turning knowledge into practice

America's Best Hospitals 2007 Methodology

Emily McFarlane
Joe Murphy
Murrey G. Olmsted
Edward M. Drozd
Craig Hill

To Whom it May Concern:

U.S. News & World Report's "America's Best Hospitals" study is the sole and exclusive property of *U.S. News & World Report*, which owns all rights, including but not limited to copyright, in and to the attached data and material. Any party wishing to cite, reference, publish, or otherwise disclose the information contained herein may do so only with the prior written consent of *U.S. News*. Any *U.S. News*-approved reference or citation must identify the source as "*U.S. News & World Report*'s America's Best Hospitals" and, with the exception of academic journals, must include the following credit line: "Data reprinted with permission from *U.S. News & World Report*." For permission to cite or use in any other way, contact permissions@usnews.com or send a written request to Permissions Department, c/o Mary Lu Meixell, U.S. News & World Report, 1050 Thomas Jefferson Street NW, Washington, DC 20007-3837. For custom reprints or photocopying permission, please contact Catherine Wiencek at 800-7711-6445 ext. 118 or by e-mail at catherinew@fostereprints.com.

Table of Contents

List of Tables

List of Figures

List of Appendixes

I. Introduction

For families faced with a serious or complex medical problem, the choice of hospital can be critical. Until 1990, patients and healthcare providers had few tools or resources beyond their doctor's recommendation to help focus their decision. That changed in 1990, however, when *U.S. News & World Report* initiated an annual assessment of U.S. hospitals in the form of lists collectively titled "America's Best Hospitals." Each summer, the magazine identifies and ranks hospitals of exceptional quality, this year drawing from a universe of 5,462 community hospitals.* Hospitals are assigned a composite score and ranked at the specialty level, based on data from multiple sources.

From 1993 to 2004, the National Opinion Research Center (NORC) at the University of Chicago executed the methodology for *U.S. News*. In 2005, RTI International† in Research Triangle Park, N.C., began producing the rankings. The methodology has been gradually refined during this time as research has indicated areas for improvement and change. In addition, larger-scale adjustments are under constant consideration and will be adopted if they clearly enhance the quality and robustness of the rankings.

For 2007, hospitals are ranked in 16 specialties:

- Cancer
- Digestive Disorders
- Ear, Nose, and Throat
- Endocrinology
- Geriatrics
- Gynecology
- Heart and Heart Surgery
- Kidney Disease
- Neurology and Neurosurgery
- Ophthalmology
- Orthopedics
- Psychiatry
- Rehabilitation
- Respiratory Disorders
- Rheumatology
- Urology

The rankings were developed and the specialties chosen explicitly to help consumers determine which hospitals provide the best care for the most serious and complicated medical conditions and procedures—not for those that are relatively commonplace. The roster of specialties has slightly expanded and contracted over the years. AIDS was dropped in 1998, for example, when it became clear that the majority of care had shifted to an outpatient setting. Last year, Geriatrics was dropped from the list, because of concerns that few hospitals provide this specialized service and in order to develop a more sophisticated methodology to address the

*Military installations, federal institutions, and institutional hospital units (e.g., prison hospitals, college infirmaries) are excluded.

† RTI International is a trade name of Research Triangle Institute.

multiple comorbidities present in this population. Given the importance of this specialty to readers and healthcare, Geriatrics was reinstated this year. We have also improved the methodological approach for this specialty, as will be described throughout this report. The Pediatrics rankings have been removed from the Best Hospitals issue; they will be published separately in a future issue, based on a revision of the methodology.

A. Index of Hospital Quality

The 16 specialties are ranked using one of two approaches. The first approach assigns a score to hospitals in 12 specialties, which will be referred to as the Index of Hospital Quality (IHQ). The 12 specialties with IHQ calculations are Cancer; Digestive Disorders; Ear, Nose, and Throat; Endocrinology; Geriatrics; Gynecology; Heart and Heart Surgery; Kidney Disease; Neurology and Neurosurgery; Orthopedics; Respiratory Disorders; and Urology.

The IHQ reflects the interrelationship, described in the Donabedian paradigm, between three fundamental dimensions of healthcare: (1) structure, (2) process, and (3) outcomes.[1-5] In a hospital, *structure* refers to resources that are directly related to patient care. Examples of structural measures factored into the Best Hospitals rankings include a census of nurses relative to patients; number of staffed beds; availability of desirable technologies and patient services; and special status conferred by a recognized external organization, such as designation as a Nurse Magnet hospital by the American Nurse Credentialing Center (ANCC) or as a National Cancer Institute (NCI) Cancer Center.

Excellent healthcare is also shaped by the *process* of care delivery. This encompasses diagnosis, treatment, prevention, and patient education. A hospital's structure and process are related to *outcomes,* the most obvious of which is whether patients under the hospital's care live or die. Outcomes are typically measured by risk-adjusted mortality rates (i.e., the likelihood of mortality given the complexity of the case). Using robust and sensitive measures for each factor, the IHQ is able to identify the hospitals that provide the best care in each of the 12 specialties. Many of these measures come from secondary data sources. The American Hospital Association (AHA) Annual Survey Database, for example, provides information regarding various structural characteristics of hospital quality. The measures used in the structural, process, and outcomes components of the IHQ are reevaluated and enhanced each year to increase the quality of the rankings. In addition, steps are taken to identify the best possible data sources for these measures. Throughout this report, we will refer to the 12 specialties as the IHQ-driven specialties.

Below is a brief description of each component of the IHQ rankings. They will be discussed in more detail later in the report.

Structure

This score is based on data related to the structural characteristics of each medical specialty within a given hospital. These elements represent volume (i.e., number of discharges), technology, and other features that characterize the hospital environment. The majority of these data elements are derived from the most recent AHA Annual Survey Database, which covers fiscal year (FY) 2005. Volume data are taken from the Medicare Provider Analysis and Review (MedPAR) database maintained by the Centers for Medicare & Medicaid Services (CMS). This database contains information on all Medicare beneficiaries who use hospital inpatient services.

Process

The reputational component of the IHQ can be viewed as the process measure, representing a hospital's reputation for an overall process that leads to high-quality care. It also can be seen as a form of peer review. The score is based on cumulative responses from three surveys of board-certified physicians, conducted for 2005, 2006, and 2007, in which those surveyed were asked to nominate up to five "best hospitals" in their specific field of care, irrespective of expense or location, for patients with serious or difficult conditions. (For the physician questionnaires used in the 2007 rankings, see ***Appendixes A***, ***B***, ***and C***.) A sample of 200 board-certified physicians was selected in each specialty from the American Medical Association Physician Masterfile, a database of more than 850,000 physicians.[‡]

The physician sample was stratified by census region and specialty. The final aggregated sample includes both federal and nonfederal medical and osteopathic physicians residing in all 50 states and the District of Columbia.

Outcomes

The outcomes score measures mortality at the time of discharge (for cancer) and at 30 days post admission (for the remaining 11 data-driven specialties). Like the volume indicator, the outcomes measure is based on the MedPAR database. For each hospital and specialty, Thomson Healthcare[§] computed an adjusted mortality rate based on predicted and actual mortality rates

[‡] Does not include medical students, residents, retirees, or deceased physicians.

[§] The MEDSTAT Group, Inc was acquired by Thompson Healthcare in 2006. We continue to work with this division of the company, but now refer to them as Thomson Healthcare to reflect their new corporate identity.

using the All Patient Refined Diagnosis Related Group (APR-DRG) method created by 3M Health Information Systems.[6] APR-DRGs adjust the value for expected deaths by severity of illness using the patient's principal and secondary diagnoses. The method is applied to the three most recent years (FY2003, FY2004, and FY2005) of Medicare reimbursement claims made by hospitals to CMS.

B. Reputation-Only Rankings

In the remaining four specialties—Ophthalmology, Psychiatry, Rehabilitation, and Rheumatology—ranking scores consist only of the reputational portion of the process component. Many of the additional measures are inapplicable to these specialties because the procedures performed are done largely on an outpatient basis and pose a very small risk of death. For this report, these specialties are referred to as reputation-only specialties; the associated rankings are referred to as reputation-only rankings.

Report Outline

The remainder of the report is structured as follows:

- ***Section II*** describes the IHQ components in detail. (For a more exhaustive review of the foundation, development, and use of the individual measures and the composite index, see "Best Hospitals: A Description of the Methodology for the Index of Hospital Quality."[7])
- ***Section III*** describes the process used to develop the rankings for the five reputation-only specialties.
- ***Section IV*** presents the Honor Roll, an additional measure that denotes excellence across a broad range of specialties.
- ***Section V*** summarizes changes in methodology for this year's rankings.
- ***Section VI*** describes several improvements under consideration for future releases of the rankings.

II. The Index of Hospital Quality

This section describes hospital eligibility criteria and the procedures used to derive the IHQ for the 12 IHQ-driven specialties. Hospitals ranked in 2007 as a result of new or merged corporate entities in the AHA database are treated as single units and listed in this report. For this

year's rankings, there was one merger between hospitals previously listed as independent entities: St. Paul University Hospital, Dallas, Texas, and the University of Texas Southwestern Medical Center merged to become the University of Texas Southwestern Medical Center, Dallas.

A. Eligibility

All 5,462** community hospitals included in the FY2005 AHA universe are considered automatically for Best Hospitals ranking; they do not have to submit an application.

There are two stages of eligibility criteria for the IHQ-driven specialties; hospitals must satisfy the requirements of each stage to be eligible for ranking in a given specialty.

Stage 1. A hospital must meet at least one of the following criteria:

1. be a member of the Council of Teaching Hospitals (COTH), or
2. be affiliated with a medical school (American Medical Association or American Osteopathic Association), or
3. offer at least 6 of 13 important advanced services, formerly called technologies (see ***Advanced Services***, page 9).

Hospitals that did not respond to the FY2005 AHA Annual Survey remained eligible in our database. For hospitals that did not respond in 2005 but responded in 2004 and 2003, we used survey data from 2004. Nonresponders lacking data from both the current survey and from one of the previous two surveys were ranked without any AHA data. A total of 1,587 hospitals passed through the first stage of the eligibility process.

Stage 2. To remain eligible, hospitals needed a specified number of discharges in a selection of specialty-specific diagnosis-related groups (DRGs) submitted for CMS reimbursement. Through 2002, the threshold for determining eligibility included all discharges, regardless of the balance of medical to surgical discharges.†† Since 2002, that proportion has been specified for Cancer; Digestive Disorders; Ear, Nose, and Throat; Gynecology; Neurology and Neurosurgery; Orthopedics; and Urology. For these specialties, we calculated the median ratio of surgical to total discharges for hospitals meeting the total discharge threshold. In each

** We excluded military installations, federal institutions, and institutional hospital units (e.g., prison hospitals, college infirmaries).

†† The exception was Heart and Heart Surgery, where surgical discharges alone determined the threshold for eligibility. Beginning in 2002, both medical and surgical discharges determined eligibility.

specialty, the median ratio was multiplied by the total number of discharges to determine the minimum surgical discharges needed to be considered eligible.

Setting discharge minimums ensures that ranking-eligible hospitals have demonstrable experience in treating a set number of complex cases in a given specialty. Prior to the start of RTI's involvement in 2005, the minimum number of surgical discharges in Heart and Heart Surgery was set to 500. For all hospitals meeting the minimum number of surgical discharges, a ratio of total discharges to surgical discharges was calculated. The median of this ratio was then multiplied by 500 to determine the minimum number of all discharges. To maintain consistency with prior years' rankings, this threshold was used again in 2007. Minimums for all specialties will be reviewed for future rankings and will be adjusted as needed. ***Table 1*** presents the discharge volume and the number of hospitals meeting the criteria for the IHQ-driven specialties. A total of 1,320 hospitals met the volume criteria in at least one specialty.

Table 1. Minimum Discharges by Specialty

Specialty	Minimum Total Discharges	Minimum Surgical Discharges	Hospitals Meeting Volume Eligibility
Cancer	394	111	688
Digestive Disorders	634	168	1,105
Ear, Nose, and Throat	16	4	979
Endocrinology	398	0	776
Geriatrics	2,757	0	1,057
Gynecology	40	35	1,080
Heart and Heart Surgery[a]	1,033	500	588
Kidney Disease	107	0	1,152
Neurology and Neurosurgery	355	117	962
Orthopedics	335	317	1,150
Respiratory Disorders	803	0	1,165
Urology	81	51	1,092

[a] In addition to the discharge eligibility criteria, a hospital must offer cardiac intensive care, adult interventional cardiac catheterization, and adult cardiac surgery to be considered in this specialty.

Hospitals with insufficient volume were considered eligible if they received at least one nomination in the most recent three physician surveys (i.e., a non-zero reputational score) and had at least 10 total discharges.

Table 2 shows the number of hospitals that did not pass the minimum discharge criteria, but became eligible in that specialty because they had a non-zero reputation score and at least 10 discharges. The total number of hospitals eligible in each specialty that met either the minimum discharge criteria or the non-zero reputation score criteria also is shown.

Table 2. Eligible Hospitals That Did Not Meet Minimum Discharge Criteria, but Were Eligible Under the Non-Zero Reputation Rule

Specialty	Hospitals Meeting Non-Zero Reputation Eligibility	Total Eligible Hospitals
Cancer	17	705
Digestive Disorders	8	1,113
Ear, Nose, and Throat	5	984
Endocrinology	22	798
Geriatrics	12	1,069
Gynecology	15	1,095
Heart and Heart Surgery	0	588
Kidney Disease	2	1,154
Neurology and Neurosurgery	7	969
Orthopedics	6	1,156
Respiratory Disorders	7	1,172
Urology	6	1,098

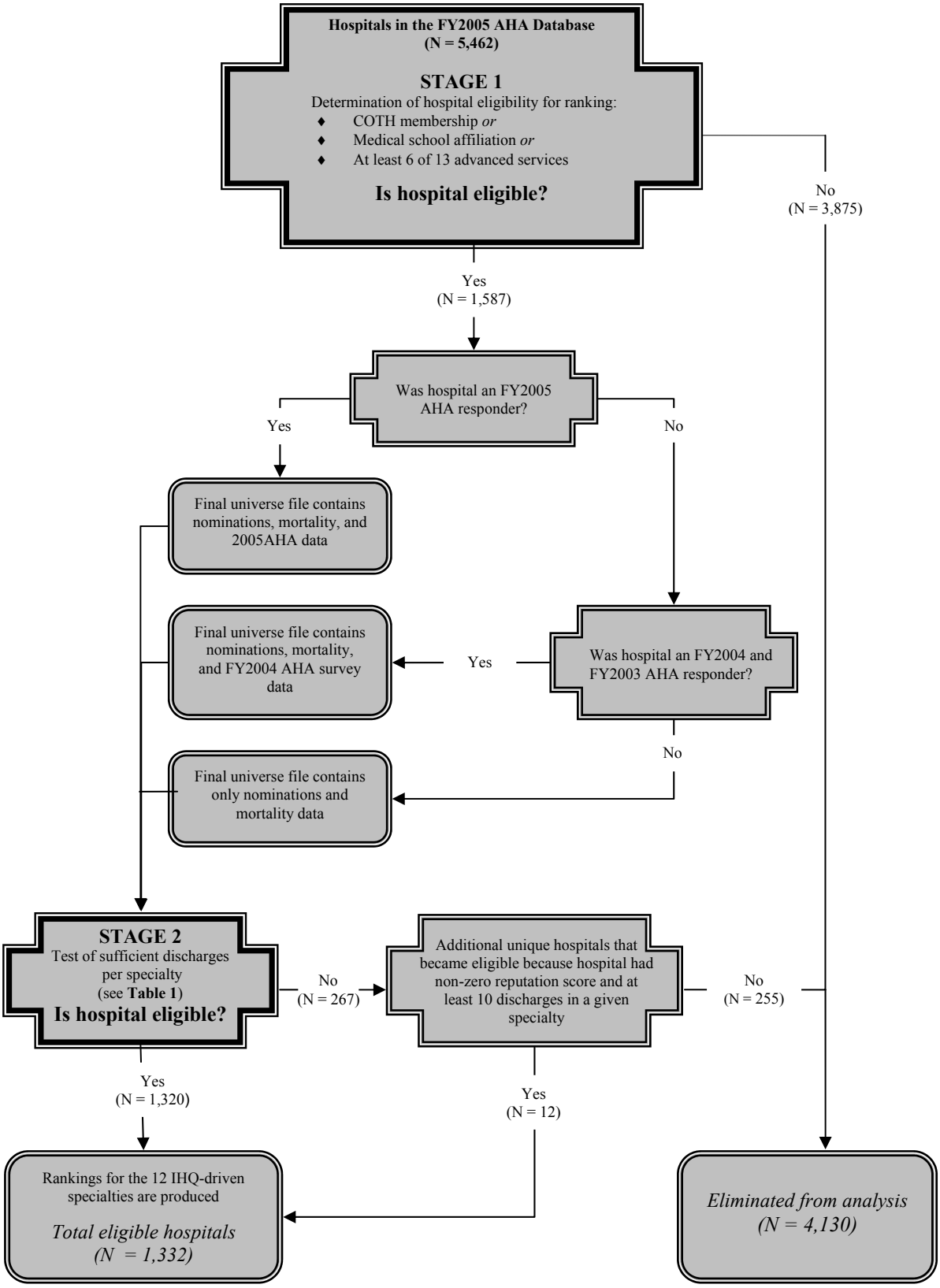
For the 2007 rankings, a total of 1,332 unique hospitals were deemed eligible for at least one of the IHQ-driven specialties under the full criteria. We then conducted separate analyses for each of the 12 IHQ-driven specialties. The top 50 hospitals in each IHQ specialty are published in *U.S. News & World Report*. ***Figure 1*** illustrates the eligibility and analysis process for IHQ-driven specialties, as described in the steps above.

B. Structure

The structural dimension defines the tools, human and otherwise, available at hospitals for treating patients. Healthcare research overwhelmingly supports the use of a structural measure to assess quality of care. However, no prior research has identified a structural indicator that summarizes all others or that adequately represents the structural dimension construct on its own. Therefore, the structural component is represented by a composite variable consisting of different specialty-specific measures with different weights.

For the 2007 index, most structural elements were derived from the 2005 AHA Annual Survey Database. Additional components came from external organizations including the NCI, the ANCC, the Foundation for the Accreditation of Cellular Therapy (FACT), the National Institute on Aging (NIA), and the National Association of Epilepsy Centers (NAEC).

Figure 1. Eligibility and Analysis Process for IHQ-Driven Specialties



AHA Survey

The AHA has surveyed hospitals annually since 1946. The survey is the most comprehensive and dependable database of information on institutional healthcare.[8] The average response rate for the most recent five surveys has been 85%. The database contains hospital-specific data items for more than 6,000 hospitals and healthcare systems, including more than 700 data fields that cover organizational structure, personnel, hospital facilities and services, and financial performance. (For specific mapping of variables to the AHA data elements, see ***Appendix D***.) The following items taken from the AHA Annual Survey Database are used to develop the majority of the structural score for the IHQ.

Advanced Services

The elements in the structural category now called advanced services (previously technology) are reviewed and updated every year in each specialty to remain consistent with the key technologies and advanced care expected from a "best hospital." Starting with the 1996 rankings, partial credit has been given to hospitals that provide a key technology or advanced service even if it is only available offsite. Many hospitals provide access to advanced services through the hospital's health system, a local community network, or a contractual arrangement or joint venture with another provider in the community. We take these off-site services into account when calculating the rankings. However, our primary focus is on quality and patient convenience. Therefore, hospitals that provide a service such as bone marrow transplant are given 1 full point if it is provided onsite; hospitals that provide the service locally through a formal arrangement receive 0.5 point. A hospital receives no more than 1 point for each element in the index.

There are a total of 14 advanced services listed, 13 of which are used to create the advanced services index for eligibility. A hospital must have available at least 6.0 points out of a possible 13.0 points from this index to be considered eligible for the rankings (see ***Section II.A. Eligibility)***. Infection isolation room is not included in the advanced services index because it represents a care environment rather than a specific technology used to enhance care.

Brief descriptions of the advanced services included in the 2007 index follow. The definitions are taken largely from the AHA annual survey, and are expanded upon as needed:

- **Bone marrow transplant.** A two-part procedure in which blood or bone marrow (from a patient or another individual) is withdrawn and immature bone marrow cells are harvested and stored; after the patient's bone marrow is destroyed by radiation to

kill cancerous cells, the collected cells are pumped back into the patient to replace the destroyed marrow cells.

- **Cardiac intensive care unit (ICU).** A part of the hospital in which support and treatment equipment are provided for patients who, because of congestive heart failure, open-heart surgery, or other serious cardiovascular conditions, require intense, comprehensive observation and care.

- **Computer-assisted orthopedic surgery (CAOS).** A group of orthopedic devices that produce three-dimensional images of a patient to assist in surgical procedures.

- **Diagnostic radioisotope services.** A procedure that uses radioactive isotopes (radiopharmaceuticals) as tracers to detect abnormal conditions or diseases.

- **Full-field digital mammography (FFDM).** Combines the X-ray generators and tubes used in analog screen-film mammography (SFM) with a detector plate that converts the X-rays into a digital signal.

- **Image-guided radiation therapy (IGRT).** A type of three-dimensional radiation therapy that targets delivery in a way less likely to damage normal tissues and that allows varying intensities.

- **Infection isolation room.** A single-occupancy room designed to minimize the possibility of infectious transmission, typically through the use of controlled ventilation, air pressure, and filtration.

- **Kidney transplant.** Surgery implanting a kidney from a donor cadaver or living person to replace one that is diseased or nonfunctional.

- **Multislice spiral computed tomography (CT).** A procedure that uses X-rays and data processing to produce narrow multiple slices that can be recombined into detailed, 3-D pictures of the internal anatomy.[‡‡]

- **Positron emission tomography (PET) scanner.** A nuclear medicine imaging technology that uses radioactive isotopes and computers to produce images showing the functional performance of the heart, brain, and other organs.

[‡‡] The indicator for multislice spiral CT includes both standard (less than 64 slices) and advanced (64 or more slices) versions of the technology. Hospitals can receive credit for either version.

- **Robotic surgery.** Use of computer-guided imaging and manipulative devices to perform surgery without the surgeon's direct intervention.

- **Shaped beam radiation.** A noninvasive procedure that delivers a therapeutic dose of radiation to a defined area of a tumor to shrink or destroy cancerous cells.

- **Single photon emission CT.** A nuclear medicine imaging technology that combines radioactive material with CT imaging to highlight blood flows to tissues and organs.

- **Stereotactic radiosurgery.** A radiotherapy modality that delivers a high dosage of radiation to a discrete treatment area in as few as one treatment session. Variants includes Gamma knife and Cyberknife.

For eligible hospitals, specialty-specific mixes of advanced care elements are used in computing the *U.S. News* scores (***Section II.E. Calculation of the Index***). ***Table 3*** presents the complete list of advanced services considered for each specialty in 2007.

Volume

The volume measure reflects total medical and surgical discharges in the appropriate specialty-specific DRG groupings submitted for CMS reimbursement. The list of DRGs used in each specialty is available in ***Appendix E***. The measure is incorporated into the structural score for all data-driven specialties. To reduce the effect of extreme values or outliers for some of the structural measures (and the mortality outcomes measure), in prior years a cap was calculated for each variable in several specialties. Starting in 2006, RTI introduced an inverse logit transformation procedure to reduce the effect of outliers on volume statistics (see ***Trimming***, page 18). In 2007, weights were also applied to the volume measure to account for over- or under-representation of volumes as measured in the MedPAR data file compared to all patients seen in U.S. hospitals (see ***Updates to the Mortality Methodology***, page 22).

Table 3. Advanced Services by Specialty

Technology	Key Technology Index	Cancer	Digestive Disorders	Ear, Nose, and Throat	Endocrinology	Geriatrics	Gynecology	Heart and Heart Surgery	Kidney Disease	Neurology and Neurosurgery	Orthopedics	Respiratory Disorders	Urology
1. Bone marrow transplant	●	●											
2. Cardiac intensive care unit	●							●					
3. Computer-assisted orthopedic surgery	◆										◆		
4. Diagnostic radioisotope services	●		●		●				●	●		●	●
5. Full-field digital mammography	◆	◆					◆						
6. Image-guided radiation therapy	◆	◆	◆		◆				◆	◆		◆	◆
7. Infection isolation room		●	●	●	●	●	●		●	●		●	●
8. Kidney transplant	●								●				
9. Multislice spiral computerized tomography	●							◆				●	
10. Positron emission tomography scanner	●	●	●	●	●	●	●	●	◆	●	●	◆	●
11. Robotic surgery	◆							◆		◆			◆
12. Shaped beam radiation	●	●											
13. Single photon emission computerized tomography	●							●		●			
14. Stereotactic radiosurgery	◆	◆	◆	◆	◆		◆		◆	◆		◆	◆
Total Elements	**13**	**7**	**5**	**3**	**5**	**2**	**4**	**5**	**6**	**7**	**2**	**6**	**6**

● Indicates a service is included in the index for that specialty.

◆ New service or new service to the specialty for 2007.

Nursing Index

The nursing index is a ratio reflecting the effort devoted to both inpatients and outpatients. The numerator is the number of on-staff registered nurses (RNs), expressed in full-time equivalents (FTEs); e.g., two half-time nurses equal one FTE. Only nurses with RN degrees from approved nursing schools and current state registration are considered. The patient measure in the denominator is the adjusted average daily census of patients; the measure estimates the total amount of care devoted to both inpatients and outpatients by reflecting the number of days of inpatient care plus the estimated volume of outpatient services. This measure gives more weight

to inpatient care while still recognizing that the vast majority of hospital visits are for outpatient care. The components of this index are available from AHA. As with volume, the nursing index has been transformed also using an inverse logit transformation to eliminate the influence of wide variation.

Standardization is performed after transformation to ensure that the data are distributed normally, with a mean of zero. This step is necessary to prepare the data for factor analysis, restoring balance so that trimmed and untrimmed measures have the same influence on the final score.

Trauma Center

In a *U.S. News & World Report* survey of board-certified physicians, the presence of an emergency room and a hospital's status as a Level 1 or Level 2 trauma-care provider were ranked high on a list of hospital quality indicators. Physicians in nine specialties ranked trauma-center status as one of the top five indicators of quality. Their recommendations and the resultant high factor loadings supported inclusion of these data in Digestive Disorders; Ear, Nose, and Throat; Gynecology; Heart and Heart Surgery; Kidney Disease; Neurology and Neurosurgery; Orthopedics; Respiratory Disorders; and Urology. For 2007, trauma-center status was dropped in Endocrinology because it generally does not have much effect on the conditions treated within this specialty.

