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U.S. News & World Report
2010/11 Best Hospitals
Rankings Methodology

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Version: August 27, 2010



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I. Introduction

For families faced with a serious or complex medical problem, the choice of hospital can be critical. Yet they had few tools or resources beyond a doctor's recommendation to inform their decision until 1990, when *U.S. News & World Report* introduced "Best Hospitals." Initially, the annual assessments took the form of alphabetized lists in 12 specialties, but in 1993 and thereafter, hospitals were ranked within each specialty. This year's "Best Hospitals" draws from a universe of 4,852 medical facilities.* We use the hospital definitions supplied by the American Hospital Association (AHA) in its annual survey, which is the source of some of the data used in the Best Hospitals rankings. Under rare circumstances, we will combine two or more AHA hospitals for rankings purposes, when the hospitals function as one but report separately to the AHA for specific, meaningful, and verifiable reasons.

In 12 of the 16 adult specialty rankings, hospitals receive a composite score that is based on data from multiple sources. ("Best Children's Hospitals,"[†] which ranks hospitals in 10 pediatric specialties, is a separate project.) The rankings and key portions of the accompanying data are published in a print edition; both ranked and unranked hospitals, with additional data, are published online at www.usnews.com/besthospitals.

Central to understanding the rankings is that they were developed and the specialties chosen to help consumers determine which hospitals provide the best care for the *most serious or complicated* medical conditions and procedures—pancreatic cancer or replacement of a heart valve in an elderly patient with comorbidities, for example. Medical centers that excel in relatively commonplace conditions and procedures, such as noninvasive breast cancer or uncomplicated knee replacement, are not the focus.

The underlying methodology for the Best Hospitals rankings was the work of the National Opinion Research Center (NORC) at the University of Chicago in the early 1990s. NORC collected the data and compiled the rankings from 1993 to 2004. In 2005, RTI International[‡] in Research Triangle Park, N.C., began producing the rankings. The methodology has been refined as opportunities appeared. Larger-scale enhancements are always under consideration. In 2009, a new measure related to patient safety was introduced. The basic eligibility requirements also were modified, potentially increasing the number of rankable hospitals.

* Military installations, federal institutions, rehabilitation and acute long-term care facilities, and institutional hospital units (e.g., prison hospitals, college infirmaries) are excluded from the data-driven specialties.

[†] Full report available at www.rti.org/besthospitals

[‡] RTI International is a trade name of Research Triangle Institute.

The roster of specialties has been revised over the years. AIDS was dropped in 1998, for example, because it was clear that the majority of AIDS care had shifted to an outpatient setting. Pediatrics was moved out of the Best Hospitals universe in 2007 to establish separate pediatric rankings. No specialties were added or removed from the 2010/11[§] rankings.

For 2010/11, hospitals are ranked in 16 adult specialties:

- Cancer
- Diabetes & Endocrinology
- Ear, Nose, & Throat
- Gastroenterology
- Geriatrics
- Gynecology
- Heart & Heart Surgery
- Kidney
- Neurology & Neurosurgery
- Ophthalmology
- Orthopedics
- Pulmonology
- Psychiatry
- Rehabilitation
- Rheumatology
- Urology

A. Index of Hospital Quality

Twelve of the 16 specialty rankings are based largely on hard data. The other four rankings are based solely on a reputational survey of physicians.

The data-driven rankings assign a score, the Index of Hospital Quality (IHQ), to hospitals in the following 12 specialties: Cancer; Diabetes & Endocrinology; Ear, Nose, & Throat; Gastroenterology; Geriatrics; Gynecology; Heart & Heart Surgery; Kidney; Neurology & Neurosurgery; Orthopedics; Pulmonology; and Urology.

The IHQ reflects performance in three interlocking dimensions of healthcare: structure, process, and outcomes.¹⁻⁵ Their relationship was described by Avedis Donabedian in 1966 in a model that became widely accepted. In a hospital, *structure* refers to resources that relate directly to patient care. Examples factored into the Best Hospitals rankings include intensity of nurse staffing, 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 also is shaped by the *process* by which care is delivered, encompassing diagnosis, treatment, prevention, and patient education.

[§] Because the rankings are released in the middle of the year and are replaced in the middle of the following year, *U.S. News* now includes both years when referring to them. This change applies to the Best Children's Hospitals rankings as well.

Structure and process are related to *outcomes*, the most obvious of which is whether patients live or die. Outcomes are typically measured by risk-adjusted mortality rates (i.e., the likelihood of mortality given the complexity of the case).

These and other factors do not necessarily sort neatly into one of the three dimensions. For example, complications of care are an outcome, but arguably they also reflect a flaw in the process of delivering care, and also may be affected by structural elements. Nonetheless, there is general agreement on the majority of measures.

Many of the measures that make up the IHQ come from secondary data sources. The AHA Annual Survey Database, for example, provides information regarding various structural hospital characteristics.

The three components of the IHQ rankings are described briefly below and in more detail later in the following pages.

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., discharges), technology, and other features that characterize the hospital environment. The source for many of these data elements in the 2010/11 rankings is the most recent AHA Annual Survey Database from fiscal year (FY) 2008. 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 process component of the IHQ score is represented by a hospital's reputation for developing and sustaining a system that delivers high-quality care. The hospital's reputation can be seen as a form of peer review. The reputational score is based on cumulative responses from the three most recent surveys of board-certified physicians conducted for the Best Hospitals rankings in 2008, 2009, and 2010/11. The surveyed physicians were asked to nominate the "best hospitals" in their specific field of care, irrespective of expense or location, for patients with serious or difficult conditions. Up to five hospitals could be listed. (For the physician questionnaires used in the 2010/11 rankings, see *Appendix A*.) In 2008, 2009, and again in 2010, a sample of 200 board-certified physicians was selected in each specialty. In 2009 and 2010, the sample was selected from the American Medical Association (AMA) Physician Masterfile, a

database of more than 850,000 physicians.** In 2008, the sample was selected from the American Board of Medical Specialties (ABMS) database.

The physician sample was stratified by census region (West, Northeast, South, and Midwest) and by specialty to ensure appropriate representation. The final aggregated sample includes both federal and nonfederal medical and osteopathic physicians in all 50 states and the District of Columbia.

Outcomes

The outcomes score measures mortality 30 days after admission for all IHQ-driven specialties. Like the volume indicator, the outcomes measure is based on MedPAR data. For each hospital and specialty, the Healthcare Division of Thomson Reuters computed an adjusted mortality rate based on observed and expected mortality rates using the All Patient Refined Diagnosis Related Group (APR-DRG) and MS Grouper software created by 3M Health Information Systems.⁶ APR-DRGs and MS-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 3 most recent years (2006, 2007, and 2008) of Medicare reimbursement claims made by hospitals to CMS.

B. Reputation-Only Rankings

The second ranking approach is used for the remaining four specialties—Ophthalmology, Psychiatry, Rehabilitation, and Rheumatology—and ranking scores reflect the results of the reputational survey alone. Many structural and outcomes measures are not applicable to these specialties because procedures are performed 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.

C. Report Outline

The remainder of this 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)

** The database does not include medical students, residents, retirees, or deceased physicians.

- *Section III* describes the process used to develop the rankings for the four reputation-only specialties.
- *Section IV* presents the Honor Roll, an additional classification that denotes excellence across a broad range of specialties.
- *Section V* summarizes changes in the methodology from 2007 on.
- *Section VI* describes improvements under consideration.

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 2010/11 as a result of new or merged corporate entities in the AHA database are treated as single units and are listed as such in this report.

A. Eligibility

All 4,852^{††} community hospitals included in the FY2008 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:

- Membership in the Council of Teaching Hospitals (COTH)
- Medical school affiliation (American Medical Association or American Osteopathic Association)
- At least 200 hospital beds set up and staffed
- At least four of eight important key technologies available (see *Key Technologies*) and at least 100 hospital beds set up and staffed

Hospitals that did not respond to the 2008 AHA Annual Survey remained eligible in our database. For hospitals that did not respond in 2008 but responded in 2007 and 2006, we used survey data from 2007. Nonresponders lacking data from both the current survey and from one

^{††} We excluded military installations, federal institutions, rehabilitation and acute long-term care facilities, and institutional hospital units (e.g., prison hospitals, college infirmaries).

of the previous two surveys were ranked without any AHA data. A total of 2,192 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 diagnoses submitted for CMS reimbursement in 2006, 2007, and 2008 combined. Through 2002, the threshold for determining eligibility included all discharges, regardless of the balance of medical to surgical discharges.^{‡‡} Since 2002, medical-surgical proportions have been specified for Cancer, Gastroenterology, Ear, Nose, & Throat, Gynecology, Neurology & 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 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 the rankings in 2005, the minimum number of surgical discharges in Heart & 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 2010/11. The criteria used to determine discharge minimums were refined this year to include only those cases that meet the minimum severity of illness thresholds set by the project using APR-DRGs; this change assures that we accurately reflect the specialty definitions rather than including all patients with all levels of severity in the discharge minimums. Minimums for all specialties will be reviewed for future rankings and adjusted as needed. *Table 1* presents discharge volumes and numbers of hospitals meeting the criteria for the IHQ-driven specialties. A total of 1,885 hospitals met the volume criteria in at least one specialty. A hospital with volume below the minimum number was considered eligible if it had received at least one nomination in the most recent three physician surveys.

Table 2 shows the number of hospitals that did not pass the minimum discharge criteria but were eligible in a specialty because they had a non-zero reputational score. Table 2 also shows the total number of hospitals eligible in each specialty that met either the minimum discharge criteria or the non-zero reputational score criteria.

^{‡‡} The exception was Heart & Heart Surgery, where surgical discharges alone determined the threshold for eligibility. Beginning in 2002, both medical and surgical discharges determined eligibility.

Table 1. Minimum Discharges by Specialty

Specialty	Minimum Total Discharges	Minimum Surgical Discharges	Hospitals Meeting Volume Eligibility
Cancer	270	46	886
Diabetes & Endocrinology	114	0	1,086
Ear, Nose, & Throat	5	2	1,417
Gastroenterology	496	140	1,520
Geriatrics	2,128	0	1,478
Gynecology	11	8	1,467
Heart & Heart Surgery ^a	1,244	500	670
Kidney	148	0	1,616
Neurology & Neurosurgery	322	81	1,296
Orthopedics	267	240	1,589
Pulmonology	767	0	1,625
Urology	62	17	1,458

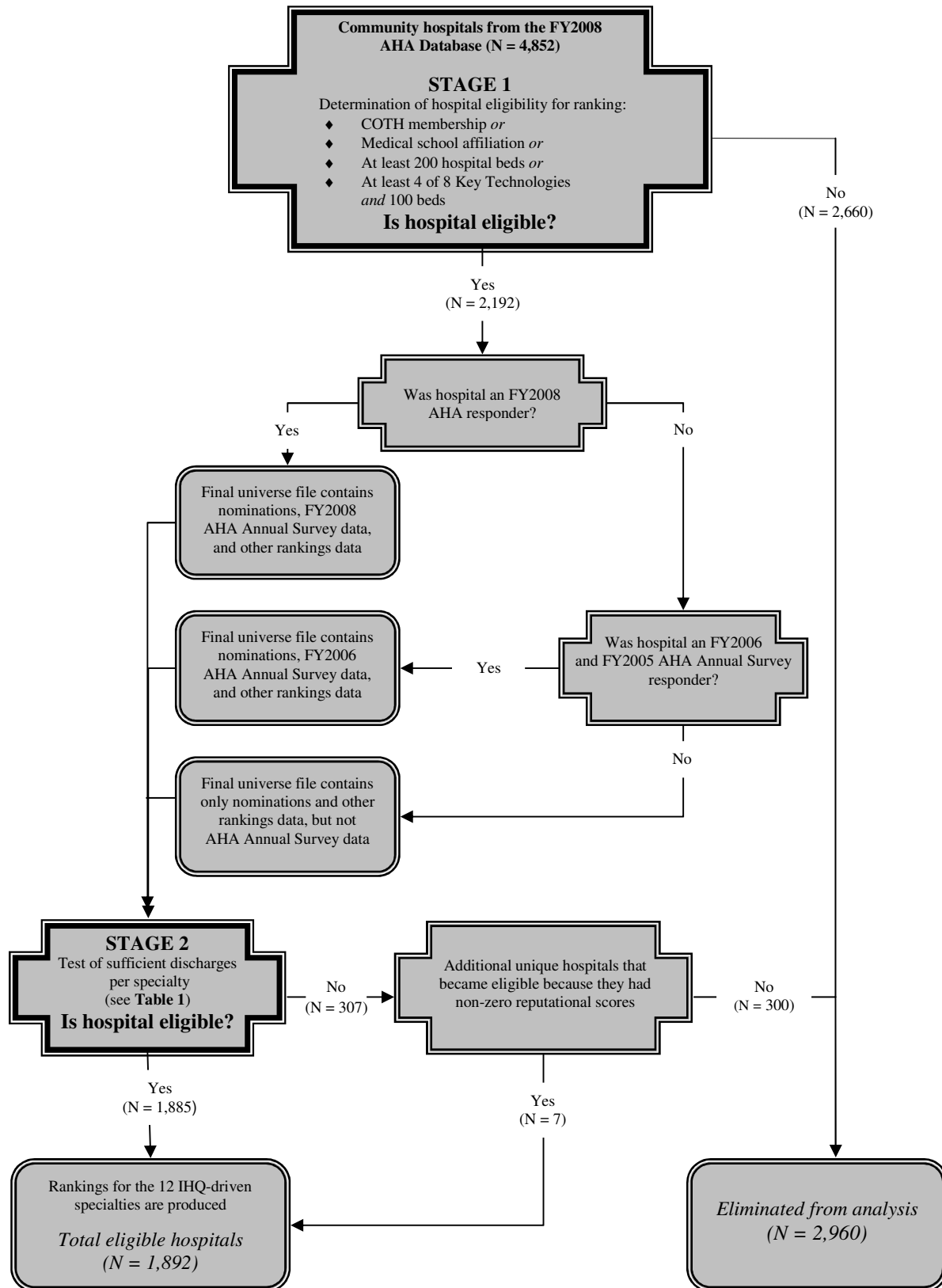
^aIn addition to the discharge eligibility criteria, a hospital must offer cardiac intensive care, adult interventional cardiac catheterization, and adult cardiac surgery to be considered in this specialty.

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
Cancer	12
Diabetes & Endocrinology	11
Ear, Nose, & Throat	6
Gastroenterology	8
Geriatrics	15
Gynecology	11
Heart & Heart Surgery	0
Kidney	2
Neurology & Neurosurgery	4
Orthopedics	9
Pulmonology	11
Urology	5

For the 2010/11 rankings, 1,892 unique hospitals were deemed eligible for at least one of the 12 IHQ-driven specialties under the full criteria. We then conducted separate analyses for each specialty. The top 50 hospitals in each IHQ specialty were published in the August 2010 print edition of *U.S. News & World Report*. **Figure 1** illustrates the eligibility and analysis process for the IHQ-driven specialties, as described in the steps above.

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



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 2010/11 index, most structural elements were derived from the 2008 AHA Annual Survey Database. Additional components came from external organizations including NCI, ANCC, the Foundation for the Accreditation of Cellular Therapy (FACT), the National Institute on Aging (NIA), the National Association of Epilepsy Centers (NAEC), and CMS.

AHA Annual Survey

The AHA has surveyed hospitals annually since 1946. The survey is the most comprehensive and dependable database of information on institutional healthcare,⁸ with an average annual response rate of 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 B*.) The following items taken from the AHA Annual Survey Database are used to develop the majority of the structural score for the IHQ.

Key Technologies

The elements in this structural index are reviewed every year in each specialty to remain consistent with the key technologies and advanced care expected from a “best hospital.” In 1996, it was decided to award partial credit to hospitals for a key technology or advanced service available off-site. Many hospitals provide such access through their hospital’s health system, a local community network, or a contractual arrangement or joint venture with another provider in the community. In 2008, the provision was changed again to award one point to all hospitals that provide a specified service on- or off-site either by the hospital or a subsidiary or through formal arrangements with other institutions.

Of the 15 key technologies that are relevant in one or more specialties, 8 comprise the index that is one of the eligibility doorways: hospitals that provide at least 4 of the 8 are eligible for ranking (see *Section II.A. Eligibility*).

Brief descriptions of the key technologies in the 2010/11 index follow. The definitions are taken largely from the AHA Annual Survey, expanded if needed:

- **Ablation of Barrett’s esophagus.** A premalignant condition that can lead to adenocarcinoma of the esophagus. The nonsurgical ablation of premalignant tissue in Barrett’s esophagus is done by the application of thermal energy or light through an endoscope passed from the mouth into the esophagus.
- **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 to assist in surgical procedures.
- **Diagnostic radioisotope services.** A procedure that uses radioactive isotopes (radiopharmaceuticals) as tracers to detect abnormal conditions or diseases.
- **Endoscopic retrograde cholangiopancreatography (ERCP).** A procedure in which a catheter is introduced through an endoscope into the bile and pancreatic ducts. Injection of contrast material permits detailed x-ray of these structures. The procedure is used diagnostically as well as therapeutically to relieve obstruction or remove stones.
- **Endoscopic ultrasound.** A specially designed endoscope that incorporates an ultrasound transducer to obtain detailed images of organs in the chest and abdomen. The endoscope can be passed through the mouth or the anus. Combined with needle biopsy, the procedure can assist in diagnosis of disease and staging of cancer.
- **Full-field digital mammography (FFDM).** A procedure that combines x-ray generators and tubes used in analog screen-film mammography with a detector plate that converts the x-rays into a digital signal to help diagnose breast cancer.
- **Image-guided radiation therapy (IGRT).** An automated system that provides high-resolution x-ray images to pinpoint tumor sites, adjust patient positioning as necessary, and complete treatment within the standard treatment time slot, allowing for more effective cancer treatments.

- **Multislice spiral computed tomography (CT).** A procedure that uses x-rays and data processing to produce multiple narrow slices that can be recombined into detailed three-dimensional pictures of the internal anatomy.^{§§}
- **PET/CT scanner.** A machine that combines PET and CT capabilities in one device to provide metabolic functional information and images of physical structures in the body for diagnostics and monitoring chemotherapy, radiotherapy, and surgical planning.
- **Robotic surgery.** The 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 flow 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 include Gamma knife and Cyberknife.
- **Transplant services.** Medicare-approved organ transplant programs in heart, liver, lung, or kidney transplant. In addition, hospitals listed as bone marrow transplant centers by the AHA are recognized. Transplant services are specific to the specialty. For example, in the Cancer specialty, transplant services include bone marrow transplants, Gastroenterology includes liver transplant, Heart & Heart Surgery includes heart transplant and tissue transplant, Kidney includes kidney transplant, Pulmonology includes lung transplant, and Orthopedics includes tissue transplant.

For eligible hospitals, specialty-specific mixes of key technologies are used in computing the *U.S. News* scores (see *Section II.F. Calculation of the Index*). *Table 3* presents the complete list of key technologies considered for each specialty in 2010/11.

Volume

The volume index reflects medical and surgical discharges in indicated specialty-specific DRG groupings submitted for CMS reimbursement in 2006, 2007, and 2008 combined. The list of DRGs in each specialty is displayed in *Appendix C*. Volume is part of the structural score in

^{§§} 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.

all 12 IHQ-driven specialties. The criteria used to calculate the volume used in the structural score changed slightly this year—it now includes all cases, including transfers, that appear in MedPAR for the MS-DRGs specified that meet the minimum severity thresholds (see Appendix D); this is a slight change from the past where the rankings included all cases in the DRGs regardless of severity threshold, but excluded transfers. To reduce the effect of extreme values or outliers for some structural measures (and for the mortality outcomes measure, as will be described), in prior years, a cap was applied to each variable in several specialties until 2006, when RTI substituted an inverse logit transformation procedure (see *Trimming*).

Nurse Staffing

The nurse staffing index is a ratio that reflects the intensity of both inpatient and outpatient nursing. The numerator is the total number of on-staff registered nurses (RNs), expressed as full-time equivalents (FTEs) (e.g., two half-time nurses equal one FTE). Only nurses with an RN degree from an approved nursing school 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 index gives more weight to inpatient care, while recognizing that outpatient care represents most hospital visits. The components of this index are derived from the AHA database.

Table 3. Key Technologies by Specialty

Technology	Key Technology Index	Cancer	Diabetes & Endocrinology	Ear, Nose, & Throat	Gastroenterology	Geriatrics	Gynecology	Heart & Heart Surgery ^{***}	Kidney	Neurology & Neurosurgery	Orthopedics	Pulmonology	Urology
1. Ablation of Barrett's esophagus					●								
2. Cardiac intensive care unit								●					
3. Computer-assisted orthopedic surgery											●		
4. Diagnostic radioisotope services	●		●		●				●	●		●	●
5. Endoscopic retrograde cholangiopancreatography					●								
6. Endoscopic ultrasound					●								
7. Full-field digital mammography	●	●					●						
8. Image-guided radiation therapy	●	●	●		●		●		●	●		●	●
9. Multislice spiral CT	●							●	●			●	
10. PET/CT scanner	●	●	●				●	●	●	●		●	●
11. Robotic surgery	●	●					●	●	●				●
12. Shaped-beam radiation		●											
13. Single-photon-emission CT	●							●		●			
14. Stereotactic radiosurgery	●	●	●	●	●		●		●	●		●	●
15. Transplant services		●			●			●	●		●	●	
Total Elements	8	7	4	1	7	0	5	7	7	5	2	6	5

● Included in the index for the specialty.

^{***} While only six measures are listed, hospitals can receive up to seven points in Heart & Heart Surgery because two points are possible for transplants—one point for heart transplant services and one point for tissue transplant services.

As with volume, calculation of nurse staffing uses 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 by respondents 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 resulting high factor loadings supported inclusion of these data in Ear, Nose, & Throat; Gastroenterology; Heart & Heart Surgery; Kidney; Neurology & Neurosurgery; Orthopedics; Pulmonology; and Urology.

The trauma center indicator is derived from two variables in the AHA Annual Survey Database and is dichotomous: (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) trauma center level. To receive credit of one point, a hospital must be a Level 1 or Level 2 trauma center. The AHA defines Level 1 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

Patient Services

Created in 2004, the patient services index (previously termed patient/community services) is updated each year. Its components encompass major conveniences for patients, such as translators; advanced or especially sophisticated care; a service considered essential 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 items are taken from the AHA Annual Survey.

Brief descriptions of patient services included in the 2010/11 index follow. The definitions are taken from the AHA Annual Survey, expanded as needed.

- **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 with all items in this survey, each hospital determines whether the service is offered, based on the AHA’s description. This index differs from designation of a hospital by NIA as an Alzheimer’s Center. Such designation represents a higher order of service and is treated as a separate structural measure in Geriatrics and Neurology & Neurosurgery.
- **Arthritis treatment center.** A center specifically equipped and staffed for diagnosing and treating 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 program that provides care (including pain relief) and supportive services for the terminally ill and their families.
- **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.
- **Pain-management program.** A program that provides specialized care, medications, or therapies for the management of acute or chronic pain.
- **Palliative care.** A program that 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 that specializes in the diagnosis and treatment of geriatric medical patients.
- **Translators.** A service provided by the hospital to assist non-English–speaking patients.

- **Wound-management services.** Services for patients with chronic wounds and nonhealing wounds often resulting from diabetes, poor circulation, improper seating, and immunocompromising conditions. The goals are to progress chronic wounds through stages of healing, reduce and eliminate infections, increase physical function to minimize complications from current wounds, and prevent future chronic wounds. Wound-management services are provided on an inpatient or outpatient basis, depending on the intensity of service needed.

From seven to nine services were included in each specialty. Starting in 2008, hospitals received one point for each specified service provided on- or off-site by the hospital or by another institution through some formal arrangement. *Table 4* presents the list of patient services by specialty.

Intensivists^{†††}

Intensivists are board-certified physicians with subspecialty or fellowship training in critical-care medicine. They specialize in managing critically ill patients in hospital ICUs. Recent research indicates better outcomes are associated with the presence of intensivists.^{9,10} The intensivists measure was added in 2009. Hospitals receive one point for having at least one intensivist assigned to medical-surgical intensive care, cardiac intensive care, or other intensive care (excluding neonatal and pediatric intensive care). This measure is derived from the AHA Annual Survey.

^{†††} Variable was used in ranking calculations but is not displayed in the magazine in print or online.

Table 4. Patient Services by Specialty

Service	Cancer	Diabetes & Endocrinology	Ear, Nose, & Throat	Gastroenterology	Geriatrics	Gynecology	Heart & Heart Surgery	Kidney	Neurology & Neurosurgery	Orthopedics	Pulmonology	Urology
1. Alzheimer's center					●				●			
2. Arthritis treatment center					●					●		
3. Cardiac rehabilitation							●					
4. Fertility clinic						●						●
5. Genetic testing/counseling	●	●	●	●		●		●	●		●	●
6. Hospice	●	●	●	●	●	●	●	●	●	●	●	●
7. Infection isolation room	●	●	●	●		●		●	●		●	●
8. Pain-management program	●	●	●	●	●	●	●	●	●	●	●	●
9. Palliative care	●	●	●	●	●	●	●	●	●	●	●	●
10. Patient-controlled analgesia	●	●	●	●	●	●	●	●	●	●	●	●
11. Psychiatry-geriatric service					●							
12. Translators	●	●	●	●	●	●	●	●	●	●	●	●
13. Wound-management services	●	●	●	●	●	●	●	●	●	●	●	●
Total Elements	8	8	8	8	9	9	7	8	9	7	8	9

● Included in the index for the specialty.

External Organizations

Additional structural measures are based on data provided by sources and organizations besides AHA and CMS.

National Cancer Institute Cancer Center

This indicator was added in 2002. NCI, an arm of the National Institutes of Health (NIH), is the principal federal agency tasked with 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. Such a center is committed to advancing cancer research and, ultimately, reducing cancer incidence and increasing the effectiveness of treatment.¹¹

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, also conducts clinical (“bench to bedside”) research; (3) comprehensive cancer center, the highest level, adds prevention research, community outreach, and service activities.¹¹

Hospitals designated as NCI clinical or comprehensive cancer centers as of March 1, 2010/11, were awarded one point. NCI updates the list throughout the year. The current list is provided in *Appendix C*.

Nurse Magnet

The Nurse Magnet measure, added to all specialties in 2004, is a formal designation by the Magnet Recognition Program[®]. The Magnet Recognition Program was developed by the American Nurses Credentialing Center (ANCC) to recognize healthcare organizations that meet certain quality indicators on specific standards of nursing excellence. The list of Magnet facilities is updated throughout the year as hospitals apply for designation and redesignation status. Hospitals accorded status by the Magnet Recognition Program as of March 1, 2010, received credit. The current list of Nurse Magnet hospitals can be accessed at <http://www.nursecredentialing.org/MagnetOrg/searchmagnet.cfm>.

