

## ***Distinguished Hospital Award for Clinical Excellence™*** **2014 Methodology**

To help consumers evaluate and compare hospital performance, Healthgrades analyzed clinical outcomes data for nearly every acute care hospital in the country. In order to evaluate overall hospital performance and to identify the best-performing hospitals in clinical excellence across the United States, Healthgrades used a two-step methodology.

1. Evaluated hospital performance for 30 procedures and conditions using *Healthgrades Mortality and Complication Outcomes Methodology*.
2. Identified the overall best-performing hospitals using this *Distinguished Hospital Award for Clinical Excellence™ Methodology*.

### ***Evaluating Hospital Performance***

Using a logistic regression based risk-adjusted model to compare performance among hospitals, Healthgrades stratified hospital performance into one of three performance categories: 1-star (worse than expected), 3-star (as expected), or 5-star (better than expected) for each of 30 procedures and conditions (see *Procedure and Conditions List* below).

To have hospital performance evaluated in a specific procedure or condition, a hospital must have a minimum of 30 cases over the three years of study and at least five cases in the most recent year of analysis (2012).

The Healthgrades risk-adjustment methodology considers important differences in patient demographic (e.g., age, gender) and clinical characteristics (e.g., underlying medical conditions) that could increase the patient's risk of mortality or in-hospital complications. Risk adjustment of the data is needed to make accurate and valid comparisons of clinical outcomes at different hospitals.

For more information regarding the risk-adjustment methodology, read the complete methodology, *Healthgrades Mortality and Complication Outcomes Methodology*, at [www.healthgrades.com](http://www.healthgrades.com).

### ***Designating Distinguished Hospitals for Clinical Excellence***

The Distinguished Hospital Award for Clinical Excellence recognizes the top 5% of hospitals in the country for clinical excellence. During the 2014 study period (2010 through 2012), 260 hospitals showed superior performance in caring for patients in the Medicare population, as measured by objective clinical outcomes (risk-adjusted mortality and in-hospital complications) across at least 21 of 30 of the most common inpatient conditions and procedures. These hospitals are recognized as Healthgrades 2014 Distinguished Hospital Award for Clinical Excellence recipients.

These 260 award recipient hospitals stand out above the rest for their overall clinical care across a broad spectrum of care. While many hospitals have specific areas of expertise and high-quality outcomes in certain areas, these hospitals exhibit comprehensive high-quality care across clinical specialties.

To be considered for the Healthgrades Distinguished Hospital Award for Clinical Excellence, a hospital's performance had to have been evaluated in at least 21 of the 30 Healthgrades procedures and conditions using Medicare inpatient data from the Medicare Provider Analysis and Review (MedPAR) database purchased from the Centers for Medicare and Medicaid Services (CMS).

After creating a list of hospitals that met these eligibility criteria, Healthgrades took the following steps to determine recipients of the Distinguished Hospital Award for Clinical Excellence.

1. The overall performance score for each hospital was calculated using volume-weighted z-scores averaged across all complications, in-hospital mortality, and 30-day mortality based cohorts. Volume weights represent the proportion of patients within a given cohort and outcome measure. The proportion is calculated as the ratio of patients in a cohort and outcome measure over total patients across all cohorts and outcome measures. The patients used for in-hospital mortality and 30-day mortality are treated as independent for the volume weighting calculation. As each mortality cohort is composed of two outcomes measures, in-hospital mortality and 30-day mortality, and complication cohorts have only one outcome measure, the individual influence of mortality and complication outcomes on the overall performance score is 2 to 1. Within the mortality cohorts a higher emphasis is placed on 30-day mortality (0.6) compared to in-hospital mortality (0.4) because the 30-day mortality outcome measure is considered a more significant quality indicator and this quality measure will impact hospital reimbursements in the near future. The final contribution of each cohort to the overall score will vary based on the mix of cohorts at any given hospital.
2. Hospitals were then listed in descending order by their overall performance score.
3. The top 260 hospitals on the list were selected as representing the top 5% of all hospitals evaluated by Healthgrades for 2014.
4. These top 5% hospitals were designated to receive the 2014 Distinguished Hospital Award for Clinical Excellence.

## **Procedures and Conditions List**

The following 30 procedures and conditions are used in this methodology.

### **Mortality-Based Procedures & Conditions**

Bowel Obstruction	Neurosurgery
Chronic Obstructive Pulmonary Disease (COPD)	Pancreatitis
Colorectal Surgery	Pneumonia
Coronary Artery Bypass Graft (CABG)	Pulmonary Embolism
Coronary Interventional Procedures	Respiratory Failure
Diabetic Emergencies	Sepsis
Esophageal/Stomach Surgeries	Small Intestine Surgeries
Gastrointestinal Bleed	Stroke
Heart Attack	Valve Surgery
Heart Failure	

### **In-Hospital Complication-Based Procedures & Conditions**

Abdominal Aortic Aneurysm Repair	Peripheral Vascular Bypass
Back and Neck Surgery (Without Spinal Fusion)	Prostate Removal Surgery
Carotid Surgery	Spinal Fusion
Gallbladder Surgery	Total Knee Replacement
Hip Fracture Treatment	Transurethral Prostate Resection Surgery
Hip Replacement	