The trauma center indicator is dichotomous and is derived from two variables in the AHA database: (1) presence of a state-certified trauma center in the hospital (as opposed to trauma services provided only as part of a health system, network, or joint venture) and (2) level of the trauma center. To receive credit for trauma services, hospitals must provide Level 1 or Level 2 trauma services. AHA defines Level 1 trauma service as "a regional resource trauma center, which is capable of providing total care for every aspect of injury and plays a leadership role in trauma research and education."[8] Level 2 is "a community trauma center, which is capable of providing trauma care to all but the most severely injured patients who require highly specialized care."[8] One point is awarded for either Level 1 or Level 2 trauma certification.

Patient Services

Created in 2004, the patient services (previously patient/community services) index is updated each year to reflect the most current services. The index encompasses items representing a major convenience for patients, such as translators; an advanced degree or sophistication of care; an essential service in a comprehensive high-quality hospital, such as cardiac rehabilitation;

or a service that reflects forward thinking and sensitivity to community needs, such as genetic testing or counseling. All of the items in the patient services index are taken from the AHA annual survey.

For 2007, a number of broad patient services were dropped. While important, they have no direct effect on the technical quality of patient care. The services removed were ambulance services, assisted living, case-management services, enabling services, meals on wheels, patient-representative services, and transportation to health facilities. Four specialized care services also were removed: birthing rooms, obstetric care, sports medicine, and women's health center. Although valued by patients and communities, they are not involved in treating life-threatening or difficult-to-treat conditions, which are the focus of the "America's Best Hospitals" rankings.

Several patient services were added, including three that had previously been part of the Geriatric specialty services index: Alzheimer's center, arthritis center, and geriatric services. Two other new additions include cardiac rehabilitation and psychiatry (geriatric service). Cardiac rehabilitation replaced the rehabilitation care indicator for the Heart/Heart Surgery specialty, while psychiatry (geriatric service) is a new indicator for the Geriatric specialty.

Hospice and palliative care, which previously comprised one combined structural variable on their own, are now separate components of the patient services index.

Brief descriptions of patient services included in the 2007 index follow. The definitions are from the AHA annual survey.

- **Alzheimer's center.** A facility that offers care to persons with Alzheimer's disease and their families through an integrated program of clinical services, research, and education. As is the case with all items taken from the AHA survey, hospitals decide for themselves whether they offer this service, based on the AHA's description. This index differs from designation of a hospital by the NIA as an Alzheimer's Center. Such designation represents a higher order of service and is treated as a separate structural measure in Geriatrics. (See page 18 for details.)

- **Arthritis treatment center**. A specifically equipped and staffed center for the diagnosis and treatment of arthritis and other joint disorders.

- **Cardiac rehabilitation**. A medically supervised program to help heart patients recover quickly and improve their overall physical and mental functioning in order to

reduce risk of another cardiac event or to keep current heart conditions from worsening.

- **Fertility clinic.** A specialized program set in an infertility center that provides counseling and education, as well as advanced reproductive techniques.

- **Genetic testing/counseling.** A service equipped with adequate laboratory facilities and directed by a qualified physician to advise parents and prospective parents on potential problems in cases of genetic defects.

- **Hospice.** A qualifying hospice program provides care (including pain relief) and supportive services for the terminally ill and their families

- **Pain management program.** A program that provides specialized care, medications, or therapies for the management of acute or chronic pain.

- **Palliative care**. A qualifying palliative care program provides care by specially trained physicians and other clinicians for relief of acute or chronic pain or to control symptoms of illness.

- **Patient-controlled analgesia.** A system that allows the patient to control intravenously administered pain medicine.

- **Psychiatry–Geriatric service.** A psychiatric service offered by hospitals that specializes in the diagnosis and treatment of geriatric medical patients.

- **Rehabilitation care.** A care unit that provides restoration services for the disabled and all support services necessary to help patients attain their maximum functional capacity.

- **Translators.** A service provided by the hospital to assist non-English–speaking patients.

Six to nine services were included in each specialty. As in the past, these patient services must be provided onsite for hospitals to receive credit (1 point); partial credit for offsite delivery was not awarded for most items. For hospice and palliative care, hospitals receive full credit (1point) if the service is provided either onsite or locally but not in the hospital. For fertility clinic, hospitals receive full credit (1 point) if the service is provided onsite, and half credit (0.5 point) if the service is provided locally but not in the hospital. ***Table 4*** presents the complete list of services by specialty.

Table 4. Patient Services Index

Service	Cancer	Digestive Disorders	Ear, Nose, and Throat	Endocrinology	Geriatrics	Gynecology	Heart and Heart Surgery	Kidney Disease	Neurology and Neurosurgery	Orthopedics	Respiratory Disorders	Urology
1. Alzheimer's center					●							
2. Arthritis treatment center					●							
3. Cardiac rehabilitation							◆					
4. Fertility clinic						●						◆
5. Genetic testing/counseling	●	●	●	●		●		●	●		●	●
6. Hospice	●	◆	◆	◆	●	◆	●	◆	◆	◆	●	◆
7. Pain management program	●	●	●	●	●	●	●	●	●	●	●	●
8. Palliative care	●	◆	◆	◆	●	◆	●	◆	◆	◆	●	◆
9. Patient-controlled analgesia	●	●	●	●	●	●	●	●	●	●	●	●
10. Psychiatry – Geriatric service					◆							
11. Rehabilitation care		●	●	●	●	●		●	●	●	●	●
12. Translators	●	●	●	●	●	●	●	●	●	●	●	●
Total Elements	**6**	**7**	**7**	**7**	**9**	**8**	**6**	**7**	**7**	**6**	**7**	**8**

● Indicates a service is included in the index for that specialty.

◆ New service or new service to that specialty for 2007.

External Organizations

Additional structural measures are based on data provided by sources and organizations other than the AHA and CMS.

National Cancer Institute Cancer Center Indicator

The NCI Cancer Center indicator was added in 2002. NCI, a component of the National Institutes of Health (NIH), is the principal federal agency for conducting and sponsoring cancer

research and training and promoting research and standards of care by various means, including certification as an NCI-designated Cancer Center. NCI-designated Cancer Centers are committed to advancing cancer research and ultimately reducing the incidence of cancer and increasing the likelihood of positive health outcomes.[10]

NCI-designated centers have three classifications: (1) cancer center, the lowest level, denotes a facility that conducts a high volume of advanced laboratory research with federal funding; (2) clinical cancer center, the middle level, conducts clinical ("bench to bedside") research as well; and (3) comprehensive cancer center, the highest level, adds prevention research, community outreach, and service activities.[10]

Hospitals designated as NCI Clinical Cancer Centers and Comprehensive Cancer Centers as of April 1, 2007, were awarded 1 point. NCI updates the list throughout the year. The current listing is at http://www3.cancer.gov/cancercenters/centerslist.html.

Nurse Magnet Hospital

The Nurse Magnet hospital indicator, added to all specialties in 2004, is a formal designation by the ANCC, an arm of the American Nursing Association (ANA), for hospitals that meet certain quality indicators on specific standards of nursing excellence. The list of Nurse Magnet hospitals is updated throughout the year as hospitals apply for designation and redesignation status. Hospitals accorded Nurse Magnet hospital status by the ANCC as of April 1, 2007, received 1 point. The current list of Nurse Magnet hospitals is at www.nursingworld.org/ancc/magnet/facilities.html.

Epilepsy Center Certification

This indicator was added to Neurology and Neurosurgery in 2004. One point is awarded to hospitals designated as Level 4 epilepsy centers by the NAEC as of April 1, 2007. A Level 4 epilepsy center serves as a regional or national referral facility. These centers provide more complex forms of intensive neurodiagnostic monitoring, as well as more extensive medical, neuropsychological, and psychosocial treatment. Level 4 centers also offer a complete evaluation for epilepsy; surgery, including intracranial electrodes; and a broad range of surgical procedures for epilepsy.[11] The list of hospitals is updated throughout the year. The current list is at www.naecepilepsy.org/centers/centers.html#NC.

NIA Alzheimer's Center

NIA Alzheimer's Center certification was added to Geriatrics in 2007. Such centers are designated and funded by the National Institute on Aging, an arm of the National Institutes of Health to translate research advances into improved diagnosis and care of Alzheimer's disease and to conduct research on prevention and cures. Recognition means that a hospital provides a high level of care for Alzheimer's patients. Hospitals designated as an NIA Alzheimer's Center as of April 1, 2007 received 1 point. Hospitals listed as affiliated centers did not receive credit. The current list is at http://www.nia.nih.gov/Alzheimers/ResearchInformation/ResearchCenters/.

FACT accreditation

FACT accreditation was added to Cancer this year. This designation indicates that as of April 1, 2007, a hospital met standards set by FACT for transplantation of cells for treatment of cancer. Half a point is given if accreditation is only for autologous transplants, in which a patient's own cells are removed and then returned following radiation therapy. A full point is given if accreditation is for allogeneic transplants, in which cells are donated by another person (allowing a greater number and more kinds of cell transplants) or for both autologous and allogeneic transplantation. The current list of FACT facilities is at http://www.factwebsite.org/FacilitySearch.aspx?SearchType=FACT.

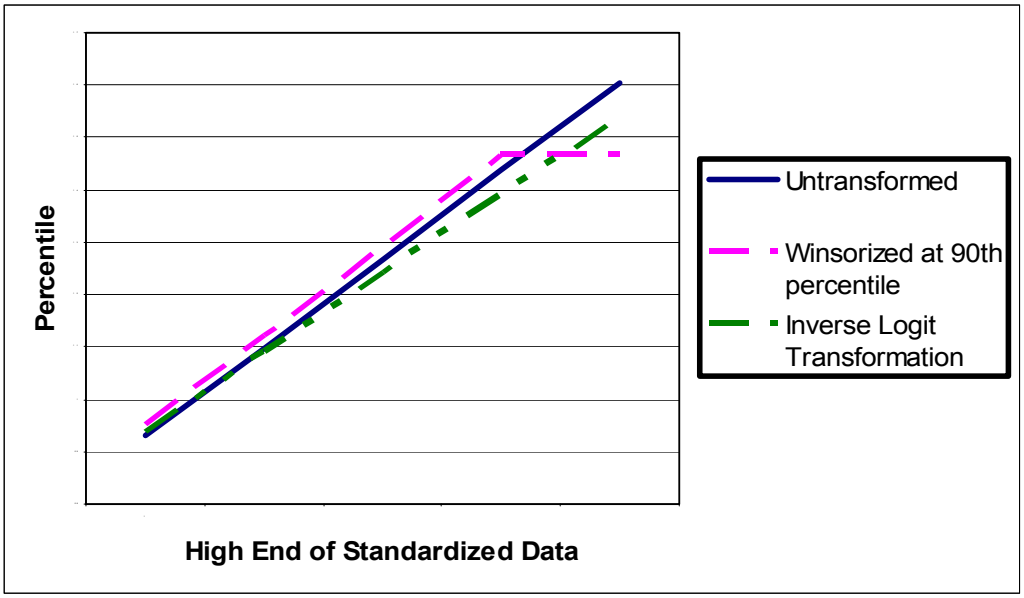
Trimming

Prior to 2006, distributions for mortality, volume, and the nursing index were transformed using Winsorization, a statistical procedure that takes extreme values—those above a defined threshold—and moves them toward the center of the distribution. In Cancer, for example, mortality values over the 95th percentile were recoded to match the 95th-percentile value. This "trimming," as the process was called in previous reports, reduced the effect of extreme outliers. A disadvantage, however, is that all extreme values were treated as if they were the same—that is, all were equal to the value at their reassigned level. Whatever variation existed at the extreme was lost. Winsorization also required that different percentile cut points be set for different variables and specialties in a way that was not standard across specialties.

The new trimming process, introduced in 2006, uses an inverse logit transformation of the distribution for the analysis variables. The function $exp(x) / \{1+[exp(x)]\}$ is used to transform the variables before standardization. This technique is sensitive to the number of outliers and produces a transformed distribution that more closely resembles the true distribution, while reducing the effect of extreme outliers.

Figure 2 shows the effect of Winsorization at the 90th percentile versus the inverse logit transformation at the high end of a standardized distribution.

Figure 2. Effect of Winsorization at the 90th Percentile vs. Inverse Logit Transformation



Weighting

To combine the structural variables from the AHA database and other external databases, the elements are weighted to create a composite measure. Using factor analysis, we reduced the number of variables to force a one-factor solution for each specialty. Factor analysis is a statistical technique used to identify underlying similarities among the structural variables. More simply, variables that are strongly associated with one another receive lower factor loadings than those that have a unique distribution. The factor loadings, or weights, are applied to reduce the effect of multiple variables that because of their strong association may measure the same concept. The relative weight assigned to each element varies by and within a specialty from one year to the next. ***Table 5*** provides the factor weights assigned to each element for 2007.

Table 5. Weights by Specialty for Structural Variables

Variable	Cancer	Digestive Disorders	Ear, Nose, and Throat	Endocrinology	Geriatrics	Gynecology	Heart and Heart Surgery	Kidney Disease	Neurology and Neurosurgery	Orthopedics	Respiratory Disorders	Urology
Advanced services	76.2	75.1	73.4	81.8	59.3	71.4	69.3	80.0	75.8	65.8	77.4	78.7
Volume	65.9	54.2	65.3	44.8		63.7	49.1	63.5	61.6	65.8	44.6	60.7
Nursing index	53.7	45.6	49.1	45.2	59.1	47.3	54.2	46.8	41.0	45.0	47.4	50.9
Trauma center		58.7	56.7			58.5	55.5	57.8	56.6	58.9	60.5	56.2
Patient services	55.7	76.9	74.8	80.1	69.4	76.7	60.2	75.4	70.0	62.9	79.9	76.6
Epilepsy center certification									57.7			
NCI Cancer Center designation	73.5											
Nurse Magnet hospital	51.3	51.8	51.0	53.0	58.1	54.8	60.7	51.4	50.8	56.7	49.5	53.1
NIA Alzheimer's Center					49.4							
FACT accreditation	73.6											

C. Outcomes

Although the use of mortality as an outcomes measure is hampered by limitations in risk-adjustment methods, there is considerable evidence to show a positive correlation between a better-than-average risk-adjusted mortality rate and overall quality of care.[12-21] Based on these findings, we use specialty-specific adjusted mortality rate as the outcomes measure for the IHQ.

Mortality data are reported using *the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM)*. The ICD-9-CM is the official system used by the National Center for Health Statistics and the Centers for Medicare and Medicaid Services to assign codes to diagnoses and procedures associated with hospital utilization in the United States.[22] Diagnosis-Related Groups (DRGs) classify the more than 10,000 ICD-9-CM diagnosis codes into more meaningful patient groups based on clinical and cost similarity. The 3M Health

Information Systems All Patient Refined Diagnosis Related Groups (APR-DRGs) refine the DRG concept by taking into account severity of illness, risk of mortality, and resources used.[6, 23-24] Conditions and diagnoses are further classified based on substantial comorbidities or complications.

Predicted mortality rates were provided by Thomson Healthcare using APR-DRGs as risk adjustors. The method was applied to the pooled 2003, 2004, and 2005 Medicare Provider Analysis and Review (MEDPAR) data set, the latest available for analysis. MEDPAR data, derived from reimbursement claims submitted by hospitals to CMS, are used for analysis of utilization, cost, and impact of inpatient payment system changes (these data are organized in an easier-to-use format than claims files). The MEDPAR file contains information on patients' diagnoses, procedures, DRG, length of stay in the hospital, and discharge status for all Medicare patients. A DRG is assigned to each patient discharge based on the patient's diagnosis, surgery, age, sex, and discharge destination.[25]

2007 DRG Groupings

DRG groupings define the cases to be included in the specialty's mortality measures as well as volume measures used in the structural component. The DRG groupings used in the rankings are reviewed and adjusted annually for every specialty (see ***Appendix E*** for the DRGs used for 2007). The most recent DRG groupings are applied to each year of data included in the analysis.

For the purposes of the Best Hospitals rankings, only DRGs that represent challenging and critical procedures are included. (For example, tonsillectomies are too common to be included in the DRG groupings for Ear, Nose, and Throat.) The process used to identify DRGs is outlined below.[§§]

1. Exclude DRGs for very-low-intensity cases.
2. Exclude DRGs related to complications of hospital-provided care.
3. Exclude DRGs not generally appropriate for a Medicare or elderly population.
4. Reevaluate excluded and included DRGs based on their embedded diagnoses.
5. Further refine the excluded and included categorizations based on the within-DRG variation in diagnostic complexity.

[§§] For a more detailed review of these procedures, see the 2005 methodology report at www.rti.org/besthospitals.

6. Reevaluate DRGs that are not assigned to a specific specialty to determine whether they would be better categorized more specifically.

7. Perform a final evaluation for clinical consistency.

8. Use ICD-9-CM diagnosis and procedure codes to provide further specificity when needed.

9. Divide DRGs that could apply to more than one specialty by principal diagnosis or procedures present and distributed to the specialty where they are most likely to occur in hospital care.

10. Include a severity measure to further refine the list of DRGs by taking into account severity of illness as measured by comorbidities and interaction with the principal diagnosis.

An annual review of the DRG process and groupings ensures that changes in advancement of medicine are reflected. Based on the review process, various DRGs and ICD-9-CM diagnoses or procedure codes were added or deleted in each category for 2007. ***Appendix F*** identifies the changes for each specialty.

Updates to the Mortality Methodology

In 2007, several changes were made to the mortality methodology. Each change is discussed in detail below.

1. **Geriatrics.** Rankings in Geriatrics were reintroduced, with a new approach to determining mortality. Rather than using a small subset of DRGs typical of geriatric patients, we elected to focus on how well hospitals treat older patients across a wider range of DRGs. All of the DRGs used for other data-driven specialties were included, but only patients at least 75 years old were included. This allowed for more accurate reflection of the quality of inpatient hospital care received by older patients.

2. **Transfers.** In calculating mortality, patients transferred into the hospital were not included. This was done to help avoid mortality rates that are possibly inflated by "dumping" of severely ill patients (relative to their DRG and severity level) on tertiary care hospitals. Research has shown that because of their location, some tertiary care hospitals are more vulnerable than others to dumping.[26] This change means that patients legitimately transferred for appropriate care are lost, but we considered it more important to ensure that each hospital's mortality numbers are not affected by hospitals transferring out patients whose acuity suddenly exceeds the hospital's ability to care for them.

3. **Inpatient versus 30-day mortality.** All previous rankings have defined mortality as inpatient deaths; (i.e., those occurring from admission to discharge). As the duration of a hospital stay has decreased, inpatient mortality has decreased as well. Mortality over longer periods, however, has not markedly declined.[27] The consequences of a hospital's quality of care can clearly continue for many weeks after discharge. AHRQ states in its *Refinements of the HCUP Quality Indicators Technical Summary* (2001) that, "without 30-day mortality data (ascertained from death certificates), hospitals that have short lengths of stay may appear to have better patient outcomes than other hospitals with equivalent 30-day mortality."[28]

Thirty-day mortality may reflect factors unrelated to care provided in the hospital (i.e., quality of aftercare, lack of patient compliance with treatment regimen). But inpatient mortality omits factors that tend to manifest their full effect after patients have been discharged from the hospital. Inpatient mortality also does not account for hospital-to-hospital differences in length of stay for comparable patients and conditions.

Therefore, in all specialties except Cancer, 30-day mortality is the basis for the mortality calculation. For Cancer, the correlation between 30-day and inpatient mortality is low, although the reason is unclear. Until the reasons for the lack of correlation are determined, or new analytic standards are developed, we will continue to use inpatient mortality for this specialty.

4. **Adjustments to MEDPAR data.** DRGs have always been represented in each specialty in accordance with their incidence among Medicare beneficiaries, because all of the available mortality and volume data reflect those patients. The distribution of conditions and procedures among Medicare patients, however, differs somewhat from the distribution among all patients treated at U.S. hospitals. For example, DRG selection focuses on cases that are complex and severe, such as cancer-related diagnoses or procedures. As a result, cancer-related cases accounted for many DRGs in a variety of specialties in previous years. However, cancer-related cases are more common among older patients. This has resulted in rankings with a tendency to favor hospitals that treat large numbers of Medicare patients.

To address this discrepancy, weights were applied to the MEDPAR data based on the relative over- or under-representation of the DRGs among all patients. Given the absence of a comprehensive national database of all-payer claims data, we used 2004 data from the AHRQ Healthcare Cost and Utilization Project (HCUP) to produce adjustment factors (i.e., weights) for each DRG. The HCUP data set comes from a variety of sources and is the largest collection of all-payer hospital care data in the United States.[29] Weights were applied to each DRG/severity-of-illness pair; the weighted observed-versus-expected mortality rate was then calculated for each hospital. Weights were applied to all specialties except Geriatrics, which is adequately

represented using Medicare data for those age 75 and older. The weights for each DRG/severity-of-illness pair are shown in ***Appendix E***.

Scoring Mortality

As in previous years, risk-adjusted mortality ratios (i.e., the mortality index in the rankings tables) were computed by dividing the actual mortality rate by the expected rate after adjusting for case complexity. The expected mortality was an estimate of the hospital's mortality rate if its death rate for patients in each APR-DRG and severity level was equal to the national average. Mortality ratios greater than 1 suggest that more patients died than expected. Mortality ratios less than 1 suggest that fewer died than expected.

For the IHQ, we transformed mortality ratios into mortality scores. Mortality scores were computed by subtracting each specialty-specific mortality ratio from 1. A mortality ratio of 0.25 produced a mortality score of 0.75, a ratio of 0.05 produced a score of 0.95, and so on. This reverse scoring maintained the magnitude of the differences between scores. To lessen the effect of year-to-year fluctuations, we averaged mortality scores for 3 years. As with volume and the nursing index in the structural component, we transformed scores at the extreme ends to eliminate the influence of wide variation.

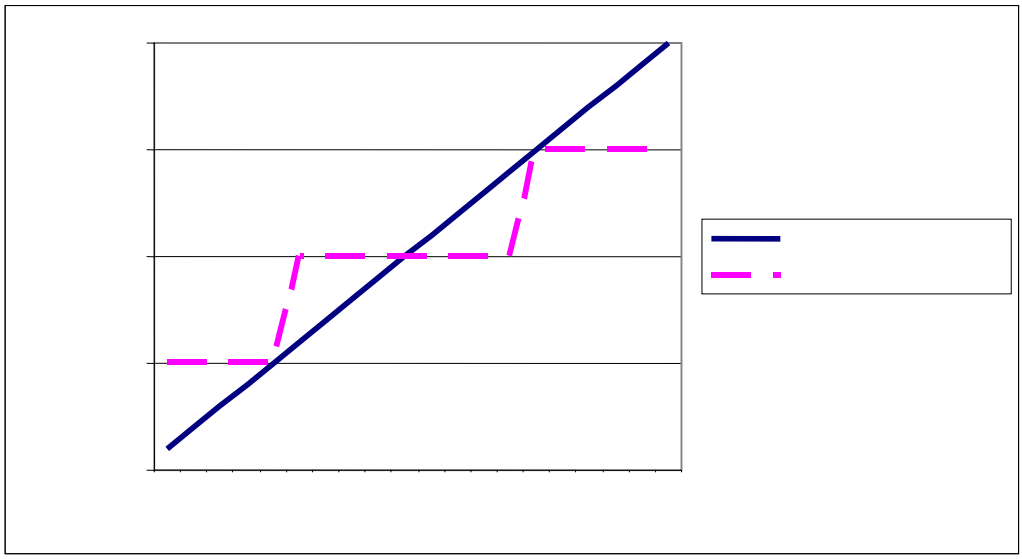
Recoding Mortality Values for Hospitals with Low Volume

A procedure was established in 2006 to address instances in which a low-volume hospital with relatively few discharges during the last 3 available years of data had an inordinately low or high mortality score because of the dearth of applicable cases associated with that hospital. For instance, a hospital treating only 75 Medicare patients in the last 3 years in a particular specialty might have an observed-versus-expected mortality ratio of zero or close to zero. With so few cases to examine, we were not confident that the mortality numbers for this hospital reflected a real measure of outcomes rather than an extreme value based on too few cases.

To correct for this, mortality at or below the 25th percentile was recoded to the 25th percentile. Mortality between the 25th and 75th percentiles was recoded to the 50th percentile. Mortality at or above the 75th percentile was recoded to the 75th.*** This helped reduce the effect of mortality outliers associated with low volume. The effect of recoding or collapsing mortality scores for hospitals with low volume is shown in ***Figure 3***.

*** For specialties where the 75th percentile on volume was below 150, we substituted 150 for the threshold for applying this rule, because analysis of the distributions suggested this was an appropriate absolute minimum for the reliability of mortality data.

Figure 3. Effect of Recoding Mortality for Low-Volume Hospitals



D. Process

The process dimension of the Donabedian paradigm reflects physicians' decisions made in the hospital setting, such as choices about the use of medication, diagnostic tests, admission to a hospital, course of treatment, and length of stay. It is extremely difficult to obtain national measurements of process; therefore, we used a proxy measure. We contend that when a physician who is qualified to judge identifies a hospital as among the "best," in essence the physician is endorsing the process choices made at that hospital. Thus we use the nomination of hospitals by board-certified specialists as a measure of process.

To collect these nominations, a survey of board-certified physicians across the country is conducted each year. For the 2007 rankings, we pooled nominations for the three most recent surveys (2005, 2006, and 2007) to arrive at the process measure. We treated the IHQ-driven and reputation-only specialties identically for the reputation component. Therefore this section presents the methodology and results for both.

Sample for the 2007 Survey

The 2007[†††] survey sample consisted of 3,200 board-certified physicians selected from the AMA Physician Masterfile, a database of more than 850,000 member physicians licensed to

[†††] For information on the 2006 and 2005 samples, please see the respective methodology reports at www.rti.org/besthospitals.

practice in the United States. From within the Masterfile, we selected a target population of 218,808 board-certified physicians who met defined eligibility requirements (below). Stratifying by census region and by specialty within region, we selected a probability (i.e., random) sample of 200 (50 from each region) from each of the 16 specialty areas, for a total of 3,200 physicians. The final sample included federal and nonfederal medical and osteopathic physicians practicing in all 50 states and the District of Columbia. For 2007, neonatologists were no longer included in the sample for the Gynecology specialty; these specialists have been included in the sample for Pediatrics, which has been removed from the annual rankings and will appear separately.

Eligibility Requirements

To define a probability sample of physicians who properly represent the 16 specialty groupings, we used two rules of eligibility: (1) a mapping between the 16 specialties and the AMA's list of 85 self-designated specialties and (2) a mapping between those 85 specialties and the 23 member boards of the American Boards of Medical Specialties.

Under the first rule, we linked each of the 16 specialties to one or more relevant AMA specialties from the list of AMA self-designated practice specialty codes. Physicians who designated a primary specialty in one of the 16 specialties were eligible for the survey. ***Table 6*** displays the association among the specialty listed in "America's Best Hospitals," the AMA self-designated specialty, and the corresponding member board.

Stratification

To compensate for wide variation in the number of eligible physicians across the targeted specialties and the four census regions in the country, we used different probabilities of selection for each grouping. Therefore, 50 physicians were selected from each of the 16 specialties in each of the four census regions (http://www.census.gov/geo/www/us_regdiv.pdf). Equal-size groups permitted easier comparison of differences among regions and specialties.