Epilepsy Center

This index was added to Neurology & Neurosurgery in 2004. One point was awarded to hospitals designated by the NAEC as Level 4 epilepsy centers as of March 1, 2010. 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.¹² The list of hospitals is updated throughout the year. The current list can be accessed at <http://www.naecepilepsy.org/find.htm>.

NIA Alzheimer's Center^{###}

NIA Alzheimer's center certification was added to Geriatrics in 2007 and to Neurology & Neurosurgery in 2008. Evaluation and certification are conducted by the National Institute on Aging, an arm of the NIH that translates research advances into improved diagnosis and care of Alzheimer's disease and conducts 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 March 1, 2010, received one point. Hospitals listed as affiliated centers did not receive credit. The current list of NIA Alzheimer's centers can be accessed at www.nia.nih.gov/Alzheimers/ResearchInformation/ResearchCenters/.

FACT Credit

FACT accreditation was added to Cancer this year. This designation indicates that as of March 1, 2010, a hospital met standards set by FACT for transplanting bone marrow or other cellular tissue to treat cancer. One point was given if accreditation was only for autologous transplants, in which a patient's own cells are removed and then returned following radiation therapy. Two points given if accreditation was for allogeneic transplants, in which cells are donated by another person (allowing for a greater number and more kinds of cell transplants) or for both autologous and allogeneic transplantation. The current list of FACT-accredited hospitals can be accessed at www.factwebsite.org/.

Trimming

Prior to 2006, distributions for the volume and nurse staffing indexes 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. For the Cancer specialty, for example, volume 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.

^{###} Variable was used in ranking calculations but is not displayed in the magazine in print.

The trimming process substituted 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.

Weighting

To combine the structural variables from the AHA Annual Survey Database and other external databases, the elements were 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 1 year to the next. For each specialty, the factor weights have been converted into percentages to represent what percentage of the structural score each component is worth. *Table 5* provides the percentages of the structural score assigned to each element for 2010/11.

C. Outcomes

Considerable evidence shows a positive correlation between quality of care and better-than-average risk-adjusted mortality.¹³⁻²² Based on this evidence, we incorporate mortality as an outcomes measure. We use risk-adjustment methods to take into account volume of cases and severity of illness and calculate a specialty-specific risk-adjusted mortality rate as an outcomes measure for the IHQ.

A patient's medical conditions (both the principal condition for which the patient is being treated, as well as other comorbid conditions the patient may have) strongly affect the chance that the patient may die while in the hospital. For a given level of quality of care, therefore, using raw mortality rates would unfairly penalize hospitals that treat patients who have a high mortality risk. In principle, we would like to compare the mortality rate of the same set of patients in all hospitals in the Best Hospitals universe. This hypothetical is infeasible because hospitals vary in the mix of conditions, both principal and comorbid, for which they treat their patients. Instead, we try to construct an "expected" mortality rate equal to what the hospital's mortality rate would be were patients sharing the same diagnoses to have the mortality risk of the Best Hospitals

universe instead of the hospital’s own mortality risk for those patients. Hospitals with observed mortality rates below the expected, case-mix-adjusted rate would, on this metric, be gauged to have higher-than-average quality, and those with observed mortality rates above the expected rate would be gauged to have lower-than-average quality.

Table 5. Elements with Percentage (%) of Structural Score, by Specialty

Item	Cancer	Diabetes & Endocrinology	Ear, Nose, & Throat	Gastroenterology	Geriatrics	Gynecology	Heart & Heart Surgery	Kidney	Neurology & Neurosurgery	Orthopedics	Pulmonology	Urology
Epilepsy center									11.8			
FACT credit	14.9											
Intensivists	9.6	16.2	14.0	13.9	20.4	15.0	13.8	13.3	10.4	14.0	14.5	13.3
Key technologies	14.6	21.1	15.1	18.5		20.5	18.5	19.0	13.2	15.9	19.0	17.7
NCI cancer center	14.3											
NIA Alzheimer’s center					16.2				9.5			
Nurse Magnet hospital	10.2	14.0	12.9	12.1	20.6	14.4	13.2	12.1	9.6	13.5	12.1	12.2
Nurse staffing	10.7	13.0	12.6	11.7	20.2	14.1	12.5	11.2	9.5	12.6	11.0	11.9
Patient services	11.6	21.0	15.7	16.5	22.5	19.1	16.0	17.0	13.5	14.8	18.4	17.0
Trauma center			13.7	13.1			13.5	12.8	10.3	13.9	13.5	12.7
Volume	14.2	14.7	16.1	14.1		17.1	12.6	14.5	12.3	15.3	11.6	15.1

Expected mortality rates were provided by the Healthcare Division of Thomson Reuters using the pooled 2006, 2007, and 2008 MedPAR data set, the latest available for analysis. MedPAR data are derived from reimbursement claims submitted by hospitals to Medicare. The MedPAR file contains information on all Medicare patients’ diagnoses, procedures, lengths of stay in the hospital, and discharge status. These data were “grouped” using the 3M Health Information Systems APR-DRGs and MS Grouper software version 25.0, which aggregates tens of thousands of possible diagnosis and procedure combinations into roughly 1,000 clinically

coherent groups. These groups, defined by the APR-DRGs, severity of illness levels, and mortality risk levels, take into account the severity of the patient's illness, risk of death, and hospital resources used.^{6, 23-24}

The MedPAR record includes the CMS DRG assigned to each case for Medicare payment. Each MedPAR record is based on the patient's diagnosis, surgery (or other medical procedure), age, sex, and discharge destination.²⁵ DRGs classify the more than 10,000 *International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM)* diagnosis codes into more meaningful patient groups based on clinical and cost similarity. The ICD-9-CM is the official system used by the National Center for Health Statistics and CMS to assign codes to diagnoses and procedures associated with hospital utilization in the United States.²⁶

In FY2008, the Medicare program adopted the MS-DRG system to better recognize differences in severity of illness and utilization. To accommodate the presence of DRG codes in the 2006 and 2007 data, and the presence of MS-DRG codes in the 2008 data, we ran the 3M Health Information Systems MS Grouper software with Medicare Code Editor software version 25.0 on all 3 years of data included in the analyses. By applying MS-DRGs to all records in the analyses, it is possible to assign MedPAR records to specialties using a uniform set of criteria across years of data. Version 25.0 of the software was developed for FY2008. To run this software on older years of data, we mapped ICD-9 codes forward to reflect any revisions between 2006 and 2008 so that all codes were compatible with the Version 25.0 of the software.

Because MS-DRGs are generally relatively homogeneous groups of diagnoses and procedures, we use MS-DRGs as the basic unit for defining cases to be included in each specialty's mortality and volume measures. The MS-DRG groupings developed this year are based on the DRG groupings used in previous years of the study. We reviewed the CMS DRG to CMS MS-DRG crosswalk available from the CMS website^{§§§} to identify all of the different mappings of DRGs to MS-DRGs. Upon reviewing the APR-DRG threshold assignments for CMS DRGs in the 2009 Methodology Report and examining how this mapped to the MS-DRGs, we assigned thresholds to the MS-DRGs based on the assumption that the MS-DRG system is a more refined measure of severity (see *Appendix D* for the MS-DRGs used for 2010/11). The MS-DRG groupings are applied to each year of data included in the analysis.

For the purposes of the Best Hospitals rankings, only MS-DRGs that represent challenging and critical procedures are included. For example, tonsillectomies are too common

^{§§§} Available at: <http://www.cms.hhs.gov/acuteinpatientpps/ffd/ItemDetail.asp?ItemID=CMS1198678>

to be included in the MS-DRG groupings for Ear, Nose, & Throat. The process used to identify MS-DRGs is outlined below.****

1. Exclude MS-DRGs for very-low-intensity cases.
2. Exclude MS-DRGs not generally appropriate for a Medicare or elderly population.
 - Evaluate excluded and included MS-DRGs based on their embedded diagnoses.
 - Refine the excluded and included categorizations based on the within-MS-DRG variation in diagnostic complexity.
 - Evaluate MS-DRGs not assigned to a specific specialty to determine whether they would be better categorized more specifically.
 - Perform a final evaluation for clinical consistency.
3. Attribute MS-DRGs to more than one specialty if they are commonly treated by physicians in multiple specialties or assign specific diagnoses or procedures to different specialties based on principal diagnosis or procedures.
4. Include the APR-DRG severity measure to further refine cases assigned to specialties to take into account severity of illness, as measured by comorbidities and interaction with the principal diagnosis.

Mortality Methodology

Changes have been introduced over the years to address specific issues in mortality calculation. These changes have addressed either specialty-specific issues (such as the creation of a Geriatrics population) or more general issues that can affect mortality outcomes (such as exclusion of transfers, switching from inpatient to 30-day mortality). Brief descriptions of these special considerations are provided below.

1. Definition of the Geriatrics patient population. Rankings in Geriatrics were reintroduced in 2007, with a new approach for identifying the target population and accounting for their mortality rates. 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. Therefore, the Geriatrics specialty includes all DRGs used in the specialty rankings that are generally appropriate for a Medicare or elderly population. The sample for the mortality analysis for the Geriatrics specialty is limited to patients 75 years of age and older. This method allowed

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

for more accurate reflection of the quality of inpatient hospital care received by older patients across different types of diagnoses. The basic mortality analyses of the data for this group followed the same procedures as for the other IHQ-driven specialties.

2. Exclusion of transfers from mortality calculations. Starting in 2007, all patient transfers into the hospital were excluded from mortality calculations. This was done to help avoid mortality rates that might be inflated by transfers of severely ill patients (relative to their DRG and APR-DRG severity level) to tertiary care hospitals. Research has shown that because of their location, some tertiary care hospitals are particularly vulnerable to “dumping.”²⁷ This change in methodology means that patients legitimately transferred for appropriate care are lost, but it is more important to ensure that each hospital’s mortality numbers are not affected by transfers of very sick patients from hospitals unable to properly care for them. Transfers were identified using the claim source of inpatient admission variable on the MedPAR files. Variable values of “4” or “A” were used to identify transfers from acute hospitals or critical access hospitals. Note that the use of value “A” for transfer from a critical access hospital has not been used in previous rankings and is new to the 2010/11 project. This revision has been included to more accurately identify transfers from both acute and critical access hospitals.

3. Adjustment for hospitals in the top or bottom quartile of transfer-in rates. Based on review of hospital-level transfer data, we identified several “outlier” hospitals with respect to the proportion of cases labeled as transfers in to the facility. These cases may be due to misclassification or coding error, but the presence of potentially misclassified transfers reduces confidence in the observed “transfer-free” mortality measure. Consistent with the adjustments made for mortality rates for low-volume hospitals, we define the top and bottom quartiles of transfer-in rates as being extreme and appropriate for adjustment.

For hospitals with transfer-in rates in the top quartile of transfer-in rates, we adjust the observed transfer-free mortality rate by averaging the all-case mortality rate with a weight based on our confidence in the observed transfer-in rate. The weight placed on the all-case mortality rate will vary from 0 to 0.5, with each one-percentage point increase in the transfer-in rate percentile increasing the weight by 2 percentage points. The maximum weight on the all-case mortality is 0.5 so that, for most hospitals, the adjusted mortality rate has the observed transfer-free mortality rate as a majority component.

For hospitals with a transfer-in rate in the bottom quartile of transfer-in rates, we use the specialty average transfer-free mortality rate as the blending rate. We apply the same algorithm as for the top quartile transfer-in hospitals. However, to avoid unduly harming hospitals with

lower-than-average mortality rates (or unduly helping those with above-average mortality rates), the maximum weight on the specialty average is 0.25.

4. Change from inpatient to 30-day mortality. Prior to 2007, the rankings consistently defined mortality as inpatient deaths (i.e., those occurring from admission to discharge). As inpatient hospital length of stay has decreased, inpatient mortality has generally decreased as well. Mortality over longer periods of time posthospital discharge, however, has not declined markedly.²⁸ Quality of care provided in the inpatient hospital setting can have spillover effects on the patient's health and functional status for many weeks following discharge. The Agency for Healthcare Research and Quality (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.”²⁹

Thirty-day mortality may reflect factors unrelated to care provided in the hospital (e.g., quality of postacute care, lack of patient compliance with treatment regimen). However, 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.

To address these concerns, the 2007 rankings introduced 30-day mortality (i.e., 30 days postadmission) for all specialties except Cancer. This exception was out of concern that 30-day mortality might penalize hospitals that see cancer patients at the end of life—thus, artificially inflating their mortality numbers. After further review of available data and research, however, we concluded that 30-day mortality should be the consistent standard. Starting in 2008, 30-day mortality is used for all IHQ-driven specialties.

5. Adjustment of MedPAR data to improve representativeness. The MedPAR data represent the frequency of diagnoses among Medicare beneficiaries, and these data are the source of mortality and volume calculations. However, the distribution of conditions and procedures among Medicare patients differs somewhat from the distribution among all patients treated at U.S. hospitals. By relying on the distribution of diagnoses observed in the MedPAR data alone, the rankings would be somewhat biased toward providing readers with information on outcomes for Medicare patients, not for all patients needing care in the particular specialty.

In order to address this discrepancy, starting in 2007, weights were applied to the MedPAR data based on the relative over- or underrepresentation of the DRGs among all patients. Ideally, we would use data on all patients to estimate case-mix-adjusted mortality outcomes.

Unfortunately, no comprehensive national database of all-payer claims data exists. As a substitute, we instead used data from the AHRQ Healthcare Cost and Utilization Project (HCUP) to produce adjustment factors (i.e., weights) for each diagnosis. 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.³⁰ For the 2010/11 rankings, weights were calculated based on the 2006 and 2007 HCUP National Inpatient Sample data sets. The MS-DRG-specific weights are equal to the relative frequency of the MS-DRG among all patients nationally versus among Medicare patients, applying the case restrictions described above. 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 years and older. The weights for each MS-DRG are shown in *Appendix D*.

Mortality Scoring

The risk-adjusted mortality ratios (i.e., the mortality index in the rankings tables) were computed by dividing the observed transfer-free mortality rate (including the adjustments for hospitals in the top or bottom quartile of transfer-in rates outlined above) by the expected transfer-free mortality rate after adjusting for case complexity using APR-DRG severity of illness and risk of mortality. The expected transfer-free 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 for each specialty. Mortality ratios greater than 1 suggest that more patients died than expected; mortality ratios less than 1 suggest that fewer died than expected.

Only the most recent 3-year mortality score is listed in the rankings tables. However, for calculating the IHQ, we transformed mortality ratios into mortality scores using 3 years of data. 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 use 3 years of pooled data to compute the mortality scores. As with volume and nurse staffing in the structural component, we transformed scores to eliminate the influence of extreme 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 years of available data had an inordinately low or high mortality score because of the low frequency 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 are not confident that the mortality numbers for this hospital reflect a real measure of outcomes rather than an extreme value based on too few cases.

To account for the greater uncertainty inherent in mortality rates based on low volume, we recoded mortality for hospitals not meeting a specialty-specific volume threshold. 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 percentile.^{††††} This recoding helped reduce the effect of mortality outliers associated with low volume.

D. Process

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

To collect these nominations, a survey of board-certified physicians across the country is conducted each year. For 2010/11, we pooled nominations for the three most recent surveys (2008, 2009, and 2010) 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 2010 Survey

The 2010^{****} survey sample consisted of 3,200 board-certified physicians selected from the AMA Physician Masterfile. From within the AMA Masterfile of 820,000 physicians, we selected a target population of 271,984 board-certified physicians who met defined eligibility requirements (see below). Stratifying by census region and by specialty within region, we

^{††††} 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 that this was an appropriate absolute minimum for the reliability of mortality data.

^{****} For information on the 2008 and 2009 samples, please see the respective methodology reports at www.rti.org/besthospitals.

selected a probability (i.e., random) sample of 200 physicians (50 from each region) from each of the 16 specialty areas. The final sample included federal and nonfederal medical and osteopathic physicians practicing in all 50 states and the District of Columbia.

Eligibility Requirements

To define an appropriate probability sample of physicians who represent the 16 specialty groupings, we linked each of the specialties to one or more relevant specialties from the ABMS. Next, we identified a number of subspecialties within each medical specialty in the rankings. Physicians who designated a primary specialty in one of the specialties (or affiliated subspecialties) were eligible for the survey. **Table 6** displays the association among Best Hospitals specialties, ABMS subspecialties, and corresponding member boards.

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 (www.census.gov/geo/www/us_regdiv.pdf). Equal-size groups permitted easier comparison of differences among regions and specialties.

Survey Procedure

Materials

For 2008, 2009, and 2010, 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 **Appendices A** and **B**). 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).

Table 6. Physician Sample Mapping

Best Hospitals Specialty	American Board of	AMA Subspecialty
Cancer	Internal Medicine	Hematology
		Hematology/Oncology
		Medical Oncology
		Surgical Oncology
		Musculoskeletal Oncology
Obstetrics & Gynecology	Radiology	Gynecologic Oncology
		Radiation Oncology
Diabetes & Endocrinology	Internal Medicine	Diabetes & Endocrinology
Ear, Nose, & Throat	Otolaryngology	Diabetes
		Otolaryngology
		Plastic–Head and Neck
Gastroenterology	Internal Medicine	Otology/Neurotology
		Gastroenterology
		Hepatology
		Proctology
		Abdominal Surgery
Colon and Rectal Surgery	Internal Medicine	Colon and Rectal Surgery
		Geriatrics
Geriatrics	Internal Medicine	Geriatrics
Gynecology	Obstetrics & Gynecology	Gynecology
		Obstetrics
		Obstetrics and Gynecology
		Maternal and Fetal Medicine
Heart & Heart Surgery	Internal Medicine	Cardiovascular Diseases
		Interventional Cardiology
		Cardiac Electrophysiology
	Surgery	Thoracic Surgery
Kidney	Internal Medicine	Nephrology
Neurology & Neurosurgery	Psychiatry & Neurology	Neurology
	Neurological Surgery	Neurology/Diagnostic Radiology
Ophthalmology	Ophthalmology	Neurological Surgery
		Ophthalmology
Orthopedics	Orthopedic Surgery	Orthopedic Surgery
		Sports Medicine–Orthopedics
		Hand Surgery
		Adult Reconstructive Orthopedics
		Spine Surgery
		Orthopedic Trauma Surgery
Psychiatry	Psychiatry & Neurology	Psychiatry
Rehabilitation	Physical Medicine & Rehabilitation	Physical Medicine & Rehabilitation (PMR)
		Spinal Cord Injury
		Sports Medicine–PMR
		Sports Medicine
Pulmonology	Internal Medicine	Pulmonary Diseases
Rheumatology	Internal Medicine	Rheumatology
Urology	Urology	Urological Surgery

Mailings

The physician survey mailings were conducted in stages over several weeks at the beginning of 2010. The initial mailing was sent via U.S. Postal Service (USPS) First Class metered mail. Two weeks after the initial survey mailing, a replacement survey and new cover letter were sent to the sampled physicians as a reminder. Two weeks following the reminder, 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 either by USPS Priority or overnight via Federal Express to the remaining nonresponders; the packet included the questionnaire, a cover letter, and a postage-paid return envelope. (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 mail	Full physician sample	January 5, 2010
2nd copy of physician survey	USPS, First Class mail	Sample members who did not respond	January 21, 2010
3rd copy of physician survey	USPS, Priority mail	Sample members who did not respond	February 4, 2010
4th copy of physician survey	USPS, Priority mail, or Federal Express	Sample members who did not respond	February 19, 2010

Response Rates

Table 8 shows the response rate by specialty for the 3 years of survey data used in the 2010/11 rankings. The average response rate for the 3 years of data collection was 44.2%, using American Association for Public Opinion Research (AAPOR) Standard Response Rate 6,^{§§§§} which treats undeliverables as ineligible cases. **Table 9** shows the response rate for 2010 by region and specialty.

^{§§§§} Standard definitions are located on the Web at www.aapor.org/uploads/Standard_Definitions_04_08_Final.pdf.

Table 8. Yearly Response Rate by Specialty (2008–2010)

Specialty	2008		2008		2010		3-Year Total	
	n	%	n	%	n	%	n	%
Cancer	73	38.6	79	41.1	81	41.8	233	40.5
Diabetes & Endocrinology	61	33.0	92	47.2	86	44.8	239	41.8
Ear, Nose, & Throat	83	45.9	115	58.4	115	58.7	313	54.5
Gastroenterology	76	39.8	108	55.4	97	49.2	281	48.2
Geriatrics	56	29.0	101	52.6	99	52.1	256	44.5
Gynecology	67	38.6	82	42.3	91	48.1	240	43.1
Heart & Heart Surgery	78	40.4	83	42.6	102	53.4	263	45.4
Kidney	60	31.4	80	41.9	76	39.8	216	37.7
Neurology & Neurosurgery	77	43.3	104	53.3	83	43.9	264	47
Ophthalmology	92	47.2	105	54.1	119	60.4	316	53.9
Orthopedics	52	27.5	85	43.1	87	44.2	224	38.4
Psychiatry	48	27.7	73	37.8	83	43.5	204	36.6
Rehabilitation	96	49.2	105	54.7	103	53.1	304	52.3
Pulmonology	67	35.4	86	44.1	64	33.3	217	37.7
Rheumatology	78	41.1	93	48.9	98	51.9	269	47.3
Urology	95	48.7	104	50.8	100	52.6	299	50.7
Overall Response Rate^a	1,159	38.5	1,491	48.0	1484	48.2	4134	45

^aThe overall response rate for each year was calculated using AAPOR Standard Response Rate 6.

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 9. Response Rates by Region and Specialty, 2010

Specialty	West		Northeast		South		Midwest	
	n	%	n	%	n	%	n	%
Cancer	26	53.1	22	45.8	16	32.7	17	35.4
Diabetes & Endocrinology	22	44.9	22	45.8	19	41.3	23	46.9
Ear, Nose, & Throat	29	59.2	39	78.0	26	52.0	21	44.7
Gastroenterology	26	52.0	26	53.1	21	42.9	24	49.0
Geriatrics	26	54.2	27	58.7	25	52.1	21	43.8
Gynecology	19	41.3	29	59.2	26	54.2	17	37.0
Heart & Heart Surgery	31	66.0	24	50.0	18	36.7	29	61.7
Kidney	25	52.1	16	32.7	17	37.0	18	37.5
Neurology & Neurosurgery	21	44.7	21	43.8	23	50.0	18	37.5
Ophthalmology	25	50.0	32	64.0	29	59.2	33	68.8
Orthopedics	22	44.9	20	40.0	25	51.0	20	40.8
Psychiatry	21	44.7	20	40.8	21	43.8	21	44.7
Rehabilitation	29	59.2	27	56.3	26	54.2	21	42.9
Pulmonology	18	37.5	17	34.7	17	34.7	12	26.1
Rheumatology	28	58.3	22	47.8	26	52.0	22	48.9
Urology	27	56.3	28	60.9	23	47.9	22	45.8
Overall Response Rate^a	395	51.2	392	50.7	358	46.4	339	44.5

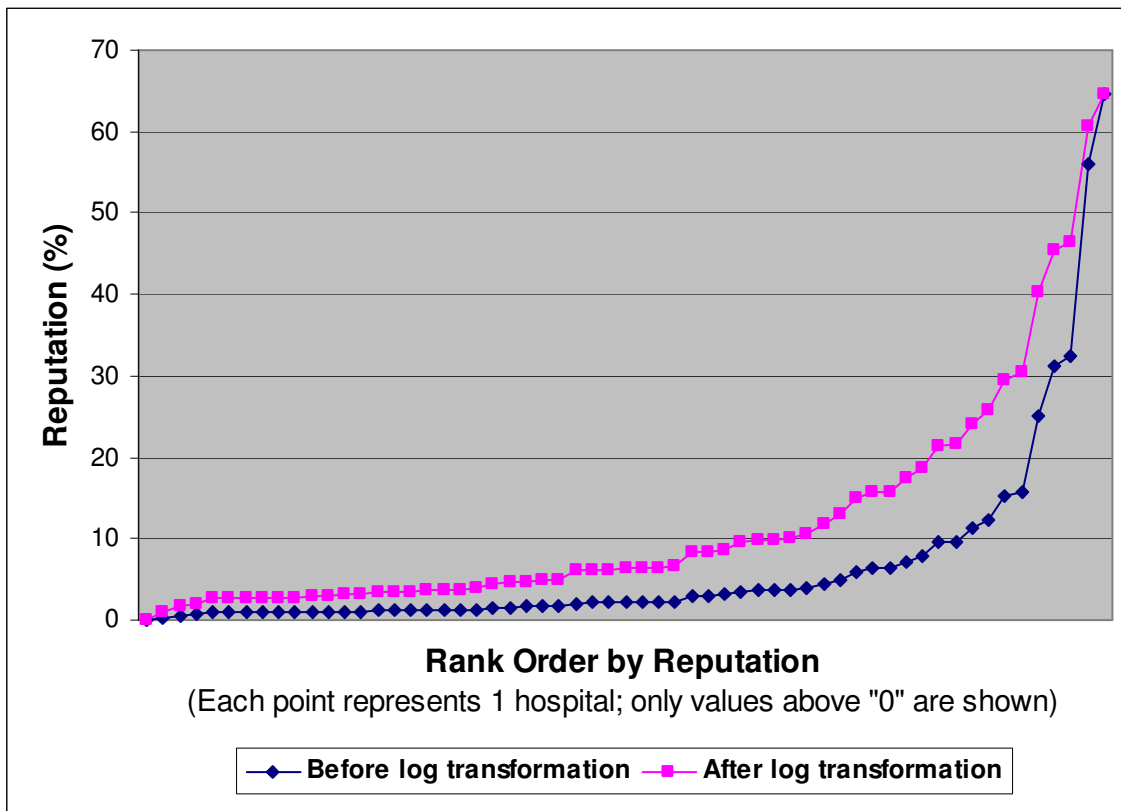
^a The overall response rate includes in the numerator all physicians who returned a questionnaire with at least one item completed; it subtracts ineligible cases from the denominator.

Log Transformation

For 2010/11, we added a step to the analysis of the reputation data obtained from physicians' hospital nominations. By its nature, a survey that solicits recommendations for "best hospitals" will result in data that is not normally distributed—relatively few hospitals will receive even one "best" recommendation. Of the hospitals recommended, moreover, a small number will receive many nominations, producing a highly skewed distribution. Since the other ranking components, such as structural measures and mortality, are not skewed to this degree, reputation can have a somewhat larger than intended impact on the final rankings. To address

this issue, we implemented a log transformation of the reputation data. The transformation reshapes the distribution, reducing the skew (flattening the distribution) of the reputation data. In this way, the distribution of reputation data more closely matches those of the other components in the rankings. **Figure 2** demonstrates the impact of this step on reputation data, using a set of simulated values. As is evident, once the log transformation has been applied, the relative position of each hospital on this variable remains the same but the distance between the values is reduced. Due to the reduced variance, the impact of the reputation score on hospitals' final standing in the rankings is slightly diminished. As with the other components, the reputation data is standardized before being combined in the Index of Hospital Quality.

