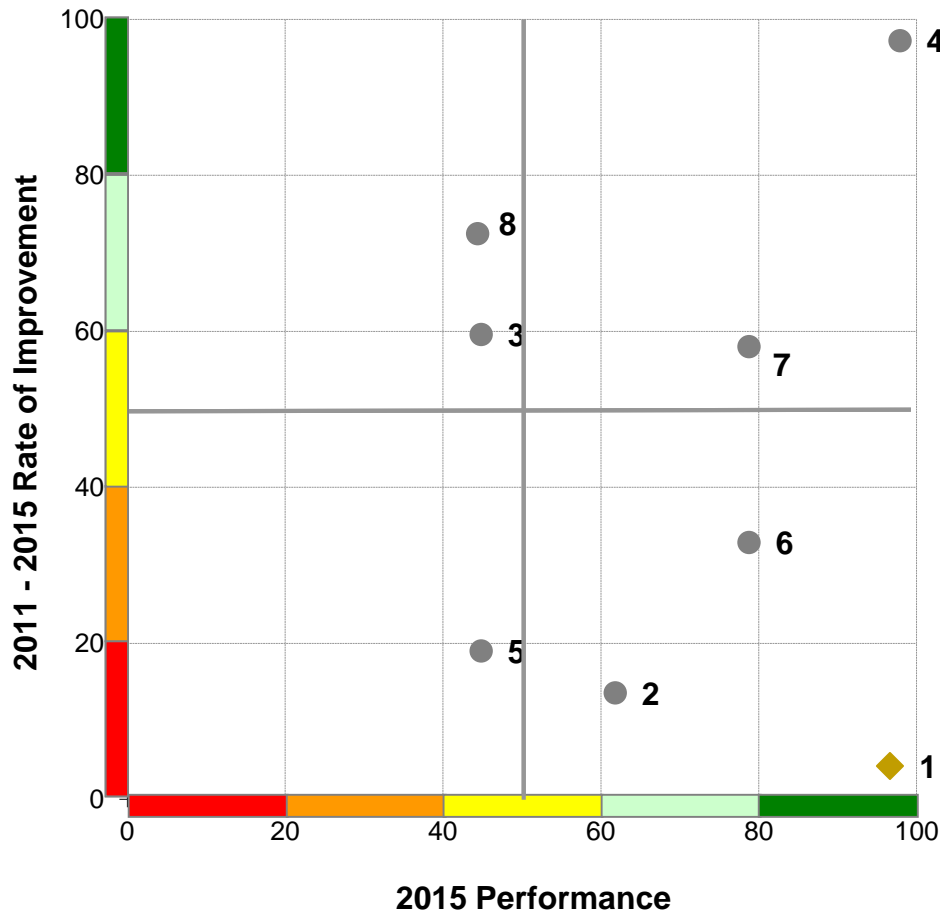
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# HCAHPS Score

## 2015 Performance and 2011-2015 Rate of Improvement



### HOSPITAL KEY

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# Methodology Overview

# General Ranking Methodology

- 2015 Performance
  - Hospitals are ranked on each of the included measures, by class, for the most current year(s) of data
    - 2015 and 2014 data are combined for mortality, complications
  - Ranks are weighted, summed and the sum is re-ranked by class to determine each hospital's overall performance achievement relative to its class
- 2011-2015 Rate of Improvement
  - Hospitals are ranked on the regression line t-statistic for each included measure, by class
  - Ranks are weighted, summed and the sum is re-ranked by class to determine each hospital's overall rate of improvement performance relative to its class

# Hospital Classification

Hospital Classes - The Comparison Groups	Winners	Total Hosps
<p><b>Major Teaching Hospitals</b> – three ways to qualify:</p> <ul style="list-style-type: none"> <li>400+ beds plus 0.25 IR/bed ratio and                             <ul style="list-style-type: none"> <li>- 10 GME sponsored programs OR</li> <li>- 20 GME programs total</li> </ul> </li> <li>30 GME programs total (regardless of beds or IR/bed ratios)</li> <li>0.60 IR/Bed ratio (regardless of beds or GME count)</li> </ul>	15	204
<p><b>Teaching Hospitals</b> – 200+ beds and</p> <ul style="list-style-type: none"> <li>- 0.03 IR/bed ratio OR</li> <li>- 3 GME programs total</li> </ul>	25	445
<p><b>Large Community Hospitals</b> – 250+ beds; NOT teaching</p>	20	312
<p><b>Medium Community Hospitals</b> – 100 to 249 beds; NOT teaching</p>	20	933
<p><b>Small Community Hospitals</b> – 25 to 99 beds; NOT teaching</p>	20	846
<p><b>2017 National In-Study Hospitals</b></p>	<b>100</b>	<b>2,740</b>