Survey Procedure

Materials

For 2005, 2006, and 2007, sampled physicians in each specialty were mailed a one-page, single-sided questionnaire containing a single hospital nomination element. Respondents were asked to select as many as five hospitals in their specialty that provide the best care to patients with serious conditions, regardless of location or expense (see ***Appendixes A***, ***B***, and ***C***). For

2005, 25% of physicians in each specialty received instead a one-page, double-sided questionnaire (see ***Appendix B***). The front side of the questionnaire was the same. The second side contained questions asking the basis for their nominations. An additional item in this version of the survey asked physicians their preferred means of returning future surveys: mail, e-mail, telephone, or fax. The 2007 survey included an additional line asking physicians not to nominate hospitals where they currently practice (see ***Appendix C***). Along with the questionnaire, physicians were sent a cover letter, a business reply envelope, and a $2 bill (a token incentive used since the first set of rankings in 1990). For 2007, physicians were given the option of mailing, faxing, or submitting their completed surveys via the web.

Table 6. Physician Sample Mapping

America's Best Hospitals Specialty	American Board of	AMA Self-Designated Specialty
Cancer	Internal Medicine	Hematology
		Oncology
Digestive Disorders	Internal Medicine	Gastroenterology
Ear, Nose, and Throat	Otolaryngology	Otolaryngology
Endocrinology	Internal Medicine	Endocrinology
		Diabetes
Geriatrics	Internal Medicine	Geriatrics
Gynecology	Obstetrics & Gynecology	Gynecology
		Obstetrics & Gynecology
Heart and Heart Surgery	Internal Medicine	Cardiovascular Diseases
	Surgery	Cardiovascular Surgery
Kidney Disease	Internal Medicine	Nephrology
Neurology and Neurosurgery	Psychiatry & Neurology	Neurology
		Neurological Surgery
Ophthalmology	Ophthalmology	Ophthalmology
Orthopedics	Orthopedic Surgery	Orthopedic Surgery
Psychiatry	Psychiatry & Neurology	Psychiatry
Rehabilitation	Physical Medicine & Rehabilitation	Physical Medicine & Rehabilitation
Respiratory Disorders	Internal Medicine	Pulmonary Diseases
Rheumatology	Internal Medicine	Rheumatology
Urology	Urology	Urological Surgery

Mailings

The physician survey mailings were conducted in stages during several weeks in the fall of 2006. The initial mailing was sent via U.S. Postal Service (USPS) First Class metered mail. Three weeks after the initial survey mailing, a replacement survey and new cover letter were sent to the sampled physicians. Physicians with an available fax number also received a faxed cover letter and survey. Physicians with a valid available e-mail address received an e-mail with the option to complete the survey online. Two weeks following the reminders, we sent a USPS Priority mailing to nonresponders, along with another copy of the questionnaire, a new cover letter, and a business reply envelope. Two weeks after the second survey was sent, a third survey mailing was sent overnight via Federal Express to the remaining nonresponders; the packet included the questionnaire, a cover letter, and a business reply envelope. A final mailing was sent via USPS First Class mail approximately 4 weeks later. This mailing included the questionnaire and a personalized letter with a handwritten note and signature. (See ***Table 7*** for a simplified schedule of the physician survey mailing.)

Table 7. Physician Survey Mailing Schedule

Materials Mailed	Sent via	Sent to	Date
1st copy of physician survey	USPS, First Class letter	Full physician sample	September 15, 2006
2nd copy of physician survey	Letter/fax/email	Full physician sample	October 6, 2006
3rd copy of physician survey	Priority mail	Sample members who did not respond	October 20, 2006
4th copy of physician survey	Federal Express	Sample members who did not respond	November 3, 2006
5th copy of physician survey	USPS, First Class letter	Sample members who did not respond	December 8, 2006

Response Rates

Of the 3,200 physicians sampled for this year's report, 7 were deemed ineligible because it was discovered that they were no longer actively involved in medical practice. Of the

remaining 3,193 physicians, close to half (1,410) returned the completed questionnaire by the deadline of January 31, 2007. The final response rate was 46.2%, using American Association for Public Opinion Research (AAPOR) standard response rate 6 (standard definitions are located on the Web at www.aapor.org/pdfs/standarddefs_ver3.pdf), which treats undeliverables as ineligible cases. In prior years, the response rate was reported using AAPOR standard response rate 2.

Table 8 shows the response rate by specialty for the 3 years of survey data used in the 2007 rankings. The average response rate for the 3 years of data collection was 47.9%, with a slight downward trend each year. All response rates are calculated using AAPOR standard response rate 6.

Table 9 shows the response rate for 2007 by region and specialty. Overall, physicians from the Northeast and Midwest responded at a higher rate than physicians from the South. Physicians in the West had the lowest response rate.

Survey Response Weighting

The physician survey was stratified by specialty and census region (West, Northeast, South, and Midwest). Weights were constructed and applied to each physician's survey response to make nominations representative at the national level. Weights were based on the probability of selection within each unique specialty-region combination, with an adjustment to account for nonresponders.

Table 8. Yearly Response Rate by Specialty (2005–2007)

Specialty	2005		2006		2007		3-year total	
	n	%	n	%	n	%	n	%
Cancer	94	49.2	103	53.9	96	50.0	293	51.0
Digestive Disorders	95	49.5	79	39.5	89	45.6	263	44.8
Ear, Nose, and Throat	123	62.4	111	57.8	101	51.5	335	57.3
Endocrinology	86	46.0	106	54.6	93	49.7	285	50.2
Geriatrics[a]	95	50.5	90	47.6	106	54.4	291	50.9
Gynecology	85	44.7	75	39.9	70	37.2	230	40.6
Heart and Heart Surgery	73	38.2	74	38.5	82	43.4	229	40.0
Kidney Disease	83	43.9	75	39.9	72	37.5	230	40.4
Neurology and Neurosurgery	98	49.5	92	48.4	91	48.9	281	49.0
Ophthalmology	113	57.9	106	55.5	110	56.1	329	56.5
Orthopedics	92	46.7	87	45.8	67	34.4	246	42.3
Psychiatry	76	39.8	83	45.1	73	38.6	232	41.1
Rehabilitation	109	56.2	109	56.8	91	49.5	309	54.2
Respiratory Disorders	70	37.4	87	47.8	82	42.9	239	42.7
Rheumatology	96	51.1	97	51.9	90	47.6	283	50.2
Urology	105	55.5	107	55.2	97	50.8	309	53.8
Overall Response Rate[b]	1,493	**48.7**	1,481	**48.6**	1,410	**46.2**	4,384	**47.9**

[a] Although Geriatrics was not ranked in 2006, the physician survey was still conducted.

[b] The overall response rate for each year was calculated using AAPOR Standard Response Rate 6.

Table 9. Response Rates by Region and Specialty, 2007

Specialty	West		Northeast		South		Midwest	
	n	%	n	%	n	%	n	%
Cancer	22	45.8	23	50.0	24	49.0	27	55.1
Digestive Disorders	24	50.0	19	38.8	19	38.0	27	56.3
Ear, Nose, and Throat	21	43.8	27	54.0	25	51.0	28	57.1
Endocrinology	19	40.4	25	58.1	23	48.9	26	52.0
Geriatrics	21	42.9	27	55.1	28	58.3	30	61.2
Gynecology	13	26.0	13	28.9	20	42.6	24	52.2
Heart and Heart Surgery	17	35.4	23	50.0	20	40.8	22	47.8
Kidney Disease	14	29.8	22	45.8	17	34.7	19	39.6
Neurology and Neurosurgery	20	42.6	21	48.8	24	49.0	26	55.3
Ophthalmology	27	54.0	29	60.4	31	62.0	23	47.9
Orthopedics	12	24.0	21	43.8	18	36.7	16	33.3
Psychiatry	12	26.1	22	44.9	23	47.9	16	34.8
Rehabilitation	21	42.9	21	47.7	24	52.2	25	55.6
Respiratory Disorders	18	37.5	25	53.2	20	43.5	19	38.0
Rheumatology	20	42.6	24	55.8	22	44.9	24	48.0
Urology	24	50.0	29	59.2	19	42.2	25	51.0
Overall Response Rate[a]	305	**39.6**	371	**49.7**	357	**46.4**	377	**49.1**

[a] The overall response rate includes in the numerator all physicians who returned a questionnaire with at least one item completed on the front page; it subtracts ineligible cases from the denominator.

E. Calculation of the Index

In calculating the rankings for the IHQ-driven specialties, structure, process, and outcomes each received one-third of the weight. Although each of the three measures represents a specific aspect of quality, a single score provides a result that is easy to use and understand and portrays overall quality more accurately than would any of the three elements individually.

The formula for calculating the specialty-specific IHQ for a hospital is in Equation (1). Please note that this formula is meant for illustrative purposes only. The formula cannot be used directly to calculate a score for an individual hospital; the standardized data values are adjusted

based on the distribution of measures across all eligible hospitals. The IHQ score can be thought of as a simple weighted sum of structural, process, and outcome measures. The weights for the structural measures are factor loadings, and the weights for the process and outcomes measures are equal to the sum of all structural measure factors.

$$IHQ_i = \{[(S_{1i} \times F_{1i}) + (S_{2i} \times F_{2i}) + \ldots + (S_{ni} \times F_{ni})] + [(P_i \times \sum_{1i}^{ni} F)] + [(M_i \times \sum_{1i}^{ni} F)]\}, \quad (1)$$

where

IHQ_i = index for hospital quality for specialty *i,*

S_{ni} = standardized value for structural indicator *n* (STRUCTURE), for specialty *i,*

F_{ni} = factor loadings for structural indicator *n* for specialty *i*

P_i = standardized nomination score (PROCESS) for specialty *i*, and

M_i = standardized mortality score (OUTCOMES) for specialty *i*.

The general formula for deriving the hospital index scores has remained unchanged since its creation in 1993. For presentation purposes, we transformed the raw IHQ scores to a 100-point scale, where the top hospital in each specialty received a score of 100. The transformation is shown in Equation (2):

$$(Raw\ IHQ\ score_i - minimum_i) / range_i. \quad (2)$$

Means and standard deviations (SD) of the IHQ for the 12 data-driven specialties are listed in ***Table 10***. These data illustrate that the spread of IHQ scores produces a very small number of hospitals that are 2 and 3 SDs above the mean. Horizontal lines in each of the 12 specialty lists in ***Appendix G*** indicate the cutoff points of 2 and 3 SDs above the mean.

III. Reputation-Only Specialties

The data available for the reputation-only specialties are more limited than for the IHQ-driven specialties. Mortality is irrelevant in Ophthalmology, Psychiatry, and Rehabilitation, which rarely involve life-threatening procedures. For Rheumatology, inpatient volume is extremely low, making it difficult to collect reliable mortality measures. Reliable structural measures also are not currently available for these specialties. We therefore used only the process component to develop these rankings. This section describes the eligibility and procedures used to develop the rankings for the four reputation-only specialties.

Table 10. IHQ Means and Standard Deviations by Specialty

Specialty	Mean	SD	2 SDs Above the Mean	3 SDs Above the Mean
Cancer	15.88	8.41	32.71	41.12
Digestive Disorders	10.88	6.15	23.17	29.32
Ear, Nose, and Throat	11.73	8.02	27.77	35.79
Endocrinology	14.18	7.25	28.68	35.93
Geriatrics	13.80	7.40	28.59	35.99
Gynecology	17.36	8.46	34.29	42.75
Heart and Heart Surgery	15.67	8.02	31.71	39.73
Kidney Disease	17.62	10.25	38.12	48.37
Neurology and Neurosurgery	13.07	8.28	29.63	37.91
Orthopedics	11.90	6.91	25.72	32.63
Respiratory Disorders	15.13	7.21	29.55	36.76
Urology	11.79	7.29	26.36	33.65

A. Eligibility

Hospitals ranked solely by reputation do not have to meet the same eligibility standards required for the IHQ-driven specialties. A hospital becomes eligible when it receives one or more physician nominations (i.e., a non-zero reputational score). Only hospitals representing 3% or more of the total nominations in a specialty are published.

B. Process

The IHQ-driven specialties and the reputation-only specialties share the same process component (see ***Section II.B*** for more information).

C. Calculation of the Rankings

As mentioned above, scores for the reputation-only specialties of Ophthalmology, Psychiatry, Rehabilitation, and Rheumatology must be calculated differently from scores of IHQ specialties because of the unavailability of structural and outcomes measures. Thus, we rank hospitals in these specialties solely by reputation (see ***Appendix H***). Although the four reputation-only specialties are ranked without IHQ scores, SDs of the reputational scores remain

useful in identifying truly superior hospitals (in terms of statistically relevant nomination scores). ***Table 11*** presents the mean and SD of the reputation-only scores.

Table 11. Means and Standard Deviations for Reputation-Only Specialties

Specialty	Mean	SD	2 SDs Above the Mean	3 SDs Above the Mean
Ophthalmology	3.97	11.76	27.49	39.25
Psychiatry	2.14	4.86	11.86	16.72
Rehabilitation	2.22	6.60	15.41	22.01
Rheumatology	3.63	9.12	21.87	30.99

IV. The Honor Roll

This year, 173 different hospitals were ranked in at least one specialty. An additional measure, the Honor Roll, indicates excellence across a broad range of specialties. To be listed in the Honor Roll, a hospital must rank at least two SDs above the mean in at least 6 of the 16 specialties. For 2007, 18 hospitals are listed on the Honor Roll. A hospital's ranking on the Honor Roll is based on points assigned by specialty, as follows:

- A hospital that ranks three or more standard deviations above the mean receives 2 points.
- A hospital that ranks between two and three standard deviations above the mean receives 1 point.

Using standard deviations above the mean as the criterion for inclusion in the Honor Roll sets a threshold for overall excellence. The Honor Roll also indicates the relative distances between the best hospitals, which cannot be determined solely from the rankings. ***Appendix I*** lists this year's 18 Honor Roll hospitals.

V. Summary of Changes for 2007

RTI began working with *U.S. News* on the Best Hospitals rankings in 2005. To maintain consistency in the ranking process, RTI replicated the preexisting methodology in the 2005 rankings and implemented only minor improvements in 2006.

Changes for 2007 were more substantial, but still in keeping with the goal of maintaining consistency and continuity. Many of the changes were discussed at length at a meeting convened by *U.S. News* in the fall of 2006 to solicit the views of a new Best Hospitals advisory panel. The methodological changes in the 2007 rankings are listed below.

- **Updated list of specialties.** Geriatrics was reintroduced to the list of specialties with an updated methodology. Pediatrics was removed from this issue of the rankings and will be explored in a separate issue (***Section I***).

- **Updated services index.** The technology index is now referred to as the advanced care index. The elements in the index were updated for each specialty to remain consistent with the technology and advanced services expected from a best hospital (***Section II.B***).

- **Updated patient/community services.** The patient/community services index, now referred to as the patient services index, was updated to remain consistent with the services expected from a best hospital (***Section II.B***).

- **Added external organizations.** Hospitals in the Cancer specialty now receive points for accreditation by FACT as a Cellular Therapy Facility. Hospitals in Geriatrics now receive points if they are recognized by the NIA for having an Alzheimer's Center (***Section II.B***).

- **Updated DRG groupings.** DRG groupings were updated for all specialties, consistent with typical year-to-year changes (***Section II.C***).

- **Excluded transfers.** Patients transferred in to a hospital or out to another hospital are excluded from mortality and volume calculations to reduce the likelihood of either benefiting or suffering from "dumping" of patients (***Section II.C***).

- **Included 30-day mortality rates.** 30-days-from-admission mortality rates were introduced in all IHQ-driven specialties except Cancer instead of death-at-discharge mortality rates (***Section II.C***.).

- **Weighted mortality.** Weights were applied to the MedPAR data based on the relative over- or under-representation of the cases' DRGs among all patients as identified in the HCUP data (***Section II.C***).

- **Moved neonatologists**. Neonatologists were removed from the Gynecology sample and included in the Pediatrics sample instead (***Section II.D***).

VI. Future Improvements

The "America's Best Hospitals" methodology is examined and refined each year to better measure hospital quality. In future years, RTI will closely examine current measures and new data sources in the changing context of hospital organization across the nation. Our goal is to continually improve and enhance the quality of the rankings, with help from the Best Hospitals advisory group. Here we present several methodological improvements that we are considering for future rankings.

- **Review sample design for physician survey.** We will continue to explore sample design options that will yield better estimates of change in physician nominations across time.
- **Reevaluate process component.** We will continue to evaluate the way in which additional measures of process could be used to enhance the physician survey proxy measure.
- **Incorporate structural data for reputation-only specialties.** We are examining resources and measures that would provide structural data for the current reputation-only specialties to further strengthen and improve the rankings for these specialties.
- **Review external data sources.** We will investigate additional and new sources of data that offer quality measures for all hospitals. Data sources under consideration include quality indicators from the AHRQ and the Joint Commission on Accreditation of Healthcare Organizations.
- **Reevaluate outcomes component.** We will continue to evaluate additional measures to use in measuring outcomes, such as introducing a medical complications measure.

Contact Information

We welcome suggestions and questions. Readers and users are encouraged to contact the Best Hospitals research team at the address listed below. This and previous methodology reports since 2002 can be viewed or downloaded online in their entirety from the RTI International Web site at http://www.rti.org/BestHospitals. Specific questions or comments about the contents of this report can be sent via e-mail to BestHospitals@rti.org.

VII. References

1. Donabedian A. "Evaluating the quality of medical care." *The Milbank Memorial Fund Quarterly.* 1966; 44:166-203.

2. Donabedian A. "Promoting quality through evaluating the process of patient care." *Med Care.* 1968; 6:181.

3. Donabedian A. "The quality of care: How can it be assessed?" *JAMA.* 1988; 260:1743-1748.

4. Donabedian A. "The seven pillars of quality." *Archives of Pathology and Laboratory Medicine.* 1990; 114:1115-1118.

5. Donabedian A. "The role of outcomes in quality assessment and assurance." *QRB: Quality Review Bulletin*. 1992; 18(11):356-360.

6. Clinical Research and Documentation Departments of 3M Health Information Systems. *All Patient Refined Diagnosis Related Groups (APR-DRGs): Methodology Overview, Version 20.0*. Wallingford, CT: 3M Health Information Systems; 2003.

7. Hill CA, Winfrey KL, Rudolph BA. "'Best Hospitals': A description of the methodology for the index of hospital quality." *Inquiry.* 1997; 34:80-90.

8. American Hospital Association. *Annual survey of hospitals data base documentation manual*. Chicago, IL: American Hospital Association; 2005.

9. Ehrlich RH, Hill CA, Winfrey KL. *1997 Survey of best hospitals*. Chicago: National Opinion Research Center; 1997.

10. The Cancer Centers Branch of the National Cancer Institute. *Policies and guidelines relating to the cancer-center support grant*. Washington, DC: National Cancer Institute; 2000.

11. The National Association of Epilepsy Centers. "Guidelines for essential services, personnel, and facilities in specialized epilepsy centers in the United States." *Epilepsia*. 2001; 42(6).

12. U.S. Department of Health and Human Services. *Medicare hospital mortality information.* HCFA publication 01-002. Report prepared by Otis R. Bowen and William L. Roper. Washington, DC: U.S. Government Printing Office; 1987.

13. Blumberg MS. "Comments on HCFA hospital death rate statistical outliers." *HSR: Health Services Research*. 1987; 21:715-740.

14. Dubois RW, Brook RH, Rogers WH. "Adjusted hospital death rates: A potential screen or the quality of medical care." *AJPH.* 1987; 77:1162-1166.

15. Gillis KD, Hixson JS. "Efficacy of statistical outlier analysis for monitoring quality of care." *Journal of Business and Economic Statistics.* 1991; 9:241-252.

16. Green J, Wintfield N, Sharkey P, Passman LJ. "The importance of severity of illness in assessing hospital mortality." *JAMA.* 1990; 263:241-246.

17. Green J, Passman LJ, Wintfield N. "Analyzing hospital mortality: The consequences of diversity in patient mix." *JAMA.* 1991; 265:1849-1853.

18. Greenfield S, Aronow HU, Elashoff RM, Watanabe D. "Flaws in mortality data: The hazards of ignoring comorbid disease." *JAMA.* 1988; 260:2253-2257.

19. Rosen HM, Green BA. "The HCFA excess mortality lists: A methodological critique." *Hospital and Health Services Administration*. 1987; 2:119-124.

20. Flood AB, Scott WR. "Conceptual and methodological issues in measuring the quality of care in hospitals." In *Hospital Structure and Performance.* Baltimore: Johns Hopkins University Press; 1987.

21. Iezzoni LI, Ash AS, Coffman GA, Moskowitz MA. "Predicting in-hospital mortality: A comparison of severity measurement approaches." *Medical Care.* 1992; 30:347-359.

22. National Center for Health Statistics. *The International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM*). Hyattsville, MD: National Center for Health Statistics. Available at <www.cdc.gov/nchs/about/otheract/icd9/abticd9.htm>. Accessed on April 21, 2006.

23. De Marco MF, Lorenzoni L, Addari P, Nante N. "Evaluation of the capacity of the APR-DRG classification system to predict hospital mortality." *Epidemiol Prev*. 2002; 26(4):183-190.

24. Ciccone G, Lorenzoni L, Ivaldi C, Ciccarelli E, Piobbici M, Arione R. "Social class, mode of admission, severity of illness and hospital mortality: An analysis with 'all patient refined DRG' of discharges from the Molinette Hospital in Turin." *Epidemiol Prev*. 1999; 23(3):188-196.

25. Centers for Medicare & Medicaid Services (CMS). *Medicare Provider Analysis and Review (MEDPAR) of short-stay hospitals.* Baltimore, MD: Centers for Medicare & Medicaid Services. Available at <www.cms.hhs.gov/statistics/medpar/default.as>. Accessed on April 26, 2005.

26. Cromwell J, WO Adamache, S Bernard, LM Greenwald, EM Drozd, ED Root, NM Kane, KJ Devers. *Specialty hospital evaluation.* Final report prepared for the Centers for Medicare & Medicaid Services (CMS Contract No. 500-00-0024, T.O. 12). Waltham, MA: RTI International; 2005.

27. Medicare Payment Advisory Commission. *A data book: Healthcare spending and the Medicare program, June 2006*. Washington, DC: Medicare Prospective Payment Commission; 2006.

28. Davies GM, Geppert J, McClellan M, et al. *Refinement of the HCUP quality indicators.* Prepared by UCSF-Stanford Evidence-based Practice Center for the Agency for Healthcare Research and Quality (AHRQ Publication No. 01-0035). Rockville, MD: Agency for Healthcare Research and Quality; 2001. Available at <www.qualityindicators.ahrq.gov/downloads/technical/qi_technical_summary.pdf>.

29. HCUP Databases. *Healthcare Cost and Utilization Project (HCUP). 1998-2004.* Rockville, MD: Agency for Healthcare Research and Quality. Available at www.hcup-us.ahrq.gov/databases.jsp.

Appendix A

2005 Sample Physician Questionnaire (Long Form)

America's Best Hospitals

THIS SURVEY OF PHYSICIANS' JUDGMENTS PROVIDES THE BASIS FOR THE REPUTATION COMPONENT OF THE ANNUAL RANKING OF HOSPITALS FOR U.S. NEWS & WORLD REPORT.

RTI INTERNATIONAL

Research Triangle Institute

❶ **Please list in the spaces below, the five hospitals (and/or affiliated medical schools) in the United States that you believe provide the best care for patients with the most serious or difficult medical problems associated with neurology and neurosurgery, regardless of location or expense** (we've provided space for the hospitals and/or affiliated medical schools in hopes that will make it easier to provide your answer):

	Hospitals and/or affiliated medical schools that provide the best care	City	State
a.			
b.			
c.			
d.			
e.			

Please turn the page ➲

Conducted by the Research Triangle Institute
3040 Cornwallis Road, P.O. Box 12194, Research Triangle Park, NC 27709-2194

❷ **Please indicate how much you Strongly Agree, Agree, Neither Agree nor Disagree, Disagree, or Strongly Disagree that each of the following was an important influence in choosing the hospitals you named above:**

For each of the following influencing factors, circle the appropriate response, 1-5.	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
a. Your own direct knowledge of those hospitals	1	2	3	4	5
b. Experiences of your own patients at those hospitals	1	2	3	4	5
c. Experiences of your colleagues or your colleagues' patients at those hospitals	1	2	3	4	5
d. Published rankings of those hospitals on various indices of performance	1	2	3	4	5
e. Direct knowledge about specific physicians on staff at those hospitals	1	2	3	4	5
f. Publications or presentations by physicians or researchers at those hospitals	1	2	3	4	5
g. Knowledge of sophisticated medical technology utilized by those hospitals	1	2	3	4	5
h. Where you went to medical school	1	2	3	4	5
i. Where you did your internship or residency training	1	2	3	4	5
j. Some other factor *(Please specify)* _____	1	2	3	4	5

❸ **If you had your choice of how to respond to this survey, how would you have preferred to complete the survey?** ***(Please check one)***

- ☐ By mail
- ☐ By fax
- ☐ By telephone
- ☐ By the Internet

Thank you again for your participation.

Research Triangle Institute
3040 Cornwallis Road, P.O. Box 12194, Research Triangle Park, NC 27709-2194

Appendix B

2005–2006 Sample Physician Questionnaire (Short Form)

America's Best Hospitals

THIS SURVEY OF PHYSICIANS' JUDGMENTS PROVIDES THE BASIS FOR THE REPUTATION COMPONENT OF THE ANNUAL RANKING OF HOSPITALS FOR U.S. NEWS & WORLD REPORT.

RTI INTERNATIONAL

Research Triangle Institute

Please list in the spaces below, the five hospitals (and/or affiliated medical schools) in the United States that you believe provide the best care for patients with the most serious or difficult medical problems associated with cancer, regardless of location or expense (we've provided space for the hospitals and/or affiliated medical schools in hopes that will make it easier to provide your answer):

	Hospitals and/or affiliated medical schools that provide the best care	City	State
a.			
b.			
c.			
d.			
e.			

Conducted by the Research Triangle Institute
3040 Cornwallis Road, P.O. Box 12194, Research Triangle Park, NC 27709-2194

Thank you again for your participation.

Research Triangle Institute
3040 Cornwallis Road, P.O. Box 12194
Research Triangle Park, NC 27709-2194

Appendix C

2007 Sample Physician Questionnaire

America's Best Hospitals

THIS SURVEY OF PHYSICIANS' JUDGMENTS PROVIDES THE BASIS FOR THE REPUTATIONAL COMPONENT OF THE ANNUAL RANKINGS OF HOSPITALS FOR *U.S. NEWS & WORLD REPORT*.