Figure 2. Comparison of Reputation Data Prior to and After Log Transformation



E. Patient Safety Index

An important aspect of both outcomes and reputation is a patient's safety. It is a critical component in evaluating and determining the best hospitals. For 2009, *U.S. News* introduced the patient safety index, a new index score addressing patient safety in the Best Hospitals rankings.

Background

Prior to the 2009 rankings, the only outcome measure used to determine the rankings was mortality. While this obviously is an important outcome measure, other adverse events befall hospitalized patients that may not result in death. In its 2000 report *To Err is Human*,³¹ the Institute of Medicine (IOM) identified three domains of quality: (1) safety, (2) practice consistent with current medical knowledge, and (3) customization of care to the patient's values and expectations. The first of these domains, patient safety, is defined by the IOM as "freedom from accidental injury." Preventable adverse events have been identified by the IOM as a leading cause of death and injury and the principal challenge to patients' safety. Hospitals with high rates of adverse events are unlikely to be providing high-quality care to all of their patients.

In 2003, AHRQ released the first version of its Patient Safety Indicators (PSIs), a set of 20 provider-level and 7 area-level indicators of potentially adverse events.³² As described below, we use a subset of these indicators to identify adverse outcomes likely associated with less-than-desirable quality of care.

Previous research indicates that PSIs are not strongly associated with other outcome and structural quality measures.³³⁻³⁵ However, we believe that PSIs incorporate important information separate from other measures used in the IHQ. Including PSIs in addition to mortality allows us to measure aspects of quality of care where there may be harm to patients and increased service utilization (for example, to correct a harm), but where the patient may not die. Hospital stays with patient safety events have been found to be more costly and longer in length than stays without patient safety events.³⁶⁻⁴⁰ Patient safety events have also been associated with higher hospital 90-day readmission rates compared to patients without safety events.³⁶

Development of the Patient Safety Index

The patient safety index was developed by RTI using the framework described in the *Patient Safety Quality Indicators Composite Measure Workshop Final Report*,⁴¹ with some project-specific modifications. This report summarizes the steps to take to construct an index to be reported in the annual *National Healthcare Quality Report*⁴² and *National Healthcare Disparities Report*,⁴³ part of the HCUP initiative. The composite measure final report's framework divides the index creation process into three basic components:

1. Choosing index components,

2. Weighting the index components, and
3. Adjusting hospital-specific PSIs to account for measurement variance.

Choosing Index Components

AHRQ's PSI composite index includes the 11 PSIs checked in the second column of **Table 10**. These PSIs were chosen based on codes likely to be reported, not already part of existing composites, and not related to obstetric care. The Best Hospitals patient safety index includes only five of the constituents of AHRQ's PSI index, as indicated in the third column of Table 10. The five chosen were selected because they have already been endorsed by the National Quality Forum (NQF) or are in the process of becoming endorsed. The patient safety index includes two additional PSIs. PSIs 02 and 04 (Death in Low-Mortality DRGs and Failure to Rescue, respectively) were included because these PSIs identify deaths that are generally deemed to be avoidable. Additional indicators may be added to the patient safety index in future years, as the measures become more refined.

Table 10. Comparison of the AHRQ PSI Index and the Best Hospitals Patient Safety Index

PSI	Included in the AHRQ PSI Composite Index	Included in the Best Hospitals Patient Safety Index
PSI 02: Death in Low-Mortality DRGs		✓
PSI 03: Decubitus Ulcer	✓	
PSI 04: Failure to Rescue		✓
PSI 06: Iatrogenic Pneumothorax	✓	✓
PSI 07: Selected Infection Due to Medical Care	✓	
PSI 08: Postoperative Hip Fracture	✓	
PSI 09: Postoperative Hemorrhage or Hematoma	✓	✓
PSI 10: Postoperative Physiological and Metabolic Derangements	✓	
PSI 11: Postoperative Respiratory Failure	✓	✓
PSI 12: Postoperative Pulmonary Embolism or Deep Vein Thrombosis	✓	
PSI 13: Postoperative Sepsis	✓	
PSI 14: Postoperative Wound Dehiscence	✓	✓
PSI 15: Accidental Puncture or Laceration	✓	✓

Weighting the Index Components

An index is generally a weighted sum or mean of its components. The Best Hospitals rankings considered a patient safety index that weighted each PSI equally, as well as one that weighted each PSI by the population at risk of each indicator. Weights equal to the population at risk make the PSI index analogous to the mortality measure—a hospital’s observed-versus-expected mortality rate is a weighted average of the observed-versus-expected mortality rates by MS-DRG, with weights equal to the proportion of patients in each MS-DRG. The weights used in the Best Hospitals patient safety index are shown in *Table 11*.

Table 11. Weights for the PSI Components of the Best Hospitals Patient Safety Index

PSI	Weight in the Best Hospitals Patient Safety Index
PSI 02: Death in Low-Mortality DRGs	7.6%
PSI 04: Failure to Rescue	0.2%
PSI 06: Iatrogenic Pneumothorax	38.6%
PSI 09: Postoperative Hemorrhage or Hematoma	8.4%
PSI 11: Postoperative Respiratory Failure	3.4%
PSI 14: Postoperative Wound Dehiscence	1.8%
PSI 15: Accidental Puncture or Laceration	40.1%

Adjusting Hospital-Specific PSIs to Account for PSI Measurement Variance

Similar to the method used in the AHRQ index, the Best Hospitals patient safety index incorporates a feature that adjusts for differences among the PSIs in their reliability, or the variation in PSIs that appears due to random variation instead of real quality differences. Each PSI is adjusted based on the observed variation (specifically, the standard error of the mean) in the PSI within each hospital. To make the adjustment, the PSI value used is set equal to a weighted average of the hospital’s own value and that of the population. The greater the within-hospital variation or the fewer the number of cases, the greater the weight on the population value and less on the hospital’s own value. Thus, the less reliably estimated a particular PSI is for a given hospital, relative to the other PSIs, the less weight is put on that PSI for that hospital.

Controlling for the Influence of Hospital Case-Mix on Measured PSIs

Patients with complex medical conditions require more complex care. Assuming the same level of quality with every “touch” from a hospital staff person, the more complex the care, the greater the likelihood that an error will be made. As a result, comparing patient safety index values of a hospital with a complex case-mix to one with a simple case-mix may not be fair; a hospital with a simple case-mix might have worse underlying quality but a somewhat better-seeming patient safety index than a hospital with a complex case-mix. To control for this possibility, and to conduct a more apples-to-apples comparison, we control for the effect of case-mix on the index by estimating a simple linear regression of the patient safety index, computed as described above, on the Medicare case-mix index—the average MS-DRG weight of the Medicare patients treated in each hospital. The adjusted patient safety index used in the ranking is the actual index less the value predicted in the linear regression. Negative values of the adjusted patient safety index indicate fewer than expected adverse events (higher quality); positive values indicate greater than expected adverse events (lower quality). For purposes of scoring, the PSI index is coded into quintiles with 1 indicating lowest and 5 highest quality. Means and several percentile points for the distributions of unadjusted and adjusted patient safety indexes are shown in *Table 12*.

Table 12. Summary Statistics for Case Mix-Adjusted and Unadjusted Patient Safety Index, by Index Quintile Score

Index Quintile Score	Index	Mean	Minimum	10th Percentile	Median	90th Percentile	Maximum
1	Unadjusted	1.40	0.21	0.90	1.45	1.86	2.05
	Adjusted	1.32	1.10	1.13	1.28	1.54	1.98
2	Unadjusted	0.95	0.12	0.54	0.95	1.34	1.99
	Adjusted	0.98	0.88	0.90	0.98	1.07	1.09
3	Unadjusted	0.76	0.15	0.41	0.75	1.12	1.96
	Adjusted	0.81	0.75	0.76	0.81	0.87	0.88
4	Unadjusted	0.62	0.11	0.32	0.59	0.95	1.51
	Adjusted	0.67	0.59	0.61	0.67	0.73	0.75
5	Unadjusted	0.44	0.10	0.19	0.40	0.76	1.88
	Adjusted	0.40	0.10	0.19	0.44	0.56	0.59
Total	Unadjusted	0.84	0.10	0.30	0.77	1.51	2.05
	Adjusted	0.84	0.10	0.44	0.81	1.28	1.98

The data source for the Best Hospitals Patient Safety Index is the same 3-year sample from the MedPAR dataset that is used for volume and mortality analyses in the Best Hospitals rankings. For the 2010/11 rankings, the MedPAR files used were the Federal fiscal year 2006, 2007, and 2008 files. Data were analyzed using the AHRQ PSI grouper software version 3.2.

F. Calculation of the Index of Hospital Quality

Prior to 2009, the rankings for the IHQ-driven specialties—structure, process, and outcomes—each received one-third of the weight. Starting in 2009, the weights were altered slightly to adjust for the inclusion of the patient safety index. The patient safety index is worth 5% of the total score. Conceptually, it is tied to the outcomes and process components of the rankings. As a result, its weight has been evenly distributed between the outcomes and process components, such that each of these components has a total weight of 32.5% and structure has a weight of 30%. 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 shown in Equation (1). Please note that this formula is illustrative. It cannot be used directly to calculate a score for an individual hospital because standardized data values are adjusted according to the distribution of measures across all eligible hospitals.

The IHQ score can be thought of as a simple weighted sum of structural, process, and outcomes 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.

$$IHQ_i = \{.3[(S_{1i} \times F_{1i}) + (S_{2i} \times F_{2i}) + \dots + (S_{ni} \times F_{ni})] + .325[(P_i \times \sum_{1i}^{ni} F)] + .325[(M_i \times \sum_{1i}^{ni} F)] + .05PS_i\}, \quad (1)$$

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 ;

M_i = standardized mortality score (OUTCOMES) for specialty i ; and

PS_i = standardized patient safety index score for specialty i .

The general formula for deriving the IHQ scores has remained unchanged since its creation in 1993. For presentation purposes, raw IHQ scores are transformed to a 100-point scale and the top hospital in each specialty receives 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 (SDs) of the IHQ for the 12 IHQ-driven specialties are listed in *Table 13*. These data illustrate that the spread of IHQ scores produces a very small number of hospitals that are 3 and 4 SDs above the mean. Horizontal lines in the 12 specialty lists in *Appendix E* indicate cutoff points of 3 and 4 SDs above the mean.

Table 13. Means and Standard Deviations for the IHQ-Driven Specialties

Specialty	Mean	SD	3 SDs Above the Mean	4 SDs Above the Mean
Cancer	15.95	9.05	43.09	52.14
Ear, Nose, & Throat	26.18	7.22	47.84	55.06
Diabetes & Endocrinology	26.93	7.07	48.15	55.22
Gastroenterology	19.06	6.65	39.00	45.65
Geriatrics	17.77	8.11	42.11	50.23
Gynecology	33.87	7.65	56.82	64.46
Heart & Heart Surgery	19.81	9.36	47.90	57.26
Kidney	21.76	8.58	47.50	56.08
Neurology & Neurosurgery	20.15	7.94	43.98	51.92
Orthopedics	16.77	6.85	37.33	44.18
Pulmonology	19.22	7.87	42.82	50.69
Urology	21.08	7.49	43.55	51.04

III. Reputation-Only Specialties

Available data for the four 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. Inpatient volume in Rheumatology is extremely low, making it difficult to collect reliable mortality measures. Reliable structural measures also are unavailable for these specialties. Therefore, we used only reputation—the process

component—to develop the rankings. This section describes the eligibility and procedures used to develop the rankings for the four reputation-only specialties.

A. Eligibility

Hospitals ranked solely by reputation do not have to meet the same eligibility standards as the IHQ-driven specialties. For these four specialties, a hospital is eligible if it receives one or more physician nominations. Only hospitals representing 3% or more of the total nominations in a specialty are published in print.

B. Process

The IHQ-driven specialties and the reputation-only specialties share the same process component (see *Section II.B. Structure* 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 for the IHQ-driven specialties because of the unavailability of structural and outcomes measures. Thus, we rank hospitals in these specialties solely by reputation (see *Appendix F*). Although the four reputation-only specialties are ranked without IHQ scores, SDs of the reputational scores remains useful in identifying truly superior hospitals (in terms of statistically relevant nomination scores). *Table 14* presents the means and SDs of the reputation-only scores.

Table 14. Means and Standard Deviations for the Reputation-Only Specialties

Specialty	Mean	SD	2 SDs Above the Mean	3 SDs Above the Mean
Ophthalmology	3.96	11.71	27.38	39.09
Psychiatry	2.26	4.74	11.74	16.48
Rehabilitation	2.61	7.52	17.66	25.18
Rheumatology	3.30	8.16	19.62	27.77

IV. The Honor Roll

This year, 152 different hospitals were ranked in at least one specialty. The Honor Roll recognizes excellence across a broad range of specialties. To be listed, a hospital must rank at least three standard deviations above the mean in at least 6 of the 16 specialties. For 2010/11, 14 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 at least 3 but less than 4 SDs above the mean receives one point.
- A hospital that ranks 4 or more SDs above the mean receives 2 points.

Using SDs 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 G* lists this year's 14 Honor Roll hospitals.

V. Summary of Changes, 2005 to 2010/11

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 and 2008 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 day-long meeting convened by *U.S. News* in the fall of 2006 to solicit the views of a Best Hospitals advisory panel of approximately 40 invitees. The panelists represented top hospitals and brought expertise in areas such as clinical care, healthcare data analyses, and quality research. Several representatives from key trade/industry organizations also participated. The significant methodological changes introduced in the 2007 rankings are listed below; for a more detailed discussion of these changes, we recommend reviewing the 2007 or 2008 project methodology reports, which are available online at www.rti.org/besthospitals.

Summary of 2007 Changes

- **External organizations added.** 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 NIA for having an Alzheimer's Center.

- **DRG groupings updated.** DRG groupings were updated for all specialties, consistent with typical year-to-year changes.
- **Transfers excluded.** Patients transferred into a hospital from another hospital are excluded from mortality and volume calculations to reduce the likelihood of either benefiting or suffering from “dumping” of patients.
- **30-day mortality introduced.** Thirty-days-from-admission mortality rates were introduced in all IHQ-driven specialties (except Cancer) instead of death-at-discharge mortality rates.
- **Mortality data weighted.** Weights were applied to the MedPAR data based on the relative over- or underrepresentation of the cases' DRGs among all patients, as identified in the HCUP data.
- **Neonatologists moved.** Neonatologists were removed from the Gynecology sample and included in the Pediatrics sample instead.

Summary of 2008 Changes

- **Advanced technologies updated.** The elements in this index were updated for a few specialties to remain consistent with the advanced technologies expected from a best hospital.
- **Patient services updated.** The elements in these services were updated for a few specialties to remain consistent with the patient services expected from a best hospital.
- **Trauma center certification dropped.** Trauma center certification was dropped from the Gynecology specialty.
- **Alzheimer's disease center added.** This element was added to the Neurology & Neurosurgery specialty.
- **30-day mortality rates added for Cancer.** Thirty-days-from-admission mortality rates were introduced in all IHQ-driven specialties except Cancer in 2007. For 2010/11, 30-day mortality was used in Cancer as well.

Summary of 2009 Changes

- **Eligibility criteria updated.** Hospitals with a minimum number of hospital beds may now be eligible for the rankings (see *Section II.A*).
- **Key technologies updated.** The elements in this index were updated for a few specialties to remain consistent with the key technologies expected from a best hospital (see *Section II.B*).
- **Intensivists added.** Hospitals now receive credit in all data-driven specialties for having intensivists on staff (see *Section II.B*).
- **Patient safety index added.** A Best Hospitals patient safety index was created and applied to all data-driven specialties (see *Section II.E*).
- **DRG groupings updated.** DRG groupings were updated for all data-driven specialties, consistent with typical year-to-year changes (see *Section II.C*).

Summary of 2010/11 Changes

- **Reputation scores transformed.** Implemented a new log transformation of the reputation survey data prior to standardization. This change will allow reputation scores to cluster more, reducing the overall impact of this component on the final hospital ranking.
- **MS-DRGs incorporated.** The 3M Health Information Systems MS Grouper software was run on all 3 years of data included in the analyses, and we revised the assignment of cases to specialties using the MS-DRGs.
- **Change in the structural volume measure.** The criteria used to determine volume for the structural variable has now changed to include only those cases meeting the minimum severity of illness thresholds set by the project using APR-DRGs and includes transfers; previously, this measure focused on all discharges for DRGs used by the project and excluded transfers. This change will allow the volume measure to more accurately reflect the actual volume of cases according to the specialty definitions.
- **Codes identifying transfers for mortality calculation revised.** As in previous years, transfers were identified using the claim source of inpatient admission variable on the MedPAR files. In past years, transfers were identified based on the value “4” for transfer from an acute hospital. This year the variable value “A” for transfer from critical access hospital was also used.

- **“Outlier” transfer data adjusted.** We adjusted the observed transfer-free mortality rate for hospitals in the top and bottom quartiles of transfer-in rates to account for the fact that some hospitals may have had too many or too few cases included in the mortality calculations due to poor or inaccurate coding of administrative data.

VI. Future Improvements

The Best Hospitals methodology is reexamined and refined each year to best measure hospital quality. As always, RTI will closely monitor the potential of new data sources and measures. Several of the methodological improvements being considered follow:

- **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. For example, the Hospital Consumer Assessment of Health Care Providers and Systems (HCAHPS), implemented by CMS in 2008, evaluates patients’ feedback on the quality of care they received during a recent hospital stay. Such programs may offer useful data.
- **Incorporate structural data into reputation-only specialties.** We are examining resources and measures that would add structural data to 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 AHRQ and the Joint Commission.

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 report, as well as those since 2005, can be viewed or downloaded in their entirety from the RTI International website at www.rti.org/BestHospitals. Specific questions or comments about the contents of this report can be sent via e-mail to BestHospitals@rti.org.

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Appendix A

2009/10 Sample Physician Questionnaire



America's Best Hospitals

Your nominations will be reflected in the 2009 *U.S. News & World Report* <<specialty>> rankings.

Without considering location or expense, list up to five U.S. hospitals (and/or affiliated medical schools) that in your opinion provide the best inpatient care for the most complex or difficult medical <<fill>> associated with <<specialty>>.

	Hospital and/or affiliated medical school	City	State
a.	<input type="text"/>	<input type="text"/>	<input type="text"/>
b.	<input type="text"/>	<input type="text"/>	<input type="text"/>
c.	<input type="text"/>	<input type="text"/>	<input type="text"/>
d.	<input type="text"/>	<input type="text"/>	<input type="text"/>
e.	<input type="text"/>	<input type="text"/>	<input type="text"/>

Please send your response in the enclosed postpaid envelope, or by fax (800-476-9721), or fill out the survey online at <http://americasbesthospitals.rti.org/>. Your username is <<username>> and password is <<id>>.



Conducted by:

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Research Triangle Park, NC 27709-2194

Appendix B
Structural Variable Map

The following variables, used to construct structural elements of the 2010/11 IHQ, were taken from the 2008 Annual Survey of Hospitals Database published by the American Hospital Association, unless otherwise specified. Hospitals did not receive more than one point for any one service.

Key Technologies (Total of 8 points possible)

1 point awarded if...
DRADFHOS, DRADFSYS, DRADFNET, or DRADFVEN=1
FFDMHOS, FFDMSYS, FFDMNET, or FFDMVEN=1
IGRTHOS, IGRTSYS, IGRTNET, or IGRTVEN=1
MSCTHOS, MSCTSYS, MSCTNET, MSCTVEN, MSCTGHOS, MSCTGSYS, MSCTGNET, or MSCTGVEN=1
PETCTHOS, PETCTSYS, PETCTNET, or PETCTVEN=1
ROBOHOS, ROBOSYS, ROBONET, or ROBOVEN=1
SPECTHOS, SPECTSYS, SPECTNET, or SPECTVEN=1
SRADHOS, SRADSYS, SRADNET, or SRADVEN=1

Cancer Key Technologies (Total of 7 points possible)

1 point awarded if...
FFDMHOS, FFDMSYS, FFDMNET, or FFDMVEN=1
IGRTHOS, IGRTSYS, IGRTNET, or IGRTVEN=1
ROBOBHOS, ROBOBSYS, ROBOBNET, or ROBOBVEN=1
PETCTHOS, PETCTSYS, PETCTNET, or PETCTVEN=1
BEAMHOS, BEAHMSYS, BEAMNET, or BEAMVEN=1
SRADHOS, SRADSYS, SRADNET, or SRADVEN=1
OTBONHOS, OTBONSYS, OTBONNET, or OTBONVEN=1

Diabetes & Endocrinology Key Technologies (Total of 4 points possible)

1 point awarded if...
DRADFHOS, DRADFSYS, DRADFNET, or DRADFVEN=1
IGRTHOS, IGRTSYS, IGRTNET, or IGRTVEN=1
PETCTHOS, PETCTSYS, PETCTNET, or PETCTVEN=1
SRADHOS, SRADSYS, SRADNET, or SRADVEN=1

Ear, Nose, & Throat Key Technologies (Total of 1 point possible)

1 point awarded if...
SRADHOS, SRADSYS, SRADNET, or SRADVEN=1

Gastroenterology Key Technologies (Total of 7 points possible)

1 point awarded if...
DRADFHOS, DRADFSYS, DRADFNET, or DRADFVEN=1
ENDOAHOS, ENDOASYS, ENDOANET, or ENDOAVEN=1
ENDORHOS, ENDORSYS, ENDORNET, or ENDORVEN=1
ENDOUHOS, ENDOUSYS, ENDOUNET, or ENDOUVEN=1
IGRTHOS, IGRTSYS, IGRTNET, or IGRTVEN=1
SRADHOS, SRADSYS, SRADNET, or SRADVEN=1
CMS Liver Transplant Center=1

Gynecology Key Technologies (Total of 5 points possible)

1 point awarded if...
FFDMHOS, FFDMSYS, FFDMNET, or FFDMVEN=1
IGRTHOS, IGRTSYS, IGRTNET, or IGRTVEN=1
PETCTHOS, PETCTSYS, PETCTNET, or PETCTVEN=1
ROBOHOS, ROBOSYS, ROBONET, or ROBOVEN=1
SRADHOS, SRADSYS, SRADNET, or SRADVEN=1

Heart & Heart Surgery Key Technologies (Total of 7 points possible)

1 point awarded if...
CICHOS, CICSYS, CICNET, or CICVEN=1
MSCTHOS MSCTSYS, MSCTNET, MSCTVEN, MSCTGHOS, MSCTGSYS, MSCTGNET, or MSCTGVEN=1
PETCTHOS, PETCTSYS, PETCTNET, or PETCTVEN=1
ROBOHOS, ROBOSYS, ROBONET, or ROBOVEN=1
SPECTHOS, SPECTSYS, SPECTNET, SPECTVEN=1
TISUVEN, TISUHOS, TISUSYS, TISUNET=1
CMS Heart Transplant Center=1

Kidney Key Technologies (Total of 7 points possible)

1 point awarded if...
DRADFHOS, DRADFSYS, DRADFNET, or DRADFVEN=1
IGRTHOS, IGRTSYS, IGRTNET, or IGRTVEN=1
MSCTHOS MSCTSYS, MSCTNET, MSCTVEN, MSCTGHOS, MSCTGSYS, MSCTGNET, or MSCTGVEN=1
PETCTHOS, PETCTSYS, PETCTNET, or PETCTVEN=1
ROBOHOS, ROBOSYS, ROBONET, or ROBOVEN=1
SRADHOS, SRADSYS, SRADNET, or SRADVEN=1
CMS Kidney Transplant Center=1

Neurology & Neurosurgery Key Technologies (Total of 5 points possible)

1 point awarded if...
DRADFHOS, DRADFSYS, DRADFNET, or DRADFVEN=1
IGRTHOS, IGRTSYS, IGRTNET, or IGRTVEN=1
PETCTHOS, PETCTSYS, PETCTNET, or PETCTVEN=1
SPECTHOS, SPECTSYS, SPECTNET, or SPECTVEN=1
SRADHOS, SRADSYS, SRADNET, or SRADVEN=1

Orthopedics Key Technologies (Total of 2 point possible)

1 point awarded if...
CAOSHOS, CAOSSYS, CAOSNET, or CAOSVEN=1
TISUVEN, TISUHOS, TISUSYS, TISUNET=1

Pulmonology Key Technologies (Total of 6 points possible)

1 point awarded if...
DRADFHOS, DRADFSYS, DRADFNET, or DRADFVEN=1
IGRTHOS, IGRTSYS, IGRTNET, or IGRTVEN=1
MSCTHOS, MSCTSYS, MSCTNET, MSCTVEN, MSCTGHOS, MSCTGSYS, MSCTGNET, or MSCTGVEN=1
PETCTHOS, PETCTSYS, PETCTNET, or PETCTVEN=1
SRADHOS, SRADSYS, SRADNET, or SRADVEN=1
CMS Lung Transplant Center=1

Urology Key Technologies (Total of 5 points possible)

1 point awarded if...
DRADFHOS, DRADFSYS, DRADFNET, or DRADFVEN=1
IGRTHOS, IGRTSYS, IGRTNET, or IGRTVEN=1
PETCTHOS, PETCTSYS, PETCTNET, or PETCTVEN=1
ROBOHOS, ROBOSYS, ROBONET, or ROBOVEN=1
SRADHOS, SRADSYS, SRADNET, SRADVEN=1

Nurse Staffing

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

Trauma Center

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

Cancer Patient Services (Total of 8 points possible)

1 point awarded if...
GNTCHOS, SYS, NET, or VEN=1
HOSPCHOS, SYS, NET, or VEN=1
PAINHOS, SYS, NET, or VEN=1
PALHOS, SYS, NET, or VEN=1
PCAHOS, SYS, NET, or VEN=1
LINGHOS, SYS, NET, or VEN=1
AIRBHOS, SYS, NET, or VEN=1
WMGTHOS, SYS, NET, or VEN=1

Diabetes & Endocrinology Patient Services (Total of 8 points possible)

1 point awarded if...
GNTCHOS, SYS, NET, or VEN=1
HOSPCHOS, SYS, NET, or VEN=1
PAINHOS, SYS, NET, or VEN=1
PALHOS, SYS, NET, or VEN=1
PCAHOS, SYS, NET, or VEN=1
LINGHOS, SYS, NET, or VEN=1
AIRBHOS, SYS, NET, or VEN=1
WMGTHOS, SYS, NET, or VEN=1

Ear, Nose, & Throat Patient Services (Total of 8 points possible)

1 point awarded if...
GNTCHOS, SYS, NET, or VEN=1
HOSPCHOS, SYS, NET, or VEN=1
PAINHOS, SYS, NET, or VEN=1
PALHOS, SYS, NET, or VEN=1
PCAHOS, SYS, NET, or VEN=1
LINGHOS, SYS, NET, or VEN=1
AIRBHOS, SYS, NET, or VEN=1
WMGTHOS, SYS, NET, or VEN=1