# Performance Domains, Measures & Rank Weights

Domain	Measure	Current Weights	Trend Weights
Inpatient Outcomes	Risk-Adjusted Inpatient Mortality	1	1
	Risk-Adjusted Complications	1	1
Process of Care	Core Measures Mean Percent ( <i>Stroke and Blood Clot Prevention</i> )	1	NA*
Extended Outcomes	30-Day Mortality Rates ( <i>AMI, HF, PN, COPD, STK</i> )	1	1
	30-Day Readmission Rates ( <i>AMI, HF, PN, HipKnee, COPD, STK</i> )	1	1
	<b>Quality Subtotal</b>	<b>5</b>	<b>4</b>
Process Efficiency	Severity-Adjusted Average Length of Stay	1	1
	Mean Emergency Department Throughput ( <i>minutes</i> )	1	1
Cost Efficiency	Inpatient Expense per Discharge, AWI & Casemix Adjusted	½	½
	Medicare Spend Per Beneficiary Index	½	½
Financial Health	Operating Profit Margin	1	1
Patient Experience	HCAHPS Score ( <i>Overall rating question</i> )	1	1
	<b>Operations Subtotal</b>	<b>5</b>	<b>5</b>
	<b>TOTAL</b>	<b>10</b>	<b>9</b>

\*Not enough data points available to trend.

# Data Sources For Current Profile

Performance Measure	Current Performance (100 Top Award Selection)
Risk-Adjusted Inpatient Mortality Index	MEDPAR Federal Fiscal Year (FFY) 2014 and 2015*
Risk-Adjusted Complications Index	MEDPAR FFY 2014 and 2015*
Core Measures Mean Percent (Stroke, Blood Clot)	CMS Hospital Compare Jan 1, 2015-Dec 31, 2015
Mean 30-Day Mortality Rate (AMI, Heart Failure, Pneumonia, COPD, Stroke)	CMS Hospital Compare Jul 1, 2012-Jun 30, 2015
Mean 30-Day Readmission Rate (AMI, Heart Failure, Pneumonia, Hip/Knee, COPD, Stroke)	CMS Hospital Compare Jul 1, 2012-Jun 30, 2015
Severity-Adjusted Average Length of Stay	MEDPAR FFY 2015
Mean Emergency Department Throughput	CMS Hospital Compare Calendar Year CY 2015
Inpatient Expense per Discharge (Case mix- and wage-adjusted)	HCRIS Medicare Cost reports ending in 2015
Medicare Spend per Beneficiary Index	CMS Hospital Compare CY 2015
Adjusted Operating Profit Margin	HCRIS Medicare Cost reports ending in 2015
HCAHPS Score (Overall Hospital Rating)	CMS Hospital Compare CY 2015

*\*Two years of data are combined for each study year data point*

# Data Sources For Trend Profile

Performance Measure	5-Year Trend Performance
Risk-Adjusted Inpatient Mortality Index	MEDPAR Federal Fiscal Year (FFY) 2010-2015*
Risk-Adjusted Complications Index	MEDPAR FFY 2010-2015*
Core Measures Mean Percent (Stroke, Blood Clot)	Trend not available
Mean 30-Day Mortality Rate** (AMI, Heart Failure, Pneumonia)	CMS Hospital Compare: Three-year datasets ending Jun 30 in 2011, 2012, 2013, 2014, 2015
Mean 30-Day Readmission Rate*** (AMI, Heart Failure, Pneumonia)	CMS Hospital Compare: Three-year datasets ending Jun 30 in 2011, 2012, 2013, 2014, 2015
Severity-Adjusted Average Length of Stay	MEDPAR FFY 2011-2015
Mean Emergency Department Throughput	CMS Hospital Compare CY 2012, FFY 2013, CY 2014, CY 2015 (CY2013 not published)
Inpatient Expense per Discharge (Case mix- and wage-adjusted)	HCRIS Medicare Cost reports ending in 2011-2015
Medicare Spend per Beneficiary Index	CMS Hospital Compare CY 2012-2015
Adjusted Operating Profit Margin	HCRIS Medicare Cost reports ending in 2011-2015
HCAHPS Score (Overall Hospital Rating)	CMS Hospital Compare CY 2011-2015

\*Two years of data are combined for each study year data point

\*\*Trend data for 30-day mortality does not include COPD or Stroke

\*\*\*Trend data for 30-day readmissions does not include Hip/Knee, COPD or Stroke