RTI INTERNATIONAL

Research Triangle Institute

List the five U.S. hospitals (and/or affiliated medical schools) that in your opinion provide the best care for patients with the most serious or difficult medical problems associated with <<SPECIALTY>>, without considering location or expense. (Please do not list any hospital where you currently practice.)

	Hospital and/or affiliated medical school	City	State
a.			
b.			
c.			
d.			
e.			

Conducted RTI International
3040 Cornwallis Road, P.O. Box 12194, Research Triangle Park, NC 27709-2194

Thank you for your participation.

RTI International
3040 Cornwallis Road, P.O. Box 12194
Research Triangle Park, NC 27709-2194

Appendix D

Structural Variable Map

The following variables, used to construct structural elements of the 2007 IHQ, were taken from the 2005 Annual Survey of Hospitals Database published by the American Hospital Association. Hospitals do not receive more than 1 point for any one service.

Key Advanced Care Index (Total of 13 points possible)

1 point awarded if...	OR ½ point awarded if...
OTBONHOS=1	OTBONSYS, OTBONNET, or OTBONVEN=1
CICHOS=1	CICSYS, CICNET, or CICVEN=1
CAOSHOS=1	CAOSSYS, CAOSNET, or CAOSVEN=1
DRADFHOS=1	DRADFSYS, DRADFNET, or DRADFVEN=1
FFDMHOS=1	FFDMSYS, FFDMNET, or FFDMVEN=1
IGRTHOS=1	IGRTSYS, IGRTNET, or IGRTVEN=1
KDNYHOS=1	KYDNYSYS, KDNYNET, or KDNYVEN=1
MSCTHOS or MSCTGHOS=1	MSCTSYS, MSCTNET, MSCTVEN, MSCTGSYS, MSCTGNET, or MSCTGVEN=1
PETHOS=1	PETSYS, PETNET, or PETVEN=1
ROBOHOS=1	ROBOSYS, ROBONET, or ROBOVEN=1
BEAMHOS=1	BEAHMSYS, BEAMNET, or BEAMVEN=1
SPECTHOS=1	SPECTSYS, SPECTNET, SPECTVEN=1
SRADHOS=1	SRADSYS, SRADNET, SRADVEN=1

Cancer Advanced Care Index (Total of 7 points possible)

1 point awarded if...	OR ½ point awarded if...
OTBONHOS=1	OTBONSYS, OTBONNET, OTBONVEN=1
DRADFHOS=1	DRADFSYS, DRADFNET, or DRADFVEN=1
AIRBHOS=1	AIRBSYS, AIRBNET, or AIRBVEN=1
IGRTHOS=1	IGRTSYS, IGRTNET, or IGRTVEN=1
PETHOS=1	PETSYS, PETNET, or PETVEN=1
BEAMHOS=1	BEAHMSYS, BEAMNET, or BEAMVEN=1
SRADHOS=1	SRADSYS, SRADNET, SRADVEN=1

Digestive Disorders Advanced Care Index (Total of 5 points possible)

1 point awarded if...	OR ½ point awarded if...
DRADFHOS=1	DRADFSYS, DRADFNET, or DRADFVEN=1
AIRBHOS=1	AIRBSYS, AIRBNET, or AIRBVEN=1
IGRTHOS=1	IGRTSYS, IGRTNET, or IGRTVEN=1
PETHOS=1	PETSYS, PETNET, or PETVEN=1
SRADHOS=1	SRADSYS, SRADNET, SRADVEN=1

Ear, Nose, and Throat Advanced Care Index (Total of 3 points possible)

1 point awarded if...	OR ½ point awarded if...
AIRBHOS=1	AIRBSYS, AIRBNET, or AIRBVEN=1
PETHOS=1	PETSYS, PETNET, or PETVEN=1
SRADHOS=1	SRADSYS, SRADNET, SRADVEN=1

Endocrinology Advanced Care Index (Total of 5 points possible)

1 point awarded if...	OR ½ point awarded if...
DRADFHOS=1	DRADFSYS, DRADFNET, or DRADFVEN=1
AIRBHOS=1	AIRBSYS, AIRBNET, or AIRBVEN=1
IGRTHOS=1	IGRTSYS, IGRTNET, or IGRTVEN=1
PETHOS=1	PETSYS, PETNET, or PETVEN=1
SRADHOS=1	SRADSYS, SRADNET, SRADVEN=1

Geriatrics Advanced Care Index (Total of 2 points possible)

1 point awarded if...	OR ½ point awarded if...
AIRBHOS=1	AIRBSYS, AIRBNET, or AIRBVEN=1
PETHOS=1	PETSYS, PETNET, or PETVEN=1

Gynecology Advanced Care Index (Total of 4 points possible)

1 point awarded if...	OR ½ point awarded if...
FFDMHOS=1	FFDMSYS, FFDMNET, or FFDMVEN=1
AIRBHOS=1	AIRBSYS, AIRBNET, or AIRBVEN=1
PETHOS=1	PETSYS, PETNET, or PETVEN=1
SRADHOS=1	SRADSYS, SRADNET, SRADVEN=1

Heart and Heart Surgery Advanced Care Index (Total of 4 points possible)

1 point awarded if...	OR ½ point awarded if...
CICHOS=1	CICSYS, CICNET, or CICVEN=1
MSCTHOS or MSCTGHOS=1	MSCTSYS, MSCTNET, MSCTVEN, MSCTGSYS, MSCTGNET, or MSCTGVEN=1
PETHOS=1	PETSYS, PETNET, or PETVEN=1
ROBOHOS=1	ROBOSYS, ROBONET, or ROBOVEN=1
SPECTHOS=1	SPECTSYS, SPECTNET, SPECTVEN=1

Kidney Disease Advanced Care Index (Total of 6 points possible)

1 point awarded if...	OR ½ point awarded if...
DRADFHOS=1	DRADFSYS, DRADFNET, or DRADFVEN=1
AIRBHOS=1	AIRBSYS, AIRBNET, or AIRBVEN=1
IGRTHOS=1	IGRTSYS, IGRTNET, or IGRTVEN=1
KDNYHOS=1	KYDNYSYS, KDNYNET, or KDNYVEN=1
PETHOS=1	PETSYS, PETNET, or PETVEN=1
SRADHOS=1	SRADSYS, SRADNET, SRADVEN=1

Neurology and Neurosurgery Advanced Care Index (Total of 7 points possible)

1 point awarded if...	OR ½ point awarded if...
DRADFHOS=1	DRADFSYS, DRADFNET, or DRADFVEN=1
AIRBHOS=1	AIRBSYS, AIRBNET, or AIRBVEN=1
IGRTHOS=1	IGRTSYS, IGRTNET, or IGRTVEN=1
PETHOS=1	PETSYS, PETNET, or PETVEN=1
ROBOHOS=1	ROBOSYS, ROBONET, or ROBOVEN=1
SPECTHOS=1	SPECTSYS, SPECTNET, SPECTVEN=1
SRADHOS=1	SRADSYS, SRADNET, SRADVEN=1

Orthopedics Advanced Care Index (Total of 2 points possible)

1 point awarded if...	OR ½ point awarded if...
CAOSHOS=1	CAOSSYS, CAOSNET, or CAOSVEN=1
PETHOS=1	PETSYS, PETNET, or PETVEN=1

Respiratory Disorders Advanced Care Index (Total of 6 points possible)

1 point awarded if...	OR ½ point awarded if...
DRADFHOS=1	DRADFSYS, DRADFNET, or DRADFVEN=1
AIRBHOS=1	AIRBSYS, AIRBNET, or AIRBVEN=1
IGRTHOS=1	IGRTSYS, IGRTNET, or IGRTVEN=1
MSCTHOS or MSCTGHOS=1	MSCTSYS, MSCTNET, MSCTVEN, MSCTGSYS, MSCTGNET, or MSCTGVEN=1
PETHOS=1	PETSYS, PETNET, or PETVEN=1
SRADHOS=1	SRADSYS, SRADNET, SRADVEN=1

Urology Advanced Care Index (Total of 6 points possible)

1 point awarded if...	OR ½ point awarded if...
DRADFHOS=1	DRADFSYS, DRADFNET, or DRADFVEN=1
AIRBHOS=1	AIRBSYS, AIRBNET, or AIRBVEN=1
IGRTHOS=1	IGRTSYS, IGRTNET, or IGRTVEN=1
PETHOS=1	PETSYS, PETNET, or PETVEN=1
ROBOHOS=1	ROBOSYS, ROBONET, or ROBOVEN=1
SRADHOS=1	SRADSYS, SRADNET, SRADVEN=1

Cancer Patient Services (Total of 6 points possible)

1 point awarded if...
GNTCHOS=1
HOSPVEN=1
PAINHOS=1
PALHOS, PALSYS, PALNET, or PATVEN=1
PCAHOS=1
LINGHOS=1

Digestive Disorders—Patient Services (Total of 7 points possible)

1 point awarded if...
GNTCHOS=1
HOSPVEN=1
PAINHOS=1
PALHOS, PALSYS, PALNET, or PATVEN=1
PCAHOS=1
REHABHOS=1
LINGHOS=1

Ear, Nose, and Throat—Patient Services (Total of 7 points possible)

1 point awarded if...
GNTCHOS=1
HOSPVEN=1
PAINHOS=1
PALHOS, PALSYS, PALNET, or PATVEN=1
PCAHOS=1
REHABHOS=1
LINGHOS=1

Endocrinology—Patient Services (Total of 7 points possible)

1 point awarded if...
GNTCHOS=1
HOSPVEN=1
PAINHOS=1
PALHOS, PALSYS, PALNET, or PATVEN=1
PCAHOS=1
REHABHOS=1
LINGHOS=1

Geriatrics—Patient Services (Total of 9 points possible)

1 point awarded if...
ALZHOS=1
ARTHCHOS=1
HOSPVEN=1
PAINHOS=1
PALHOS, PALSYS, PALNET, or PATVEN=1
PCAHOS=1
PSYHOS=1
REHABHOS=1
LINGHOS=1

Gynecology—Patient Services (Total of 8 points possible)

1 point awarded if...	OR ½ point awarded if...
FRTCHOS=1	FRTCSYS, FRTCNET, or FRTCVEN=1
GNTCHOS=1	
HOSPVEN=1	
PAINHOS=1	
PALHOS, PALSYS, PALNET, or PATVEN=1	
PCAHOS=1	
REHABHOS=1	
LINGHOS=1	

Heart and Heart Surgery—Patient Services (Total of 6 points possible)

1 point awarded if...
CHABHOS=1
HOSPVEN=1
PAINHOS=1
PALHOS, PALSYS, PALNET, or PATVEN=1
PCAHOS=1
LINGHOS=1

Kidney Disease—Patient Services (Total of 7 points possible)

1 point awarded if...
GNTCHOS=1
HOSPVEN=1
PAINHOS=1
PALHOS, PALSYS, PALNET, or PATVEN=1
PCAHOS=1
REHABHOS=1
LINGHOS=1

Neurology and Neurosurgery—Patient Services (Total of 7 points possible)

1 point awarded if...
GNTCHOS=1
HOSPVEN=1
PAINHOS=1
PALHOS, PALSYS, PALNET, or PATVEN=1
PCAHOS=1
REHABHOS=1
LINGHOS=1

Orthopedics—Patient Services (Total of 6 points possible)

1 point awarded if...
HOSPVEN=1
PAINHOS=1
PALHOS, PALSYS, PALNET, or PATVEN=1
PCAHOS=1
REHABHOS=1
LINGHOS=1

Respiratory Disorders—Patient Services (Total of 7 points possible)

1 point awarded if...
GNTCHOS=1
HOSPVEN=1
PAINHOS=1
PALHOS, PALSYS, PALNET, or PATVEN=1
PCAHOS=1
REHABHOS=1
LINGHOS=1

Urology—Patient Services (Total of 8 points possible)

1 point awarded if...	OR ½ point awarded if...
FRTCHOS=1	FRTCSYS, FRTCNET, or FRTCVEN=1
GNTCHOS=1	
HOSPVEN=1	
PAINHOS=1	
PALHOS, PALSYS, PALNET, or PATVEN=1	
PCAHOS=1	
REHABHOS=1	
LINGHOS=1	

Nursing Index

Index equals:
Full-time Equivalent Registered Nurses (FTEN where available, FTERN otherwise) divided by Adjusted Average Daily Census (ADJADC)

Trauma

"Yes" if...
TRAUML90=1 or 2 *and* TRAUMHOS=1

Appendix E

2007 Diagnosis-Related Group (DRG)

Groupings by Specialty

Cancer*

	DRGs	ICD-9-CMs	Severity	Weight
#10	Nervous System Neoplasms W CC	Include All	3	1.1421
#11	Nervous System Neoplasms W/O CC	Include All	3	1.6775
#64	Ear, Nose, Mouth & Throat Malignancy	Include All	2	1.2451
#82	Respiratory Neoplasms	Include All	2	0.9264
#172	Digestive Malignancy W CC	Include All	2	0.9560
#173	Digestive Malignancy W/O CC	Include All	2	1.0253
#199	Hepatobiliary Diagnostic Procedure For Malignancy	Include All	2	1.0050
#203	Malignancy Of Hepatobiliary System Or Pancreas	Include All	2	0.9709
#239	Pathological Fractures & Musculoskeletal & Conn Tiss Malignancy	Include All	2	0.7851
#257	Total Mastectomy For Malignancy W CC	Include All	2	0.9290
#258	Total Mastectomy For Malignancy W/O CC	Include All	2	1.7770
#259	Subtotal Mastectomy For Malignancy W CC	Include All	2	0.9708
#260	Subtotal Mastectomy For Malignancy W/O CC	Include All	2	0.9136
#272	Major Skin Disorders W CC	Include Diag: 172, 1720-9	2	1.5772
#273	Major Skin Disorders W/O CC	Include Diag: 172, 1720-9	2	2.1160
#274	Malignant Breast Disorders W CC	Include All	2	1.2939
#275	Malignant Breast Disorders W/O CC	Include All	2	1.2328
#303	Kidney, Ureter & Major Bladder Procedures For Neoplasm	Include All	3	0.8745
#318	Kidney & Urinary Tract Neoplasms W CC	Include All	3	0.8614
#319	Kidney & Urinary Tract Neoplasms W/O CC	Include All	3	1.8817
#338	Testes Procedures, For Malignancy	Include All	2	0.9098
#344	Other Male Reproductive System O.R. Procedures For Malignancy	Include All	2	0.8630
#346	Malignancy, Male Reproductive System, W CC	Include All	2	0.7980
#347	Malignancy, Male Reproductive System, W/O CC	Include All	2	1.1942
#354	Uterine, Adnexa Proc For Non-Ovarian/Adnexal Malig W CC	Include All	2	1.1523
#355	Uterine, Adnexa Proc For Non-Ovarian/Adnexal Malig W/O CC	Include All	2	2.0571
#357	Uterine & Adnexa Proc For Ovarian Or Adnexal Malignancy	Include All	2	1.3943
#363	D&C, Conization & Radio-Implant, For Malignancy	Include All	2	1.2038
#366	Malignancy, Female Reproductive System W CC	Include All	2	1.1518
#367	Malignancy, Female Reproductive System W/O CC	Include All	2	1.7553
#400	Lymphoma & Leukemia W Major O.R. Procedure	Include All	2	1.1475
#401	Lymphoma & Non-Acute Leukemia W Other O.R. Proc W CC	Include All	2	0.9993
#402	Lymphoma & Non-Acute Leukemia W Other O.R. Proc W/O CC	Include All	2	1.2314
#403	Lymphoma & Non-Acute Leukemia W CC	Include All	2	0.8791

*The Geriatrics specialty includes the full set of DRGs used for all specialties

(continued)

Cancer (continued)

	DRGs	ICD-9-CMs	Severity	Weight
#404	Lymphoma & Non-Acute Leukemia W/O CC	Include All	2	1.1851
#406	Myeloprolif Disord Or Poorly Diff Neopl W Maj or Proc W CC	Include All	2	1.2559
#407	Myeloprolif Disord Or Poorly Diff Neopl W Maj or Proc W/O CC	Include All	2	1.8477
#408	Myeloprolif Disord Or Poorly Diff Neopl W Other or Proc	Include All	2	1.2055
#410	Chemotherapy W/O Acute Leukemia As Secondary Diagnosis	Include All	3	1.6788
#413	Other Myeloprolif Dis Or Poorly Diff Neopl Diag W CC	Include All	3	1.0092
#414	Other Myeloprolif Dis Or Poorly Diff Neopl Diag W/O CC	Include All	3	3.4041
#473	Acute Leukemia W/O Major O.R. Procedure Age >17	Include All	2	1.1414
#481	Bone Marrow Transplant	Include All	1	3.7669
#492	Chemotherapy W Acute Leukemia As Secondary Diagnosis	Include All	2	2.6869
#539	Lymphoma & Leukemia W Major Or Procedure W CC	Include All	2	1.1289
#540	Lymphoma & Leukemia W Major Or Procedure W/O CC	Include All	2	1.5392
#543	Craniotomy with Implantation of Chemotherapeutic Agent or Acute Complex Central Nervous System Principal Diagnosis	Include Proc: 0010	1	1.5081

Digestive Disorders*

	DRGs	ICD-9-CMs	Severity	Weight
#146	Rectal Resection W CC	Include All	1	1.0428
#147	Rectal Resection W/O CC	Include All	2	1.7777
#148	Major Small & Large Bowel Procedures W CC	Include All	2	1.0367
#149	Major Small & Large Bowel Procedures W/O CC	Include All	2	1.8642
#150	Peritoneal Adhesiolysis W CC	Include All	2	1.0888
#151	Peritoneal Adhesiolysis W/O CC	Include All	2	2.2002
#152	Minor Small & Large Bowel Procedures W CC	Include All	2	1.1778
#153	Minor Small & Large Bowel Procedures W/O CC	Exclude Proc: 4511, 4515, 4521, 4821	3	6.4407
#154	Stomach, Esophageal & Duodenal Procedures Age >17 W CC	Include All	2	1.0622
#155	Stomach, Esophageal & Duodenal Procedures Age >17 W/O CC	Include All	3	2.2140
#170	Other Digestive System O.R. Procedures W CC	Include All	2	0.9847
#171	Other Digestive System O.R. Procedures W/O CC	Include All	3	1.7592
#172	Digestive Malignancy W CC	Include All	2	0.9836
#173	Digestive Malignancy W/O CC	Include All	2	1.0550
#174	G.I. Hemorrhage W CC	Include All	2	0.7796

*The Geriatrics specialty includes the full set of DRGs used for all specialties

(continued)

Digestive Disorders (continued)

	DRGs	ICD-9-CMs	Severity	Weight
#175	G.I. Hemorrhage W/O CC	Include All	2	0.9698
#176	Complicated Peptic Ulcer	Include All	2	0.9147
#177	Uncomplicated Peptic Ulcer W CC	Include All	3	0.8332
#179	Inflammatory Bowel Disease	Include All	2	2.0392
#180	G.I. Obstruction W CC	Include All	3	0.7432
#182	Esophagi is, Gastroent & Misc Digest Disorders Age >17 W CC	Include All	3	0.8288
#188	Other Digestive System Diagnoses Age >17 W CC	Include All	2	0.9078
#191	Pancreas, Liver & Shunt Procedures W CC	Include All	1	1.3945
#192	Pancreas, Liver & Shunt Procedures W/O CC	Include All	2	2.0748
#193	Biliary Tract Proc Except Only Cholecyst W Or W/O C.D.E. W CC	Include All	2	1.0036
#194	Biliary Tract Proc Except Only Cholecyst W Or W/O C.D.E. W/O CC	Include All	3	5.2837
#195	Cholecystectomy W C.D.E. W CC	Include All	2	0.9434
#196	Cholecystectomy W C.D.E. W/O CC	Include All	2	2.0168
#197	Cholecystectomy Except By Laparoscope W/O C.D.E. W CC	Include All	2	1.0093
#199	Hepatobiliary Diagnostic Procedure For Malignancy	Include All	2	1.0341
#200	Hepatobiliary Diagnostic Procedure For Non-Malignancy	Include All	2	1.3254
#201	Other Hepatobiliary or Pancreas or Procedures	Exclude Proc: 4011	3	1.0727
#202	Cirrhosis & Alcoholic Hepatitis	Include All	2	1.8060
#203	Malignancy Of Hepatobiliary System Or Pancreas	Include All	2	0.9990
#204	Disorders Of Pancreas Except Malignancy	Include All	2	1.4391
#205	Disorders of Liver Except Malig, Cirr, Alc Hepa W CC	Exclude Diag: 7948	2	1.4165
#207	Disorders Of The Biliary Tract W CC	Include All	3	0.8369
#493	Laparoscopic Cholecystectomy W/O C.D.E. W CC	Include All	3	1.0139

Ear, Nose, and Throat*

	DRGs	ICD-9-CMs	Severity	Weight
#49	Major Head & Neck Procedures	Include All	2	1.0675
#51	Salivary Gland Procedures Except Sialoadenectomy	Include All	3	1.0000
#57	T&A Proc, Except Tonsillectomy &/or Adenoidectomy Only, Age >17	Include All	3	1.5135
#63	Other Ear, Nose, Mouth & Throat O.R. Procedures	Include All	3	1.9417
#64	Ear, Nose, Mouth & Throat Malignancy	Include All	2	1.0314
#67	Epiglottitis	Include All	3	1.2331
#68	Otitis Media & Uri Age >17 W CC	Include All	3	0.7411
#71	Laryngotracheitis	Include All	3	13.6508
#72	Nasal Trauma & Deformity	Include All	3	0.6829
#73	Other Ear, Nose, Mouth & Throat Diagnoses Age >17	Include All	3	0.6471
#482	Tracheostomy For Face, Mouth & Neck Diagnoses	Include All	2	1.1825

*The Geriatrics specialty includes the full set of DRGs used for all specialties

Endocrinology*

	DRGs	ICD-9-CMs	Severity	Weight
#286	Adrenal & Pituitary Procedures	Include All	2	1.9818
#287	Skin Grafts & Wound Debrid For Endoc, Nutrit & Metab Disorders	Include All	2	1.1350
#288	O.R. Procedures For Obesity	Include All	2	5.7991
#289	Parathyroid Procedures	Exclude Proc: 0613	2	1.0471
#290	Thyroid Procedures	Exclude Proc: 0061, 0611-13, 0619	2	1.8638
#292	Other Endocrine, Nutrit & Metab O.R. Proc W CC	Include All	2	0.9563
#293	Other Endocrine, Nutrit & Metab O.R. Proc W/O CC	Include All	2	1.6797
#294	Diabetes Age >35	Include All	3	0.9614
#296	Nutritional & Misc Metabolic Disorders Age >17 W CC	Include All	3	0.7446
#300	Endocrine Disorders W CC	Include All	3	0.8792

*The Geriatrics specialty includes the full set of DRGs used for all specialties

Gynecology*

	DRGs	ICD-9-CMs	Severity	Weight
#353	Pelvic Evisc, Radical Hysterectomy & Radical Vulvectomy	Include All	1	0.8848
#354	Uterine, Adnexa Proc for Non-Ovarian/Adnexal Malig W CC	Include All	2	0.5420
#355	Uterine, Adnexa Proc for Non-Ovarian/Adnexal Malig W/O CC	Include All	2	0.9676
#357	Uterine & Adnexa Proc for Ovarian Or Adnexal Malignancy	Include All	2	0.6558
#358	Uterine & Adnexa Proc for Non-Malignancy W CC	Include All	2	1.5996
#359	Uterine & Adnexa Proc for Non-Malignancy W/O CC	Include All	3	3.1201
#360	Vagina, Cervix & Vulva Procedures	Excl. Proc: 7021-4, 7029	3	0.4777
#363	D&C, Conization & Radio-Implant, For Malignancy	Include All	2	0.5662
#365	Other Female Reproductive System O.R. Procedures	Include All	2	1.2102
#366	Malignancy, Female Reproductive System W CC	Include All	2	0.5418
#367	Malignancy, Female Reproductive System W/O CC	Include All	2	0.8256
#368	Infections, Female Reproductive System	Include All	3	0.4347
#369	Menstrual & Other Female Reproductive System Disorders	Include All	3	0.6295

*The Geriatrics specialty includes the full set of DRGs used for all specialties

Heart and Heart Surgery*

	DRGs	ICD-9-CMs	Severity	Weight
#75	Major Chest Procedures	Incl. Procs: 3712, 3724, 3731, 3791, 3805, 3815, 3835, 3845, 3855, 3865, 3885, 3954	2	1.9858
#103	Heart Transplant	Include All	1	2.3744
#104	Cardiac Valve & Other Major Cardiothoracic Px W Cardiac Cath	Include All	2	1.0689
#105	Cardiac Valve & Other Major Cardiothoracic Px W/O Cardiac Cath	Include All	2	1.2578
#106	Coronary Bypass With Ptca	Include All	2	1.5455
#107	Coronary Bypass With Cardiac Cath	Include All	2	1.3071
#108	Other Cardiothoracic Procedures	Include All	2	1.9135
#109	Coronary Bypass Wo/Cardiac Cath	Include All	2	1.3092
#110	Major Cardiovascular Procedures W CC	Include All	2	1.1409
#111	Major Cardiovascular Procedures W/O CC	Include All	2	1.4686
#115	Prm Card Pacem Impl W Ami, Hrt Fail Or Shk, Or Acid Lead Or Gnrtr Proc	Include All	2	0.8683
#116	Other Permanent Cardiac Pacemaker Implantation	Include All	3	0.8202
#117	Cardiac Pacemaker Revision Except Device Replacement	Include All	2	0.9730
#121	Circulatory Disorders W Ami & Major Comp, Discharged Alive	Include All	2	0.8772
#122	Circulatory Disorders W Ami W/O Major Comp, Discharged Alive	Include All	2	1.2259
#123	Circulatory Disorders W Ami, Expired	Include All	2	0.8341
#124	Circ Dis Ex Ami W/Cath &Complex Diag	Include All	2	1.1609
#126	Acute & Subacute Endocarditis	Include All	2	1.3084
#127	Heart Failure & Shock	Include All	2	0.8863
#135	Cardiac Congenital & Valvular Disorders Age >17 W CC	Include All	2	0.9604
#138	Cardiac Arrhythmia & Conduction Disorders W CC	Include All	2	0.9309
#144	Other Circulatory System Diagnoses W CC	Include All	2	1.1991
#145	Other Circulatory System Diagnoses W/O CC	Include All	3	3.3579
#514	Cardiac Defibrillator Implant W Cardiac Cath	Include All	1	1.0968
#515	Cardiac Defibrillator Implant W/O Cardiac Cath	Include All	1	1.0336
#516	Percutaneous Cardiovascular Proc W Ami	Include All	2	1.2596
#517	Perc Cardio Proc W Coronary Artery Stent W/O Ami	Include All	3	1.0153
#518	Perc Cardio Proc W/O Coronary Artery Stent Or Ami	Include All	3	1.0586
#525	Heart Assist System Implant	Include All	1	1.7220
#526	Percut. Cv Proc W/Drug Eluting Stent W/Ami	Include All	3	1.0999
#527	Percut. Cv Proc W/Drug Eluting Stent W/O Ami	Include All	3	1.0468
#535	Cardiac Defibrillator Implant W Cath W Ami, Heart Failure, Or Shock	Include All	1	1.0783
#536	Cardiac Defibrillator Implant W Cath W/O Ami, Heart Failure, Or Shock	Include All	3	1.1225