Gastroenterology Patient Services (Total of 8 points possible)

1 point awarded if...
GNTCHOS, SYS, NET, or VEN=1
HOSPCHOS, SYS, NET, or VEN=1
PAINHOS, SYS, NET, or VEN=1
PALHOS, SYS, NET, or VEN=1
PCAHOS, SYS, NET, or VEN=1
LINGHOS, SYS, NET, or VEN=1
AIRBHOS, SYS, NET, or VEN=1
WMGTHOS, SYS, NET, or VEN=1

Geriatric Care Patient Services (Total of 9 points possible)

1 point awarded if...
ALZHOS, SYS, NET, or VEN=1
ARTHCHOS, SYS, NET, or VEN=1
HOSPCHOS, SYS, NET, or VEN=1
PAINHOS, SYS, NET, or VEN=1
PALHOS, SYS, NET, or VEN=1
PCAHOS, SYS, NET, or VEN=1
PSYGRHOS, SYS, NET, or VEN=1
LINGHOS, SYS, NET, or VEN=1
WMGTHOS, SYS, NET, or VEN=1

Gynecology Patient Services (Total of 9 points possible)

1 point awarded if...
FRTCHOS, SYS, NET, or VEN=1
GNTCHOS, SYS, NET, or VEN=1
HOSPCHOS, SYS, NET, or VEN=1
PAINHOS, SYS, NET, or VEN=1
PALHOS, SYS, NET, or VEN=1
PCAHOS, SYS, NET, or VEN=1
LINGHOS, SYS, NET, or VEN=1
AIRBHOS, SYS, NET, or VEN=1
WMGTHOS, SYS, NET, or VEN=1

Heart & Heart Surgery Patient Services (Total of 7 points possible)

1 point awarded if...
CHABHOS, SYS, NET, or VEN=1
HOSPCHOS, SYS, NET, or VEN=1
PAINHOS, SYS, NET, or VEN=1
PALHOS, SYS, NET, or VEN=1
PCAHOS, SYS, NET, or VEN=1
LINGHOS, SYS, NET, or VEN=1
WMGTHOS, SYS, NET, or VEN=1

Kidney Patient Services (Total of 8 points possible)

1 point awarded if...
GNTCHOS, SYS, NET, or VEN=1
HOSPCHOS, SYS, NET, or VEN=1
PAINHOS, SYS, NET, or VEN=1
PALHOS, SYS, NET, or VEN=1
PCAHOS, SYS, NET, or VEN=1
LINGHOS, SYS, NET, or VEN=1
AIRBHOS, SYS, NET, or VEN=1
WMGTHOS, SYS, NET, or VEN=1

Neurology & Neurosurgery Patient Services (Total of 9 points possible)

1 point awarded if...
ALZHOS, SYS, NET, or VEN=1
GNTCHOS, SYS, NET, or VEN=1
HOSPCHOS, SYS, NET, or VEN=1
PAINHOS, SYS, NET, or VEN=1
PALHOS, SYS, NET, or VEN=1
PCAHOS, SYS, NET, or VEN=1
LINGHOS, SYS, NET, or VEN=1
AIRBHOS, SYS, NET, or VEN=1
WMGTHOS, SYS, NET, or VEN=1

Orthopedics Patient Services (Total of 7 points possible)

1 point awarded if...
ARTHCHOS, SYS, NET, or VEN=1
HOSPCHOS, SYS, NET, or VEN=1
PAINHOS, SYS, NET, or VEN=1
PALHOS, SYS, NET, or VEN=1
PCAHOS, SYS, NET, or VEN=1
LINGHOS, SYS, NET, or VEN=1
WMGTHOS, SYS, NET, or VEN=1

Pulmonology Patient Services (Total of 8 points possible)

1 point awarded if...
GNTCHOS, SYS, NET, or VEN=1
HOSPCHOS, SYS, NET, or VEN=1
PAINHOS, SYS, NET, or VEN=1
PALHOS, SYS, NET, or VEN=1
PCAHOS, SYS, NET, or VEN=1
LINGHOS, SYS, NET, or VEN=1
AIRBHOS, SYS, NET, or VEN=1
WMGTHOS, SYS, NET, or VEN=1

Urology Patient Services (Total of 9 points possible)

1 point awarded if...
FRTCHOS, SYS, NET, or VEN=1
GNTCHOS, SYS, NET, or VEN=1
HOSPCHOS, SYS, NET, or VEN=1
PAINHOS, SYS, NET, or VEN=1
PALHOS, SYS, NET, or VEN=1
PCAHOS, SYS, NET, or VEN=1
LINGHOS, SYS, NET, or VEN=1
AIRBHOS, SYS, NET, or VEN=1
WMGTHOS, SYS, NET, or VEN=1

Intensivists

1 point awarded if...
FTMSIA, FTCICA, FTOICA, PTMSIA, PTCICA, PTOICA, FTEMSI, FTECIC, or FTEOIC > 0

Appendix C
NCI Cancer Centers

A

Abramson Cancer Center
University of Pennsylvania
Craig B. Thompson, M.D.
Director

16th Floor Penn Tower
3400 Spruce Street
Philadelphia, Pennsylvania 19104-4283
Tel: (215) 662-6065
Fax: (215) 349-5325

Arizona Cancer Center
University of Arizona
David S. Alberts, M.D.
Director

1515 North Campbell Avenue
P.O. Box 245024
Tucson, Arizona 85724
Tel: (520) 626-7685
Fax: (520) 626-6898

for Albert Einstein Cancer Center, see E

C

The Cancer Institute of New Jersey
Robert Wood Johnson Medical School
Robert S. DiPaola, M.D.
Director

195 Little Albany Street
New Brunswick, New Jersey 08903-2681
Tel: (732) 235-8064
Fax: (732) 235-8094

Cancer Research Center of Hawaii
University of Hawaii at Manoa
Michele Carbone, M.D., Ph.D.
Director

651 Ilalo Street, BSB 231-H
Honolulu, Hawaii 96813
Tel: (808) 440-4596
Fax: (808) 587-0790

Cancer Therapy & Research Center
University of Texas Health Science Center at San Antonio
Ian M. Thompson, M.D.
Executive Director

7979 Wurzbach Road, Mail Code 8026
Urschel Tower, Room U627
San Antonio, Texas 78229
Tel: (210) 450-1000
Fax: (210) 450-1100

Case Comprehensive Cancer Center
Case Western Reserve University
Stanton L. Gerson, M.D.
Director

11100 Euclid Ave., Wearn 151
Cleveland, Ohio 44106-5065
Tel: (216) 844-8562
Fax: (216) 844-4975

Chao Family Comprehensive Cancer Center
University of California at Irvine
Frank L. Meyskens, Jr., M.D.
Director

101 The City Drive
Building 56, Rt. 81, Room 216L
Orange, California 92868
Tel: (714) 456-6310
Fax: (714) 456-2240

City of Hope National Medical Center
Beckman Research Institute
Michael A. Friedman, M.D.
Director

1500 East Duarte Road
Duarte, California 91010-3000
Tel: (626) 256-HOPE (4673)
Fax: (626) 930-5394

D

Dana-Farber/Harvard Cancer Center

Dana-Farber Cancer Institute

Edward J. Benz, Jr., M.D.

Director

44 Binney Street, Rm. 1628

Boston, Massachusetts 02115

Tel: (617) 632-2100

Toll Free: (877) 420-3951

Fax: (617) 632-4452

Duke Comprehensive Cancer Center

Duke University Medical Center

H. Kim Lyerly, M.D.

Director

Box 2714

Durham, North Carolina 27710

Tel: (919) 684-5613

Fax: (919) 684-5653

Dan L. Duncan Cancer Center

Baylor College of Medicine

C. Kent Osborne, M.D.

Director

One Baylor Plaza

MS: BCM305

Houston, Texas 77030

Tel: (713) 798-1354

Fax: (713) 798-2716

E

Albert Einstein Cancer Research Center

Albert Einstein College of Medicine

I. David Goldman, M.D.

Director

Chanin Building, Room 209

1300 Morris Park Avenue

Bronx, New York 10461

Tel: (718) 430-2302

Fax: (718) 430-8550

F

Fox Chase Cancer Center

Micheal V. Seiden, M.D., Ph.D.

President & Chief Executive Officer

333 Cottman Avenue

Philadelphia, Pennsylvania 19111

Tel: (215) 728-3636

Fax: (215) 728-2571

Fred Hutchinson/University of Washington Cancer Consortium

Fred Hutchinson Cancer Research Center

Leland H. Hartwell, Ph.D.

President & Director

P.O. Box 19024, D1-060

Seattle, Washington 98109-1024

Tel: (206) 667-4305

Fax: (206) 667-5268

G

Greenebaum Cancer Center

University of Maryland

Kevin J. Cullen, M.D.

Director

22 South Greene Street

Baltimore, Maryland 21201

Tel: (410) 328-7904

Fax: (410) 328-3018

H

Holden Comprehensive Cancer Center

The University of Iowa

George J. Weiner, M.D.

Director

5970 "Z" JPP

200 Hawkins Drive

Iowa City, Iowa 52242

Tel: (319) 353-8620

Fax: (319) 353-8988

Hollings Cancer Center

Medical University of South Carolina

Andrew S. Kraft, M.D.

Director

86 Jonathan Lucas Street

Charleston, South Carolina 29425

Tel: (843) 792-8284

Fax: (843) 792-9456

Huntsman Cancer Institute

University of Utah

Mary C. Beckerle, Ph.D.

Executive Director

2000 Circle of Hope

Salt Lake City, Utah 84112-5550

Tel: (801) 581-4485

Fax: (801) 581-2175

I

Indiana University Melvin and Bren Simon Cancer Center

Patrick J. Loehrer, Sr., M.D.

Director

Indiana Cancer Pavilion

535 Barnhill Drive, Room 455

Indianapolis, Indiana 46202-5289

Tel: (317) 278-0070

Fax: (317) 278-0074

Herbert Irving Comprehensive Cancer Center

College of Physicians & Surgeons

Columbia University

Riccardo Dalla-Favera, M.D.

Director

1130 St. Nicholas Avenue

Room 508

New York, New York 10032

Tel: (212) 851-5273

Fax: (212) 851-5236

J

Jonsson Comprehensive Cancer Center

University of California Los Angeles

Judith C. Gasson, Ph.D.

Director

Factor Building, Room 8-684

10833 Le Conte Avenue

Los Angeles, California 90095-1781

Tel: (310) 825-5268

Fax: (310) 206-5553

K

The Barbara Ann Karmanos Cancer Institute

Wayne State University School of Medicine

Gerold Bepler, M.D., Ph.D.

President & CEO

4100 John R

Detroit, Michigan 48201

Tel: (800) KARMANOS

Fax: (313) 576-8630

Kimmel Cancer Center
Thomas Jefferson University
Richard G. Pestell, M.D., Ph.D.
Director

233 South 10th Street
BLSB, Room 1050
Philadelphia, Pennsylvania 19107-5799
Tel: (215) 503-5692
Fax: (215) 503-9334

L

Lombardi Comprehensive Cancer Center
at Georgetown University
Louis M. Weiner, M.D.
Director

3970 Reservoir Road, N.W.
Research Bldg., Suite E501
Washington, DC 20057
Tel: (202) 687-2110
Fax: (202) 687-6402

Robert H. Lurie Comprehensive Cancer Center
Northwestern University
Steven T. Rosen, M.D.
Director

303 E. Superior Street
Suite 3-125
Chicago, Illinois 60611
Tel: (312) 908-5250
Fax: (312) 908-1372

M

M.D. Anderson Cancer Center
University of Texas
John Mendelsohn, M.D.
President

1515 Holcombe Boulevard, Box 91
Houston, Texas 77030
Tel: (713) 792-2121
Fax: (713) 799-2210

Masonic Cancer Center
at the University of Minnesota
Douglas Yee, M.D.
Director

MMC 806, 420 Delaware Street, S.E.
Minneapolis, Minnesota 55455
Tel: (612) 624-8484
Tel: (888) 226-2376
Fax: (612) 626-3069

Massey Cancer Center
Virginia Commonwealth University
Gordon D. Ginder, M.D.
Professor of Medicine & Director

P.O. Box 980037
Richmond, Virginia 23298-0037
Tel: (804) 828-0450
Fax: (804) 828-8453

Mayo Clinic Cancer Center
Mayo Clinic Rochester
Robert Diasio, M.D.
Director

200 First Street, S.W.
Rochester, Minnesota 55905
Tel: (507) 266-4997
Fax: (507) 284-1544

Memorial Sloan-Kettering Cancer Center
Harold E. Varmus, M.D.
President & CEO

1275 York Avenue
New York, New York 10021
Tel: (212) 639-2000 or (800) 525-2225
Fax: (212) 717-3299

H. Lee Moffitt Cancer Center & Research Institute
at the University of South Florida

William S. Dalton, Ph.D., M.D.
CEO & Center Director

12902 Magnolia Drive, MCC-CEO
Tampa, Florida 33612-9497
Tel: (813) 615-4261
Fax: (813) 615-4258

Moore's Cancer Center
University of California, San Diego

Dennis A. Carson, M.D.
Director

3855 Health Sciences Drive, Room 2247
La Jolla, California 92093-0658
Tel: (858) 822-1222
Fax: (858) 822-1207

N

Norris Cotton Cancer Center
Dartmouth-Hitchcock Medical Center

Mark A. Israel, M.D.
Director

One Medical Center Drive, Hinman Box 7920
Lebanon, New Hampshire 03756-0001
Tel: (603) 653-9000
Fax: (603) 653-9003

NYU Cancer Institute
New York University Medical Center

William L. Carroll, M.D.
Director

550 First Avenue
New York, New York 10016
Tel: (212) 263-6485
Fax: (212) 263-8210

O

Comprehensive Cancer Center
The Ohio State University

Michael A. Caligiuri, M.D.
Director

OSU James Cancer Hospital
300 W. 10th Ave., Suite 519
Columbus, Ohio 43210
Tel: (614) 293-7521
Fax: (614) 293-3132

OHSU Knight Cancer Institute
Oregon Health & Science University

Brian J. Druker, M.D.
Director

3181 S.W. Sam Jackson Park Rd., CR145
Portland, Oregon 97239-3098
Tel: (503) 494-1617
Fax: (503) 494-7086

R

Roswell Park Cancer Institute

Donald L. Trump, M.D., FACP
President & CEO

Elm & Carlton Streets
Buffalo, New York 14263-0001
Tel: (716) 845-5772
Fax: (716) 845-8261

S

St. Jude Children's Research Hospital

Michael B. Kastan, M.D., Ph.D.
Director

262 Danny Thomas Place
Memphis, Tennessee 38105-3678
Tel: (901) 595-3982
Fax: (901) 595-3966

Sidney Kimmel Comprehensive Cancer Center
at Johns Hopkins University
William G. Nelson, M.D., Ph.D.
Director

401 North Broadway
The Weinberg Building, Suite 1100
Baltimore, Maryland 21231
Tel: (410) 955-8822
Fax: (410) 955-6787

Siteman Cancer Center
Washington University School of Medicine
Timothy J. Eberlein M.D.
Director

660 South Euclid Avenue, Campus Box 8109
St. Louis, Missouri 63110
Tel: (314) 362-8020
Fax: (314) 454-1898

Stanford Cancer Center
Stanford University
Beverly S. Mitchell, M.D.
Director

800 Welch Road, Room 284
Stanford, CA 94305-5796
Tel: (650) 736-1808
Fax: (650) 736-0607

U

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Appendix D
2010/11 Diagnosis Related Group (DRG)
Groupings, by Specialty

Cancer

MS-DRG	Medical/Surgical	DRG Title	ICD-9-CM	Severity	Weight
009	S	Bone marrow transplant	Include all	1	1.9430
023	S	Cranio w major dev impl/acute complex CNS PDX w MCC or chemo implant	Include procedures: 0010	1	1.4891
054	M	Nervous system neoplasms w MCC	Include all	1	1.0363
055	M	Nervous system neoplasms w/o MCC	Include all	2	1.1016
146	M	Ear, nose, mouth & throat malignancy w MCC	Include all	1	1.0692
147	M	Ear, nose, mouth & throat malignancy w CC	Include all	2	1.2483
148	M	Ear, nose, mouth & throat malignancy w/o CC/MCC	Include all	2	1.1884
180	M	Respiratory neoplasms w MCC	Include all	1	0.8415
181	M	Respiratory neoplasms w CC	Include all	2	0.8906
182	M	Respiratory neoplasms w/o CC/MCC	Include all	2	0.8199
374	M	Digestive malignancy w MCC	Include all	1	0.8597
375	M	Digestive malignancy w CC	Include all	2	0.9255
376	M	Digestive malignancy w/o CC/MCC	Include all	2	0.8383
435	M	Malignancy of hepatobiliary system or pancreas w MCC	Include all	1	0.9242
436	M	Malignancy of hepatobiliary system or pancreas w CC	Include all	2	0.9517
437	M	Malignancy of hepatobiliary system or pancreas w/o CC/MCC	Include all	2	0.8659
456	S	Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w MCC	Include diagnoses: 1702, 1985	1	1.3400
457	S	Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w CC	See MS-DRG 456	2	1.7208
458	S	Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w/o CC/MCC	See MS-DRG 456	2	1.3355
542	M	Pathological fractures & musculoskelet & conn tiss malig w MCC	Include all	1	0.7534
543	M	Pathological fractures & musculoskelet & conn tiss malig w CC	Include all	2	0.7769
544	M	Pathological fractures & musculoskelet & conn tiss malig w/o CC/MCC	Include all	2	0.6494
582	S	Mastectomy for malignancy w CC/MCC	Include all	2	0.9862
583	S	Mastectomy for malignancy w/o CC/MCC	Include all	2	1.1814
595	M	Major skin disorders w MCC	Include diagnoses: 1720, 1722-9	1	1.3296
596	M	Major skin disorders w/o MCC	See MS-DRG 595	2	1.1883
597	M	Malignant breast disorders w MCC	Include all	1	1.2163
598	M	Malignant breast disorders w CC	Include all	2	1.2311
599	M	Malignant breast disorders w/o CC/MCC	Include all	2	1.0546
656	S	Kidney & ureter procedures for neoplasm w MCC	Include all	1	0.8331
657	S	Kidney & ureter procedures for neoplasm w CC	Include all	2	1.0192
658	S	Kidney & ureter procedures for neoplasm w/o CC/MCC	Include all	2	1.0462
686	M	Kidney & urinary tract neoplasms w MCC	Include all	2	0.8093
687	M	Kidney & urinary tract neoplasms w CC	Include all	2	0.8616
688	M	Kidney & urinary tract neoplasms w/o CC/MCC	Include all	3	0.6769
715	S	Other male reproductive system O.R. proc for malignancy w CC/MCC	Include all	2	0.8525
716	S	Other male reproductive system O.R. proc for malignancy w/o CC/MCC	Include all	2	0.9227
722	M	Malignancy, male reproductive system w MCC	Include all	1	0.7678
723	M	Malignancy, male reproductive system w CC	Include all	2	0.7956
724	M	Malignancy, male reproductive system w/o CC/MCC	Include all	2	0.7080
736	S	Uterine & adnexa proc for ovarian or adnexal malignancy w MCC	Include all	1	0.9603
737	S	Uterine & adnexa proc for ovarian or adnexal malignancy w CC	Include all	2	1.3944
738	S	Uterine & adnexa proc for ovarian or adnexal malignancy w/o CC/MCC	Include all	2	1.6928
739	S	Uterine,adnexa proc for non-ovarian/adnexal malig w MCC	Include all	1	0.9291

MS-DRG	Medical/Surgical	DRG Title	ICD-9-CM	Severity	Weight
740	S	Uterine,adnexa proc for non-ovarian/adnexal malign w CC	Include all	2	1.1908
741	S	Uterine,adnexa proc for non-ovarian/adnexal malign w/o CC/MCC	Include all	2	1.3790
754	M	Malignancy, female reproductive system w MCC	Include all	1	1.0293
755	M	Malignancy, female reproductive system w CC	Include all	2	1.1562
756	M	Malignancy, female reproductive system w/o CC/MCC	Include all	2	1.3042
808	M	Major hematom/immun diag exc sickle cell crisis & coagul w MCC	Include diagnoses: 99685	1	1.0000
809	M	Major hematom/immun diag exc sickle cell crisis & coagul w CC	See MS-DRG 809	2	1.0000
810	M	Major hematom/immun diag exc sickle cell crisis & coagul w/o CC/MCC	See MS-DRG 809	2	1.0000
820	S	Lymphoma & leukemia w major O.R. procedure w MCC	Include all	1	1.0374
821	S	Lymphoma & leukemia w major O.R. procedure w CC	Include all	2	1.1343
822	S	Lymphoma & leukemia w major O.R. procedure w/o CC/MCC	Include all	2	1.0952
823	S	Lymphoma & non-acute leukemia w other O.R. proc w MCC	Include all	1	0.9026
824	S	Lymphoma & non-acute leukemia w other O.R. proc w CC	Include all	2	0.9605
825	S	Lymphoma & non-acute leukemia w other O.R. proc w/o CC/MCC	Include all	2	0.9370
826	S	Myeloprolif disord or poorly diff neopl w maj O.R. proc w MCC	Include all	1	1.2466
827	S	Myeloprolif disord or poorly diff neopl w maj O.R. proc w CC	Include all	2	1.3995
828	S	Myeloprolif disord or poorly diff neopl w maj O.R. proc w/o CC/MCC	Include all	2	1.0522
829	S	Myeloprolif disord or poorly diff neopl w other O.R. proc w CC/MCC	Include all	2	1.2286
830	S	Myeloprolif disord or poorly diff neopl w other O.R. proc w/o CC/MCC	Include all	2	0.9237
834	M	Acute leukemia w/o major O.R. procedure w MCC	Include all	1	1.1685
835	M	Acute leukemia w/o major O.R. procedure w CC	Include all	2	1.3164
836	M	Acute leukemia w/o major O.R. procedure w/o CC/MCC	Include all	2	1.3175
837	M	Chemo w acute leukemia as sdx or w high dose chemo agent w MCC	Include all	1	1.7285
838	M	Chemo w acute leukemia as sdx w CC or high dose chemo agent	Include all	2	1.9430
839	M	Chemo w acute leukemia as sdx w/o CC/MCC	Include all	2	1.9430
840	M	Lymphoma & non-acute leukemia w MCC	Include all	1	0.8403
841	M	Lymphoma & non-acute leukemia w CC	Include all	2	0.8919
842	M	Lymphoma & non-acute leukemia w/o CC/MCC	Include all	2	0.8636
843	M	Other myeloprolif dis or poorly diff neopl diag w MCC	Exclude diagnosis: v10, v711	3	0.9773
844	M	Other myeloprolif dis or poorly diff neopl diag w CC	See MS-DRG 844	3	0.9490
845	M	Other myeloprolif dis or poorly diff neopl diag w/o CC/MCC	See MS-DRG 844	3	0.8369
846	M	Chemotherapy w/o acute leukemia as secondary diagnosis w MCC	Include all	3	1.5350
847	M	Chemotherapy w/o acute leukemia as secondary diagnosis w CC	Include all	3	1.8272
848	M	Chemotherapy w/o acute leukemia as secondary diagnosis w/o CC/MCC	Include all	3	1.2586

Diabetes & Endocrinology

MS-DRG	Medical/Surgical	DRG Title	ICD-9-CM	Severity	Weight
614	S	Adrenal & pituitary procedures w CC/MCC	Include all	2	1.8873
615	S	Adrenal & pituitary procedures w/o CC/MCC	Include all	2	1.5867
619	S	O.R. procedures for obesity w MCC	Include all	1	2.1946
620	S	O.R. procedures for obesity w CC	Include all	2	2.8156
621	S	O.R. procedures for obesity w/o CC/MCC	Include all	2	2.8156
622	S	Skin grafts & wound debrid for endoc, nutrit & metab dis w MCC	Include all	1	0.7780

MS-DRG	Medical/Surgical	DRG_Title	ICD-9-CM	Severity	Weight
623	S	Skin grafts & wound debrid for endoc, nutrit & metab dis w CC	Include all	2	1.0587
624	S	Skin grafts & wound debrid for endoc, nutrit & metab dis w/o CC/MCC	Include all	2	1.1870
625	S	Thyroid, parathyroid & thyroglossal procedures w MCC	Include all	1	0.8156
626	S	Thyroid, parathyroid & thyroglossal procedures w CC	Include all	2	1.5343
627	S	Thyroid, parathyroid & thyroglossal procedures w/o CC/MCC	Include all	2	1.3734
628	S	Other endocrine, nutrit & metab O.R. proc w MCC	Include all	1	0.7341
629	S	Other endocrine, nutrit & metab O.R. proc w CC	Include all	2	0.9719
630	S	Other endocrine, nutrit & metab O.R. proc w/o CC/MCC	Include all	2	1.1359
637	M	Diabetes w MCC	Include all	3	1.1963
638	M	Diabetes w CC	Include all	3	0.8601
639	M	Diabetes w/o CC/MCC	Include all	3	0.8868
640	M	Nutritional & misc metabolic disorders w MCC	Include all	3	0.7333
643	M	Endocrine disorders w MCC	Include all	3	0.7872
644	M	Endocrine disorders w CC	Include all	3	0.8041

Ear, Nose, & Throat

MS-DRG	Medical/Surgical	DRG_Title	ICD-9-CM	Severity	Weight
011	S	Tracheostomy for face,mouth & neck diagnoses w MCC	Include all	1	0.9572
012	S	Tracheostomy for face,mouth & neck diagnoses w CC	Include all	1	1.1176
013	S	Tracheostomy for face,mouth & neck diagnoses w/o CC/MCC	Include all	1	1.2525
129	S	Major head & neck procedures w CC/MCC or major device	Include all	2	0.9863
130	S	Major head & neck procedures w/o CC/MCC	Include all	2	1.0370
131	S	Cranial/Facial Procedures w CC/MCC	Include all	3	2.0809
132	S	Cranial/Facial Procedures w/o CC/MCC	Include all	3	2.0809
133	S	Other ear, nose, mouth & throat O.R. procedures w CC/MCC	Include all	3	1.7715
134	S	Other ear, nose, mouth & throat O.R. procedures w/o CC/MCC	Include all	3	1.7675
139	S	Salivary gland procedures	Include all	3	0.7514
146	M	Ear, nose, mouth & throat malignancy w MCC	Include all	1	0.8551
147	M	Ear, nose, mouth & throat malignancy w CC	Include all	2	0.9984
148	M	Ear, nose, mouth & throat malignancy w/o CC/MCC	Include all	2	0.9505
152	M	Otitis media & URI w MCC	Include all	3	0.8638
154	M	Nasal trauma & deformity w MCC	Include all	3	0.7472
155	M	Nasal trauma & deformity w CC	Include all	3	0.6665
156	M	Nasal trauma & deformity w/o CC/MCC	Include all	3	0.7020

Gastroenterology

MS-DRG	Medical/Surgical	DRG_Title	ICD-9-CM	Severity	Weight
326	S	Stomach, esophageal & duodenal proc w MCC	Include all	2	1.0611
327	S	Stomach, esophageal & duodenal proc w CC	Include all	2	1.2590
328	S	Stomach, esophageal & duodenal proc w/o CC/MCC	Include all	3	1.4106
329	S	Major small & large bowel procedures w MCC	Include all	1	0.9552
330	S	Major small & large bowel procedures w CC	Include all	2	1.1006
331	S	Major small & large bowel procedures w/o CC/MCC	Include all	2	1.1373
332	S	Rectal resection w MCC	Include all	1	0.8344
333	S	Rectal resection w CC	Include all	1	1.1434
334	S	Rectal resection w/o CC/MCC	Include all	2	1.2026
335	S	Peritoneal adhesiolysis w MCC	Include all	1	0.9085

MS-DRG	Medical/ Surgical	DRG Title	ICD-9-CM	Severity	Weight
336	S	Peritoneal adhesiolysis w CC	Include all	2	1.2008
337	S	Peritoneal adhesiolysis w/o CC/MCC	Include all	2	1.3336
344	S	Minor small & large bowel procedures w MCC	Include procedures: 4500, 4502-3, 4515, 4526, 4534, 4549, 465, 4650-2, 466, 4660-4, 4791, 480, 4825, 5783	2	1.1107
345	S	Minor small & large bowel procedures w CC	Include procedures: 4502-3, 4515, 4526, 4534, 4549, 465, 4650-2, 466, 4660-4, 4791, 480, 4825, 5783	2	1.3843
346	S	Minor small & large bowel procedures w/o CC/MCC	See MS-DRG 345	3	0.7369
356	S	Other digestive system O.R. procedures w MCC	Include all	2	0.8750
357	S	Other digestive system O.R. procedures w CC	Include all	2	1.1004
358	S	Other digestive system O.R. procedures w/o CC/MCC	Include all	3	0.7801
368	M	Major esophageal disorders w MCC	Include all	1	0.9985
369	M	Major esophageal disorders w CC	Include all	2	1.0872
370	M	Major esophageal disorders w/o CC/MCC	Include all	2	1.1755
371	M	Major gastrointestinal disorders & peritoneal infections w MCC	Include all	1	0.7699
372	M	Major gastrointestinal disorders & peritoneal infections w CC	Include all	2	0.8819
373	M	Major gastrointestinal disorders & peritoneal infections w/o CC/MCC	Include all	2	0.9944
374	M	Digestive malignancy w MCC	Include all	1	0.9216
375	M	Digestive malignancy w CC	Include all	2	0.9921
376	M	Digestive malignancy w/o CC/MCC	Include all	2	0.8987
377	M	G.I. hemorrhage w MCC	Include all	1	0.7406
378	M	G.I. hemorrhage w CC	Include all	2	0.7730
379	M	G.I. hemorrhage w/o CC/MCC	Include all	2	0.7806
380	M	Complicated peptic ulcer w MCC	Include all	1	0.8829
381	M	Complicated peptic ulcer w CC	Include all	2	0.9288
382	M	Complicated peptic ulcer w/o CC/MCC	Include all	2	0.9742
383	M	Uncomplicated peptic ulcer w MCC	Include all	3	0.8274
385	M	Inflammatory bowel disease w MCC	Include all	1	1.3936
386	M	Inflammatory bowel disease w CC	Include all	2	1.7511
387	M	Inflammatory bowel disease w/o CC/MCC	Include all	2	1.7511
388	M	G.I. obstruction w MCC	Include all	3	0.7309
389	M	G.I. obstruction w CC	Include all	3	0.7322
391	M	Esophagitis, gastroent & misc digest disorders w MCC	Include all	3	0.8904
393	M	Other digestive system diagnoses w MCC	Include all	1	0.8530
394	M	Other digestive system diagnoses w CC	Include all	2	0.9331
405	S	Pancreas, liver & shunt procedures w MCC	Include all	1	1.3549
406	S	Pancreas, liver & shunt procedures w CC	Include all	1	1.4180
407	S	Pancreas, liver & shunt procedures w/o CC/MCC	Include all	2	1.6231
408	S	Biliary tract proc except only cholecyst w or w/o c.d.e. w MCC	Include all	2	0.9685
409	S	Biliary tract proc except only cholecyst w or w/o c.d.e. w CC	Include all	2	1.1090
410	S	Biliary tract proc except only cholecyst w or w/o c.d.e. w/o CC/MCC	Include all	3	1.1994
411	S	Cholecystectomy w c.d.e. w MCC	Include all	1	0.8933
412	S	Cholecystectomy w c.d.e. w CC	Include all	2	1.0945

MS-DRG	Medical/Surgical	DRG Title	ICD-9-CM	Severity	Weight
413	S	Cholecystectomy w c.d.e. w/o CC/MCC	Include all	2	1.2827
414	S	Cholecystectomy except by laparoscope w/o c.d.e. w MCC	Include all	1	0.9110
415	S	Cholecystectomy except by laparoscope w/o c.d.e. w CC	Include all	2	1.1303
417	S	Laparoscopic cholecystectomy w/o c.d.e. w MCC	Include all	3	0.9240
418	S	Laparoscopic cholecystectomy w/o c.d.e. w CC	Include all	3	1.1088
420	S	Hepatobiliary diagnostic procedures w MCC	Include all	1	1.2069
421	S	Hepatobiliary diagnostic procedures w CC	Include all	2	1.1764
422	S	Hepatobiliary diagnostic procedures w/o CC/MCC	Include all	2	1.5031
423	S	Other hepatobiliary or pancreas O.R. procedures w MCC	Include all	3	1.0881
424	S	Other hepatobiliary or pancreas O.R. procedures w CC	Include all	3	1.0051
425	S	Other hepatobiliary or pancreas O.R. procedures w/o CC/MCC	Include all	3	0.8837
432	M	Cirrhosis & alcoholic hepatitis w MCC	Include all	1	1.7366
433	M	Cirrhosis & alcoholic hepatitis w CC	Include all	2	1.7511
434	M	Cirrhosis & alcoholic hepatitis w/o CC/MCC	Include all	2	1.7511
435	M	Malignancy of hepatobiliary system or pancreas w MCC	Include all	1	0.9907
436	M	Malignancy of hepatobiliary system or pancreas w CC	Include all	2	1.0203
437	M	Malignancy of hepatobiliary system or pancreas w/o CC/MCC	Include all	2	0.9282
438	M	Disorders of pancreas except malignancy w MCC	Include all	1	1.2865
439	M	Disorders of pancreas except malignancy w CC	Include all	2	1.5132
440	M	Disorders of pancreas except malignancy w/o CC/MCC	Include all	2	1.5564
441	M	Disorders of liver except malig,cirr,alc hepa w MCC	Exclude diagnosis: 7948	1	1.3499
442	M	Disorders of liver except malig,cirr,alc hepa w CC	See MS-DRG 442	2	1.3963

Geriatrics

MS-DRG	Medical/Surgical	DRG Title	ICD-9-CM	Severity	Weight
001	S	Heart transplant or implant of heart assist system w MCC	Include all	1	2.5035
002	S	Heart transplant or implant of heart assist system w/o MCC	Include all	1	2.0443
003	S	ECMO or trach w MV 96+ hrs or PDX exc face, mouth & neck w maj O.R.	Include all	1	1.3904
004	S	Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R.	Include all	1	1.0829
005	S	Liver transplant w MCC or intestinal transplant	Include all	1	2.4905
006	S	Liver transplant w/o MCC	Include all	1	2.4995
007	S	Lung transplant	Include all	1	1.7833
008	S	Simultaneous pancreas/kidney transplant	Include all	1	1.1909
009	S	Bone marrow transplant	Include all	1	2.7962
010	S	Pancreas transplant	Include all	1	1.6215
011	S	Tracheostomy for face,mouth & neck diagnoses w MCC	Include all	1	1.4187
012	S	Tracheostomy for face,mouth & neck diagnoses w CC	Include all	1	1.6565
013	S	Tracheostomy for face,mouth & neck diagnoses w/o CC/MCC	Include all	1	1.8563
020	S	Intracranial vascular procedures w PDX hemorrhage w MCC	Include all	1	2.5740
021	S	Intracranial vascular procedures w PDX hemorrhage w CC	Include all	1	2.7962
022	S	Intracranial vascular procedures w PDX hemorrhage w/o CC/MCC	Include all	1	2.7962
023	S	Cranio w major dev impl/acute complex CNS PDX w MCC or chemo implant	Include all	1	1.5798
024	S	Cranio w major dev impl/acute complex CNS PDX w/o MCC	Include all	1	1.7015
025	S	Craniotomy & endovascular intracranial procedures w MCC	Include all	1	1.4439
026	S	Craniotomy & endovascular intracranial procedures w CC	Include all	1	1.7946
027	S	Craniotomy & endovascular intracranial procedures w/o CC/MCC	Include all	1	2.1676

MS-DRG	Medical/ Surgical	DRG Title	ICD-9-CM	Severity	Weight
028	S	Spinal procedures w MCC	Include all	1	1.9138
029	S	Spinal procedures w CC or spinal neurostimulators	Include all	2	2.2134
030	S	Spinal procedures w/o CC/MCC	Include all	2	2.6080
031	S	Ventricular shunt procedures w MCC	Include all	1	1.9247
032	S	Ventricular shunt procedures w CC	Include all	2	1.8773
033	S	Ventricular shunt procedures w/o CC/MCC	Include all	2	0.9473
034	S	Carotid artery stent procedure w MCC	Include all	1	0.8064
035	S	Carotid artery stent procedure w CC	Include all	2	0.8167
036	S	Carotid artery stent procedure w/o CC/MCC	Include all	2	0.8194
037	S	Extracranial procedures w MCC	Include all	2	0.7938
038	S	Extracranial procedures w CC	Include all	2	0.8168
039	S	Extracranial procedures w/o CC/MCC	Include all	3	0.8523
040	S	Periph & cranial nerve & other nerv syst proc w MCC	Include all	2	1.0516
041	S	Periph/cranial nerve & other nerv syst proc w CC or periph neurostim	Include all	2	1.2111
042	S	Periph & cranial nerve & other nerv syst proc w/o CC/MCC	Include all	3	0.8145
052	M	Spinal disorders & injuries w CC/MCC	Include all	2	1.3699
053	M	Spinal disorders & injuries w/o CC/MCC	Include all	2	1.9201
054	M	Nervous system neoplasms w MCC	Include all	1	1.2284
055	M	Nervous system neoplasms w/o MCC	Include all	2	1.3058
056	M	Degenerative nervous system disorders w MCC	Include all	1	0.7687
057	M	Degenerative nervous system disorders w/o MCC	Include all	2	0.7349
058	M	Multiple sclerosis & cerebellar ataxia w MCC	Include all	1	1.3120
059	M	Multiple sclerosis & cerebellar ataxia w CC	Include all	2	1.4239
060	M	Multiple sclerosis & cerebellar ataxia w/o CC/MCC	Include all	2	1.6114
061	M	Acute ischemic stroke w use of thrombolytic agent w MCC	Include all	1	0.8917
062	M	Acute ischemic stroke w use of thrombolytic agent w CC	Include all	2	1.0229
063	M	Acute ischemic stroke w use of thrombolytic agent w/o CC/MCC	Include all	2	1.0098
064	M	Intracranial hemorrhage or cerebral infarction w MCC	Include all	1	0.8503
065	M	Intracranial hemorrhage or cerebral infarction w CC	Include all	2	0.8793
066	M	Intracranial hemorrhage or cerebral infarction w/o CC/MCC	Include all	2	0.9089
067	M	Nonspecific cva & precerebral occlusion w/o infarct w MCC	Include all	1	0.7926
068	M	Nonspecific cva & precerebral occlusion w/o infarct w/o MCC	Include all	2	0.8038
069	M	Transient ischemia	Include all	3	0.7452
070	M	Nonspecific cerebrovascular disorders w MCC	Include all	2	0.8360
071	M	Nonspecific cerebrovascular disorders w CC	Include all	2	0.8293
072	M	Nonspecific cerebrovascular disorders w/o CC/MCC	Include all	3	0.8055
073	M	Cranial & peripheral nerve disorders w MCC	Include all	1	1.0114
074	M	Cranial & peripheral nerve disorders w/o MCC	Include all	2	1.1831
075	M	Viral meningitis w CC/MCC	Include all	2	2.7962
076	M	Viral meningitis w/o CC/MCC	Include all	2	2.7962
077	M	Hypertensive encephalopathy w MCC	Include all	1	1.0734
078	M	Hypertensive encephalopathy w CC	Include all	2	1.0508
079	M	Hypertensive encephalopathy w/o CC/MCC	Include all	2	1.0973
080	M	Nontraumatic stupor & coma w MCC	Include all	1	0.9113
081	M	Nontraumatic stupor & coma w/o MCC	Include all	2	0.9697
082	M	Traumatic stupor & coma, coma >1 hr w MCC	Include all	1	1.5711
083	M	Traumatic stupor & coma, coma >1 hr w CC	Include all	1	1.9908
084	M	Traumatic stupor & coma, coma >1 hr w/o CC/MCC	Include all	1	2.7785
085	M	Traumatic stupor & coma, coma <1 hr w MCC	Include all	1	0.9610
086	M	Traumatic stupor & coma, coma <1 hr w CC	Include all	2	1.1116
087	M	Traumatic stupor & coma, coma <1 hr w/o CC/MCC	Include all	2	1.1513

MS-DRG	Medical/ Surgical	DRG Title	ICD-9-CM	Severity	Weight
088	M	Concussion w MCC	Include all	3	1.9963
089	M	Concussion w CC	Include all	3	1.3604
090	M	Concussion w/o CC/MCC	Include all	3	0.8038
091	M	Other disorders of nervous system w MCC	Include all	3	1.0747
092	M	Other disorders of nervous system w CC	Include all	3	0.9254
093	M	Other disorders of nervous system w/o CC/MCC	Include all	3	0.9234
094	M	Bacterial & tuberculous infections of nervous system w MCC	Include all	1	1.7400
095	M	Bacterial & tuberculous infections of nervous system w CC	Include all	2	2.1747
096	M	Bacterial & tuberculous infections of nervous system w/o CC/MCC	Include all	2	2.7962
097	M	Non-bacterial infect of nervous sys exc viral meningitis w MCC	Include all	1	1.3232
098	M	Non-bacterial infect of nervous sys exc viral meningitis w CC	Include all	2	1.7759
099	M	Non-bacterial infect of nervous sys exc viral meningitis w/o CC/MCC	Include all	2	2.7962
100	M	Seizures w MCC	Include all	2	1.3364
101	M	Seizures w/o MCC	Include all	3	1.4583
102	M	Headaches w MCC	Include all	3	1.9678
103	M	Headaches w/o MCC	Include all	3	1.3697
113	S	Orbital procedures w CC/MCC	Include all	2	2.4703
114	S	Orbital procedures w/o CC/MCC	Include all	2	2.4090
115	S	Extraocular procedures except orbit	Include all	3	1.2625
116	S	Intraocular procedures w CC/MCC	Include all	3	1.3949
117	S	Intraocular procedures w/o CC/MCC	Include all	3	1.8338
121	M	Acute major eye infections w CC/MCC	Include all	2	1.6489
122	M	Acute major eye infections w/o CC/MCC	Include all	2	2.5171
123	M	Neurological eye disorders	Include all	3	1.1464
124	M	Other disorders of the eye w MCC	Include all	2	1.1863
125	M	Other disorders of the eye w/o MCC	Include all	3	0.9462
129	S	Major head & neck procedures w CC/MCC or major device	Include all	2	1.4617
130	S	Major head & neck procedures w/o CC/MCC	Include all	2	1.5369
131	S	Cranial/facial procedures w CC/MCC	Include all	3	2.7962
132	S	Cranial/facial procedures w/o CC/MCC	Include all	3	2.7962
133	S	Other ear, nose, mouth & throat O.R. procedures w CC/MCC	Include all	3	2.6255
134	S	Other ear, nose, mouth & throat O.R. procedures w/o CC/MCC	Include all	3	2.6196
135	S	Sinus & mastoid procedures w CC/MCC	Include all	2	2.3397
136	S	Sinus & mastoid procedures w/o CC/MCC	Include all	2	1.5792
137	S	Mouth procedures w CC/MCC	Include all	3	1.4764
138	S	Mouth procedures w/o CC/MCC	Include all	3	1.6422
139	S	Salivary gland procedures	Include all	3	1.1136
146	M	Ear, nose, mouth & throat malignancy w MCC	Include all	1	1.2674
147	M	Ear, nose, mouth & throat malignancy w CC	Include all	2	1.4797
148	M	Ear, nose, mouth & throat malignancy w/o CC/MCC	Include all	2	1.4087
149	M	Dysequilibrium	Include all	3	0.7610
150	M	Epistaxis w MCC	Include all	3	0.8497
151	M	Epistaxis w/o MCC	Include all	3	0.8763
152	M	Otitis media & URI w MCC	Include all	3	1.2803
153	M	Otitis media & URI w/o MCC	Include all	3	1.1208
154	M	Nasal trauma & deformity w MCC	Include all	3	1.1074
155	M	Nasal trauma & deformity w CC	Include all	3	0.9878
156	M	Nasal trauma & deformity w/o CC/MCC	Include all	3	1.0405
157	M	Dental & Oral Diseases w MCC	Include all	3	1.1751
158	M	Dental & Oral Diseases w CC	Include all	3	1.1665

MS-DRG	Medical/ Surgical	DRG Title	ICD-9-CM	Severity	Weight
159	M	Dental & Oral Diseases w/o CC/MCC	Include all	3	0.9922
163	S	Major chest procedures w MCC	Include all	1	1.3920
164	S	Major chest procedures w CC	Include all	2	1.2601
165	S	Major chest procedures w/o CC/MCC	Include all	2	1.3785
166	S	Other resp system O.R. procedures w MCC	Include all	2	0.9832
167	S	Other resp system O.R. procedures w CC	Include all	2	1.0611
168	S	Other resp system O.R. procedures w/o CC/MCC	Include all	3	0.8753
175	M	Pulmonary embolism w MCC	Include all	1	1.0381
176	M	Pulmonary embolism w/o MCC	Include all	1	1.2851
177	M	Respiratory infections & inflammations w MCC	Include all	1	0.8144
178	M	Respiratory infections & inflammations w CC	Include all	2	0.8138
179	M	Respiratory infections & inflammations w/o CC/MCC	Include all	2	0.8726
180	M	Respiratory neoplasms w MCC	Include all	1	0.9974
181	M	Respiratory neoplasms w CC	Include all	2	1.0557
182	M	Respiratory neoplasms w/o CC/MCC	Include all	2	0.9718
183	M	Major chest trauma w MCC	Include all	1	1.1982
184	M	Major chest trauma w CC	Include all	1	1.5107
185	M	Major chest trauma w/o CC/MCC	Include all	1	1.4398
186	M	Pleural effusion w MCC	Include all	3	0.8845
187	M	Pleural effusion w CC	Include all	3	0.9147
188	M	Pleural effusion w/o CC/MCC	Include all	3	0.8324
189	M	Pulmonary edema & respiratory failure	Include all	2	0.8420
190	M	Chronic obstructive pulmonary disease w MCC	Include all	3	0.8278
191	M	Chronic obstructive pulmonary disease w CC	Include all	3	0.7903
192	M	Chronic obstructive pulmonary disease w/o CC/MCC	Include all	3	0.7781
193	M	Simple pneumonia & pleurisy w MCC	Include all	3	0.8262
194	M	Simple pneumonia & pleurisy w CC	Include all	3	0.7966
195	M	Simple pneumonia & pleurisy w/o CC/MCC	Include all	3	0.7316
196	M	Interstitial lung disease w MCC	Include all	3	0.8907
197	M	Interstitial lung disease w CC	Include all	3	0.8946
198	M	Interstitial lung disease w/o CC/MCC	Include all	3	0.8389
199	M	Pneumothorax w MCC	Include all	1	1.2793
200	M	Pneumothorax w CC	Include all	2	1.7012
201	M	Pneumothorax w/o CC/MCC	Include all	2	1.7851
202	M	Bronchitis & asthma w CC/MCC	Include all	3	1.3069
203	M	Bronchitis & asthma w/o CC/MCC	Include all	3	1.0443
204	M	Respiratory signs & symptoms	Include all	3	1.0051
205	M	Other respiratory system diagnoses w MCC	Include all	3	1.1239
206	M	Other respiratory system diagnoses w/o MCC	Include all	3	1.0031
207	M	Respiratory system diagnosis w ventilator support 96+ hours	Include all	2	1.0019
208	M	Respiratory system diagnosis w ventilator support <96 hours	Include all	2	1.0024
215	S	Other heart assist system implant	Include all	1	1.4185
216	S	Cardiac valve & oth maj cardiothoracic proc w card cath w MCC	Include all	1	0.9163
217	S	Cardiac valve & oth maj cardiothoracic proc w card cath w CC	Include all	2	0.9554
218	S	Cardiac valve & oth maj cardiothoracic proc w card cath w/o CC/MCC	Include all	2	0.9684
219	S	Cardiac valve & oth maj cardiothoracic proc w/o card cath w MCC	Include all	1	1.0394
220	S	Cardiac valve & oth maj cardiothoracic proc w/o card cath w CC	Include all	2	1.0785
221	S	Cardiac valve & oth maj cardiothoracic proc w/o card cath w/o CC/MCC	Include all	2	1.0812
222	S	Cardiac defib implant w cardiac cath w AMI/HF/shock w MCC	Include all	1	1.0261
223	S	Cardiac defib implant w cardiac cath w AMI/HF/shock w/o MCC	Include all	1	0.9818

MS-DRG	Medical/ Surgical	DRG Title	ICD-9-CM	Severity	Weight
224	S	Cardiac defib implant w cardiac cath w/o AMI/HF/shock w MCC	Include all	3	1.0703
225	S	Cardiac defib implant w cardiac cath w/o AMI/HF/shock w/o MCC	Include all	3	1.0434
226	S	Cardiac defibrillator implant w/o cardiac cath w MCC	Include all	1	0.8840
227	S	Cardiac defibrillator implant w/o cardiac cath w/o MCC	Include all	1	0.9465
228	S	Other cardiothoracic procedures w MCC	Include all	1	1.8058
229	S	Other cardiothoracic procedures w CC	Include all	2	1.7146
230	S	Other cardiothoracic procedures w/o CC/MCC	Include all	2	1.4767
231	S	Coronary bypass w PTCA w MCC	Include all	1	1.3616
232	S	Coronary bypass w PTCA w/o MCC	Include all	2	1.5052
233	S	Coronary bypass w cardiac cath w MCC	Include all	2	1.0655
234	S	Coronary bypass w cardiac cath w/o MCC	Include all	3	1.0794
235	S	Coronary bypass w/o cardiac cath w MCC	Include all	2	1.0263
236	S	Coronary bypass w/o cardiac cath w/o MCC	Include all	3	0.9891
237	S	Major cardiovasc procedures w MCC or thoracic aortic aneurysm repair	Include all	1	1.0256
238	S	Major cardiovascular procedures w/o MCC	Include all	2	1.0039
239	S	Amputation for circ sys disorders exc upper limb & toe w MCC	Include all	1	0.7919
240	S	Amputation for circ sys disorders exc upper limb & toe w CC	Include all	2	0.8597
241	S	Amputation for circ sys disorders exc upper limb & toe w/o CC/MCC	Include all	2	0.8022
242	S	Permanent cardiac pacemaker implant w MCC	Include all	2	0.7218
243	S	Permanent cardiac pacemaker implant w CC	Include all	2	0.7329
244	S	Permanent cardiac pacemaker implant w/o CC/MCC	Include all	3	0.7361
245	S	AICD lead & generator procedures	Include all	2	0.8514
246	S	Perc cardiovasc proc w drug-eluting stent w MCC or 4+ vessels/stents	Include all	2	0.9859
247	S	Perc cardiovasc proc w drug-eluting stent w/o MCC	Include all	3	0.8960
248	S	Perc cardiovasc proc w non-drug-eluting stent w MCC or 4+ ves/stents	Include all	2	0.9826
249	S	Perc cardiovasc proc w non-drug-eluting stent w/o MCC	Include all	3	0.8905
250	S	Perc cardiovasc proc w/o coronary artery stent or AMI w MCC	Include all	3	0.9809
251	S	Perc cardiovasc proc w/o coronary artery stent or AMI w/o MCC	Include all	3	0.9483
252	S	Other vascular procedures w MCC	Include all	2	0.8098
253	S	Other vascular procedures w CC	Include all	2	0.8877
254	S	Other vascular procedures w/o CC/MCC	Include all	3	0.8593
255	S	Upper limb & toe amputation for circ system disorders w MCC	Include all	1	0.8980
256	S	Upper limb & toe amputation for circ system disorders w CC	Include all	2	1.0854
257	S	Upper limb & toe amputation for circ system disorders w/o CC/MCC	Include all	2	0.8734
258	S	Cardiac pacemaker device replacement w MCC	Include all	3	0.7138
259	S	Cardiac pacemaker device replacement w/o MCC	Include all	3	0.7073
260	S	Cardiac pacemaker revision except device replacement w MCC	Include all	1	0.8945
261	S	Cardiac pacemaker revision except device replacement w CC	Include all	2	0.8909
262	S	Cardiac pacemaker revision except device replacement w/o CC/MCC	Include all	2	0.9317
263	S	Vein ligation & stripping	Include all	3	1.1260
264	S	Other circulatory system O.R. procedures	Include all	2	0.9159
280	M	Acute myocardial infarction, discharged alive w MCC	Include all	1	0.7584
281	M	Acute myocardial infarction, discharged alive w CC	Include all	2	0.8037
282	M	Acute myocardia infarction, discharged alive w/o CC/MCC	Include all	2	0.9372
283	M	Acute myocardial infarction, expired w MCC	Include all	1	0.7381
284	M	Acute myocardial infarction, expired w CC	Include all	2	0.7379
285	M	Acute myocardial infarction, expired w/o CC/MCC	Include all	2	0.7077