*The Geriatrics specialty includes the full set of DRGs used for all specialties

Kidney Disease*

	DRGs	ICD-9-CMs	Severity	Weight
#302	Kidney Transplant	Include All	1	1.2176
#303	Kidney, Ureter & Major Bladder Procedures For Neoplasm	Incl. Proc: 3924, 5501-4, 5511-2, 5521-4, 5529, 5531, 5539, 5551-4, 5561, 5569, 5581-7, 5589, 5591-9	2	1.1808
#304	Kidney, Ureter & Major Bladder Proc For Non-Neopl W CC	See DRG #303	2	1.3620
#305	Kidney, Ureter & Major Bladder Proc For Non-Neopl W/O CC	See DRG #303	3	2.6596
#315	Other Kidney & Urinary Tract Or Procedures	Excl. Proc: 0681, 0689, 3328, 3402, 3402, 3972, 640, 6495-7, 7740-9	3	1.0202
#316	Renal Failure	Include All	2	0.9480
#318	Kidney and Urinary Tract Neoplasms W CC	Incl. Diag: 189, 1890-4, 1898-9, 198, 1980-8, 19881-2, 19889, 223, 2230-3, 2238, 22381, 22389, 2239	2	1.1671
#319	Kidney and Urinary Tract Neoplasms W/O CC	See DRG #318	3	1.0000
#320	Kidney & Urinary Tract Infections Age >17 W CC	See DRG #318	2	1.0000
#325	Kidney & Urinary Tract Signs & Symptoms Age >17 W CC	Include All	3	0.8266
#331	Other Kidney & Urinary Tract Diagnoses Age >17 W CC	Too many to list**	3	1.1087
#332	Other Kidney & Urinary Tract Diagnoses Age >17 W/O CC	Too many to list**	3	1.7316
#512	Simultaneous Pancreas/Kidney Transplant	Include All	1	1.3467

*The Geriatrics specialty includes the full set of DRGs used for all specialties

**To obtain a complete list, send your request via e-mail to besthospitals@rti.org.

Neurology and Neurosurgery*

	DRGs	ICD-9-CMs	Severity	Weight
#1	Craniotomy Age >17 W CC	Include All	2	1.3664
#2	Craniotomy Age >17 W/O CC	Include All	2	2.0482
#4	Spinal Procedures	Include All	2	2.3636
#5	Extracranial Vascular Procedures	Include All	2	0.7410
#7	Periph & Cranial Nerve & Other Nerv Syst Proc W CC	Include All	2	1.0498
#8	Periph & Cranial Nerve & Other Nerv Syst Proc W/O CC	Include All	2	1.8171
#9	Spinal Disorders & Injuries	Include All	2	1.4726
#10	Nervous System Neoplasm With CC	Include All	2	1.2004
#11	Nervous System Neoplasm Without CC	Include All	2	1.3122
#12	Degenerative Nervous System Disorders	Include All	2	0.6870
#13	Multiple Sclerosis & Cerebellar Ataxia	Include All	2	1.3706
#14	Specific Cerebrovascular Disorders Except Tia	Include All	2	0.8136
#15	Transient Ischemic Attack & Precerebral Occlusions	Include All	2	0.7460
#16	Nonspecific Cerebrovascular Disorders W CC	Include All	2	0.7853
#18	Cranial & Peripheral Nerve Disorders W CC	Include All	2	1.0072
#19	Cranial & Peripheral Nerve Disorders W/O CC	Include All	2	1.3102
#20	Nervous System Infection Except Viral Meningitis	Include All	2	1.9945
#21	Viral Meningitis	Include All	2	4.5173
#22	Hypertensive Encephalopathy	Include All	2	0.9403
#23	Nontraumatic Stupor & Coma	Include All	2	0.8638
#24	Seizure & Headache Age >17 W CC	Include All	2	1.1458
#27	Traumatic Stupor & Coma, Coma >1 Hr	Include All	1	2.1121
#28	Traumatic Stupor & Coma, Coma <1 Hr Age >17 W CC	Include All	1	1.0287
#29	Traumatic Stupor & Coma, Coma <1 Hr Age >17 W/O CC	Include All	1	1.6713
#34	Other Disorders Of Nervous System W CC	Include All	3	1.0183
#35	Other Disorders Of Nervous System W/O CC	Include All	3	1.6587
#484	Craniotomy For Multiple Significant Trauma	Include All	1	5.8363
#496	Combined Anterior/Posterior Spinal Fusion	Include All	2	2.7663
#497	Spinal Fusion With CC	Include All	2	1.3027
#498	Spinal Fusion Without CC	Include All	2	1.8981
#499	Back And Neck Procedures Except Spinal Fusion With CC	Include All	3	0.8422
#500	Back And Neck Procedures Except Spinal Fusion Without CC	Include All	3	1.1136
#519	Cervical Fusion With CC	Include All	2	1.4728
#520	Cervical Fusion Without CC	Include All	2	2.4703
#528	Intracranial Vasc Proc W PDX Hemorrhage	Include All	1	2.9389
#529	Ventricular Shunt Proc W CC	Include All	2	1.1768
#530	Ventricular Shunt Proc W/O CC	Include All	2	0.9638
#531	Spinal Procedures W CC	Include All	2	1.8846
#532	Spinal Procedures W/O CC	Include All	2	4.1922
#533	Extracranial Vascular Proc W CC	Include All	2	0.7452
#543	Craniotomy with Implantation of Chemotherapeutic Agent or Acute Complex Central Nervous System Principal Diagnosis	Include All	1	1.5081

*The Geriatrics specialty includes the full set of DRGs used for all specialties

Orthopedics*

	DRGs	ICD-9-CMs	Severity	Weight
#4	Spinal Procedures	Incl. Proc: 7781, 7791, 8050-1, 8059, 8100-9, 8130-9, 8161	3	2.5153
#209	Major Joint & Limb Reattachment Procedures of Lower Extremity	Include All	2	0.9380
#210	Hip & Femur Procedures Except Major Joint Age >17 W CC	Include All	2	0.7595
#211	Hip & Femur Procedures Except Major Joint Age >17 W/O CC	Include All	3	1.6737
#218	Lower Extrem & Humer Proc Except Hip, Foot, Femur Age >17 W CC	Include All	2	1.3340
#219	Lower Extrem & Humer Proc Except Hip, Foot, Femur Age >17 W/O CC	Include All	3	8.5131
#223	Maj Shoulder/Elbow Proc, or other Upper Extremity Proc W CC	Include All	2	1.2470
#225	Foot Procedures	Include All	3	1.4537
#226	Soft Tissue Procedures W CC	Include All	3	1.2947
#228	Major Thumb or Joint Proc, or Oth Hand or Wrist Proc W CC	Include All	3	1.5129
#230	Local Excision & Removal of Int Fix Devices Of Hip & Femur	Include All	3	1.0663
#231	Local Excision & Removal of Int Fix Devices Except Hip & Femur	Include All	2	1.4910
#233	Other Musculoskelet Sys & Conn Tiss O.R. Proc W CC	Too many to list*	3	0.8545
#234	Other Musculoskelet Sys & Conn Tiss O.R. Proc W/O CC	Include All	3	0.8933
#235	Fractures of Femur	Include All	2	1.2301
#236	Fractures of Hip & Pelvis	Include All	2	0.7794
#238	Osteomyelitis	Include All	3	0.9802
#239	Pathological Fractures & Musculoskeletal & Conn Tiss Malig	Include Diag: 7339, 73390-6, 73399	3	0.7905
#471	Bilateral or Multiple Major Joint Procs of Lower Extremity	Include All	2	1.0997
#485	Limb Reattachment, Hip And Femur Proc For Multiple Significant Trauma	Include All	1	2.5432
#491	Major Joint & Limb Reattachment Proc of Upper Extremity	Include All	1	0.9455
#496	Combined Anterior/Posterior Spinal Fusion	Include All	2	2.9877
#497	Spinal Fusion Except Cervical W CC	Include All	2	1.4069

*The Geriatrics specialty includes the full set of DRGs used for all specialties

(continued)

Orthopedics (continued)

	DRGs	ICD-9-CMs	Severity	Weight
#498	Spinal Fusion Except Cervical W/O CC	Include All	2	2.0500
#499	Back And Neck Procedures Except Spinal Fusion With CC	Include All	2	1.0181
#500	Back And Neck Procedures Except Spinal Fusion Without CC	Include All	2	1.5286
#501	Knee Procedures W Pdx of Infection W CC	Include All	2	1.0727
#502	Knee Procedures W Pdx of Infection W/O CC	Include All	2	2.2562
#519	Cervical Fusion W CC	Include All	2	1.5906
#520	Cervical Fusion W/O CC	Include All	2	2.6680
#531	Spinal Procedures W CC	Include Proc: 7781, 7791, 8050-1, 8059, 8100-9, 8130-9, 8161	3	2.5391
#532	Spinal Procedures W/O CC	See DRG #531	3	4.4109
#537	Local Excis & Remov of Int Fix Dev Except Hip & Femur W CC	Include All	2	1.3014
#538	Local Excis & Remov of Int Fix Dev Except Hip & Femur W/O CC	Include All	3	2.8453

**To obtain a complete list, send your request via e-mail to besthospitals@rti.org.

Respiratory Disorders*

	DRGs	ICD-9-CMs	Severity	Weight
#75	Major Chest Procedures	Too many to list**	2	1.4218
#76	Other Resp System O.R. Procedures W CC	Include All	2	1.1094
#77	Other Resp System O.R. Procedures W/O CC	Include All	3	3.2857
#78	Pulmonary Embolism	Include All	1	1.3751
#79	Respiratory Infections & Inflammations Age >17 W CC	Exclude Diag: V712, 7955	2	0.8408
#80	Respiratory Infections & Inflammations Age >17 W/O CC	See DRG #79	2	1.0528
#82	Respiratory Neoplasms	Exclude Diag: 2120-9, 2133	2	1.1218
#83	Major Chest Trauma W CC	Include All	1	1.4627
#84	Major Chest Trauma W/O CC	Include All	1	2.1318
#85	Pleural Effusion W CC	Include All	3	1.0287
#87	Pulmonary Edema & Respiratory Failure	Include All	2	0.9353
#88	Chronic Obstructive Pulmonary Disease	Include All	3	0.8878
#89	Simple Pneumonia & Pleurisy Age >17 W CC	Include All	3	0.8501
#92	Interstitial Lung Disease W CC	Include All	3	0.9879
#93	Interstitial Lung Disease W/O CC	Include All	3	4.9176

*The Geriatrics specialty includes the full set of DRGs used for all specialties
**To obtain a complete list, send your request via e-mail to besthospitals@rti.org.

(continued)

Respiratory Disorders (Continued)

	DRGs	ICD-9-CMs	Severity	Weight
#94	Pneumothorax W CC	Exclude Diag: 5121	2	1.7886
#96	Bronchitis & Asthma Age >17 W CC	Include All	3	1.1143
#475	Respiratory System Diagnosis With Ventilator Support	Include All	2	1.0989
#483	Tracheostomy With Mechanical Ventilation 96+Hrs or Pdx Except Face,Mouth & Neck Dx	Include All	1	1.3404
#495	Lung Transplant	Include All	1	2.1220
#541	Tracheostomy With Mechanical Ventilation 96+ Hours or Pdx Except Face, Mouth, and Neck W Major OR Procedure	Include All	1	1.5127
#542	Tracheostomy With Mechanical Ventilation 96+ Hours or Pdx Except Face, Mouth, and Neck W/O Major OR Procedure	Include All	1	1.2485

Urology*

	DRGs	ICD-9-CMs	Severity	Weight
#303	Kidney, Ureter & Major Bladder Procedures For Neoplasm	Exclude Proc: 3924, 3926, 3955, 5501-4, 5511-2, 5521-4, 5529, 5531, 5539, 5551-4, 5561, 5569, 5581-9, 5591-9	2	1.1077
#304	Kidney, Ureter & Major Bladder Proc For Non-Neopl W CC	See DRG #303	2	1.7426
#305	Kidney, Ureter & Major Bladder Proc For Non-Neopl W/O CC	See DRG #303	3	5.1544
#306	Prostatectomy W CC	Include All	3	0.7676
#308	Minor Bladder Procedures W CC	Include All	3	0.9908
#309	Minor Bladder Procedures W/O CC	Include All	3	7.3910
#310	Transurethral Procedures W CC	Include All	3	0.9539
#312	Urethral Procedures, Age >17 W CC	Include All	3	1.1046
#315	Other Kidney & Urinary Tract O.R. Procedures	Include Proc: 6495-7	3	0.8638
#318	Kidney & Urinary Tract Neoplasms W CC	Exclude Diag: 189, 1890-4, 1898-9, 198, 1980-8, 19881-2, 19889, 223, 2230-3, 2238, 22381, 22389, 2239	2	0.9379

*The Geriatrics specialty includes the full set of DRGs used for all specialties

(continued)

Urology (Continued)

	DRGs	ICD-9-CMs	Severity	Weight
#319	Kidney & Urinary Tract Neoplasms W/O CC	See DRG #318	3	0.9469
#323	Urinary Stones W Cc, &/Or Esw Lithotripsy	Include All	3	1.2623
#328	Urethral Stricture Age >17 W Cc	Include All	3	0.8381
#331	Other Kidney & Urinary Tract Diagnoses Age >17 W CC	Too many to list**	3	0.9180
#332	Other Kidney & Urinary Tract Diagnoses Age >17 W/O CC	Too many to list**	3	1.2734
#334	Major Male Pelvic Procedures W CC	Include All	2	1.5721
#335	Major Male Pelvic Procedures W/O CC	Include All	2	2.0060
#336	Transurethral Prostatectomy W CC	Include All	2	0.7915
#338	Testes Procedures, For Malignancy	Include All	2	1.0689
#339	Testes Procedures, Non-Malignancy Age >17	Include All	3	1.1932
#341	Penis Procedures	Include All	3	1.1330
#344	Other Male Reproductive System or Procedures for Malignancy	Include All	2	1.0139
#345	Other Male Reproductive System or Proc Except for Malignancy	Include All	3	1.1165
#346	Malignancy, Male Reproductive System, W CC	Include All	2	0.9376
#347	Malignancy, Male Reproductive System, W/O CC	Include All	2	1.4031
#350	Inflammation Of The Male Reproductive System	Include All	3	1.1293
#352	Other Male Reproductive System Diagnoses	Include All	3	1.1652
#476	Prostatic or Proc Unrelated to Principal Diagnosis	Include All	3	0.7502

**To obtain a complete list, send your request via e-mail to besthospitals@rti.org.

Appendix F

Changes to DRG Groupings for Mortality

Specialty	DRGs Added*	DRGs Deleted
Cancer	543: Craniotomy with Implantation of Chemotherapeutic Agent or Acute Complex Central Nervous System Principal Diagnosis (Include Proc: 0010)	NONE
Digestive Disorders	NONE	NONE
Ear, Nose, and Throat	NONE	NONE
Endocrinology	NONE	NONE
Gynecology	NONE	NONE
Heart and Heart Surgery	NONE	NONE
Kidney Disease	NONE	NONE
Neurology & Neurosurgery	543: Craniotomy with Implantation of Chemotherapeutic Agent or Acute Complex Central Nervous System Principal Diagnosis	
Orthopedics	NONE	NONE
Respiratory Disorders	541:Tracheostomy With Mechanical Ventilation 96+ Hours or Principal Diagnosis Except Face, Mouth, and Neck Diagnosis With Major Operating Room Procedure 542: Tracheostomy With Mechanical Ventilation 96+ Hours or Principal Diagnosis Except Face, Mouth, and Neck Diagnosis Without Major Operating Room Procedure	NONE
Urology	NONE	NONE

* Geriatrics was not included in the rankings last year, therefore all DRGs are considered new for this year.

Appendix G

Index of Hospital Quality (IHQ)

Scores by Specialty

Final IHQ-Driven Rankings 2007—Cancer

Rank 2007	Hospital	*U.S. News* Score	Reputation (%)	Mortality index	Discharges (3 years)	Nursing index	Nurse Magnet hospital	NCI cancer center	FACT credit	Advanced services (of 7)	Patient services (of 6)	
1	University of Texas M. D. Anderson Cancer Center, Houston	100.0	67.9	0.90	6,567	1.9	Yes	Yes	1.0	7.0	5	
2	Memorial Sloan-Kettering Cancer Center, New York	96.3	65.9	0.90	7,095	1.5	No	Yes	1.0	7.0	6	
3	Johns Hopkins Hospital, Baltimore	73.2	37.8	0.51	2,172	1.9	Yes	Yes	1.0	6.5	6	
4	Mayo Clinic, Rochester, Minn.	61.5	26.0	0.52	5,066	2.8	Yes	Yes	1.0	6.0	6	
5	Dana-Farber Cancer Institute, Boston	54.4	33.1	0.99	260	0.6	Yes	Yes	1.0	3.5	4	
6	University of Washington Medical Center, Seattle	42.9	15.8	0.89	1,055	2.1	Yes	Yes	1.0	5.5	6	(+3 SD)
7	University of Chicago Medical Center	39.5	6.1	0.53	1,793	2.3	Yes	Yes	1.0	7.0	6	
8	UCLA Medical Center, Los Angeles	39.3	8.4	0.66	1,574	2.4	Yes	Yes	1.0	7.0	3	
9	Duke University Medical Center, Durham, N.C.	38.9	7.3	0.69	3,010	1.6	Yes	Yes	1.0	7.0	6	
10	Massachusetts General Hospital, Boston	36.7	10.4	1.03	2,622	2.0	Yes	Yes	1.0	7.0	6	
11	Fox Chase Cancer Center, Philadelphia	36.3	7.2	0.71	1,062	1.7	Yes	Yes	1.0	5.5	6	
12	University of Pittsburgh Medical Center	36.2	4.9	0.62	2,603	1.9	No	Yes	1.0	7.0	6	
13	Stanford Hospital and Clinics, Stanford, Calif.	36.1	11.6	0.86	1,204	1.8	Yes	No	1.0	7.0	4	
14	University of California, San Francisco Medical Center	35.8	11.8	1.01	1,520	2.2	No	Yes	1.0	6.0	5	
15	Ohio State University James Cancer Hospital, Columbus	35.4	3.7	0.66	3,166	1.9	Yes	Yes	1.0	6.0	6	
16	H. Lee Moffitt Cancer Center and Research Institute, Tampa	34.6	4.5	0.60	2,153	1.3	No	Yes	1.0	6.0	6	
17	Cleveland Clinic	34.1	7.2	0.87	3,375	2.0	Yes	Yes	0	6.5	6	
18	University of Alabama Hospital at Birmingham	33.6	3.0	0.65	1,874	2.1	Yes	Yes	1.0	5.0	5	
19	Barnes-Jewish Hospital/Washington University, St. Louis	33.4	2.4	0.75	3,946	2.1	Yes	Yes	1.0	7.0	6	(+2 SD)
20	University of Wisconsin Hospital and Clinics, Madison	32.7	1.3	0.34	1,247	1.8	No	Yes	1.0	6.0	5	
21	University of Michigan Hospitals and Health Centers, Ann Arbor	32.5	2.8	0.75	2,225	2.4	No	Yes	1.0	7.0	6	
22	Vanderbilt University Medical Center, Nashville	31.8	5.0	0.92	1,462	1.8	Yes	Yes	1.0	7.0	6	
23	Yale-New Haven Hospital, New Haven, Conn.	30.8	0.0	0.54	1,603	2.5	No	Yes	1.0	5.0	6	
24	University of Minnesota Medical Center, Minneapolis	29.5	0.8	0.78	1,317	1.9	Yes	Yes	1.0	6.5	6	
25	University Hospitals Case Medical Center, Cleveland	29.2	0.8	0.73	1,236	1.3	Yes	Yes	1.0	6.0	6	
26	Beth Israel Deaconess Medical Center, Boston	29.2	1.0	0.72	1,524	1.6	No	Yes	1.0	7.0	5	
27	University of Virginia Medical Center, Charlottesville	29.2	0.5	0.68	1,603	2.1	Yes	Yes	0	7.0	6	
28	Brigham and Women's Hospital, Boston	28.8	1.2	0.86	2,013	2.3	No	Yes	1.0	7.0	6	
29	Hospital of the University of Pennsylvania, Philadelphia	28.6	6.6	1.11	1,898	1.5	No	Yes	1.0	7.0	6	
30	City of Hope, Duarte, Calif.	28.4	5.6	1.01	1,087	1.9	No	Yes	1.0	6.0	5	
31	University Medical Center, Tucson, Ariz.	28.3	0.8	0.61	583	2.4	Yes	Yes	1.0	5.5	6	
32	University of Utah Hospitals and Clinics, Salt Lake City	28.3	0.0	0.62	1,029	1.9	No	Yes	1.0	5.0	5	
33	Rush University Medical Center, Chicago	27.7	0.0	0.62	1,378	1.9	Yes	No	1.0	5.0	6	
34	Mayo Clinic Hospital, Phoenix	27.6	0.5	0.53	1,324	2.7	No	No	1.0	5.0	4	
35	University of Colorado Hospital, Denver	27.5	1.1	0.48	632	1.9	Yes	Yes	.5	7.0	5	
36	Dartmouth-Hitchcock Medical Center, Lebanon, N.H.	27.4	0.2	0.79	999	2.0	Yes	Yes	.5	7.0	6	
37	Oregon Health and Science University Hospital, Portland	26.5	0.8	0.86	804	1.9	No	Yes	1.0	7.0	6	
38	William Beaumont Hospital, Royal Oak, Mich.	26.3	0.7	0.67	2,955	1.6	Yes	No	0	5.0	6	
39	University of California, San Diego Medical Center	26.2	0.0	0.57	677	1.9	No	Yes	1.0	6.0	6	
40	University of North Carolina Hospitals, Chapel Hill	26.1	0.6	0.89	1,410	1.8	No	Yes	1.0	6.0	6	
41	New York-Presbyterian Univ. Hosp. of Columbia and Cornell	25.9	3.3	1.01	4,352	1.7	No	Yes	0	7.0	6	
42	Evanston Northwestern Healthcare, Evanston, Ill.	25.8	0.6	0.58	1,811	1.0	No	No	.5	6.0	6	
43	Abbott Northwestern Hospital, Minneapolis	25.8	0.0	0.65	1,502	1.9	No	No	.5	7.0	6	
44	Loyola University Medical Center, Maywood, Ill.	25.8	0.0	0.72	1,453	2.0	No	No	1.0	6.0	6	
45	Sarasota Memorial Health Care System, Fla.	25.6	0.0	0.56	1,499	1.5	Yes	No	0	5.0	6	
46	University of Kentucky Chandler Hospital, Lexington	25.6	0.3	0.66	868	2.3	Yes	No	1.0	5.0	2	
47	Methodist Hospital, Houston	25.4	0.5	0.83	2,372	1.4	Yes	No	1.0	7.0	4	
48	Lehigh Valley Hospital, Allentown, Pa.	25.3	0.0	0.65	1,518	2.0	Yes	No	0	5.0	6	
49	Lancaster General Hospital, Lancaster, Pa.	25.3	0.0	0.59	1,549	1.4	Yes	No	0	6.0	5	
50	Inova Fairfax Hospital, Falls Church, Va.	25.1	0.9	0.80	1,461	1.4	Yes	No	.5	7.0	6	