MS-DRG	Medical/ Surgical	DRG Title	ICD-9-CM	Severity	Weight
286	M	Circulatory disorders except AMI, w card cath w MCC	Include all	2	0.9845
287	M	Circulatory disorders except AMI, w card cath w/o MCC	Include all	3	1.0580
288	M	Acute & subacute endocarditis w MCC	Include all	1	1.0912
289	M	Acute & subacute endocarditis w CC	Include all	2	1.2118
290	M	Acute & subacute endocarditis w/o CC/MCC	Include all	2	1.2709
291	M	Heart failure & shock w MCC	Include all	1	0.7684
292	M	Heart failure & shock w CC	Include all	2	0.7795
293	M	Heart failure & shock w/o CC/MCC	Include all	2	0.7931
294	M	Deep vein thrombophlebitis w CC/MCC	Include all	3	1.0285
295	M	Deep vein thrombophlebitis w/o CC/MCC	Include all	3	0.7400
296	M	Cardiac arrest, unexplained w MCC	Include all	1	1.0097
297	M	Cardiac arrest, unexplained w CC	Include all	2	0.9963
298	M	Cardiac arrest, unexplained w/o CC/MCC	Include all	2	0.8040
299	M	Peripheral vascular disorders w MCC	Include all	1	0.8565
300	M	Peripheral vascular disorders w CC	Include all	2	0.9623
301	M	Peripheral vascular disorders w/o CC/MCC	Include all	2	0.9299
302	M	Atherosclerosis w MCC	Include all	3	0.7841
303	M	Atherosclerosis w/o MCC	Include all	3	0.7888
304	M	Hypertension w MCC	Include all	3	1.3515
305	M	Hypertension w/o MCC	Include all	3	1.0911
306	M	Cardiac congenital & valvular disorders w MCC	Include all	1	1.0667
307	M	Cardiac congenital & valvular disorders w/o MCC	Include all	2	0.9221
308	M	Cardiac arrhythmia & conduction disorders w MCC	Include all	1	0.8033
309	M	Cardiac arrhythmia & conduction disorders w CC	Include all	2	0.8299
310	M	Cardiac arrhythmia & conduction disorders w/o CC/MCC	Include all	2	0.8849
311	M	Angina pectoris	Include all	3	0.8741
312	M	Syncope & collapse	Include all	2	0.8420
313	M	Chest pain	Include all	3	0.9582
314	M	Other circulatory system diagnoses w MCC	Include all	2	0.9419
315	M	Other circulatory system diagnoses w CC	Include all	2	1.1156
316	M	Other circulatory system diagnoses w/o CC/MCC	Include all	3	0.9931
326	S	Stomach, esophageal & duodenal proc w MCC	Include all	2	1.1733
327	S	Stomach, esophageal & duodenal proc w CC	Include all	2	1.3921
328	S	Stomach, esophageal & duodenal proc w/o CC/MCC	Include all	3	1.5597
329	S	Major small & large bowel procedures w MCC	Include all	1	1.0562
330	S	Major small & large bowel procedures w CC	Include all	2	1.2170
331	S	Major small & large bowel procedures w/o CC/MCC	Include all	2	1.2576
332	S	Rectal resection w MCC	Include all	1	0.9226
333	S	Rectal resection w CC	Include all	1	1.2643
334	S	Rectal resection w/o CC/MCC	Include all	2	1.3298
335	S	Peritoneal adhesiolysis w MCC	Include all	1	1.0045
336	S	Peritoneal adhesiolysis w CC	Include all	2	1.3278
337	S	Peritoneal adhesiolysis w/o CC/MCC	Include all	2	1.4746
338	S	Appendectomy w complicated principal diag w MCC	Include all	3	1.5319
339	S	Appendectomy w complicated principal diag w CC	Include all	3	1.4717
340	S	Appendectomy w complicated principal diag w/o CC/MCC	Include all	3	1.6514
341	S	Appendectomy w/o complicated principal diag w MCC	Include all	3	1.9648
342	S	Appendectomy w/o complicated principal diag w CC	Include all	3	1.4410
343	S	Appendectomy w/o complicated principal diag w/o CC/MCC	Include all	3	1.0088
344	S	Minor small & large bowel procedures w MCC	Include all	2	1.2319
345	S	Minor small & large bowel procedures w CC	Include all	2	1.5258
346	S	Minor small & large bowel procedures w/o CC/MCC	Include all	3	0.8147

MS-DRG	Medical/ Surgical	DRG Title	ICD-9-CM	Severity	Weight
347	S	Anal & stomal procedures w MCC	Include all	1	1.2398
348	S	Anal & stomal procedures w CC	Include all	2	1.4628
349	S	Anal & stomal procedures w/o CC/MCC	Include all	2	1.9471
350	S	Inguinal & femoral hernia procedures w MCC	Include all	3	0.8457
351	S	Inguinal & femoral hernia procedures w CC	Include all	3	0.7990
352	S	Inguinal & femoral hernia procedures w/o CC/MCC	Include all	3	0.7471
353	S	Hernia procedures except inguinal & femoral w MCC	Include all	1	1.0763
354	S	Hernia procedures except inguinal & femoral w CC	Include all	2	1.3204
355	S	Hernia procedures except inguinal & femoral w/o CC/MCC	Include all	2	1.3748
356	S	Other digestive system O.R. procedures w MCC	Include all	2	0.9675
357	S	Other digestive system O.R. procedures w CC	Include all	2	1.2167
358	S	Other digestive system O.R. procedures w/o CC/MCC	Include all	3	0.8626
368	M	Major esophageal disorders w MCC	Include all	1	1.1041
369	M	Major esophageal disorders w CC	Include all	2	1.2021
370	M	Major esophageal disorders w/o CC/MCC	Include all	2	1.2998
371	M	Major gastrointestinal disorders & peritoneal infections w MCC	Include all	1	0.8513
372	M	Major gastrointestinal disorders & peritoneal infections w CC	Include all	2	0.9751
373	M	Major gastrointestinal disorders & peritoneal infections w/o CC/MCC	Include all	2	1.0996
374	M	Digestive malignancy w MCC	Include all	1	1.0190
375	M	Digestive malignancy w CC	Include all	2	1.0970
376	M	Digestive malignancy w/o CC/MCC	Include all	2	0.9937
377	M	G.I. hemorrhage w MCC	Include all	1	0.8188
378	M	G.I. hemorrhage w CC	Include all	2	0.8548
379	M	G.I. hemorrhage w/o CC/MCC	Include all	2	0.8631
380	M	Complicated peptic ulcer w MCC	Include all	1	0.9763
381	M	Complicated peptic ulcer w CC	Include all	2	1.0269
382	M	Complicated peptic ulcer w/o CC/MCC	Include all	2	1.0772
383	M	Uncomplicated peptic ulcer w MCC	Include all	3	0.9149
384	M	Uncomplicated peptic ulcer w/o MCC	Include all	3	0.9026
385	M	Inflammatory bowel disease w MCC	Include all	1	1.5410
386	M	Inflammatory bowel disease w CC	Include all	2	2.2922
387	M	Inflammatory bowel disease w/o CC/MCC	Include all	2	2.7962
388	M	G.I. obstruction w MCC	Include all	3	0.8082
389	M	G.I. obstruction w CC	Include all	3	0.8096
390	M	G.I. obstruction w/o CC/MCC	Include all	3	0.7067
391	M	Esophagitis, gastroent & misc digest disorders w MCC	Include all	3	0.9845
392	M	Esophagitis, gastroent & misc digest disorders w/o MCC	Include all	3	0.9216
393	M	Other digestive system diagnoses w MCC	Include all	1	0.9431
394	M	Other digestive system diagnoses w CC	Include all	2	1.0317
395	M	Other digestive system diagnoses w/o CC/MCC	Include all	2	1.0263
405	S	Pancreas, liver & shunt procedures w MCC	Include all	1	1.4981
406	S	Pancreas, liver & shunt procedures w CC	Include all	1	1.5679
407	S	Pancreas, liver & shunt procedures w/o CC/MCC	Include all	2	1.7947
408	S	Biliary tract proc except only cholecyst w or w/o c.d.e. w MCC	Include all	2	1.0708
409	S	Biliary tract proc except only cholecyst w or w/o c.d.e. w CC	Include all	2	1.2263
410	S	Biliary tract proc except only cholecyst w or w/o c.d.e. w/o CC/MCC	Include all	3	1.3262
411	S	Cholecystectomy w c.d.e. w MCC	Include all	1	0.9878
412	S	Cholecystectomy w c.d.e. w CC	Include all	2	1.2102
413	S	Cholecystectomy w c.d.e. w/o CC/MCC	Include all	2	1.4183
414	S	Cholecystectomy except by laparoscope w/o c.d.e. w MCC	Include all	1	1.0073

MS-DRG	Medical/Surgical	DRG Title	ICD-9-CM	Severity	Weight
415	S	Cholecystectomy except by laparoscope w/o c.d.e. w CC	Include all	2	1.2498
416	S	Cholecystectomy except by laparoscope w/o c.d.e. w/o CC/MCC	Include all	2	1.2089
417	S	Laparoscopic cholecystectomy w/o c.d.e. w MCC	Include all	3	1.0217
418	S	Laparoscopic cholecystectomy w/o c.d.e. w CC	Include all	3	1.2260
419	S	Laparoscopic cholecystectomy w/o c.d.e. w/o CC/MCC	Include all	3	1.0321
420	S	Hepatobiliary diagnostic procedures w MCC	Include all	1	1.3345
421	S	Hepatobiliary diagnostic procedures w CC	Include all	2	1.3007
422	S	Hepatobiliary diagnostic procedures w/o CC/MCC	Include all	2	1.6620
423	S	Other hepatobiliary or pancreas O.R. procedures w MCC	Include all	3	1.2031
424	S	Other hepatobiliary or pancreas O.R. procedures w CC	Include all	3	1.1114
425	S	Other hepatobiliary or pancreas O.R. procedures w/o CC/MCC	Include all	3	0.9771
432	M	Cirrhosis & alcoholic hepatitis w MCC	Include all	1	1.9201
433	M	Cirrhosis & alcoholic hepatitis w CC	Include all	2	2.0150
434	M	Cirrhosis & alcoholic hepatitis w/o CC/MCC	Include all	2	1.9737
435	M	Malignancy of hepatobiliary system or pancreas w MCC	Include all	1	1.0955
436	M	Malignancy of hepatobiliary system or pancreas w CC	Include all	2	1.1281
437	M	Malignancy of hepatobiliary system or pancreas w/o CC/MCC	Include all	2	1.0264
438	M	Disorders of pancreas except malignancy w MCC	Include all	1	1.4225
439	M	Disorders of pancreas except malignancy w CC	Include all	2	1.6731
440	M	Disorders of pancreas except malignancy w/o CC/MCC	Include all	2	1.7209
441	M	Disorders of liver except malig,cirr,alc hepa w MCC	Include all	1	1.4915
442	M	Disorders of liver except malig,cirr,alc hepa w CC	Include all	2	1.5437
443	M	Disorders of liver except malig,cirr,alc hepa w/o CC/MCC	Include all	2	1.7503
444	M	Disorders of the biliary tract w MCC	Include all	3	0.9167
445	M	Disorders of the biliary tract w CC	Include all	3	0.8779
446	M	Disorders of the biliary tract w/o CC/MCC	Include all	3	0.7640
453	S	Combined anterior/posterior spinal fusion w MCC	Include all	1	1.6133
454	S	Combined anterior/posterior spinal fusion w CC	Include all	2	2.5019
455	S	Combined anterior/posterior spinal fusion w/o CC/MCC	Include all	2	2.7962
456	S	Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w MCC	Include all	1	1.7762
457	S	Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w CC	Include all	2	1.8674
458	S	Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w/o CC/MCC	Include all	2	1.7308
459	S	Spinal fusion except cervical w MCC	Include all	1	1.2140
460	S	Spinal fusion except cervical w/o MCC	Include all	2	1.3628
461	S	Bilateral or multiple major joint procs of lower extremity w MCC	Include all	1	1.0320
462	S	Bilateral or multiple major joint procs of lower extremity w/o MCC	Include all	2	1.1773
463	S	Wnd debrid & skn grft exc hand, for musculo-conn tiss dis w MCC	Include all	1	1.1132
464	S	Wnd debrid & skn grft exc hand, for musculo-conn tiss dis w CC	Include all	2	1.7710
465	S	Wnd debrid & skn grft exc hand, for musculo-conn tiss dis w/o CC/MCC	Include all	2	2.0635
466	S	Revision of hip or knee replacement w MCC	Include all	3	0.7905
467	S	Revision of hip or knee replacement w CC	Include all	3	0.8529
468	S	Revision of hip or knee replacement w/o CC/MCC	Include all	3	0.9711
469	S	Major joint replacement or reattachment of lower extremity w MCC	Include all	1	0.7759
470	S	Major joint replacement or reattachment of lower extremity w/o MCC	Include all	2	0.9773
471	S	Cervical spinal fusion w MCC	Include all	1	1.3300
472	S	Cervical spinal fusion w CC	Include all	2	1.7583
473	S	Cervical spinal fusion w/o CC/MCC	Include all	2	1.7522
474	S	Amputation for musculoskeletal sys & conn tissue dis w MCC	Include all	1	0.8603
475	S	Amputation for musculoskeletal sys & conn tissue dis w CC	Include all	2	1.0665

MS-DRG	Medical/ Surgical	DRG Title	ICD-9-CM	Severity	Weight
476	S	Amputation for musculoskeletal sys & conn tissue dis w/o CC/MCC	Include all	2	1.0813
477	S	Biopsies of musculoskeletal system & connective tissue w MCC	Include all	3	0.8260
478	S	Biopsies of musculoskeletal system & connective tissue w CC	Include all	3	0.7821
479	S	Biopsies of musculoskeletal system & connective tissue w/o CC/MCC	Include all	3	0.6932
480	S	Hip & femur procedures except major joint w MCC	Include all	2	0.7746
481	S	Hip & femur procedures except major joint w CC	Include all	2	0.7892
482	S	Hip & femur procedures except major joint w/o CC/MCC	Include all	3	0.8469
483	S	Major joint & limb reattachment proc of upper extremity w CC/MCC	Include all	1	0.8632
484	S	Major joint & limb reattachment proc of upper extremity w/o CC/MCC	Include all	1	0.9539
485	S	Knee procedures w pdx of infection w MCC	Include all	1	0.9753
486	S	Knee procedures w pdx of infection w CC	Include all	2	1.4066
487	S	Knee procedures w pdx of infection w/o CC/MCC	Include all	2	2.0350
488	S	Knee procedures w/o pdx of infection w CC/MCC	Include all	3	1.4253
489	S	Knee procedures w/o pdx of infection w/o CC/MCC	Include all	3	1.4476
490	S	Back & neck proc exc spinal fusion w CC/MCC or disc device/neurostim	Include all	2	1.1050
491	S	Back & neck proc exc spinal fusion w/o CC/MCC	Include all	3	0.8358
492	S	Lower extrem & humer proc except hip,foot,femur w MCC	Include all	2	1.2198
493	S	Lower extrem & humer proc except hip,foot,femur w CC	Include all	2	1.5387
494	S	Lower extrem & humer proc except hip,foot,femur w/o CC/MCC	Include all	3	2.7962
495	S	Local excision & removal int fix devices exc hip & femur w MCC	Include all	2	1.1723
496	S	Local excision & removal int fix devices exc hip & femur w CC	Include all	2	1.6105
497	S	Local excision & removal int fix devices exc hip & femur w/o CC/MCC	Include all	3	2.4070
498	S	Local excision & removal int fix devices of hip & femur w CC/MCC	Include all	3	1.0897
499	S	Local excision & removal int fix devices of hip & femur w/o CC/MCC	Include all	3	1.5758
500	S	Soft tissue procedures w MCC	Include all	3	1.3029
501	S	Soft tissue procedures w CC	Include all	3	1.3370
502	S	Soft tissue procedures w/o CC/MCC	Include all	3	1.4195
503	S	Foot procedures w MCC	Include all	3	1.1533
504	S	Foot procedures w CC	Include all	3	1.3956
505	S	Foot procedures w/o CC/MCC	Include all	3	2.0956
506	S	Major thumb or joint procedures	Include all	3	1.1354
507	S	Major shoulder or elbow joint procedures w CC/MCC	Include all	2	1.2549
508	S	Major shoulder or elbow joint procedures w/o CC/MCC	Include all	2	1.5770
509	S	Arthroscopy	Include all	3	1.5779
510	S	Shoulder,elbow or forearm proc,exc major joint proc w MCC	Include all	1	1.2660
511	S	Shoulder,elbow or forearm proc,exc major joint proc w CC	Include all	2	1.3554
512	S	Shoulder,elbow or forearm proc,exc major joint proc w/o CC/MCC	Include all	2	1.7089
513	S	Hand or wrist proc, except major thumb or joint proc w CC/MCC	Include all	3	1.4085
514	S	Hand or wrist proc, except major thumb or joint proc w/o CC/MCC	Include all	3	2.7962
515	S	Other musculoskelet sys & conn tiss O.R. proc w MCC	Include all	3	0.9698
516	S	Other musculoskelet sys & conn tiss O.R. proc w CC	Include all	3	0.8553
517	S	Other musculoskelet sys & conn tiss O.R. proc w/o CC/MCC	Include all	3	0.7221
533	M	Fractures of femur w MCC	Include all	1	0.8422
534	M	Fractures of femur w/o MCC	Include all	2	1.3213
535	M	Fractures of hip & pelvis w MCC	Include all	1	0.7361
536	M	Fractures of hip & pelvis w/o MCC	Include all	2	0.7625

MS-DRG	Medical/ Surgical	DRG Title	ICD-9-CM	Severity	Weight
537	M	Sprains, strains, & dislocations of hip, pelvis & thigh w CC/MCC	Include all	3	0.7726
538	M	Sprains, strains, & dislocations of hip, pelvis & thigh w/o CC/MCC	Include all	3	0.6122
539	M	Osteomyelitis w MCC	Include all	3	0.9454
540	M	Osteomyelitis w CC	Include all	3	0.9934
541	M	Osteomyelitis w/o CC/MCC	Include all	3	0.9223
542	M	Pathological fractures & musculoskelet & conn tiss malig w MCC	Include all	1	0.8931
543	M	Pathological fractures & musculoskelet & conn tiss malig w CC	Include all	2	0.9209
544	M	Pathological fractures & musculoskelet & conn tiss malig w/o CC/MCC	Include all	2	0.7698
545	M	Connective tissue disorders w MCC	Include all	3	1.4660
546	M	Connective tissue disorders w CC	Include all	3	1.3783
547	M	Connective tissue disorders w/o CC/MCC	Include all	3	1.3044
548	M	Septic arthritis w MCC	Include all	1	1.0245
549	M	Septic arthritis w CC	Include all	2	1.2422
550	M	Septic arthritis w/o CC/MCC	Include all	2	1.1061
551	M	Medical back problems w MCC	Include all	3	0.8252
552	M	Medical back problems w/o MCC	Include all	3	0.8548
553	M	Bone diseases & arthropathies w MCC	Include all	2	0.8583
554	M	Bone diseases & arthropathies w/o MCC	Include all	3	0.7696
555	M	Signs & symptoms of musculoskeletal system & conn tissue w MCC	Include all	3	0.8789
556	M	Signs & symptoms of musculoskeletal system & conn tissue w/o MCC	Include all	3	0.8237
557	M	Tendonitis, myositis & bursitis w MCC	Include all	3	0.9510
558	M	Tendonitis, myositis & bursitis w/o MCC	Include all	3	0.8256
559	M	Aftercare, musculoskeletal system & connective tissue w MCC	Include all	3	0.7372
560	M	Aftercare, musculoskeletal system & connective tissue w CC	Include all	3	0.7212
561	M	Aftercare, musculoskeletal system & connective tissue w/o CC/MCC	Include all	3	0.6998
562	M	Fx, sprn, strn & disl except femur, hip, pelvis & thigh w MCC	Include all	3	0.8134
563	M	Fx, sprn, strn & disl except femur, hip, pelvis & thigh w/o MCC	Include all	3	0.7865
564	M	Other musculoskeletal sys & connective tissue diagnoses w MCC	Include all	3	0.8761
565	M	Other musculoskeletal sys & connective tissue diagnoses w CC	Include all	3	0.9697
566	M	Other musculoskeletal sys & connective tissue diagnoses w/o CC/MCC	Include all	3	0.8125
573	S	Skin graft &/or debrid for skn ulcer or cellulitis w MCC	Include all	1	0.9686
574	S	Skin graft &/or debrid for skn ulcer or cellulitis w CC	Include all	2	1.1060
575	S	Skin graft &/or debrid for skn ulcer or cellulitis w/o CC/MCC	Include all	2	1.4125
576	S	Skin graft &/or debrid exc for skin ulcer or cellulitis w MCC	Include all	1	1.0372
577	S	Skin graft &/or debrid exc for skin ulcer or cellulitis w CC	Include all	2	1.3444
578	S	Skin graft &/or debrid exc for skin ulcer or cellulitis w/o CC/MCC	Include all	2	1.3470
579	S	Other skin, subcut tiss & breast proc w MCC	Include all	2	1.1882
580	S	Other skin, subcut tiss & breast proc w CC	Include all	2	1.4045
581	S	Other skin, subcut tiss & breast proc w/o CC/MCC	Include all	3	0.9985
582	S	Mastectomy for malignancy w CC/MCC	Include all	2	1.1690
583	S	Mastectomy for malignancy w/o CC/MCC	Include all	2	1.4004
584	S	Breast biopsy, local excision & other breast procedures w CC/MCC	Include all	2	1.5351
585	S	Breast biopsy, local excision & other breast procedures w/o CC/MCC	Include all	3	1.2230
592	M	Skin ulcers w MCC	Include all	1	0.8401
593	M	Skin ulcers w CC	Include all	2	0.9101
594	M	Skin ulcers w/o CC/MCC	Include all	2	0.8606

MS-DRG	Medical/ Surgical	DRG Title	ICD-9-CM	Severity	Weight
595	M	Major skin disorders w MCC	Include all	1	1.0354
596	M	Major skin disorders w/o MCC	Include all	2	1.0858
597	M	Malignant breast disorders w MCC	Include all	1	1.4417
598	M	Malignant breast disorders w CC	Include all	2	1.4593
599	M	Malignant breast disorders w/o CC/MCC	Include all	2	1.2500
600	M	Non-malignant breast disorders w CC/MCC	Include all	3	1.3011
601	M	Non-malignant breast disorders w/o CC/MCC	Include all	3	1.0856
602	M	Cellulitis w MCC	Include all	1	1.0356
603	M	Cellulitis w/o MCC	Include all	2	1.2253
604	M	Trauma to the skin, subcut tiss & breast w MCC	Include all	1	0.9863
605	M	Trauma to the skin, subcut tiss & breast w/o MCC	Include all	2	0.9678
606	M	Minor skin disorders w MCC	Include all	3	1.1361
607	M	Minor skin disorders w/o MCC	Include all	3	1.0897
614	S	Adrenal & pituitary procedures w CC/MCC	Include all	2	2.2572
615	S	Adrenal & pituitary procedures w/o CC/MCC	Include all	2	1.8977
616	S	Amputat of lower limb for endocrine,nutrit,& metabol dis w MCC	Include all	1	1.0589
617	S	Amputat of lower limb for endocrine,nutrit,& metabol dis w CC	Include all	2	1.2749
618	S	Amputat of lower limb for endocrine,nutrit,& metabol dis w/o CC/MCC	Include all	2	1.1965
619	S	O.R. procedures for obesity w MCC	Include all	1	2.6249
620	S	O.R. procedures for obesity w CC	Include all	2	2.7962
621	S	O.R. procedures for obesity w/o CC/MCC	Include all	2	2.7962
622	S	Skin grafts & wound debrid for endoc, nutrit & metab dis w MCC	Include all	1	0.9305
623	S	Skin grafts & wound debrid for endoc, nutrit & metab dis w CC	Include all	2	1.2663
624	S	Skin grafts & wound debrid for endoc, nutrit & metab dis w/o CC/MCC	Include all	2	1.4197
625	S	Thyroid, parathyroid & thyroglossal procedures w MCC	Include all	1	0.9755
626	S	Thyroid, parathyroid & thyroglossal procedures w CC	Include all	2	1.8351
627	S	Thyroid, parathyroid & thyroglossal procedures w/o CC/MCC	Include all	2	1.6427
628	S	Other endocrine, nutrit & metab O.R. proc w MCC	Include all	1	0.8780
629	S	Other endocrine, nutrit & metab O.R. proc w CC	Include all	2	1.1624
630	S	Other endocrine, nutrit & metab O.R. proc w/o CC/MCC	Include all	2	1.3586
637	M	Diabetes w MCC	Include all	3	1.4308
638	M	Diabetes w CC	Include all	3	1.0287
639	M	Diabetes w/o CC/MCC	Include all	3	1.0606
640	M	Nutritional & misc metabolic disorders w MCC	Include all	3	0.8770
641	M	Nutritional & misc metabolic disorders w/o MCC	Include all	3	0.8436
642	M	Inborn errors of metabolism	Include all	3	1.8334
643	M	Endocrine disorders w MCC	Include all	3	0.9416
644	M	Endocrine disorders w CC	Include all	3	0.9617
645	M	Endocrine disorders w/o CC/MCC	Include all	3	0.8541
652	S	Kidney transplant	Include all	1	1.0365
653	S	Major bladder procedures w MCC	Include all	1	0.9464
654	S	Major bladder procedures w CC	Include all	2	1.0966
655	S	Major bladder procedures w/o CC/MCC	Include all	2	1.1775
656	S	Kidney & ureter procedures for neoplasm w MCC	Include all	1	0.9875
657	S	Kidney & ureter procedures for neoplasm w CC	Include all	2	1.2081
658	S	Kidney & ureter procedures for neoplasm w/o CC/MCC	Include all	2	1.2400
659	S	Kidney & ureter procedures for non-neoplasm w MCC	Include all	2	1.1329
660	S	Kidney & ureter procedures for non-neoplasm w CC	Include all	2	1.5490
661	S	Kidney & ureter procedures for non-neoplasm w/o CC/MCC	Include all	3	1.3410
662	S	Minor bladder procedures w MCC	Include all	3	0.8522

MS-DRG	Medical/ Surgical	DRG Title	ICD-9-CM	Severity	Weight
663	S	Minor bladder procedures w CC	Include all	3	0.9019
664	S	Minor bladder procedures w/o CC/MCC	Include all	3	0.7907
665	S	Prostatectomy w MCC	Include all	3	0.7472
666	S	Prostatectomy w CC	Include all	3	0.7673
667	S	Prostatectomy w/o CC/MCC	Include all	3	0.6480
668	S	Transurethral procedures w MCC	Include all	3	0.9243
669	S	Transurethral procedures w CC	Include all	3	0.8886
670	S	Transurethral procedures w/o CC/MCC	Include all	3	0.6969
671	S	Urethral procedures w CC/MCC	Include all	3	0.9995
672	S	Urethral procedures w/o CC/MCC	Include all	3	1.9931
673	S	Other kidney & urinary tract procedures w MCC	Include all	3	0.9271
674	S	Other kidney & urinary tract procedures w CC	Include all	3	1.0036
675	S	Other kidney & urinary tract procedures w/o CC/MCC	Include all	3	0.9026
682	M	Renal failure w MCC	Include all	1	0.8906
683	M	Renal failure w CC	Include all	2	0.8667
684	M	Renal failure w/o CC/MCC	Include all	2	0.9171
685	M	Admit for renal dialysis	Include all	3	0.7125
686	M	Kidney & urinary tract neoplasms w MCC	Include all	2	0.9593
687	M	Kidney & urinary tract neoplasms w CC	Include all	2	1.0212
688	M	Kidney & urinary tract neoplasms w/o CC/MCC	Include all	3	0.8024
689	M	Kidney & urinary tract infections w MCC	Include all	3	0.7795
690	M	Kidney & urinary tract infections w/o MCC	Include all	3	0.7743
691	M	Urinary stones w esw lithotripsy w CC/MCC	Include all	3	1.2548
692	M	Urinary stones w esw lithotripsy w/o CC/MCC	Include all	3	0.6122
693	M	Urinary stones w/o esw lithotripsy w MCC	Include all	3	1.3104
694	M	Urinary stones w/o esw lithotripsy w/o MCC	Include all	3	1.1138
695	M	Kidney & urinary tract signs & symptoms w MCC	Include all	3	0.7643
696	M	Kidney & urinary tract signs & symptoms w/o MCC	Include all	3	0.7894
697	M	Urethral stricture	Include all	3	0.8571
698	M	Other kidney & urinary tract diagnoses w MCC	Include all	3	0.9575
699	M	Other kidney & urinary tract diagnoses w CC	Include all	3	1.0341
700	M	Other kidney & urinary tract diagnoses w/o CC/MCC	Include all	3	1.0845
707	S	Major male pelvic procedures w CC/MCC	Include all	2	1.4697
708	S	Major male pelvic procedures w/o CC/MCC	Include all	2	1.7030
709	S	Penis procedures w CC/MCC	Include all	3	1.1946
710	S	Penis procedures w/o CC/MCC	Include all	3	1.2706
711	S	Testes procedures w CC/MCC	Include all	2	1.3711
712	S	Testes procedures w/o CC/MCC	Include all	3	1.1513
713	S	Transurethral prostatectomy w CC/MCC	Include all	2	0.7739
714	S	Transurethral prostatectomy w/o CC/MCC	Include all	3	0.6706
715	S	Other male reproductive system O.R. proc for malignancy w CC/MCC	Include all	2	1.0105
716	S	Other male reproductive system O.R. proc for malignancy w/o CC/MCC	Include all	2	1.0937
717	S	Other male reproductive system O.R. proc exc malignancy w CC/MCC	Include all	3	0.9815
718	S	Other male reproductive system O.R. proc exc malignancy w/o CC/MCC	Include all	3	0.8497
722	M	Malignancy, male reproductive system w MCC	Include all	1	0.9101
723	M	Malignancy, male reproductive system w CC	Include all	2	0.9431
724	M	Malignancy, male reproductive system w/o CC/MCC	Include all	2	0.8392
725	M	Benign prostatic hypertrophy w MCC	Include all	3	0.8178
726	M	Benign prostatic hypertrophy w/o MCC	Include all	3	0.7214

MS-DRG	Medical/Surgical	DRG Title	ICD-9-CM	Severity	Weight
727	M	Inflammation of the male reproductive system w MCC	Include all	3	1.0375
728	M	Inflammation of the male reproductive system w/o MCC	Include all	3	0.9724
729	M	Other male reproductive system diagnoses w CC/MCC	Include all	3	1.1097
730	M	Other male reproductive system diagnoses w/o CC/MCC	Include all	3	1.2248
734	S	Pelvic evisceration, rad hysterectomy & rad vulvectomy w CC/MCC	Include all	1	1.8208
735	S	Pelvic evisceration, rad hysterectomy & rad vulvectomy w/o CC/MCC	Include all	1	2.3252
736	S	Uterine & adnexa proc for ovarian or adnexal malignancy w MCC	Include all	1	1.1383
737	S	Uterine & adnexa proc for ovarian or adnexal malignancy w CC	Include all	2	1.6529
738	S	Uterine & adnexa proc for ovarian or adnexal malignancy w/o CC/MCC	Include all	2	2.0066
739	S	Uterine,adnexa proc for non-ovarian/adnexal malig w MCC	Include all	1	1.1013
740	S	Uterine,adnexa proc for non-ovarian/adnexal malig w CC	Include all	2	1.4115
741	S	Uterine,adnexa proc for non-ovarian/adnexal malig w/o CC/MCC	Include all	2	1.6345
742	S	Uterine & adnexa proc for non-malignancy w CC/MCC	Include all	2	2.7962
743	S	Uterine & adnexa proc for non-malignancy w/o CC/MCC	Include all	3	1.2711
744	S	D&C, conization, laparoscopy & tubal interruption w CC/MCC	Include all	2	2.0392
745	S	D&C, conization, laparoscopy & tubal interruption w/o CC/MCC	Include all	3	0.9704
746	S	Vagina, cervix & vulva procedures w CC/MCC	Include all	3	1.1883
747	S	Vagina, cervix & vulva procedures w/o CC/MCC	Include all	3	0.8304
748	S	Female reproductive system reconstructive procedures	Include all	3	0.9348
749	S	Other female reproductive system O.R. procedures w CC/MCC	Include all	2	2.2600
750	S	Other female reproductive system O.R. procedures w/o CC/MCC	Include all	2	2.7962
754	M	Malignancy, female reproductive system w MCC	Include all	1	1.2201
755	M	Malignancy, female reproductive system w CC	Include all	2	1.3704
756	M	Malignancy, female reproductive system w/o CC/MCC	Include all	2	1.5459
757	M	Infections, female reproductive system w MCC	Include all	3	0.9450
758	M	Infections, female reproductive system w CC	Include all	3	1.1051
759	M	Infections, female reproductive system w/o CC/MCC	Include all	3	0.9381
760	M	Menstrual & other female reproductive system disorders w CC/MCC	Include all	3	1.2683
761	M	Menstrual & other female reproductive system disorders w/o CC/MCC	Include all	3	0.9974
799	S	Splenectomy w MCC	Include all	1	1.7042
800	S	Splenectomy w CC	Include all	2	2.1085
801	S	Splenectomy w/o CC/MCC	Include all	2	2.0394
802	S	Other O.R. proc of the blood & blood forming organs w MCC	Include all	3	1.1221
803	S	Other O.R. proc of the blood & blood forming organs w CC	Include all	3	1.1391
804	S	Other O.R. proc of the blood & blood forming organs w/o CC/MCC	Include all	3	2.3096
808	M	Major hematomol/immun diag exc sickle cell crisis & coagul w MCC	Include all	1	1.3027
809	M	Major hematomol/immun diag exc sickle cell crisis & coagul w CC	Include all	2	1.7242
810	M	Major hematomol/immun diag exc sickle cell crisis & coagul w/o CC/MCC	Include all	2	1.4231
811	M	Red blood cell disorders w MCC	Include all	3	0.9748
812	M	Red blood cell disorders w/o MCC	Include all	3	0.9405
813	M	Coagulation disorders	Include all	2	1.1991
814	M	Reticuloendothelial & immunity disorders w MCC	Include all	1	0.9539
815	M	Reticuloendothelial & immunity disorders w CC	Include all	2	1.4138
816	M	Reticuloendothelial & immunity disorders w/o CC/MCC	Include all	2	2.0219
820	S	Lymphoma & leukemia w major O.R. procedure w MCC	Include all	1	1.2297
821	S	Lymphoma & leukemia w major O.R. procedure w CC	Include all	2	1.3446

MS-DRG	Medical/Surgical	DRG Title	ICD-9-CM	Severity	Weight
822	S	Lymphoma & leukemia w major O.R. procedure w/o CC/MCC	Include all	2	1.2982
823	S	Lymphoma & non-acute leukemia w other O.R. proc w MCC	Include all	1	1.0699
824	S	Lymphoma & non-acute leukemia w other O.R. proc w CC	Include all	2	1.1385
825	S	Lymphoma & non-acute leukemia w other O.R. proc w/o CC/MCC	Include all	2	1.1107
826	S	Myeloprolif disord or poorly diff neopl w maj O.R. proc w MCC	Include all	1	1.4776
827	S	Myeloprolif disord or poorly diff neopl w maj O.R. proc w CC	Include all	2	1.6589
828	S	Myeloprolif disord or poorly diff neopl w maj O.R. proc w/o CC/MCC	Include all	2	1.2473
829	S	Myeloprolif disord or poorly diff neopl w other O.R. proc w CC/MCC	Include all	2	1.4563
830	S	Myeloprolif disord or poorly diff neopl w other O.R. proc w/o CC/MCC	Include all	2	1.0949
834	M	Acute leukemia w/o major O.R. procedure w MCC	Include all	1	1.3851
835	M	Acute leukemia w/o major O.R. procedure w CC	Include all	2	1.5604
836	M	Acute leukemia w/o major O.R. procedure w/o CC/MCC	Include all	2	1.5617
837	M	Chemo w acute leukemia as sdx or w high dose chemo agent w MCC	Include all	1	2.0489
838	M	Chemo w acute leukemia as sdx w CC or high dose chemo agent	Include all	2	2.7962
839	M	Chemo w acute leukemia as sdx w/o CC/MCC	Include all	2	2.7962
840	M	Lymphoma & non-acute leukemia w MCC	Include all	1	0.9961
841	M	Lymphoma & non-acute leukemia w CC	Include all	2	1.0572
842	M	Lymphoma & non-acute leukemia w/o CC/MCC	Include all	2	1.0236
843	M	Other myeloprolif dis or poorly diff neopl diag w MCC	Include all	3	1.1575
844	M	Other myeloprolif dis or poorly diff neopl diag w CC	Include all	3	1.1242
845	M	Other myeloprolif dis or poorly diff neopl diag w/o CC/MCC	Include all	3	0.9920
846	M	Chemotherapy w/o acute leukemia as secondary diagnosis w MCC	Include all	3	1.8196
847	M	Chemotherapy w/o acute leukemia as secondary diagnosis w CC	Include all	3	2.1659
848	M	Chemotherapy w/o acute leukemia as secondary diagnosis w/o CC/MCC	Include all	3	1.4919
849	M	Radiotherapy	Include all	3	1.1289
853	S	Infectious & parasitic diseases w O.R. procedure w MCC	Include all	1	0.9737
854	S	Infectious & parasitic diseases w O.R. procedure w CC	Include all	2	1.4024
855	S	Infectious & parasitic diseases w O.R. procedure w/o CC/MCC	Include all	2	1.8861
856	S	Postoperative or post-traumatic infections w O.R. proc w MCC	Include all	1	1.2743
857	S	Postoperative or post-traumatic infections w O.R. proc w CC	Include all	2	1.4028
858	S	Postoperative or post-traumatic infections w O.R. proc w/o CC/MCC	Include all	2	1.4082
862	M	Postoperative & post-traumatic infections w MCC	Include all	1	1.3853
863	M	Postoperative & post-traumatic infections w/o MCC	Include all	2	1.2675
864	M	Fever of unknown origin	Include all	2	1.3262
865	M	Viral illness w MCC	Include all	1	1.5452
866	M	Viral illness w/o MCC	Include all	2	1.9552
867	M	Other infectious & parasitic diseases diagnoses w MCC	Include all	1	1.3947
868	M	Other infectious & parasitic diseases diagnoses w CC	Include all	2	1.6556
869	M	Other infectious & parasitic diseases diagnoses w/o CC/MCC	Include all	2	1.8293
870	M	Septicemia w MV 96+ hours	Include all	1	0.9367
871	M	Septicemia w/o MV 96+ hours w MCC	Include all	1	0.8462
872	M	Septicemia w/o MV 96+ hours w/o MCC	Include all	1	0.9876
876	S	O.R. procedure w principal diagnoses of mental illness	Include all	3	0.9339
880	M	Acute adjustment reaction & psychosocial dysfunction	Include all	3	0.9826
881	M	Depressive neuroses	Include all	3	1.5741
882	M	Neuroses except depressive	Include all	3	2.7962

MS-DRG	Medical/ Surgical	DRG Title	ICD-9-CM	Severity	Weight
883	M	Disorders of personality & impulse control	Include all	3	2.7962
884	M	Organic disturbances & mental retardation	Include all	3	0.7102
885	M	Psychoses	Include all	3	1.2209
886	M	Behavioral & developmental disorders	Include all	3	2.7962
887	M	Other mental disorder diagnoses	Include all	3	2.7786
894	M	Alcohol/drug abuse or dependence, left ama	Include all	3	2.7962
895	M	Alcohol/drug abuse or dependence w rehabilitation therapy	Include all	3	2.4185
896	M	Alcohol/drug abuse or dependence w/o rehabilitation therapy w MCC	Include all	3	2.0194
897	M	Alcohol/drug abuse or dependence w/o rehabilitation therapy w/o MCC	Include all	3	2.0532
901	S	Wound debridements for injuries w MCC	Include all	1	1.1356
902	S	Wound debridements for injuries w CC	Include all	2	1.4421
903	S	Wound debridements for injuries w/o CC/MCC	Include all	2	1.5203
904	S	Skin grafts for injuries w CC/MCC	Include all	2	1.6878
905	S	Skin grafts for injuries w/o CC/MCC	Include all	2	1.7291
906	S	Hand procedures for injuries	Include all	3	2.7962
907	S	Other O.R. procedures for injuries w MCC	Include all	1	1.2977
908	S	Other O.R. procedures for injuries w CC	Include all	2	1.4516
909	S	Other O.R. procedures for injuries w/o CC/MCC	Include all	2	1.3781
913	M	Traumatic injury w MCC	Include all	1	1.1086
914	M	Traumatic injury w/o MCC	Include all	2	1.0848
915	M	Allergic reactions w MCC	Include all	3	1.2280
916	M	Allergic reactions w/o MCC	Include all	3	0.9909
917	M	Poisoning & toxic effects of drugs w MCC	Include all	2	2.1672
918	M	Poisoning & toxic effects of drugs w/o MCC	Include all	3	1.6546
919	M	Complications of treatment w MCC	Include all	3	1.0425
920	M	Complications of treatment w CC	Include all	3	1.0180
921	M	Complications of treatment w/o CC/MCC	Include all	3	0.8681
922	M	Other injury, poisoning & toxic effect diag w MCC	Include all	3	2.2516
923	M	Other injury, poisoning & toxic effect diag w/o MCC	Include all	3	1.2042
927	S	Extensive burns or full thickness burns w MV 96+ hrs w skin graft	Include all	1	2.7514
928	S	Full thickness burn w skin graft or inhal inj w CC/MCC	Include all	1	2.4367
929	S	Full thickness burn w skin graft or inhal inj w/o CC/MCC	Include all	2	2.7962
933	M	Extensive burns or full thickness burns w MV 96+ hrs w/o skin graft	Include all	1	2.1670
934	M	Full thickness burn w/o skin grft or inhal inj	Include all	2	2.2774
935	M	Non-extensive burns	Include all	2	2.2394
939	S	O.R. proc w diagnoses of other contact w health services w MCC	Include all	3	1.0952
940	S	O.R. proc w diagnoses of other contact w health services w CC	Include all	3	1.0980
941	S	O.R. proc w diagnoses of other contact w health services w/o CC/MCC	Include all	3	0.8788
945	M	Rehabilitation w CC/MCC	Include all	3	0.8508
946	M	Rehabilitation w/o CC/MCC	Include all	3	0.9869
947	M	Signs & symptoms w MCC	Include all	3	0.9268
948	M	Signs & symptoms w/o MCC	Include all	3	0.9829
949	M	Aftercare w CC/MCC	Include all	3	0.8282
950	M	Aftercare w/o CC/MCC	Include all	3	0.9146
951	M	Other factors influencing health status	Include all	3	1.3413
955	S	Craniotomy for multiple significant trauma	Include all	1	2.7962
956	S	Limb reattachment, hip & femur proc for multiple significant trauma	Include all	1	2.2004
957	S	Other O.R. procedures for multiple significant trauma w MCC	Include all	1	2.7962

MS-DRG	Medical/Surgical	DRG_Title	ICD-9-CM	Severity	Weight
958	S	Other O.R. procedures for multiple significant trauma w CC	Include all	2	2.7962
959	S	Other O.R. procedures for multiple significant trauma w/o CC/MCC	Include all	2	2.7962
963	M	Other multiple significant trauma w MCC	Include all	1	2.5535
964	M	Other multiple significant trauma w CC	Include all	2	2.7962
965	M	Other multiple significant trauma w/o CC/MCC	Include all	2	2.7962
969	S	HIV w extensive O.R. procedure w MCC	Include all	1	2.1079
970	S	HIV w extensive O.R. procedure w/o MCC	Include all	1	2.2166
974	M	HIV w major related condition w MCC	Include all	1	2.2613
975	M	HIV w major related condition w CC	Include all	1	2.7340
976	M	HIV w major related condition w/o CC/MCC	Include all	1	2.7962
977	M	HIV w or w/o other related condition	Include all	2	2.1116
981	S	Extensive O.R. procedure unrelated to principal diagnosis w MCC	Include all	1	0.9664
982	S	Extensive O.R. procedure unrelated to principal diagnosis w CC	Include all	2	1.1030
983	S	Extensive O.R. procedure unrelated to principal diagnosis w/o CC/MCC	Include all	2	1.2276
984	S	Prostatic O.R. procedure unrelated to principal diagnosis w MCC	Include all	3	0.7134
985	S	Prostatic O.R. procedure unrelated to principal diagnosis w CC	Include all	3	0.6949
986	S	Prostatic O.R. procedure unrelated to principal diagnosis w/o CC/MCC	Include all	3	0.6122
987	S	Non-extensive O.R. proc unrelated to principal diagnosis w MCC	Include all	3	0.9700
988	S	Non-extensive O.R. proc unrelated to principal diagnosis w CC	Include all	3	0.9935
989	S	Non-extensive O.R. proc unrelated to principal diagnosis w/o CC/MCC	Include all	3	0.9820

Gynecology

MS-DRG	Medical/Surgical	DRG_Title	ICD-9-CM	Severity	Weight
734	S	Pelvic evisceration, rad hysterectomy & rad vulvectomy w CC/MCC	Include all	1	0.8586
735	S	Pelvic evisceration, rad hysterectomy & rad vulvectomy w/o CC/MCC	Include all	1	1.0965
736	S	Uterine & adnexa proc for ovarian or adnexal malignancy w MCC	Include all	1	0.5368
737	S	Uterine & adnexa proc for ovarian or adnexal malignancy w CC	Include all	2	0.7794
738	S	Uterine & adnexa proc for ovarian or adnexal malignancy w/o CC/MCC	Include all	2	0.9462
739	S	Uterine,adnexa proc for non-ovarian/adnexal malig w MCC	Include all	1	0.5193
740	S	Uterine,adnexa proc for non-ovarian/adnexal malig w CC	Include all	2	0.6656
741	S	Uterine,adnexa proc for non-ovarian/adnexal malig w/o CC/MCC	Include all	2	0.7708
742	S	Uterine & adnexa proc for non-malignancy w CC/MCC	Include all	2	1.3787
743	S	Uterine & adnexa proc for non-malignancy w/o CC/MCC	Include all	3	0.5994
746	S	Vagina, cervix & vulva procedures w CC/MCC	Include all	3	0.5603
747	S	Vagina, cervix & vulva procedures w/o CC/MCC	Include all	3	0.3916
749	S	Other female reproductive system O.R. procedures w CC/MCC	Include all	2	1.0657
750	S	Other female reproductive system O.R. procedures w/o CC/MCC	Include all	2	1.3787
754	M	Malignancy, female reproductive system w MCC	Include all	1	0.5753
755	M	Malignancy, female reproductive system w CC	Include all	2	0.6462
756	M	Malignancy, female reproductive system w/o CC/MCC	Include all	2	0.7290
757	M	Infections, female reproductive system w MCC	Include all	3	0.4456
758	M	Infections, female reproductive system w CC	Include all	3	0.5211
759	M	Infections, female reproductive system w/o CC/MCC	Include all	3	0.4424
760	M	Menstrual & other female reproductive system disorders w CC/MCC	Include all	3	0.5981

MS-DRG	Medical/Surgical	DRG_Title	ICD-9-CM	Severity	Weight
761	M	Menstrual & other female reproductive system disorders w/o CC/MCC	Include all	3	0.4703

Heart & Heart Surgery

MS-DRG	Medical/Surgical	DRG_Title	ICD-9-CM	Severity	Weight
001	S	Heart transplant or implant of heart assist system w MCC	Include all	1	1.9328
002	S	Heart transplant or implant of heart assist system w/o MCC	Include all	1	1.9328
163	S	Major chest procedures w MCC	Include procedures: 3712, 3724, 3731, 3791, 3805, 3815, 3835, 3845, 3855, 3865, 3885, 3954	1	1.8570
164	S	Major chest procedures w CC	See MS-DRG: 163	2	1.8977
165	S	Major chest procedures w/o CC/MCC	See MS-DRG: 164	2	1.9328
215	S	Other heart assist system implant	Include all	1	1.6512
216	S	Cardiac valve & oth maj cardiothoracic proc w card cath w MCC	Include all	1	1.0666
217	S	Cardiac valve & oth maj cardiothoracic proc w card cath w CC	Include all	2	1.1121
218	S	Cardiac valve & oth maj cardiothoracic proc w card cath w/o CC/MCC	Include all	2	1.1273
219	S	Cardiac valve & oth maj cardiothoracic proc w/o card cath w MCC	Include all	1	1.2099
220	S	Cardiac valve & oth maj cardiothoracic proc w/o card cath w CC	Include all	2	1.2554
221	S	Cardiac valve & oth maj cardiothoracic proc w/o card cath w/o CC/MCC	Include all	2	1.2586
222	S	Cardiac defib implant w cardiac cath w AMI/HF/shock w MCC	Include all	1	1.1943
223	S	Cardiac defib implant w cardiac cath w AMI/HF/shock w/o MCC	Include all	1	1.1429
224	S	Cardiac defib implant w cardiac cath w/o AMI/HF/shock w MCC	Include all	3	1.2458
225	S	Cardiac defib implant w cardiac cath w/o AMI/HF/shock w/o MCC	Include all	3	1.2145
226	S	Cardiac defibrillator implant w/o cardiac cath w MCC	Include all	1	1.0289
227	S	Cardiac defibrillator implant w/o cardiac cath w/o MCC	Include all	1	1.1018
228	S	Other cardiothoracic procedures w MCC	Include all	1	1.9328
229	S	Other cardiothoracic procedures w CC	Include all	2	1.9328
230	S	Other cardiothoracic procedures w/o CC/MCC	Include all	2	1.7189
231	S	Coronary bypass w PTCA w MCC	Include all	1	1.5849
232	S	Coronary bypass w PTCA w/o MCC	Include all	2	1.7521
233	S	Coronary bypass w cardiac cath w MCC	Include all	2	1.2403
234	S	Coronary bypass w cardiac cath w/o MCC	Include all	3	1.2565
235	S	Coronary bypass w/o cardiac cath w MCC	Include all	2	1.1946
236	S	Coronary bypass w/o cardiac cath w/o MCC	Include all	3	1.1513
237	S	Major cardiovasc procedures w MCC or thoracic aortic aneurysm repair	Include all	1	1.1938
238	S	Major cardiovascular procedures w/o MCC	Include all	2	1.1686
242	S	Permanent cardiac pacemaker implant w MCC	Include all	2	0.8402
243	S	Permanent cardiac pacemaker implant w CC	Include all	2	0.8531
244	S	Permanent cardiac pacemaker implant w/o CC/MCC	Include all	3	0.8568
245	S	AICD Lead and Generator Procedures	Include all	2	0.9910
246	S	Perc cardiovasc proc w drug-eluting stent w MCC or 4+ vessels/stents	Include all	2	1.1476
247	S	Perc cardiovasc proc w drug-eluting stent w/o MCC	Include all	3	1.0429
248	S	Perc cardiovasc proc w non-drug-eluting stent w MCC or 4+ ves/stents	Include all	2	1.1438

MS-DRG	Medical/Surgical	DRG Title	ICD-9-CM	Severity	Weight
249	S	Perc cardiovasc proc w non-drug-eluting stent w/o MCC	Include all	3	1.0366
250	S	Perc cardiovasc proc w/o coronary artery stent or AMI w MCC	Include all	3	1.1418
251	S	Perc cardiovasc proc w/o coronary artery stent or AMI w/o MCC	Include all	3	1.1038
252	S	Other vascular procedures w MCC	Include all	2	0.9427
253	S	Other vascular procedures w CC	Include all	2	1.0333
254	S	Other vascular procedures w/o CC/MCC	Include all	3	1.0002
260	S	Cardiac pacemaker revision except device replacement w MCC	Include all	1	1.0412
261	S	Cardiac pacemaker revision except device replacement w CC	Include all	2	1.0370
262	S	Cardiac pacemaker revision except device replacement w/o CC/MCC	Include all	2	1.0845
280	M	Acute myocardial infarction, discharged alive w MCC	Include all	1	0.8827
281	M	Acute myocardial infarction, discharged alive w CC	Include all	2	0.9355
282	M	Acute myocardia infarction, discharged alive w/o CC/MCC	Include all	2	1.0909
283	M	Acute myocardial infarction, expired w MCC	Include all	1	0.8591
284	M	Acute myocardial infarction, expired w CC	Include all	2	0.8589
285	M	Acute myocardial infarction, expired w/o CC/MCC	Include all	2	0.8238
286	M	Circulatory disorders except AMI, w card cath w MCC	Include all	2	1.1460
287	M	Circulatory disorders except AMI, w card cath w/o MCC	Include all	3	1.2315
288	M	Acute & subacute endocarditis w MCC	Include all	1	1.2702
289	M	Acute & subacute endocarditis w CC	Include all	2	1.4105
290	M	Acute & subacute endocarditis w/o CC/MCC	Include all	2	1.4793
291	M	Heart failure & shock w MCC	Include all	1	0.8944
292	M	Heart failure & shock w CC	Include all	2	0.9073
293	M	Heart failure & shock w/o CC/MCC	Include all	2	0.9232
306	M	Cardiac congenital & valvular disorders w MCC	Include all	1	1.2417
308	M	Cardiac arrhythmia & conduction disorders w MCC	Include all	1	0.9350
309	M	Cardiac arrhythmia & conduction disorders w CC	Include all	2	0.9660
314	M	Other circulatory system diagnoses w MCC	Include all	2	1.0964
315	M	Other circulatory system diagnoses w CC	Include all	2	1.2986
316	M	Other circulatory system diagnoses w/o CC/MCC	Include all	3	1.1559