Final IHQ-Driven Rankings 2007—Digestive Disorders

Rank 2007	Hospital	*U.S. News* Score	Reputation (%)	Mortality index	Discharges (3 years)	Nursing index	Nurse Magnet hospital	Advanced services (of 5)	Patient services (of 7)	Trauma center	
1	Mayo Clinic, Rochester, Minn.	100.0	60.0	0.74	8,865	2.8	Yes	4.0	7	Yes	
2	Cleveland Clinic	62.3	33.5	0.88	5,357	2.0	Yes	5.0	6	No	
3	Johns Hopkins Hospital, Baltimore	61.5	29.9	0.74	3,606	1.9	Yes	4.5	7	Yes	
4	Massachusetts General Hospital, Boston	54.2	25.0	0.81	5,196	2.0	Yes	5.0	6	Yes	
5	UCLA Medical Center, Los Angeles	44.5	18.1	0.78	2,456	2.4	Yes	5.0	4	Yes	
6	University of Chicago Medical Center	41.6	15.4	0.79	2,777	2.3	Yes	5.0	6	Yes	
7	Duke University Medical Center, Durham, N.C.	32.9	10.6	0.88	3,997	1.6	Yes	5.0	6	Yes	
8	Cedars-Sinai Medical Center, Los Angeles	32.8	7.1	0.74	5,476	2.0	Yes	5.0	7	Yes	
9	Mount Sinai Medical Center, New York	32.5	14.7	1.01	6,305	1.6	Yes	4.5	7	No	
10	Brigham and Women's Hospital, Boston	31.5	7.3	0.66	3,251	2.3	No	5.0	6	Yes	
11	Clarian Health Partners, Indianapolis	31.1	6.5	0.77	5,561	1.9	Yes	5.0	6	Yes	
12	University of California, San Francisco Medical Center	31.0	11.9	0.90	2,362	2.2	No	5.0	5	No	
13	New York-Presbyterian Univ. Hosp. of Columbia and Cornell	29.8	8.6	0.89	7,173	1.7	No	5.0	7	Yes	(+3 SD)
14	Beth Israel Deaconess Medical Center, Boston	26.7	5.0	0.78	4,230	1.6	No	5.0	5	Yes	
15	University of Michigan Hospitals and Health Centers, Ann Arbor	25.7	5.9	0.91	4,113	2.4	No	5.0	7	Yes	
16	Yale-New Haven Hospital, New Haven, Conn.	24.5	2.5	0.72	3,607	2.5	No	4.0	6	Yes	
17	Hospital of the University of Pennsylvania, Philadelphia	23.9	8.8	1.01	2,572	1.5	No	5.0	7	Yes	
18	Barnes-Jewish Hospital/Washington University, St. Louis	23.8	6.4	1.00	6,564	2.1	Yes	5.0	7	Yes	(+2 SD)
19	William Beaumont Hospital, Royal Oak, Mich.	22.9	0.0	0.74	7,602	1.6	Yes	4.0	7	Yes	
20	Stanford Hospital and Clinics, Stanford, Calif.	22.6	5.8	0.97	1,971	1.8	Yes	5.0	5	Yes	
21	University of Wisconsin Hospital and Clinics, Madison	22.6	1.3	0.72	2,389	1.8	No	5.0	6	Yes	
22	University of Minnesota Medical Center, Minneapolis	22.3	0.5	0.79	2,313	1.9	Yes	5.0	7	Yes	
23	Virginia Mason Medical Center, Seattle	22.2	2.9	0.73	2,334	1.2	No	5.0	5	No	
24	Lehigh Valley Hospital, Allentown, Pa.	22.2	0.0	0.81	4,481	2.0	Yes	5.0	7	Yes	
25	St. Luke's Episcopal Hospital, Houston	21.9	1.2	0.80	3,764	1.6	Yes	5.0	6	No	
26	Methodist Hospital, Houston	21.9	1.4	0.79	4,348	1.4	Yes	5.0	5	No	
27	University of Pittsburgh Medical Center	21.8	6.3	1.01	5,914	1.9	No	5.0	7	Yes	
28	Inova Fairfax Hospital, Falls Church, Va.	21.7	0.0	0.78	3,920	1.4	Yes	5.0	6	Yes	
29	Thomas Jefferson University Hospital, Philadelphia	21.4	1.0	0.81	2,996	1.8	No	5.0	7	Yes	
30	University of Washington Medical Center, Seattle	21.4	5.8	0.88	1,470	2.1	Yes	3.5	7	No	
31	Baylor University Medical Center, Dallas	21.3	1.7	0.91	5,048	1.8	Yes	5.0	7	Yes	
32	University of Miami, Jackson Memorial Hospital	20.9	2.1	0.86	2,421	1.5	No	5.0	7	Yes	
33	Abbott Northwestern Hospital, Minneapolis	20.9	0.0	0.79	3,527	1.9	No	5.0	7	Yes	
34	NYU Medical Center, New York	20.6	0.7	0.86	3,053	1.4	Yes	4.5	7	Yes	
35	St. Francis Hospital, Roslyn, N.Y.	20.5	0.0	0.79	2,313	2.2	Yes	4.0	5	Yes	
36	Christiana Care Health System, Wilmington, Del.	20.4	0.0	0.83	6,976	1.7	No	5.0	7	Yes	
37	Penrose-St. Francis Health Services, Colorado Springs, Colo.	20.3	0.4	0.75	2,755	1.2	No	4.0	7	Yes	
38	Rush University Medical Center, Chicago	20.3	0.0	0.84	2,888	1.9	Yes	4.0	7	Yes	
39	Kettering Medical Center, Kettering, Ohio	20.3	0.0	0.75	2,773	1.2	Yes	5.0	6	No	
40	University of Iowa Hospitals and Clinics, Iowa City	20.2	1.2	0.77	1,604	1.6	Yes	5.0	7	Yes	
41	Presbyterian Hospital, Dallas	20.2	0.6	0.80	3,328	1.8	Yes	3.5	6	No	
42	John Muir Medical Center, Walnut Creek, Calif.	20.2	0.0	0.77	2,244	1.8	No	4.5	7	Yes	
43	Baptist Medical Center, Jacksonville, Fla.	20.1	0.0	0.75	2,300	1.4	No	5.0	6	Yes	
44	Flagler Hospital, Saint Augustine, Fla.	20.0	0.0	0.72	2,494	1.4	Yes	4.5	5	No	
45	Willis-Knighton Medical Center, Shreveport, La.	20.0	0.0	0.72	4,239	1.3	No	4.5	7	No	
46	Henry Ford Hospital, Detroit	19.9	1.1	0.88	4,549	1.9	No	5.0	6	Yes	
47	University of Virginia Medical Center, Charlottesville	19.8	0.0	0.88	2,946	2.1	Yes	5.0	7	Yes	
48	Medical University of South Carolina, Charleston	19.7	8.2	1.07	2,234	2.0	No	4.5	5	Yes	
49	St. Luke's Hospital and Health Network, Bethlehem, Pa.	19.7	0.0	0.81	3,524	1.7	No	4.5	6	Yes	
50	Dartmouth-Hitchcock Medical Center, Lebanon, N.H.	19.6	0.7	0.85	1,802	2.0	Yes	5.0	6	Yes	

Final IHQ-Driven Rankings 2007—Ear, Nose, and Throat

Rank 2007	Hospital	*U.S. News* Score	Reputation (%)	Mortality index	Discharges (3 years)	Nursing index	Nurse Magnet hospital	Advanced services (of 3)	Patient services (of 7)	Trauma Center	
1	Johns Hopkins Hospital, Baltimore	100.0	40.6	0.53	275	1.9	Yes	2.5	7	Yes	
2	University of Iowa Hospitals and Clinics, Iowa City	77.1	28.0	0.49	249	1.6	Yes	3.0	7	Yes	
3	University of Pittsburgh Medical Center	61.6	22.6	0.74	382	1.9	No	3.0	7	Yes	
4	Massachusetts Eye and Ear Infirmary, Boston	60.1	23.7	0.70	240	1.5	No	1.5	3	Yes	
5	Barnes-Jewish Hospital/Washington University, St. Louis	57.6	16.6	0.43	327	2.1	Yes	3.0	7	Yes	
6	University of Michigan Hospitals and Health Centers, Ann Arbor	56.0	16.4	0.42	368	2.4	No	3.0	7	Yes	
7	University of Texas M. D. Anderson Cancer Center, Houston	54.3	17.9	0.63	387	1.9	Yes	3.0	5	No	
8	Mayo Clinic, Rochester, Minn.	50.4	12.8	0.36	520	2.8	Yes	3.0	7	Yes	
9	Cleveland Clinic	49.3	16.9	0.80	272	2.0	Yes	3.0	6	No	
10	Hospital of the University of Pennsylvania, Philadelphia	49.0	13.4	0.44	374	1.5	No	3.0	7	Yes	
11	UCLA Medical Center, Los Angeles	46.8	10.5	0.16	279	2.4	Yes	3.0	4	Yes	
12	Stanford Hospital and Clinics, Stanford, Calif.	45.7	12.3	0.36	145	1.8	Yes	3.0	5	Yes	
13	University of Washington Medical Center, Seattle	42.8	12.6	0.72	191	2.1	Yes	2.5	7	No	
14	University of California, San Francisco Medical Center	40.3	9.9	0.47	189	2.2	No	3.0	5	No	(+3 SD)
15	Memorial Sloan-Kettering Cancer Center, New York	34.6	6.0	0.33	389	1.5	No	3.0	6	No	
16	Vanderbilt University Medical Center, Nashville	33.8	9.8	0.94	235	1.8	Yes	3.0	6	Yes	
17	University of Miami, Jackson Memorial Hospital	31.8	4.0	0.42	322	1.5	No	3.0	7	Yes	
18	Methodist Hospital, Houston	31.7	8.4	0.74	131	1.4	Yes	3.0	5	No	
19	Ohio State University Hospital, Columbus	30.8	3.3	0.57	440	1.9	Yes	3.0	7	Yes	
20	Duke University Medical Center, Durham, N.C.	30.4	4.2	0.60	173	1.6	Yes	3.0	6	Yes	
21	Emory University Hospital, Atlanta	28.8	3.1	0.34	249	1.9	No	2.5	6	No	
22	University of Alabama Hospital at Birmingham	28.7	1.4	0.41	414	2.1	Yes	2.5	6	Yes	
23	Shands at the University of Florida, Gainesville	27.8	1.6	0.40	243	1.7	Yes	3.0	4	Yes	(+2 SD)
24	Mount Sinai Medical Center, New York	27.4	4.7	0.77	301	1.6	Yes	3.0	7	No	
25	University of Chicago Medical Center	27.4	1.8	0.33	142	2.3	Yes	3.0	6	Yes	
26	Yale-New Haven Hospital, New Haven, Conn.	27.3	0.8	0.34	333	2.5	No	3.0	6	Yes	
27	University of Minnesota Medical Center, Minneapolis	27.0	1.1	0.53	208	1.9	Yes	3.0	7	Yes	
28	Brigham and Women's Hospital, Boston	25.9	0.4	0.32	182	2.3	No	3.0	6	Yes	
29	Massachusetts General Hospital, Boston	25.0	0.0	0.50	210	2.0	Yes	3.0	6	Yes	
30	Advocate Lutheran General Hospital, Park Ridge, Ill.	24.8	0.4	0.54	185	1.6	Yes	3.0	7	Yes	
31	Clarian Health Partners, Indianapolis	24.7	2.4	0.76	367	1.9	Yes	3.0	6	Yes	
32	Rush University Medical Center, Chicago	23.9	0.0	0.46	130	1.9	Yes	3.0	7	Yes	
33	St. John's Mercy Medical Center, St. Louis	23.7	0.2	0.06	199	1.1	No	1.0	7	Yes	
34	Oregon Health and Science University Hospital, Portland	23.5	2.9	0.75	171	1.9	No	3.0	6	Yes	
35	Beth Israel Deaconess Medical Center, Boston	23.3	0.0	0.35	162	1.6	No	3.0	5	Yes	
36	University of California, Davis Medical Center, Sacramento	23.3	1.2	0.67	165	3.0	No	3.0	7	Yes	
37	St. Joseph's Hospital, Marshfield, Wis.	23.0	0.0	0.53	115	1.8	Yes	3.0	6	Yes	
38	University of North Carolina Hospitals, Chapel Hill	22.8	5.6	0.97	200	1.8	No	2.0	7	Yes	
39	Christiana Care Health System, Wilmington, Del.	22.6	0.0	0.56	231	1.7	No	3.0	7	Yes	
40	Hospital of St. Raphael, New Haven, Conn.	22.5	0.0	0.48	185	1.4	No	3.0	6	Yes	
41	University of Kentucky Chandler Hospital, Lexington	22.3	0.5	0.60	168	2.3	Yes	3.0	2	Yes	
42	H. Lee Moffitt Cancer Center and Research Institute, Tampa	22.3	0.0	0.35	183	1.3	No	3.0	6	No	
43	New York-Presbyterian Univ. Hosp. of Columbia and Cornell	22.1	5.2	1.03	325	1.7	No	3.0	7	Yes	
44	St. Francis Hospital, Roslyn, N.Y.	21.7	0.0	0.38	72	2.2	Yes	2.5	5	Yes	
45	Greater Baltimore Medical Center	21.7	0.7	0.31	154	1.0	No	1.5	6	No	
46	Tampa General Hospital	21.5	0.0	0.35	114	1.5	Yes	1.5	7	Yes	
47	Charleston Area Medical Center, Charleston, W.Va.	21.4	0.0	0.61	174	1.7	No	3.0	7	Yes	
48	Miami Valley Hospital, Dayton, Ohio	21.4	0.0	0.15	92	1.7	Yes	2.0	6	Yes	
49	Ochsner Clinic Foundation, New Orleans	21.3	0.0	0.00	74	1.5	Yes	2.5	6	Yes	
50	University of California, San Diego Medical Center	21.2	0.8	0.30	74	1.9	No	2.0	6	Yes	

Final IHQ-Driven Rankings 2007—Endocrinology

Rank 2007	Hospital	*U.S. News* Score	Reputation (%)	Mortality index	Discharges (3 years)	Nursing index	Nurse Magnet hospital	Advanced services (of 5)	Patient services (of 7)	
1	Mayo Clinic, Rochester, Minn.	100.0	76.6	0.63	2,029	2.8	Yes	4.0	7	
2	Massachusetts General Hospital, Boston	86.3	65.2	0.72	1,572	2.0	Yes	5.0	6	
3	Johns Hopkins Hospital, Baltimore	65.8	41.0	0.56	869	1.9	Yes	4.5	7	
4	University of California, San Francisco Medical Center	48.2	24.5	0.50	787	2.2	No	5.0	5	
5	New York-Presbyterian Univ. Hosp. of Columbia and Cornell	43.0	17.5	0.54	2,222	1.7	No	5.0	7	
6	Cleveland Clinic	38.7	15.5	0.71	1,362	2.0	Yes	5.0	6	
7	Barnes-Jewish Hospital/Washington University, St. Louis	38.7	14.5	0.71	1,874	2.1	Yes	5.0	7	
8	University of Virginia Medical Center, Charlottesville	38.2	14.7	0.70	1,002	2.1	Yes	5.0	7	
9	Brigham and Women's Hospital, Boston	36.1	10.7	0.49	938	2.3	No	5.0	6	(+3 SD)
10	Hospital of the University of Pennsylvania, Philadelphia	32.7	8.8	0.56	882	1.5	No	5.0	7	
11	University of Chicago Medical Center	32.7	6.9	0.59	843	2.3	Yes	5.0	6	
12	Joslin Clinic and Beth Israel Deaconess Medical Center, Boston	32.0	7.6	0.52	1,376	1.6	No	5.0	5	
13	UCLA Medical Center, Los Angeles	31.0	10.0	0.28	596	2.4	Yes	5.0	4	
14	University of Michigan Hospitals and Health Centers, Ann Arbor	30.5	3.2	0.43	1,132	2.4	No	5.0	7	
15	Cedars-Sinai Medical Center, Los Angeles	29.2	1.8	0.57	1,283	2.0	Yes	5.0	7	
16	University of Washington Medical Center, Seattle	29.0	11.9	0.95	415	2.1	Yes	3.5	7	
17	Yale-New Haven Hospital, New Haven, Conn.	28.8	3.6	0.52	1,348	2.5	No	4.0	6	(+2 SD)
18	University of Colorado Hospital, Denver	27.5	5.9	0.44	425	1.9	Yes	5.0	6	
19	Vanderbilt University Medical Center, Nashville	27.4	4.2	0.70	1,006	1.8	Yes	5.0	6	
20	University of Minnesota Medical Center, Minneapolis	26.8	1.3	0.60	740	1.9	Yes	5.0	7	
21	Northwestern Memorial Hospital, Chicago	26.5	3.5	0.68	1,169	1.7	Yes	4.0	6	
22	Kettering Medical Center, Kettering, Ohio	25.9	0.0	0.47	793	1.2	Yes	5.0	6	
23	Abbott Northwestern Hospital, Minneapolis	25.9	0.0	0.49	890	1.9	No	5.0	7	
24	Froedtert Hospital, Milwaukee	25.8	0.7	0.65	1,013	1.7	Yes	5.0	7	
25	Wake Forest Univ. Baptist Medical Center, Winston-Salem, N.C.	25.8	1.5	0.62	1,021	1.7	Yes	4.0	6	
26	Duke University Medical Center, Durham, N.C.	25.6	4.3	0.75	884	1.6	Yes	5.0	6	
27	University of Pittsburgh Medical Center	25.5	3.8	0.74	1,827	1.9	No	5.0	7	
28	NYU Medical Center, New York	25.5	2.3	0.66	728	1.4	Yes	4.5	7	
29	William Beaumont Hospital, Royal Oak, Mich.	25.0	0.0	0.65	1,638	1.6	Yes	4.0	7	
30	Rush University Medical Center, Chicago	24.9	0.5	0.66	1,054	1.9	Yes	4.0	7	
31	Baylor University Medical Center, Dallas	24.8	0.0	0.69	1,318	1.8	Yes	5.0	7	
32	St. Luke's Episcopal Hospital, Houston	24.8	0.3	0.64	926	1.6	Yes	5.0	6	
33	Thomas Jefferson University Hospital, Philadelphia	24.5	0.4	0.59	832	1.8	No	5.0	7	
34	University Hospital, Cincinnati	24.5	0.3	0.43	810	1.5	No	4.0	6	
35	St. Elizabeth Medical Center-North, Covington, Ky.	23.8	0.0	0.64	742	1.6	Yes	5.0	6	
36	University Hospitals Case Medical Center, Cleveland	23.8	1.2	0.72	1,114	1.3	Yes	5.0	7	
37	Lehigh Valley Hospital, Allentown, Pa.	23.8	0.0	0.73	1,282	2.0	Yes	5.0	7	
38	Christiana Care Health System, Wilmington, Del.	23.6	0.0	0.67	1,783	1.7	No	5.0	7	
39	Florida Hospital, Orlando	23.5	0.4	0.58	3,377	1.3	No	4.0	5	
40	Inova Fairfax Hospital, Falls Church, Va.	23.5	0.0	0.67	1,011	1.4	Yes	5.0	6	
41	Clarian Health Partners, Indianapolis	23.3	1.1	0.76	1,457	1.9	Yes	5.0	6	
42	Baystate Medical Center, Springfield, Mass.	23.3	0.0	0.58	1,014	1.4	Yes	2.5	6	
43	Franklin Square Hospital Center, Baltimore	22.8	0.0	0.57	1,194	1.4	No	4.0	5	
44	Methodist Hospital, Houston	22.7	1.0	0.73	1,322	1.4	Yes	5.0	5	
45	Swedish Health Services, Seattle	22.6	0.0	0.62	896	1.4	No	5.0	6	
46	Mission Health and Hospitals, Asheville, N.C.	22.6	0.0	0.72	1,143	2.5	No	5.0	7	
47	LDS Hospital, Salt Lake City	22.5	0.0	0.57	533	1.9	Yes	5.0	7	
48	Willis-Knighton Medical Center, Shreveport, La.	22.5	0.0	0.65	1,357	1.3	No	4.5	7	
49	Sinai Hospital of Baltimore	22.4	0.4	0.62	817	1.3	No	4.0	7	
50	Jewish Hospital, Louisville, Ky.	22.4	0.0	0.43	747	1.4	No	3.0	5	

Final IHQ-Driven Rankings 2007—Geriatrics

Rank 2007	Hospital	*U.S. News* Score	Reputation (%)	Mortality index	Discharges (3 years)	Nursing index	Nurse Magnet hospital	NIA Alzheimer's center	Advanced services (of2)	Patient services (0f 9)	
1	UCLA Medical Center, Los Angeles	100.0	50.9	0.64	9,583	2.4	Yes	Yes	2.0	5	
2	Johns Hopkins Hospital, Baltimore	85.6	40.5	0.62	10,127	1.9	Yes	Yes	1.5	9	
3	Mount Sinai Medical Center, New York	77.1	37.0	0.99	26,852	1.6	Yes	Yes	2.0	9	
4	Massachusetts General Hospital, Boston	60.0	19.7	0.73	22,823	2.0	Yes	Yes	2.0	8	
5	Duke University Medical Center, Durham, N.C.	57.1	21.3	0.87	11,997	1.6	Yes	Yes	2.0	7	
6	Mayo Clinic, Rochester, Minn.	51.4	12.9	0.70	35,536	2.8	Yes	Yes	2.0	9	
7	Yale-New Haven Hospital, New Haven, Conn.	50.6	17.4	0.76	16,271	2.5	No	No	2.0	7	
8	University of Pittsburgh Medical Center	41.0	9.7	0.86	24,058	1.9	No	Yes	2.0	9	
9	Cleveland Clinic	38.2	6.5	0.63	19,733	2.0	Yes	No	2.0	8	
10	Beth Israel Deaconess Medical Center, Boston	38.2	9.3	0.77	18,958	1.6	No	No	2.0	8	
11	Emory University Hospital, Atlanta	37.5	9.5	0.90	12,418	1.9	No	Yes	2.0	8	
12	University of Michigan Hospitals and Health Centers, Ann Arbor	37.0	7.2	0.85	11,766	2.4	No	Yes	2.0	9	(+3 SD)
13	University of Washington Medical Center, Seattle	35.9	7.2	0.76	3,988	2.1	Yes	Yes	2.0	8	
14	Barnes-Jewish Hospital/Washington University, St. Louis	35.9	3.6	0.77	20,260	2.1	Yes	Yes	2.0	9	
15	New York-Presbyterian Univ. Hosp. of Columbia and Cornell	35.5	4.2	0.75	36,782	1.7	No	Yes	2.0	9	
16	University of California, San Francisco Medical Center	33.8	7.2	0.80	7,541	2.2	No	Yes	2.0	6	
17	Rush University Medical Center, Chicago	33.6	1.7	0.61	10,739	1.9	Yes	Yes	2.0	9	
18	NYU Medical Center, New York	33.3	1.5	0.63	18,090	1.4	Yes	Yes	2.0	9	
19	Northwestern Memorial Hospital, Chicago	33.2	3.3	0.81	14,042	1.7	Yes	Yes	2.0	8	
20	University of Alabama Hospital at Birmingham	32.2	7.4	0.92	8,945	2.1	Yes	Yes	1.5	9	
21	Hospital of the University of Pennsylvania, Philadelphia	31.7	5.7	0.74	8,917	1.5	No	Yes	2.0	8	
22	Brigham and Women's Hospital, Boston	31.1	1.6	0.69	12,467	2.3	No	Yes	2.0	8	
23	Cedars-Sinai Medical Center, Los Angeles	30.0	1.3	0.68	26,519	2.0	Yes	No	2.0	7	
24	University of Chicago Medical Center	29.7	4.6	0.69	8,017	2.3	Yes	No	2.0	8	
25	Clarian Health Partners, Indianapolis	29.2	1.1	0.85	18,312	1.9	Yes	Yes	2.0	7	
26	Washington Hospital Center, Washington, D.C.	28.9	3.8	0.74	16,392	1.3	No	No	2.0	6	
27	Shands at the University of Florida, Gainesville	28.8	3.7	0.83	13,807	1.7	Yes	No	2.0	5	(+2 SD)
28	Johns Hopkins Bayview Medical Center, Baltimore	28.2	6.2	0.87	9,640	0.7	No	No	2.0	8	
29	St. Louis University Hospital	28.0	8.7	0.88	5,114	1.5	No	No	2.0	8	
30	Thomas Jefferson University Hospital, Philadelphia	27.9	1.5	0.71	14,859	1.8	No	No	2.0	9	
31	William Beaumont Hospital, Royal Oak, Mich.	27.7	0.3	0.73	44,637	1.6	Yes	No	2.0	7	
32	Methodist Hospital, Houston	27.6	1.1	0.70	18,955	1.4	Yes	No	2.0	6	
33	Hackensack University Medical Center, N.J.	26.8	0.7	0.85	25,609	1.9	Yes	No	2.0	9	
34	Mount Sinai Medical Center, Miami Beach, Fla.	26.5	0.9	0.65	20,225	1.1	No	Yes	1.0	4	
35	Loyola University Medical Center, Maywood, Ill.	26.4	1.2	0.79	12,301	2.0	No	No	2.0	9	
36	St. Francis Hospital, Roslyn, N.Y.	26.4	0.0	0.67	17,662	2.2	Yes	No	1.5	5	
37	Lehigh Valley Hospital, Allentown, Pa.	26.3	0.4	0.85	23,442	2.0	Yes	No	2.0	9	
38	University Medical Center, Tucson, Ariz.	26.2	1.1	0.77	4,683	2.4	Yes	Yes	1.5	7	
39	University Hospitals Case Medical Center, Cleveland	26.2	1.4	0.84	13,222	1.3	Yes	No	2.0	9	
40	Robert Wood Johnson University Hospital, New Brunswick, N.J.	26.0	0.8	0.82	13,438	1.9	Yes	No	2.0	7	
41	Boston Medical Center	26.0	6.7	0.92	7,773	1.0	No	Yes	1.0	7	
42	St. Luke's Episcopal Hospital, Houston	25.8	0.0	0.70	15,895	1.6	Yes	No	2.0	5	
43	Abbott Northwestern Hospital, Minneapolis	25.7	0.0	0.74	19,721	1.9	No	No	2.0	8	
44	Stanford Hospital and Clinics, Stanford, Calif.	25.6	5.8	1.02	8,808	1.8	Yes	No	2.0	6	
45	Aurora St. Luke's Medical Center, Milwaukee	25.3	0.5	0.84	35,151	1.4	Yes	No	2.0	7	
46	University of California, Irvine Medical Center, Orange	25.2	0.7	0.84	3,125	1.7	Yes	Yes	1.5	8	
47	Christ Hospital, Cincinnati	25.1	0.0	0.64	11,147	1.9	No	No	2.0	7	
48	Sarasota Memorial Health Care System, Fla.	25.0	0.9	0.94	26,398	1.5	Yes	Yes	1.5	8	
49	St. Joseph's Hospital, Marshfield, Wis.	24.9	0.0	0.82	12,185	1.8	Yes	No	2.0	8	
50	Lancaster General Hospital, Lancaster, Pa.	24.9	0.2	0.84	22,419	1.4	Yes	No	2.0	8	

Final IHQ-Driven Rankings 2007—Gynecology

Rank 2007	Hospital	*U.S. News* Score	Reputation (%)	Mortality index		Discharges (3 years)	Nursing index	Nurse Magnet hospital	Advanced services (of 4)	Patient services (of 8)	Trauma center	
1	Johns Hopkins Hospital, Baltimore	100.0	26.0	0.47		339	1.9	Yes	3.5	8.0	Yes	
2	Brigham and Women's Hospital, Boston	88.8	21.5	0.34		690	2.3	No	4.0	7.0	Yes	
3	Mayo Clinic, Rochester, Minn.	76.1	17.7	0.58		1,273	2.8	Yes	4.0	8.0	Yes	
4	Duke University Medical Center, Durham, N.C.	71.1	14.0	0.18		660	1.6	Yes	4.0	7.0	Yes	
5	New York-Presbyterian Univ. Hosp. of Columbia and Cornell	64.1	12.2	0.27		594	1.7	No	4.0	8.0	Yes	
6	University of California, San Francisco Medical Center	62.6	13.5	0.34		237	2.2	No	3.0	6.0	No	
7	Cleveland Clinic	58.8	10.6	0.35		716	2.0	Yes	3.5	7.0	No	
8	University of Texas M. D. Anderson Cancer Center, Houston	57.9	11.5	0.51		518	1.9	Yes	4.0	5.0	No	
9	University of Washington Medical Center, Seattle	53.4	8.7	0.26		294	2.1	Yes	3.5	7.0	No	
10	Vanderbilt University Medical Center, Nashville	51.3	7.0	0.23		401	1.8	Yes	4.0	7.0	Yes	
11	Yale-New Haven Hospital, New Haven, Conn.	50.8	7.9	0.41		652	2.5	No	4.0	7.0	Yes	
12	Magee-Womens Hospital of UPMC, Pittsburgh	50.7	8.8	0.36		463	1.8	No	3.0	7.0	No	
13	UCLA Medical Center, Los Angeles	47.8	7.4	0.48		298	2.4	Yes	4.0	4.5	Yes	
14	Massachusetts General Hospital, Boston	47.6	8.9	0.79		470	2.0	Yes	4.0	7.0	Yes	
15	Parkland Memorial Hospital, Dallas	46.8	11.8	1.19		176	1.7	No	2.0	7.0	Yes	
16	Stanford Hospital and Clinics, Stanford, Calif.	45.3	5.4	0.25		260	1.8	Yes	4.0	6.0	Yes	(+3 SD)
17	Hospital of the University of Pennsylvania, Philadelphia	42.3	5.3	0.38		296	1.5	No	4.0	8.0	Yes	
18	University of Utah Hospitals and Clinics, Salt Lake City	41.2	4.8	0.32		311	1.9	No	3.0	7.0	Yes	
19	Memorial Sloan-Kettering Cancer Center, New York	40.9	5.1	0.36		604	1.5	No	4.0	6.0	No	
20	University of Alabama Hospital at Birmingham	38.9	5.8	0.75		782	2.1	Yes	2.5	6.5	Yes	
21	University of Colorado Hospital, Denver	38.5	3.1	0.32		178	1.9	Yes	4.0	7.0	Yes	
22	University of Virginia Medical Center, Charlottesville	38.1	2.6	0.41		516	2.1	Yes	4.0	8.0	Yes	
23	Cedars-Sinai Medical Center, Los Angeles	37.6	4.1	0.66		513	2.0	Yes	4.0	8.0	Yes	
24	University of North Carolina Hospitals, Chapel Hill	37.3	7.3	0.96		396	1.8	No	3.0	8.0	Yes	
25	Tampa General Hospital	36.3	3.1	0.32		263	1.5	Yes	1.5	7.0	Yes	
26	Northwestern Memorial Hospital, Chicago	35.3	5.6	0.91		355	1.7	Yes	4.0	7.0	Yes	
27	University of Kentucky Chandler Hospital, Lexington	34.9	2.8	0.46		509	2.3	Yes	3.0	3.0	Yes	
28	Baylor University Medical Center, Dallas	34.8	4.8	0.89		733	1.8	Yes	4.0	7.5	Yes	
29	University of Minnesota Medical Center, Minneapolis	34.7	0.6	0.17		468	1.9	Yes	3.5	8.0	Yes	
30	University of California, San Diego Medical Center	34.5	3.7	0.29		147	1.9	No	3.0	6.5	Yes	(+2 SD)
31	Beth Israel Deaconess Medical Center, Boston	34.0	3.4	0.49		275	1.6	No	4.0	5.5	Yes	
32	University of Iowa Hospitals and Clinics, Iowa City	33.5	1.6	0.47		426	1.6	Yes	4.0	8.0	Yes	
33	Mount Sinai Medical Center, New York	33.2	2.5	0.52		415	1.6	Yes	3.5	8.0	No	
34	Dartmouth-Hitchcock Medical Center, Lebanon, N.H.	33.1	0.4	0.21		301	2.0	Yes	4.0	7.0	Yes	
35	Ohio State University Hospital, Columbus	33.0	4.1	0.89		537	1.9	Yes	4.0	8.0	Yes	
36	St. Luke's Hospital, Kansas City, Mo.	32.4	0.6	0.29		306	2.0	Yes	4.0	6.0	Yes	
37	Rush University Medical Center, Chicago	32.2	0.6	0.37		458	1.9	Yes	3.0	8.0	Yes	
38	Inova Fairfax Hospital, Falls Church, Va.	31.5	1.0	0.47		655	1.4	Yes	4.0	6.5	Yes	
39	University of Chicago Medical Center	31.4	2.1	0.67		356	2.3	Yes	4.0	7.0	Yes	
40	USC University Hospital, Los Angeles	31.3	4.2	0.00		31	2.8	No	1.0	4.0	No	
41	Banner Good Samaritan Medical Center, Phoenix	31.2	2.2	0.51		239	1.6	Yes	2.5	5.5	Yes	
42	University of Wisconsin Hospital and Clinics, Madison	30.9	0.6	0.30		363	1.8	No	4.0	7.0	Yes	
43	Woman's Hospital of Texas, Houston	30.9	2.3	0.00		280	2.0	No	1.0	1.0	No	
44	Lehigh Valley Hospital, Allentown, Pa.	30.7	0.0	0.29		289	2.0	Yes	3.0	8.0	Yes	
45	Hackensack University Medical Center, N.J.	30.6	0.9	0.56		444	1.9	Yes	4.0	8.0	Yes	
46	Shands at the University of Florida, Gainesville	30.5	2.7	0.66		326	1.7	Yes	3.0	5.0	Yes	
47	Thomas Jefferson University Hospital, Philadelphia	30.3	2.1	0.59		252	1.8	No	4.0	8.0	Yes	
48	Abbott Northwestern Hospital, Minneapolis	30.2	0.0	0.28		452	1.9	No	4.0	7.5	Yes	
49	Scripps Memorial Hospital La Jolla, Calif.	29.8	1.3	0.46		138	1.9	Yes	4.0	5.0	Yes	
50	Barnes-Jewish Hospital/Washington University, St. Louis	29.8	2.5	0.85		774	2.1	Yes	4.0	8.0	Yes	

Final IHQ-Driven Rankings 2007—Heart and Heart Surgery

Rank 2007	Hospital	*U.S. News* Score	Reputation (%)	Mortality index	Discharges (3 years)	Nursing index	Nurse Magnet hospital	Advanced services (of 5)	Patient services (of 6)	Trauma center	
1	Cleveland Clinic	100.0	67.7	0.54	13,922	2.0	Yes	5.0	6	No	
2	Mayo Clinic, Rochester, Minn.	79.7	51.1	0.77	14,337	2.8	Yes	5.0	6	Yes	
3	Brigham and Women's Hospital, Boston	50.5	23.5	0.67	5,480	2.3	No	5.0	6	Yes	
4	Johns Hopkins Hospital, Baltimore	48.6	19.8	0.55	4,427	1.9	Yes	4.5	6	Yes	
5	Massachusetts General Hospital, Boston	47.6	20.4	0.72	7,974	2.0	Yes	4.0	6	Yes	
6	New York-Presbyterian Univ. Hosp. of Columbia and Cornell	45.6	18.5	0.68	13,570	1.7	No	5.0	6	Yes	
7	Texas Heart Institute at St. Luke's Episcopal Hospital, Houston	45.0	20.1	0.77	10,491	1.6	Yes	5.0	5	No	
8	Duke University Medical Center, Durham, N.C.	42.2	16.2	0.77	6,624	1.6	Yes	5.0	6	Yes	(+3 SD)
9	Stanford Hospital and Clinics, Stanford, Calif.	33.5	14.3	0.98	2,922	1.8	Yes	5.0	5	Yes	
10	Barnes-Jewish Hospital/Washington University, St. Louis	33.0	5.7	0.74	10,047	2.1	Yes	5.0	6	Yes	
11	UCLA Medical Center, Los Angeles	32.3	5.8	0.63	3,160	2.4	Yes	5.0	4	Yes	(+2 SD)
12	William Beaumont Hospital, Royal Oak, Mich.	31.4	4.6	0.75	17,794	1.6	Yes	5.0	6	Yes	
13	NYU Medical Center, New York	30.6	5.1	0.72	5,176	1.4	Yes	5.0	6	Yes	
14	Cedars-Sinai Medical Center, Los Angeles	30.5	2.9	0.70	8,124	2.0	Yes	5.0	6	Yes	
15	Lenox Hill Hospital, New York	29.6	6.9	0.62	6,065	1.6	No	5.0	3	No	
16	Emory University Hospital, Atlanta	29.0	10.4	0.90	5,879	1.9	No	4.0	6	No	
17	Washington Hospital Center, Washington, D.C.	28.4	4.4	0.66	11,981	1.3	No	4.0	5	Yes	
18	St. Francis Hospital, Roslyn, N.Y.	28.3	0.0	0.67	13,651	2.2	Yes	4.5	6	Yes	
19	Hospital of the University of Pennsylvania, Philadelphia	27.9	4.5	0.72	4,158	1.5	No	5.0	6	Yes	
20	University of California, San Francisco Medical Center	27.9	7.7	0.79	2,306	2.2	No	5.0	4	No	
21	Vanderbilt University Medical Center, Nashville	27.5	4.5	0.84	3,035	1.8	Yes	5.0	6	Yes	
22	University of Michigan Hospitals and Health Centers, Ann Arbor	26.9	3.6	0.81	5,713	2.4	No	5.0	6	Yes	
23	University of Chicago Medical Center	26.6	0.0	0.69	3,512	2.3	Yes	5.0	6	Yes	
24	Christ Hospital, Cincinnati	26.2	2.1	0.64	6,369	1.9	No	4.5	6	No	
25	Inova Fairfax Hospital, Falls Church, Va.	26.2	2.2	0.82	8,194	1.4	Yes	5.0	6	Yes	
26	Robert Wood Johnson University Hospital, New Brunswick, N.J.	26.1	0.0	0.75	6,988	1.9	Yes	5.0	6	Yes	
27	Banner Good Samaritan Medical Center, Phoenix	26.1	0.3	0.67	5,158	1.6	Yes	5.0	5	Yes	
28	Abbott Northwestern Hospital, Minneapolis	26.0	0.4	0.70	8,784	1.9	No	5.0	6	Yes	
29	University Medical Center, Tucson, Ariz.	26.0	0.1	0.63	2,788	2.4	Yes	3.5	6	Yes	
30	University of Kansas Hospital, Kansas City	25.8	0.0	0.63	2,179	1.7	Yes	5.0	5	Yes	
31	University of Minnesota Medical Center, Minneapolis	25.8	0.0	0.69	2,214	1.9	Yes	5.0	6	Yes	
32	Hackensack University Medical Center, N.J.	25.7	1.2	0.84	9,697	1.9	Yes	5.0	6	Yes	
33	Sentara Norfolk General Hospital-Sentara Heart Hospital, Norfolk, Va.	25.6	0.0	0.62	6,671	1.6	No	5.0	6	Yes	
34	St. Luke's Hospital, Kansas City, Mo.	25.5	0.6	0.76	4,904	2.0	Yes	5.0	5	Yes	
35	Shands at the University of Florida, Gainesville	24.9	2.2	0.77	7,523	1.7	Yes	4.0	3	Yes	
36	Lehigh Valley Hospital, Allentown, Pa.	24.8	0.0	0.83	8,043	2.0	Yes	5.0	6	Yes	
37	Methodist Hospital, Houston	24.8	2.8	0.82	8,276	1.4	Yes	5.0	5	No	
38	Northwestern Memorial Hospital, Chicago	24.8	1.4	0.83	4,801	1.7	Yes	5.0	6	Yes	
39	Scripps Memorial Hospital La Jolla, Calif.	24.8	1.7	0.80	3,119	1.9	Yes	4.0	6	Yes	
40	Clarian Health Partners, Indianapolis	24.7	0.8	0.85	7,116	1.9	Yes	5.0	6	Yes	
41	Jewish Hospital, Louisville, Ky.	24.5	0.8	0.68	8,323	1.4	No	4.0	6	Yes	
42	Yale-New Haven Hospital, New Haven, Conn.	24.4	0.8	0.72	6,230	2.5	No	4.0	5	Yes	
43	Henry Ford Hospital, Detroit	24.3	0.4	0.78	7,971	1.9	No	5.0	6	Yes	
44	Loyola University Medical Center, Maywood, Ill.	24.2	0.0	0.68	5,100	2.0	No	4.0	6	Yes	
45	Riverside Methodist Hospital-Ohio Health, Columbus	24.1	0.8	0.91	13,155	2.0	Yes	5.0	6	Yes	
46	University of Maryland Medical Center, Baltimore	24.0	1.4	0.72	2,742	1.8	No	4.0	6	Yes	
47	Beth Israel Deaconess Medical Center, Boston	23.9	1.6	0.76	6,255	1.6	No	4.0	6	Yes	
48	Rush University Medical Center, Chicago	23.6	0.8	0.79	3,544	1.9	Yes	4.0	5	Yes	
49	Hahnemann University Hospital, Philadelphia	23.6	0.0	0.69	3,205	1.5	No	5.0	6	Yes	
50	Maine Medical Center, Portland	23.5	0.0	0.86	6,348	1.9	Yes	5.0	6	Yes	

Final IHQ-Driven Rankings 2007—Kidney Disease

Rank 2007	Hospital	*U.S. News* Score	Reputation (%)	Mortality index	Discharges (3 years)	Nursing index	Nurse Magnet hospital	Advanced services (of 6)	Patient services (of 7)	Trauma center	
1	Brigham and Women's Hospital, Boston	100.0	29.2	0.53	921	2.3	No	6.0	6	Yes	
2	New York-Presbyterian Univ. Hosp. of Columbia and Cornell	100.0	30.0	0.71	2,523	1.7	No	6.0	7	Yes	
3	Mayo Clinic, Rochester, Minn.	97.5	28.2	0.66	2,371	2.8	Yes	5.0	7	Yes	
4	Massachusetts General Hospital, Boston	95.4	28.2	0.79	1,494	2.0	Yes	6.0	6	Yes	
5	Cleveland Clinic	94.3	27.2	0.68	1,737	2.0	Yes	6.0	6	No	
6	Johns Hopkins Hospital, Baltimore	91.7	23.8	0.42	1,551	1.9	Yes	5.5	7	Yes	
7	UCLA Medical Center, Los Angeles	82.3	20.9	0.58	1,112	2.4	Yes	6.0	4	Yes	
8	Barnes-Jewish Hospital/Washington University, St. Louis	74.8	17.4	0.69	2,643	2.1	Yes	6.0	7	Yes	
9	Duke University Medical Center, Durham, N.C.	65.1	14.3	0.74	1,382	1.6	Yes	6.0	6	Yes	
10	Vanderbilt University Medical Center, Nashville	61.7	11.2	0.49	923	1.8	Yes	6.0	6	Yes	
11	University of California, San Francisco Medical Center	60.8	12.5	0.54	1,179	2.2	No	6.0	5	No	
12	Hospital of the University of Pennsylvania, Philadelphia	55.7	10.1	0.60	838	1.5	No	6.0	7	Yes	
13	University of Colorado Hospital, Denver	52.6	8.4	0.64	520	1.9	Yes	6.0	6	Yes	
14	University of Pittsburgh Medical Center	50.1	8.4	0.77	1,617	1.9	No	6.0	7	Yes	
15	University of Alabama Hospital at Birmingham	49.7	6.9	0.68	1,701	2.1	Yes	5.0	6	Yes	
16	University of Washington Medical Center, Seattle	48.8	7.4	0.61	562	2.1	Yes	4.5	7	No	
17	University of Minnesota Medical Center, Minneapolis	48.5	4.8	0.36	814	1.9	Yes	6.0	7	Yes	(+3 SD)
18	Stanford Hospital and Clinics, Stanford, Calif.	46.5	8.8	0.87	561	1.8	Yes	6.0	5	Yes	
19	Yale-New Haven Hospital, New Haven, Conn.	46.4	6.1	0.66	1,424	2.5	No	5.0	6	Yes	
20	University of Michigan Hospitals and Health Centers, Ann Arbor	46.2	5.2	0.65	1,634	2.4	No	6.0	7	Yes	
21	Rush University Medical Center, Chicago	45.1	3.6	0.46	986	1.9	Yes	5.0	7	Yes	
22	University of Chicago Medical Center	43.3	3.0	0.56	984	2.3	Yes	6.0	6	Yes	
23	Cedars-Sinai Medical Center, Los Angeles	42.6	2.4	0.59	1,455	2.0	Yes	6.0	7	Yes	
24	Ohio State University Hospital, Columbus	41.4	2.5	0.61	1,601	1.9	Yes	5.0	7	Yes	
25	University of Maryland Medical Center, Baltimore	41.0	2.6	0.42	1,023	1.8	No	6.0	6	Yes	
26	University of Iowa Hospitals and Clinics, Iowa City	41.0	3.0	0.61	560	1.6	Yes	6.0	7	Yes	
27	University of Wisconsin Hospital and Clinics, Madison	41.0	2.1	0.32	1,507	1.8	No	6.0	6	Yes	
28	University of North Carolina Hospitals, Chapel Hill	39.8	5.0	0.80	1,017	1.8	No	5.0	7	Yes	
29	Baylor University Medical Center, Dallas	38.2	1.5	0.70	1,316	1.8	Yes	6.0	7	Yes	(+2 SD)
30	University of California, San Diego Medical Center	38.1	3.1	0.60	562	1.9	No	4.5	6	Yes	
31	Froedtert Hospital, Milwaukee	37.6	0.7	0.61	1,098	1.7	Yes	6.0	7	Yes	
32	University of Miami, Jackson Memorial Hospital	37.5	1.8	0.61	1,067	1.5	No	6.0	7	Yes	
33	Beth Israel Deaconess Medical Center, Boston	37.2	2.9	0.72	1,285	1.6	No	6.0	5	Yes	
34	Clarian Health Partners, Indianapolis	37.2	0.6	0.64	2,053	1.9	Yes	6.0	6	Yes	
35	Emory University Hospital, Atlanta	36.6	3.9	0.76	1,142	1.9	No	5.0	6	No	
36	Parkland Memorial Hospital, Dallas	36.2	2.8	0.66	673	1.7	No	4.0	6	Yes	
37	NYU Medical Center, New York	36.2	2.4	0.76	663	1.4	Yes	5.5	7	Yes	
38	Washington Hospital Center, Washington, D.C.	35.9	1.5	0.64	1,405	1.3	No	6.0	6	Yes	
39	Shands at the University of Florida, Gainesville	35.5	1.5	0.69	1,294	1.7	Yes	5.0	4	Yes	
40	Banner Good Samaritan Medical Center, Phoenix	35.5	0.5	0.48	782	1.6	Yes	5.0	5	Yes	
41	Tampa General Hospital	35.5	0.0	0.42	931	1.5	Yes	4.0	7	Yes	
42	Virginia Commonwealth University Health System, Richmond	35.4	0.4	0.57	651	2.2	Yes	5.0	6	Yes	
43	Hennepin County Medical Center, Minneapolis	35.3	1.7	0.51	625	1.9	No	4.0	5	Yes	
44	LDS Hospital, Salt Lake City	35.1	0.0	0.60	599	1.9	Yes	6.0	7	Yes	
45	St. Luke's Episcopal Hospital, Houston	34.8	0.0	0.55	1,370	1.6	Yes	6.0	6	No	
46	Methodist Hospital, Houston	34.5	0.6	0.57	1,175	1.4	Yes	6.0	5	No	
47	Thomas Jefferson University Hospital, Philadelphia	34.5	0.9	0.69	1,013	1.8	No	6.0	7	Yes	
48	Georgetown University Hospital, Washington, D.C.	34.5	3.1	0.67	413	1.2	Yes	6.0	5	No	
49	University of California, Davis Medical Center, Sacramento	34.4	1.3	0.70	514	3.0	No	6.0	7	Yes	
50	Sentara Norfolk General Hospital, Norfolk, Va.	34.3	0.6	0.56	1,042	1.6	No	5.0	6	Yes	

Final IHQ-Driven Rankings 2007—Neurology and Neurosurgery

Rank 2007	Hospital	*U.S. News* Score	Reputation (%)	Mortality index	Discharges (3 years)	Nursing index	Nurse Magnet hospital	Epilepsy center	Advanced services (of 7)	Patient services (of 7)	Trauma center	
1	Mayo Clinic, Rochester, Minn.	100.0	48.6	0.99	5,999	2.8	Yes	Yes	6.0	7	Yes	
2	Johns Hopkins Hospital, Baltimore	93.1	38.0	0.59	3,649	1.9	Yes	Yes	6.5	7	Yes	
3	New York-Presbyterian Univ. Hosp. of Columbia and Cornell	79.5	32.0	0.80	6,115	1.7	No	Yes	7.0	7	Yes	
4	Massachusetts General Hospital, Boston	78.6	35.1	0.99	4,279	2.0	Yes	Yes	6.0	6	Yes	
5	University of California, San Francisco Medical Center	77.8	33.6	0.85	2,542	2.2	No	Yes	7.0	5	No	
6	Cleveland Clinic	73.1	26.9	0.71	4,662	2.0	Yes	Yes	7.0	6	No	
7	Barnes-Jewish Hospital/Washington University, St. Louis	52.2	14.2	0.83	4,876	2.1	Yes	Yes	7.0	7	Yes	
8	UCLA Medical Center, Los Angeles	44.4	14.8	1.00	2,301	2.4	Yes	Yes	7.0	4	Yes	
9	Methodist Hospital, Houston	39.0	7.6	0.69	5,175	1.4	Yes	No	7.0	5	No	
10	St. Joseph's Hospital and Medical Center, Phoenix	38.8	17.8	1.28	4,443	1.9	No	Yes	6.0	6	Yes	(+3 SD)
11	NYU Medical Center, New York	35.9	2.1	0.51	3,839	1.4	Yes	Yes	6.5	7	Yes	
12	University of Pittsburgh Medical Center	35.0	8.3	1.00	5,942	1.9	No	Yes	7.0	7	Yes	
13	Northwestern Memorial Hospital, Chicago	34.2	3.1	0.74	2,769	1.7	Yes	Yes	6.0	6	Yes	
14	University of Chicago Medical Center	34.0	1.7	0.63	2,014	2.3	Yes	Yes	7.0	6	Yes	
15	Rush University Medical Center, Chicago	33.9	1.5	0.55	2,845	1.9	Yes	Yes	5.0	7	Yes	
16	Cedars-Sinai Medical Center, Los Angeles	33.8	1.3	0.72	4,294	2.0	Yes	Yes	7.0	7	Yes	
17	Brigham and Women's Hospital, Boston	33.2	6.3	0.93	2,599	2.3	No	Yes	7.0	6	Yes	
18	University of Iowa Hospitals and Clinics, Iowa City	31.8	1.8	0.78	2,109	1.6	Yes	Yes	7.0	7	Yes	
19	Henry Ford Hospital, Detroit	30.3	1.7	0.81	3,745	1.9	No	Yes	7.0	6	Yes	
20	University of Minnesota Medical Center, Minneapolis	30.0	0.9	0.66	1,900	1.9	Yes	No	7.0	7	Yes	
21	Mount Sinai Medical Center, New York	29.9	3.2	0.81	2,763	1.6	Yes	No	6.5	7	No	
22	Abbott Northwestern Hospital, Minneapolis	29.9	0.3	0.76	4,727	1.9	No	Yes	7.0	7	Yes	(+2 SD)
23	Duke University Medical Center, Durham, N.C.	29.3	4.3	0.99	3,518	1.6	Yes	Yes	7.0	6	Yes	
24	St. Luke's Episcopal Hospital, Houston	29.2	0.0	0.69	2,805	1.6	Yes	Yes	7.0	6	No	
25	Emory University Hospital, Atlanta	28.8	2.4	0.81	3,549	1.9	No	Yes	5.0	6	No	
26	University of Texas Southwestern Medical Center, Dallas	28.2	1.6	0.78	2,406	1.8	No	Yes	7.0	5	No	
27	Clarian Health Partners, Indianapolis	27.6	1.2	0.93	4,305	1.9	Yes	Yes	7.0	6	Yes	
28	Stanford Hospital and Clinics, Stanford, Calif.	27.5	6.5	1.08	2,250	1.8	Yes	Yes	7.0	5	Yes	
29	University of Virginia Medical Center, Charlottesville	26.9	7.9	1.22	4,015	2.1	Yes	Yes	7.0	7	Yes	
30	University of Washington Medical Center, Seattle	26.8	2.7	0.71	1,019	2.1	Yes	Yes	5.5	7	No	
31	Harper University Hospital, Detroit	26.8	0.8	0.64	2,065	1.0	No	Yes	5.5	5	No	
32	University of Michigan Hospitals and Health Centers, Ann Arbor	26.3	4.2	1.03	2,581	2.4	No	Yes	7.0	7	Yes	
33	St. Luke's Hospital, Kansas City, Mo.	26.3	0.3	0.87	2,031	2.0	Yes	Yes	6.0	6	Yes	
34	University Hospitals Case Medical Center, Cleveland	25.6	0.8	0.92	2,992	1.3	Yes	Yes	6.0	7	Yes	
35	William Beaumont Hospital, Royal Oak, Mich.	25.6	0.3	0.87	6,455	1.6	Yes	No	6.0	7	Yes	
36	Ingalls Memorial Hospital, Harvey, Ill.	25.4	0.0	0.66	2,056	1.0	No	No	6.0	7	Yes	
37	Flagler Hospital, Saint Augustine, Fla.	24.7	0.0	0.66	1,745	1.4	Yes	No	5.5	5	No	
38	Christ Hospital, Cincinnati	24.5	0.0	0.61	2,013	1.9	No	No	5.0	6	No	
39	Willis-Knighton Medical Center, Shreveport, La.	24.4	0.0	0.71	3,225	1.3	No	No	5.5	7	No	
40	Pinnacle Health System, Harrisburg, Pa.	24.3	0.0	0.75	3,127	1.5	Yes	No	4.0	6	No	
41	Presbyterian Hospital, Dallas	24.0	0.0	0.88	3,330	1.8	Yes	Yes	4.5	6	No	
42	University of Colorado Hospital, Denver	24.0	0.3	0.75	962	1.9	Yes	Yes	6.0	6	Yes	
43	Sutter Medical Center, Sacramento	23.6	0.0	0.81	1,783	2.0	No	Yes	4.5	6	No	
44	Jewish Hospital, Louisville, Ky.	23.5	0.0	0.72	2,625	1.4	No	No	4.0	5	Yes	
45	Lenox Hill Hospital, New York	23.5	0.0	0.65	1,958	1.6	No	No	6.0	4	No	
46	SSM St. Mary's Health Center, St. Louis	23.4	0.0	0.63	2,021	1.3	No	No	4.5	6	No	
47	William Beaumont Hospital, Troy, Mich.	23.4	0.0	0.79	2,408	1.8	No	No	5.5	5	Yes	
48	Sinai-Grace Hospital, Detroit	23.4	0.0	0.65	1,919	1.0	No	No	4.0	5	Yes	
49	St. John Hospital and Medical Center, Detroit	23.1	0.0	0.77	3,596	1.4	No	No	6.0	5	No	
50	Kettering Medical Center, Kettering, Ohio	23.0	0.0	0.84	2,359	1.2	Yes	No	7.0	6	No	

Final IHQ-Driven Rankings 2007—Orthopedics

Rank 2007	Hospital	*U.S. News* Score	Reputation (%)	Mortality index	Discharges (3 years)	Nursing index	Nurse Magnet hospital	Advanced services (of 2)	Patient services (of 6)	Trauma center	
1	Hospital for Special Surgery, New York	100.0	46.9	0.13	10,561	1.8	Yes	2.0	4	Yes	
2	Mayo Clinic, Rochester, Minn.	98.4	46.4	0.49	10,150	2.8	Yes	2.0	6	Yes	
3	Massachusetts General Hospital, Boston	68.8	28.6	0.70	4,190	2.0	Yes	2.0	5	Yes	
4	Cleveland Clinic	59.6	22.5	0.53	4,540	2.0	Yes	2.0	5	No	
5	Johns Hopkins Hospital, Baltimore	43.7	15.3	0.71	1,690	1.9	Yes	0.5	6	Yes	
6	Duke University Medical Center, Durham, N.C.	38.6	11.7	0.87	3,127	1.6	Yes	2.0	5	Yes	
7	New York-Presbyterian Univ. Hosp. of Columbia and Cornell	38.2	9.9	0.66	3,791	1.7	No	2.0	6	Yes	
8	Rush University Medical Center, Chicago	37.2	6.6	0.31	4,194	1.9	Yes	2.0	6	Yes	
9	UCLA Medical Center, Los Angeles	36.3	10.8	0.56	1,246	2.4	Yes	1.0	4	Yes	
10	NYU Hospital for Joint Diseases, New York	35.5	6.9	0.64	4,665	1.4	Yes	2.0	6	Yes	(+3 SD)
11	Brigham and Women's Hospital, Boston	32.1	5.0	0.36	2,821	2.3	No	2.0	5	Yes	
12	University of Pittsburgh Medical Center	32.1	7.4	0.83	4,405	1.9	No	2.0	6	Yes	
13	Thomas Jefferson University Hospital, Philadelphia	30.7	4.3	0.54	4,086	1.8	No	2.0	6	Yes	
14	Barnes-Jewish Hospital/Washington University, St. Louis	30.7	6.0	0.81	3,207	2.1	Yes	1.0	6	Yes	
15	University of Washington Medical Center, Seattle	30.6	7.5	0.57	1,330	2.1	Yes	1.0	6	No	
16	University of Iowa Hospitals and Clinics, Iowa City	30.2	8.8	1.03	2,128	1.6	Yes	2.0	6	Yes	
17	New England Baptist Hospital, Boston	28.6	3.8	0.20	5,947	1.2	No	2.0	4	No	
18	Northwestern Memorial Hospital, Chicago	28.3	2.7	0.61	2,903	1.7	Yes	2.0	5	Yes	
19	University Hospitals Case Medical Center, Cleveland	27.2	2.6	0.67	2,661	1.3	Yes	2.0	6	Yes	(+2 SD)
20	University of Michigan Hospitals and Health Centers, Ann Arbor	25.7	2.9	0.74	1,877	2.4	No	2.0	6	Yes	
21	William Beaumont Hospital, Royal Oak, Mich.	25.6	1.1	0.66	8,004	1.6	Yes	1.0	6	Yes	
22	Stanford Hospital and Clinics, Stanford, Calif.	25.4	0.6	0.57	2,879	1.8	Yes	2.0	5	Yes	
23	Baylor University Medical Center, Dallas	25.3	1.0	0.75	5,171	1.8	Yes	2.0	6	Yes	
24	Tampa General Hospital	25.3	0.3	0.48	3,277	1.5	Yes	1.5	6	Yes	
25	Cedars-Sinai Medical Center, Los Angeles	25.3	0.3	0.55	4,281	2.0	Yes	1.0	6	Yes	
26	Lenox Hill Hospital, New York	24.5	2.0	0.47	3,182	1.6	No	2.0	3	No	
27	Abbott Northwestern Hospital, Minneapolis	24.4	0.0	0.54	5,329	1.9	No	2.0	6	Yes	
28	Summa Health System, Akron, Ohio	24.4	0.0	0.52	4,457	1.9	No	2.0	6	Yes	
29	Clarian Health Partners, Indianapolis	24.3	1.6	0.83	4,399	1.9	Yes	2.0	5	Yes	
30	Methodist Hospital, Houston	24.1	0.0	0.50	5,805	1.4	Yes	2.0	5	No	
31	Grant Medical Center-OhioHealth, Columbus, Ohio	23.8	0.0	0.69	3,283	1.7	Yes	2.0	6	Yes	
32	University of Alabama Hospital at Birmingham	23.5	1.1	0.78	2,276	2.1	Yes	1.5	6	Yes	
33	Pennsylvania Hospital, Philadelphia	23.5	0.1	0.38	3,503	1.8	No	2.0	6	No	
34	University of California, San Francisco Medical Center	23.5	2.4	0.67	1,852	2.2	No	2.0	4	No	
35	St. Luke's Episcopal Hospital, Houston	22.9	0.0	0.37	2,724	1.6	Yes	1.0	5	No	
36	Carolinas Medical Center, Charlotte, N.C.	22.9	0.1	0.62	3,843	2.0	No	2.0	4	Yes	
37	Central DuPage Hospital, Winfield, Ill.	22.7	0.0	0.50	2,577	1.4	No	2.0	5	Yes	
38	John Muir Medical Center, Walnut Creek, Calif.	22.5	0.0	0.59	2,777	1.8	No	1.5	6	Yes	
39	Harborview Medical Center, Seattle	22.5	7.9	1.22	1,055	2.1	No	1.0	6	Yes	
40	Christ Hospital, Cincinnati	22.2	0.0	0.47	2,117	1.9	No	2.0	6	No	
41	St Joseph Hospital, Orange, Calif.	22.0	0.0	0.66	2,033	2.0	Yes	2.0	5	No	
42	St. Cloud Hospital, St. Cloud, Minn.	22.0	0.0	0.73	3,742	1.6	Yes	1.0	5	Yes	
43	Union Memorial Hospital, Baltimore	21.9	0.6	0.64	2,091	1.4	No	1.5	6	Yes	
44	Pinnacle Health System, Harrisburg, Pa.	21.8	0.0	0.68	4,745	1.5	Yes	1.0	6	No	
45	Maine Medical Center, Portland	21.8	0.2	0.83	3,139	1.9	Yes	2.0	5	Yes	
46	Presbyterian Hospital, Dallas	21.7	0.0	0.72	4,361	1.8	Yes	1.5	5	No	
47	Carilion Medical Center, Roanoke, Va.	21.7	0.0	0.83	3,571	1.5	Yes	2.0	6	Yes	
48	Hackensack University Medical Center, N.J.	21.7	0.0	0.78	3,454	1.9	Yes	1.0	6	Yes	
49	Vanderbilt University Medical Center, Nashville	21.6	3.3	1.17	1,665	1.8	Yes	1.0	5	Yes	
50	Ohio State University Hospital, Columbus	21.6	0.7	0.64	688	1.9	Yes	2.0	6	Yes	

Final IHQ-Driven Rankings 2007—Respiratory Disorders

Rank 2007	Hospital	*U.S. News* Score	Reputation (%)	Mortality index	Discharges (3 years)	Nursing index	Nurse Magnet hospital	Advanced services (of 6)	Patient services (of 7)	Trauma center	
1	National Jewish Medical and Research Center, Denver	100.0	51.6	0.00	20	0.9	No	3.0	1	No	
2	Mayo Clinic, Rochester, Minn.	77.9	31.0	0.85	6,225	2.8	Yes	5.0	7	Yes	
3	Johns Hopkins Hospital, Baltimore	72.5	29.1	0.90	2,215	1.9	Yes	5.5	7	Yes	
4	Massachusetts General Hospital, Boston	61.4	20.1	0.83	4,659	2.0	Yes	6.0	6	Yes	
5	Cleveland Clinic	55.2	17.3	0.82	3,522	2.0	Yes	6.0	6	No	
6	Barnes-Jewish Hospital/Washington University, St. Louis	54.1	17.5	0.93	5,326	2.1	Yes	6.0	7	Yes	
7	University of Colorado Hospital, Denver	49.1	15.2	0.77	1,434	1.9	Yes	6.0	6	Yes	
8	University of California, San Diego Medical Center	48.4	16.4	0.81	1,292	1.9	No	4.5	6	Yes	
9	University of California, San Francisco Medical Center	47.2	18.4	0.97	1,713	2.2	No	6.0	5	No	
10	Duke University Medical Center, Durham, N.C.	46.8	14.5	0.95	3,940	1.6	Yes	6.0	6	Yes	
11	Hospital of the University of Pennsylvania, Philadelphia	44.9	13.6	0.78	1,945	1.5	No	6.0	7	Yes	
12	New York-Presbyterian Univ. Hosp. of Columbia and Cornell	42.8	9.5	0.82	7,062	1.7	No	6.0	7	Yes	
13	Brigham and Women's Hospital, Boston	41.5	8.8	0.79	3,279	2.3	No	6.0	6	Yes	
14	University of Washington Medical Center, Seattle	40.3	13.4	0.94	970	2.1	Yes	4.5	7	No	
15	UCLA Medical Center, Los Angeles	37.2	8.3	0.68	1,960	2.4	Yes	6.0	4	Yes	(+3 SD)
16	University of Pittsburgh Medical Center	36.5	6.7	0.88	5,221	1.9	No	6.0	7	Yes	
17	University of Michigan Hospitals and Health Centers, Ann Arbor	36.3	7.2	0.91	3,350	2.4	No	6.0	7	Yes	
18	Vanderbilt University Medical Center, Nashville	34.9	5.6	0.88	2,570	1.8	Yes	6.0	6	Yes	
19	Yale-New Haven Hospital, New Haven, Conn.	31.9	3.2	0.80	3,766	2.5	No	5.0	6	Yes	(+2 SD)
20	Shands at the University of Florida, Gainesville	29.4	2.2	0.83	3,714	1.7	Yes	5.0	4	Yes	
21	University of Alabama Hospital at Birmingham	29.2	3.8	0.94	2,769	2.1	Yes	5.0	6	Yes	
22	NYU Medical Center, New York	29.0	1.0	0.80	2,497	1.4	Yes	5.5	7	Yes	
23	Cedars-Sinai Medical Center, Los Angeles	28.8	0.7	0.87	5,137	2.0	Yes	6.0	7	Yes	
24	Beth Israel Deaconess Medical Center, Boston	28.1	1.7	0.82	3,634	1.6	No	6.0	5	Yes	
25	University of North Carolina Hospitals, Chapel Hill	27.5	1.9	0.87	2,754	1.8	No	5.0	7	Yes	
26	Robert Wood Johnson University Hospital, New Brunswick, N.J.	27.5	0.0	0.80	2,792	1.9	Yes	6.0	5	Yes	
27	Thomas Jefferson University Hospital, Philadelphia	27.5	0.4	0.78	2,474	1.8	No	6.0	7	Yes	
28	Wake Forest Univ. Baptist Medical Center, Winston-Salem, N.C.	27.4	2.1	0.91	3,315	1.7	Yes	5.0	6	Yes	
29	University of Minnesota Medical Center, Minneapolis	27.4	1.8	0.82	1,739	1.9	Yes	6.0	7	Yes	
30	St. Elizabeth Medical Center-North, Covington, Ky.	27.1	0.0	0.84	4,036	1.6	Yes	6.0	6	Yes	
31	St. Luke's Episcopal Hospital, Houston	27.1	0.4	0.79	3,118	1.6	Yes	6.0	6	No	
32	Penrose-St. Francis Health Services, Colorado Springs, Colo.	26.6	0.0	0.69	2,882	1.2	No	5.0	7	Yes	
33	Baylor University Medical Center, Dallas	26.6	0.0	0.89	4,339	1.8	Yes	6.0	7	Yes	
34	Henry Ford Hospital, Detroit	26.6	0.4	0.85	4,634	1.9	No	6.0	6	Yes	
35	Flagler Hospital, Saint Augustine, Fla.	26.5	0.0	0.72	3,427	1.4	Yes	5.5	5	No	
36	Clarian Health Partners, Indianapolis	26.3	0.0	0.89	5,279	1.9	Yes	6.0	6	Yes	
37	University of Rochester Medical Center, N.Y.	26.2	1.1	0.89	2,439	1.6	Yes	6.0	7	Yes	
38	Christiana Care Health System, Wilmington, Del.	26.2	0.0	0.86	7,875	1.7	No	6.0	7	Yes	
39	University of Virginia Medical Center, Charlottesville	26.2	0.0	0.89	3,104	2.1	Yes	6.0	7	Yes	
40	University Medical Center, Tucson, Ariz.	26.2	1.4	0.76	1,319	2.4	Yes	5.5	6	Yes	
41	Ohio State University Hospital, Columbus	26.1	0.4	0.89	3,136	1.9	Yes	5.0	7	Yes	
42	William Beaumont Hospital, Royal Oak, Mich.	26.1	0.0	0.89	7,512	1.6	Yes	5.0	7	Yes	
43	Hackensack University Medical Center, N.J.	26.0	0.4	0.91	4,686	1.9	Yes	5.0	7	Yes	
44	Methodist Hospital, Houston	25.7	0.4	0.83	3,709	1.4	Yes	6.0	5	No	
45	Jewish Hospital, Louisville, Ky.	25.7	0.4	0.77	4,112	1.4	No	4.0	5	Yes	
46	Miami Valley Hospital, Dayton, Ohio	25.6	0.0	0.86	4,208	1.7	Yes	4.0	6	Yes	
47	Christ Hospital, Cincinnati	25.5	0.0	0.65	2,602	1.9	No	4.5	6	No	
48	Medical University of South Carolina, Charleston	25.4	2.3	0.86	1,434	2.0	No	5.5	5	Yes	
49	Willis-Knighton Medical Center, Shreveport, La.	25.4	0.0	0.77	4,274	1.3	No	5.5	7	No	
50	University of Chicago Medical Center	25.2	2.7	0.93	2,121	2.3	Yes	6.0	6	Yes	

Final IHQ-Driven Rankings 2007—Urology

Rank 2006	Hospital	*U.S. News* Score	Reputation (%)	Mortality index		Discharges (3 years)	Nursing index	Nurse Magnet hospital	Advanced services (of 6)	Patient services (of 8)	Trauma center	
1	Johns Hopkins Hospital, Baltimore	100.0	61.1	0.49		1,207	1.9	Yes	5.5	8.0	Yes	
2	Cleveland Clinic	93.6	57.5	0.59		1,571	2.0	Yes	6.0	7.0	No	
3	Mayo Clinic, Rochester, Minn.	62.6	30.3	0.33		2,946	2.8	Yes	5.0	8.0	Yes	
4	UCLA Medical Center, Los Angeles	54.5	24.8	0.54		939	2.4	Yes	6.0	4.5	Yes	
5	Memorial Sloan-Kettering Cancer Center, New York	49.5	22.2	0.43		1,369	1.5	No	6.0	6.0	No	
6	New York-Presbyterian Univ. Hosp. of Columbia and Cornell	48.2	19.2	0.42		2,455	1.7	No	6.0	8.0	Yes	
7	University of Texas M. D. Anderson Cancer Center, Houston	41.4	15.8	0.57		966	1.9	Yes	5.0	5.0	No	
8	University of California, San Francisco Medical Center	40.9	15.1	0.46		829	2.2	No	6.0	6.0	No	
9	Duke University Medical Center, Durham, N.C.	40.7	16.3	0.83		1,002	1.6	Yes	6.0	7.0	Yes	
10	Methodist Hospital, Houston	38.0	11.7	0.36		976	1.4	Yes	6.0	5.5	No	
11	Massachusetts General Hospital, Boston	37.4	10.6	0.54		1,032	2.0	Yes	5.0	7.0	Yes	
12	Barnes-Jewish Hospital/Washington University, St. Louis	36.7	8.5	0.45		1,231	2.1	Yes	6.0	8.0	Yes	
13	Vanderbilt University Medical Center, Nashville	34.0	6.7	0.41		977	1.8	Yes	6.0	7.0	Yes	(+3 SD)
14	Stanford Hospital and Clinics, Stanford, Calif.	32.9	7.4	0.48		501	1.8	Yes	6.0	6.0	Yes	
15	University of Michigan Hospitals and Health Centers, Ann Arbor	32.7	5.8	0.35		1,384	2.4	No	6.0	8.0	Yes	
16	Clarian Health Partners, Indianapolis	30.8	7.5	0.82		1,492	1.9	Yes	6.0	7.0	Yes	
17	Northwestern Memorial Hospital, Chicago	30.5	4.2	0.36		1,062	1.7	Yes	5.0	7.0	Yes	
18	Hospital of the University of Pennsylvania, Philadelphia	29.6	4.5	0.41		823	1.5	No	6.0	8.0	Yes	
19	University of California, Irvine Medical Center, Orange	28.8	3.8	0.21		381	1.7	Yes	4.0	7.0	Yes	
20	Brigham and Women's Hospital, Boston	28.1	4.4	0.59		675	2.3	No	6.0	7.0	Yes	
21	NYU Medical Center, New York	27.9	2.3	0.44		835	1.4	Yes	5.5	8.0	Yes	
22	University of Iowa Hospitals and Clinics, Iowa City	26.6	4.0	0.69		342	1.6	Yes	6.0	8.0	Yes	(+2 SD)
23	LDS Hospital, Salt Lake City	25.7	0.0	0.34		479	1.9	Yes	6.0	8.0	Yes	
24	University of Washington Medical Center, Seattle	25.5	1.4	0.28		508	2.1	Yes	4.5	7.0	No	
25	Lahey Clinic, Burlington, Mass.	25.3	4.1	0.68		816	1.3	No	5.0	7.0	Yes	
26	Rush University Medical Center, Chicago	25.1	0.5	0.39		519	1.9	Yes	4.0	8.0	Yes	
27	University of Pittsburgh Medical Center	24.9	1.7	0.63		1,033	1.9	No	6.0	8.0	Yes	
28	St. Luke's Episcopal Hospital, Houston	24.8	2.9	0.68		749	1.6	Yes	6.0	6.0	No	
29	City of Hope, Duarte, Calif.	24.4	1.6	0.28		618	1.9	No	6.0	5.0	No	
30	University of Wisconsin Hospital and Clinics, Madison	24.4	0.4	0.36		861	1.8	No	5.0	7.0	Yes	
31	William Beaumont Hospital, Royal Oak, Mich.	24.4	0.8	0.65		1,579	1.6	Yes	5.0	8.0	Yes	
32	Shands at the University of Florida, Gainesville	24.0	0.0	0.37		1,042	1.7	Yes	4.0	5.0	Yes	
33	Henry Ford Hospital, Detroit	24.0	1.0	0.61		1,148	1.9	No	6.0	6.5	Yes	
34	University Hospitals Case Medical Center, Cleveland	23.9	1.5	0.64		515	1.3	Yes	5.0	8.0	Yes	
35	MeritCare Hospital, Fargo, N.D.	23.7	0.0	0.29		601	1.5	No	6.0	6.5	Yes	
36	University of Maryland Medical Center, Baltimore	23.6	0.0	0.28		545	1.8	No	5.0	7.0	Yes	
37	Froedtert Hospital, Milwaukee	23.2	0.3	0.65		700	1.7	Yes	5.0	8.0	Yes	
38	University Hospital, Cincinnati	23.2	1.4	0.43		350	1.5	No	5.0	6.5	Yes	
39	Cedars-Sinai Medical Center, Los Angeles	23.1	0.3	0.77		1,463	2.0	Yes	6.0	8.0	Yes	
40	Carolinas Medical Center, Charlotte, N.C.	23.1	0.0	0.46		866	2.0	No	5.0	6.0	Yes	
41	Tampa General Hospital	23.0	0.0	0.36		498	1.5	Yes	3.0	7.0	Yes	
42	Thomas Jefferson University Hospital, Philadelphia	23.0	0.8	0.62		657	1.8	No	5.5	8.0	Yes	
43	University of North Carolina Hospitals, Chapel Hill	22.9	2.4	0.75		557	1.8	No	5.0	8.0	Yes	
44	Baylor University Medical Center, Dallas	22.9	0.0	0.70		725	1.8	Yes	6.0	7.5	Yes	
45	Banner Good Samaritan Medical Center, Phoenix	22.8	0.0	0.43		352	1.6	Yes	5.0	5.5	Yes	
46	University Hospital, Stony Brook, N.Y.	22.6	0.0	0.27		390	1.7	No	5.0	6.0	Yes	
47	Emory University Hospital, Atlanta	22.6	1.2	0.48		753	1.9	No	4.0	6.5	No	
48	Beth Israel Deaconess Medical Center, Boston	22.5	0.3	0.43		674	1.6	No	5.0	5.5	Yes	
49	University of Virginia Medical Center, Charlottesville	22.5	1.0	0.79		473	2.1	Yes	6.0	8.0	Yes	
50	Robert Wood Johnson University Hospital, New Brunswick, N.J.	22.3	0.0	0.63		401	1.9	Yes	6.0	6.0	Yes	

Appendix H

Reputation-Only Rankings

Final Reputation Only Rankings 2007—Ophthalmology

Rank	Hospital	Reputation (%)	
1	Bascom Palmer Eye Institute at the University of Miami	72.2	
2	Wilmer Eye Institute, Johns Hopkins Hospital, Baltimore	65.0	
3	Wills Eye Hospital, Philadelphia	56.5	(+3 SD)
4	Massachusetts Eye and Ear Infirmary, Boston	31.4	
5	Jules Stein Eye Institute, UCLA Medical Center, Los Angeles	30.2	(+2 SD)
6	University of Iowa Hospitals and Clinics, Iowa City	18.2	
7	Duke University Medical Center, Durham, N.C.	16.2	
8	Doheny Eye Institute, USC University Hospital, Los Angeles	15.0	
9	University of California, San Francisco Medical Center	7.6	
10	Barnes-Jewish Hospital/Washington University, St. Louis	7.0	
11	Emory University Hospital, Atlanta	6.9	
12	Cleveland Clinic	6.4	
13	New York Eye and Ear Infirmary	6.2	
14	New York-Presbyterian Univ. Hosp. of Columbia and Cornell	5.9	
15	Mayo Clinic, Rochester, Minn.	5.1	
16	University of Michigan Hospitals and Health Centers, Ann Arbor	4.2	
17	Cullen Eye Institute, Methodist Hospital, Houston	3.4	

Final Reputation Only Rankings 2007—Psychiatry

Rank	Hospital	Reputation (%)	
1	Massachusetts General Hospital, Boston	36.1	
2	Johns Hopkins Hospital, Baltimore	28.3	
3	McLean Hospital, Belmont, Mass.	23.0	
4	New York-Presbyterian Univ. Hosp. of Columbia and Cornell	21.0	
5	UCLA's Neuropsychiatric Hospital, Los Angeles	20.9	(+3 SD)
6	Sheppard and Enoch Pratt Hospital, Baltimore	15.9	
7	Menninger Clinic, Houston	14.0	
8	Mayo Clinic, Rochester, Minn.	13.1	(+2 SD)
9	Yale-New Haven Hospital, New Haven, Conn.	11.5	
10	Stanford Hospital and Clinics, Stanford, Calif.	10.9	
11	University of Pittsburgh Medical Center	9.6	
12	Emory University Hospital, Atlanta	8.5	
13	Duke University Medical Center, Durham, N.C.	8.4	
14	Austen Riggs Center, Stockbridge, Mass.	7.2	
15	Barnes-Jewish Hospital/Washington University, St. Louis	7.1	
16	NYU Medical Center, New York	6.1	
17	University of California, San Francisco Medical Center	4.9	
18	Hospital of the University of Pennsylvania, Philadelphia	4.8	
19	Cleveland Clinic	4.5	
20	Methodist Hospital, Houston	4.0	
21	Hartford Hospital, Hartford, Conn.	3.7	
22	Long Island Jewish Medical Center, New Hyde Park, N.Y.	3.2	

Final Reputation Only Rankings 2007—Rehabilitation

Rank	Hospital	Reputation (%)	
1	Rehabilitation Institute of Chicago	64.8	
2	Kessler Institute for Rehabilitation, West Orange, N.J.	34.8	
3	University of Washington Medical Center, Seattle	33.7	
4	Memorial Hermann TIRR, Houston	28.6	
5	Mayo Clinic, Rochester, Minn.	24.1	(+3 SD)
6	Craig Hospital, Englewood, Colo.	15.7	(+2 SD)
7	Rusk Institute, NYU Medical Center, New York	12.5	
8	Spaulding Rehabilitation Hospital, Boston	11.4	
9	National Rehabilitation Hospital, Washington, D.C.	10.9	
10	Ohio State University Hospital, Columbus	9.9	
11	Shepherd Center, Atlanta	8.9	
12	Thomas Jefferson University Hospital, Philadelphia	7.6	
13	University of Michigan Hospitals and Health Centers, Ann Arbor	6.8	
14	Magee Rehabilitation Hospital, Philadelphia	6.6	
15	Baylor Institute for Rehabilitation, Dallas	6.3	
16	Rancho Los Amigos National Rehabilitation Center, Downey, Calif.	6.1	
17	Moss Rehab, Elkins Park, Pa.	5.9	
18	University of Pittsburgh Medical Center	5.7	
19	Mount Sinai Medical Center, New York	5.5	
20	Cleveland Clinic	5.3	
21	Johns Hopkins Hospital, Baltimore	5.0	
22	University of Colorado Hospital, Denver	4.3	
23	Stanford Hospital and Clinics, Stanford, Calif.	3.7	
24	New York-Presbyterian Univ. Hosp. of Columbia and Cornell	3.3	
25	Montefiore Medical Center, New York	3.1	
26	Hospital of the University of Pennsylvania, Philadelphia	3.1	

Final Reputation Only Rankings 2007—Rheumatology

Rank	Hospital	Reputation (%)	
1	Johns Hopkins Hospital, Baltimore	58.6	
2	Mayo Clinic, Rochester, Minn.	44.0	
3	Hospital for Special Surgery, New York	41.4	
4	Cleveland Clinic	41.4	(+3 SD)
5	UCLA Medical Center, Los Angeles	22.5	(+2 SD)
6	Brigham and Women's Hospital, Boston	21.6	
7	Massachusetts General Hospital, Boston	21.2	
8	University of Alabama Hospital at Birmingham	21.1	
9	University of California, San Francisco Medical Center	14.0	
10	University of Pittsburgh Medical Center	12.7	
11	NYU Hospital for Joint Diseases, New York	11.3	
12	Stanford Hospital and Clinics, Stanford, Calif.	10.8	
13	Duke University Medical Center, Durham, N.C.	7.7	
14	University of Michigan Hospitals and Health Centers, Ann Arbor	7.5	
15	Northwestern Memorial Hospital, Chicago	6.7	
16	New York-Presbyterian Univ. Hosp. of Columbia and Cornell	6.1	
17	Barnes-Jewish Hospital/Washington University, St. Louis	6.0	
18	University of California, San Diego Medical Center	5.2	
19	Hospital of the University of Pennsylvania, Philadelphia	4.5	
20	University of Washington Medical Center, Seattle	3.6	
21	Mayo Clinic, Jacksonville, Fla.	3.6	
22	Methodist Hospital, Houston	3.3	

Appendix I

The 2007 Honor Roll

Honor Roll 2007

Rank	Hospital	Points	Specialties
1	Johns Hopkins Hospital, Baltimore	30	15
2	Mayo Clinic, Rochester, Minn.	29	15
3	UCLA Medical Center, Los Angeles	25	15
4	Cleveland Clinic	25	13
5	Massachusetts General Hospital, Boston	23	12
6	New York-Presbyterian Univ. Hosp. of Columbia and Cornell	21	11
7	Duke University Medical Center, Durham, N.C.	18	10
7	University of California, San Francisco Medical Center	18	10
9	Barnes-Jewish Hospital/Washington University, St. Louis	17	11
10	Brigham and Women's Hospital, Boston	16	10
11	University of Washington Medical Center, Seattle	15	9
12	Hospital of the University of Pennsylvania, Philadelphia	11	8
13	University of Pittsburgh Medical Center	10	7
14	University of Michigan Hospitals and Health Centers, Ann Arbor	9	7
15	Stanford Hospital and Clinics, Stanford, Calif.	8	6
15	Yale-New Haven Hospital, New Haven, Conn.	8	6
17	Cedars-Sinai Medical Center, Los Angeles	7	6
17	University of Chicago Medical Center	7	6