Kidney

MS-DRG	Medical/Surgical	DRG Title	ICD-9-CM	Severity	Weight
008	S	Simultaneous pancreas/kidney transplant	Include all	1	1.2879
652	S	Kidney transplant	Include all	1	1.1209
653	S	Major bladder procedures w MCC	Include all	1	1.0235
654	S	Major bladder procedures w CC	Include all	2	1.1860
655	S	Major bladder procedures w/o CC/MCC	Include all	2	1.2734
656	S	Kidney & ureter procedures for neoplasm w MCC	Include procedures 3924, 550, 5501-4, 551, 5511-2, 5524, 5529, 553, 5531-5, 5539, 554, 555, 5551-4, 5561, 557, 558, 5581-7, 5589, 5591, 5597, 5598, 5599	1	1.0752
657	S	Kidney & ureter procedures for neoplasm w CC	See MS-DRG 656	2	1.3284
658	S	Kidney & ureter procedures for neoplasm w/o CC/MCC	See MS-DRG 656	2	1.3497
659	S	Kidney & ureter procedures for non-neoplasm w MCC	See MS-DRG 656	2	1.2181
660	S	Kidney & ureter procedures for non-neoplasm w CC	See MS-DRG 656	2	1.6221
661	S	Kidney & ureter procedures for non-neoplasm w/o CC/MCC	See MS-DRG 656	3	1.4493

MS-DRG	Medical/ Surgical	DRG_Title	ICD-9-CM	Severity	Weight
673	S	Other kidney & urinary tract procedures w MCC	Include procedures 3806-7, 3816, 3836-7, 3846- 7,3866-7, 387, 3886-7, 3927, 3942-3, 3949-50, 3952, 3956-9, 3971	3	0.9950
674	S	Other kidney & urinary tract procedures w CC	Include procedures 3807, 3816, 3836- 7, 3846-7,3866-7, 387, 3886-7, 3927, 3942-3, 3949-50, 3952, 3956-9, 3971	3	1.0575
675	S	Other kidney & urinary tract procedures w/o CC/MCC	See MS-DRG 674	3	0.9445
682	M	Renal failure w MCC	Include all	1	0.9631
683	M	Renal failure w CC	Include all	2	0.9373
684	M	Renal failure w/o CC/MCC	Include all	2	0.9918
686	M	Kidney & urinary tract neoplasms w MCC	Include diagnoses: 1890-1, 1980, 2230	2	1.1958
687	M	Kidney & urinary tract neoplasms w CC	See MS-DRG 686	2	1.2684
688	M	Kidney & urinary tract neoplasms w/o CC/MCC	See MS-DRG 686	3	1.2351
689	M	Kidney & urinary tract infections w MCC	Include diagnoses: 0160, 590, 0786, 0954, 5900-3, 5908-9, 59010-11, 59080-1	3	1.7595
695	M	Kidney & urinary tract signs & symptoms w MCC	Include all	3	0.8266
698	M	Other kidney & urinary tract diagnoses w MCC	Include diagnoses: 2504, 580-3, 587, 589, 866, 4401, 4421, 4473, 4533, 5800, 5804, 5808- 13, 5818-22, 5824, 5828-32, 5834, 5836-9,5890-1, 5899, 5930-2, 5936, 8660, 886600-3, 8661, 86610-3, 27410, 27419, 44323, 44581, 58081, 58089, 58181, 58189, 58281, 58289, 58381, 58389, V420, V594	3	1.7851
699	M	Other kidney & urinary tract diagnoses w CC	See MS-DRG 698	3	1.9021
700	M	Other kidney & urinary tract diagnoses w/o CC/MCC	See MS-DRG 698	3	1.9021

Neurology & Neurosurgery

MS-DRG	Medical/ Surgical	DRG_Title	ICD-9-CM	Severity	Weight
020	S	Intracranial vascular procedures w PDX hemorrhage w MCC	Include all	1	2.4072
021	S	Intracranial vascular procedures w PDX hemorrhage w CC	Include all	1	3.2237
022	S	Intracranial vascular procedures w PDX hemorrhage w/o CC/MCC	Include all	1	3.3293
023	S	Cranio w major dev impl/acute complex CNS PDX w MCC or chemo implant	Include all	1	1.4775
024	S	Cranio w major dev impl/acute complex CNS PDX w/o MCC	Include all	1	1.5913
025	S	Craniotomy & endovascular intracranial procedures w MCC	Include all	1	1.3503
026	S	Craniotomy & endovascular intracranial procedures w CC	Include all	1	1.6784
027	S	Craniotomy & endovascular intracranial procedures w/o CC/MCC	Include all	1	2.0272
028	S	Spinal procedures w MCC	Include all	1	1.7898
029	S	Spinal procedures w CC or spinal neurostimulators	Include all	2	2.0700
030	S	Spinal procedures w/o CC/MCC	Include all	2	2.4391
031	S	Ventricular shunt procedures w MCC	Include all	1	1.8000
032	S	Ventricular shunt procedures w CC	Include all	2	1.7557
033	S	Ventricular shunt procedures w/o CC/MCC	Include all	2	0.8859
034	S	Carotid artery stent procedure w MCC	Include all	1	0.7542
035	S	Carotid artery stent procedure w CC	Include all	2	0.7638
036	S	Carotid artery stent procedure w/o CC/MCC	Include all	2	0.7663
037	S	Extracranial procedures w MCC	Include all	1	0.7427
038	S	Extracranial procedures w CC	Include all	2	0.7639
039	S	Extracranial procedures w/o CC/MCC	Include all	2	0.7436
040	S	Periph & cranial nerve & other nerv syst proc w MCC	Include all	1	0.9901
041	S	Periph/cranial nerve & other nerv syst proc w CC or periph neurostim	Include all	2	1.1326
042	S	Periph & cranial nerve & other nerv syst proc w/o CC/MCC	Include all	2	1.1714
052	M	Spinal disorders & injuries w CC/MCC	Include all	2	1.2811
053	M	Spinal disorders & injuries w/o CC/MCC	Include all	2	1.7957
054	M	Nervous system neoplasms w MCC	Include all	1	1.1488
055	M	Nervous system neoplasms w/o MCC	Include all	2	1.2212
056	M	Degenerative nervous system disorders w MCC	Include all	1	0.7189
057	M	Degenerative nervous system disorders w/o MCC	Include all	2	0.6873
058	M	Multiple sclerosis & cerebellar ataxia w MCC	Include all	1	1.2270
059	M	Multiple sclerosis & cerebellar ataxia w CC	Include all	2	1.3316
060	M	Multiple sclerosis & cerebellar ataxia w/o CC/MCC	Include all	2	1.5070
061	M	Acute ischemic stroke w use of thrombolytic agent w MCC	Include all	1	0.8339
062	M	Acute ischemic stroke w use of thrombolytic agent w CC	Include all	2	0.9567
063	M	Acute ischemic stroke w use of thrombolytic agent w/o CC/MCC	Include all	2	0.9443
064	M	Intracranial hemorrhage or cerebral infarction w MCC	Include all	1	0.7952
065	M	Intracranial hemorrhage or cerebral infarction w CC	Include all	2	0.8223
066	M	Intracranial hemorrhage or cerebral infarction w/o CC/MCC	Include all	2	0.8501
067	M	Nonspecific cva & precerebral occlusion w/o infarct w MCC	Include all	1	0.7412
068	M	Nonspecific cva & precerebral occlusion w/o infarct w/o MCC	Include all	2	0.7517
069	M	Transient ischemia	Include all	3	0.6969
070	M	Nonspecific cerebrovascular disorders w MCC	Include all	2	0.7818
071	M	Nonspecific cerebrovascular disorders w CC	Include all	2	0.7756
073	M	Cranial & peripheral nerve disorders w MCC	Include all	1	0.9458
074	M	Cranial & peripheral nerve disorders w/o MCC	Include all	2	1.1064
075	M	Viral meningitis w CC/MCC	Include all	2	3.2351
076	M	Viral meningitis w/o CC/MCC	Include all	2	3.3293
077	M	Hypertensive encephalopathy w MCC	Include all	1	1.0039

MS-DRG	Medical/Surgical	DRG_Title	ICD-9-CM	Severity	Weight
078	M	Hypertensive encephalopathy w CC	Include all	2	0.9827
079	M	Hypertensive encephalopathy w/o CC/MCC	Include all	2	1.0262
080	M	Nontraumatic stupor & coma w MCC	Include all	1	0.8523
081	M	Nontraumatic stupor & coma w/o MCC	Include all	2	0.9069
082	M	Traumatic stupor & coma, coma >1 hr w MCC	Include all	1	1.4693
083	M	Traumatic stupor & coma, coma >1 hr w CC	Include all	1	1.8618
084	M	Traumatic stupor & coma, coma >1 hr w/o CC/MCC	Include all	1	2.5985
085	M	Traumatic stupor & coma, coma <1 hr w MCC	Include all	1	0.8987
086	M	Traumatic stupor & coma, coma <1 hr w CC	Include all	2	1.0396
087	M	Traumatic stupor & coma, coma <1 hr w/o CC/MCC	Include all	2	1.0767
091	M	Other disorders of nervous system w MCC	Include all	3	1.0051
092	M	Other disorders of nervous system w CC	Include all	3	0.8655
093	M	Other disorders of nervous system w/o CC/MCC	Include all	3	0.8635
094	M	Bacterial & tuberculous infections of nervous system w MCC	Include all	1	1.6273
095	M	Bacterial & tuberculous infections of nervous system w CC	Include all	2	2.0338
096	M	Bacterial & tuberculous infections of nervous system w/o CC/MCC	Include all	2	3.0578
097	M	Non-bacterial infect of nervous sys exc viral meningitis w MCC	Include all	1	1.2374
098	M	Non-bacterial infect of nervous sys exc viral meningitis w CC	Include all	2	1.6608
099	M	Non-bacterial infect of nervous sys exc viral meningitis w/o CC/MCC	Include all	2	2.9194
100	M	Seizures w MCC	Include all	2	1.2498
453	S	Combined anterior/posterior spinal fusion w MCC	Include all	1	1.5087
454	S	Combined anterior/posterior spinal fusion w CC	Include all	2	2.3398
455	S	Combined anterior/posterior spinal fusion w/o CC/MCC	Include all	2	3.3293
456	S	Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w MCC	Include all	1	1.6611
457	S	Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w CC	Include all	2	1.7464
458	S	Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w/o CC/MCC	Include all	2	1.6186
459	S	Spinal fusion except cervical w MCC	Include all	1	1.1353
460	S	Spinal fusion except cervical w/o MCC	Include all	2	1.2745
471	S	Cervical spinal fusion w MCC	Include all	1	1.2439
472	S	Cervical spinal fusion w CC	Include all	2	1.6444
473	S	Cervical spinal fusion w/o CC/MCC	Include all	2	1.6386
490	S	Back & neck proc exc spinal fusion w CC/MCC or disc device/neurostim	Include all	2	1.0334
491	S	Back & neck proc exc spinal fusion w/o CC/MCC	Include all	3	0.7816
955	S	Craniotomy for multiple significant trauma	Include all	1	3.3293

Orthopedics

MS-DRG	Medical/Surgical	DRG_Title	ICD-9-CM	Severity	Weight
028	S	Spinal procedures w MCC	Exclude procedures: 0301-2, 0309, 031, 0321, 0329, 0332, 0339, 034, 0351-3, 0359, 036, 0371-2, 0379, 0393, 0394, 0397-9	1	1.7768
029	S	Spinal procedures w CC or spinal neurostimulators	See MS-DRG 028	2	2.9164
030	S	Spinal procedures w/o CC/MCC	See MS-DRG 028	2	2.9164
453	S	Combined anterior/posterior spinal fusion w MCC	Include all	1	1.5975

MS-DRG	Medical/Surgical	DRG Title	ICD-9-CM	Severity	Weight
454	S	Combined anterior/posterior spinal fusion w CC	Include all	2	2.4775
455	S	Combined anterior/posterior spinal fusion w/o CC/MCC	Include all	2	2.9164
456	S	Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w MCC	Include all	1	1.7588
457	S	Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w CC	Include all	2	1.8492
458	S	Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w/o CC/MCC	Include all	2	1.7139
459	S	Spinal fusion except cervical w MCC	Include all	1	1.2021
460	S	Spinal fusion except cervical w/o MCC	Include all	2	1.3495
461	S	Bilateral or multiple major joint procs of lower extremity w MCC	Include all	1	1.0220
462	S	Bilateral or multiple major joint procs of lower extremity w/o MCC	Include all	2	1.1658
466	S	Revision of hip or knee replacement w MCC	Include all	3	0.7828
467	S	Revision of hip or knee replacement w CC	Include all	3	0.8446
468	S	Revision of hip or knee replacement w/o CC/MCC	Include all	3	0.9616
469	S	Major joint replacement or reattachment of lower extremity w MCC	Include all	1	0.7684
470	S	Major joint replacement or reattachment of lower extremity w/o MCC	Include all	2	0.9678
471	S	Cervical spinal fusion w MCC	Include all	1	1.3171
472	S	Cervical spinal fusion w CC	Include all	2	1.7412
473	S	Cervical spinal fusion w/o CC/MCC	Include all	2	1.7350
480	S	Hip & femur procedures except major joint w MCC	Include all	2	0.7670
481	S	Hip & femur procedures except major joint w CC	Include all	2	0.7815
482	S	Hip & femur procedures except major joint w/o CC/MCC	Include all	3	0.8387
483	S	Major joint & limb reattachment proc of upper extremity w CC/MCC	Include all	1	0.8548
484	S	Major joint & limb reattachment proc of upper extremity w/o CC/MCC	Include all	1	0.9446
485	S	Knee procedures w pdx of infection w MCC	Include all	1	0.9657
486	S	Knee procedures w pdx of infection w CC	Include all	2	1.3929
487	S	Knee procedures w pdx of infection w/o CC/MCC	Include all	2	2.0151
490	S	Back & neck proc exc spinal fusion w CC/MCC or disc device/neurostim	Include all	2	1.0942
491	S	Back & neck proc exc spinal fusion w/o CC/MCC	Include all	3	0.8276
492	S	Lower extrem & humer proc except hip,foot,femur w MCC	Include all	2	1.2079
493	S	Lower extrem & humer proc except hip,foot,femur w CC	Include all	2	1.5237
494	S	Lower extrem & humer proc except hip,foot,femur w/o CC/MCC	Include all	3	2.9164
495	S	Local excision & removal int fix devices exc hip & femur w MCC	Include all	2	1.1608
496	S	Local excision & removal int fix devices exc hip & femur w CC	Include all	2	1.5947
497	S	Local excision & removal int fix devices exc hip & femur w/o CC/MCC	Include all	3	2.3835
498	S	Local excision & removal int fix devices of hip & femur w CC/MCC	Include all	3	1.0790
499	S	Local excision & removal int fix devices of hip & femur w/o CC/MCC	Include all	3	1.5604
500	S	Soft tissue procedures w MCC	Include all	3	1.2902
501	S	Soft tissue procedures w CC	Include all	3	1.3239
503	S	Foot procedures w MCC	Include all	3	1.1420
504	S	Foot procedures w CC	Include all	3	1.3820
505	S	Foot procedures w/o CC/MCC	Include all	3	2.0752
506	S	Major thumb or joint procedures	Include all	3	1.1244
507	S	Major shoulder or elbow joint procedures w CC/MCC	Include all	2	1.2427
508	S	Major shoulder or elbow joint procedures w/o CC/MCC	Include all	2	1.5616

MS-DRG	Medical/Surgical	DRG_Title	ICD-9-CM	Severity	Weight
515	S	Other musculoskelet sys & conn tiss O.R. proc w MCC	Include procedures: 7601, 7631, 7639, 764, 7641-6, 765-6, 7661-70, 7672, 7674, 7676-7, 7679, 7691-2, 7694, 7699, 7700-1, 7709, 7720-1, 7729-31, 7739, 7780-1, 7789-91, 7799-7801, 7809-7811, 7819-20, 7829-30, 7839-41, 7849-51, 7859, 7870-1, 7879, 7890-1, 7899, 7910, 7919-20, 7929-30, 7939-40, 7949-50, 7959-60, 7969, 7980, 7989-90, 7999, 8010, 8019, 8040, 8049, 8090, 8118, 8120, 8129, 8159, 8165-6, 8196-7, 8199, 8429, 8440, 8493, 8499	3	0.8606
516	S	Other musculoskelet sys & conn tiss O.R. proc w CC	See MS-DRG 515	3	0.7926
517	S	Other musculoskelet sys & conn tiss O.R. proc w/o CC/MCC	See MS-DRG 515	3	0.6981
533	M	Fractures of femur w MCC	Include all	1	0.8340
534	M	Fractures of femur w/o MCC	Include all	2	1.3084
535	M	Fractures of hip & pelvis w MCC	Include all	1	0.7289
536	M	Fractures of hip & pelvis w/o MCC	Include all	2	0.7551
539	M	Osteomyelitis w MCC	Include all	3	0.9361
540	M	Osteomyelitis w CC	Include all	3	0.9837
541	M	Osteomyelitis w/o CC/MCC	Include all	3	0.9133
542	M	Pathological fractures & musculoskelet & conn tiss malig w MCC	Include diagnoses: 7331, 73310-6, 73319, 73393-5	1	1.0000
543	M	Pathological fractures & musculoskelet & conn tiss malig w CC	See MS-DRG 542	2	1.0000
544	M	Pathological fractures & musculoskelet & conn tiss malig w/o CC/MCC	See MS-DRG 542	2	1.0000
956	S	Limb reattachment, hip & femur proc for multiple significant trauma	Include all	1	2.1789

Pulmonology

MS-DRG	Medical/Surgical	DRG_Title	ICD-9-CM	Severity	Weight
003	S	ECMO or trach w MV 96+ hrs or PDX exc face, mouth & neck w maj O.R.	Include all	1	1.4904
004	S	Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R.	Include all	1	1.1607
007	S	Lung transplant	Include all	1	1.7066

MS-DRG	Medical/ Surgical	DRG_Title	ICD-9-CM	Severity	Weight
163	S	Major chest procedures w MCC	Include procedures: 3173, 3175, 3179, 3209, 321, 3221-2, 3229, 323-6, 329-31, 3325, 3328, 3334, 3339, 334, 3341-3, 3348-9, 3392, 3398-9, 3402, 3427, 345, 3451, 3459, 346, 3473-4, 348, 3481-5, 3489, 3493	1	1.4944
164	S	Major chest procedures w CC	See MS-DRG 163	2	1.3374
165	S	Major chest procedures w/o CC/MCC	See MS-DRG 163	2	1.4767
166	S	Other resp system O.R. procedures w MCC	Include all	2	1.0539
167	S	Other resp system O.R. procedures w CC	Include all	2	1.1374
168	S	Other resp system O.R. procedures w/o CC/MCC	Include all	3	0.9383
175	M	Pulmonary embolism w MCC	Include all	1	1.1127
176	M	Pulmonary embolism w/o MCC	Include all	1	1.3775
177	M	Respiratory infections & inflammations w MCC	Exclude diagnoses: 7955, V712	1	0.8726
178	M	Respiratory infections & inflammations w CC	See MS-DRG 177	2	0.8714
179	M	Respiratory infections & inflammations w/o CC/MCC	See MS-DRG 177	2	0.9335
180	M	Respiratory neoplasms w MCC	Exclude diagnoses: 2122-5, 2128-9, 2133	1	1.0688
181	M	Respiratory neoplasms w CC	See MS-DRG 181	2	1.1313
182	M	Respiratory neoplasms w/o CC/MCC	See MS-DRG 181	2	1.0388
183	M	Major chest trauma w MCC	Include all	1	1.2843
184	M	Major chest trauma w CC	Include all	1	1.6193
185	M	Major chest trauma w/o CC/MCC	Include all	1	1.5434
186	M	Pleural effusion w MCC	Include all	3	0.9481
187	M	Pleural effusion w CC	Include all	3	0.9805
189	M	Pulmonary edema & respiratory failure	Include all	2	0.9026
190	M	Chronic obstructive pulmonary disease w MCC	Include all	3	0.8873
191	M	Chronic obstructive pulmonary disease w CC	Include all	3	0.8471
192	M	Chronic obstructive pulmonary disease w/o CC/MCC	Include all	3	0.8340
193	M	Simple pneumonia & pleurisy w MCC	Include all	3	0.8856
194	M	Simple pneumonia & pleurisy w CC	Include all	3	0.8538
196	M	Interstitial lung disease w MCC	Include all	3	0.9548
197	M	Interstitial lung disease w CC	Include all	3	0.9589
198	M	Interstitial lung disease w/o CC/MCC	Include all	3	0.8992
199	M	Pneumothorax w MCC	Exclude diagnoses: 5121	1	1.4506
200	M	Pneumothorax w CC	See MS-DRG 199	2	1.7066
202	M	Bronchitis & asthma w CC/MCC	Include all	3	1.4009
207	M	Respiratory system diagnosis w ventilator support 96+ hours	Include all	2	1.0739
208	M	Respiratory system diagnosis w ventilator support <96 hours	Include all	2	1.0745
870	M	Septicemia w MV 96+ hours	Include all	1	1.0041
871	M	Septicemia w/o MV 96+ hours w MCC	Include all	1	0.9071
872	M	Septicemia w/o MV 96+ hours w/o MCC	Include all	1	1.0586

Urology

MS-DRG	Medical/Surgical	DRG Title	IC9-CM	Severity	Weight
653	S	Major bladder procedures w MCC	Include all	1	1.0311
654	S	Major bladder procedures w CC	Include all	2	1.1947
655	S	Major bladder procedures w/o CC/MCC	Include all	2	1.2828
656	S	Kidney & ureter procedures for neoplasm w MCC	Include procedures: 561-2, 5640-2, 5651-2, 5661-2, 5671-5, 5679, 5681-6, 5689, 5692-5, 5699, 5900, 5902-3, 5909	1	0.9259
657	S	Kidney & ureter procedures for neoplasm w CC	See MS-DRG 656	2	1.0090
658	S	Kidney & ureter procedures for neoplasm w/o CC/MCC	See MS-DRG 656	2	1.1276
659	S	Kidney & ureter procedures for non-neoplasm w MCC	See MS-DRG 656	2	1.2423
660	S	Kidney & ureter procedures for non-neoplasm w CC	See MS-DRG 656	2	1.5983
661	S	Kidney & ureter procedures for non-neoplasm w/o CC/MCC	See MS-DRG 656	3	1.5983
662	S	Minor bladder procedures w MCC	Include all	3	0.9284
663	S	Minor bladder procedures w CC	Include all	3	0.9826
664	S	Minor bladder procedures w/o CC/MCC	Include all	3	0.8614
665	S	Prostatectomy w MCC	Include all	3	0.8141
666	S	Prostatectomy w CC	Include all	3	0.8360
668	S	Transurethral procedures w MCC	Include all	3	1.0071
669	S	Transurethral procedures w CC	Include all	3	0.9681
671	S	Urethral procedures w CC/MCC	Include all	3	1.0890
673	S	Other kidney & urinary tract procedures w MCC	Include procedures: 6495-7	3	0.9611
674	S	Other kidney & urinary tract procedures w CC	See MS-DRG 673	3	0.8743
675	S	Other kidney & urinary tract procedures w/o CC/MCC	See MS-DRG 673	3	1.0000
686	M	Kidney & urinary tract neoplasms w MCC	Exclude diagnoses: 1890-1, 1980-1, 2230-1	2	0.9126
687	M	Kidney & urinary tract neoplasms w CC	See MS-DRG 686	2	0.9591
688	M	Kidney & urinary tract neoplasms w/o CC/MCC	See MS-DRG 686	3	0.7861
689	M	Kidney and Urinary Tract Infections with MCC	Exclude diagnoses: 0160, 0786, 0954, 590, 5900-3, 5908-9, 59010-11, 59080-1	3	0.8482
691	M	Urinary stones w esw lithotripsy w CC/MCC	Include all	3	1.3671
692	M	Urinary stones w esw lithotripsy w/o CC/MCC	Include all	3	0.6877
697	M	Urethral stricture	Include all	3	0.9338

MS-DRG	Medical/ Surgical	DRG_Title	ICD-9-CM	Severity	Weight
698	M	Other kidney & urinary tract diagnoses w MCC	Exclude diagnoses: 580-3, 587, 589, 866, 4401, 4421, 4473, 4533, 5800, 5804, 5808-13, 5818-22, 5824, 5828-32, 5834, 5836- 9,5890-1, 5899, 5930-2, 5936, 8660, 886600-3, 8661, 86610-3, 27410, 27419, 44323, 44581, 58081, 58089, 58181, 58189, 58281, 58289, 58381, 58389, V420, V594	3	1.0287
699	M	Other kidney & urinary tract diagnoses w CC	See MS-DRG 698	3	1.0772
700	M	Other kidney & urinary tract diagnoses w/o CC/MCC	See MS-DRG 698	3	0.9986
707	S	Major male pelvic procedures w CC/MCC	Include all	2	1.5983
708	S	Major male pelvic procedures w/o CC/MCC	Include all	2	1.5983
709	S	Penis procedures w CC/MCC	Include all	3	1.3015
710	S	Penis procedures w/o CC/MCC	Include all	3	1.3843
711	S	Testes procedures w CC/MCC	Include all	2	1.4938
712	S	Testes procedures w/o CC/MCC	Include all	3	1.2543
713	S	Transurethral prostatectomy w CC/MCC	Include all	2	0.8431
715	S	Other male reproductive system O.R. proc for malignancy w CC/MCC	Include all	2	1.1009
716	S	Other male reproductive system O.R. proc for malignancy w/o CC/MCC	Include all	2	1.1915
717	S	Other male reproductive system O.R. proc exc malignancy w CC/MCC	Include all	3	1.0693
718	S	Other male reproductive system O.R. proc exc malignancy w/o CC/MCC	Include all	3	0.9257
722	M	Malignancy, male reproductive system w MCC	Include all	1	0.9915
723	M	Malignancy, male reproductive system w CC	Include all	2	1.0275
724	M	Malignancy, male reproductive system w/o CC/MCC	Include all	2	0.9143
727	M	Inflammation of the male reproductive system w MCC	Include all	3	1.1303
728	M	Inflammation of the male reproductive system w/o MCC	Include all	3	1.0595
729	M	Other male reproductive system diagnoses w CC/MCC	Exclude diagnoses: V252	3	1.2090
730	M	Other male reproductive system diagnoses w/o CC/MCC	See MS-DRG 729	3	1.3344
984	S	Prostatic O.R. procedure unrelated to principal diagnosis w MCC	Include all	3	0.7772
985	S	Prostatic O.R. procedure unrelated to principal diagnosis w CC	Include all	3	0.7571
986	S	Prostatic O.R. procedure unrelated to principal diagnosis w/o CC/MCC	Include all	3	0.6877

Appendix E
2010/11 Index of Hospital Quality (IHQ)
Scores, by Specialty

Final IHQ-Driven Rankings 2010/11—Cancer

Rank	Hospital	U.S. News Reputation		Relative mortality	Patient safety index	Discharges (3 years)	Nurse staffing	Nurse Magnet hospital	NCI cancer center	FACT accreditation (0, 1, or 2)	Technologies (of 7)	Patient services (of 8)	Intensivists	Current AHA responder
		Score	(%)	(below 1.00 is better)	(higher is better)									
1	University of Texas M.D. Anderson Cancer Center, Houston	100.0	64.5	0.38	2	3,700	2.1	Yes	Yes	2	7	8	1	Yes
2	Memorial Sloan-Kettering Cancer Center, New York	93.9	56.0	0.62	3	4,945	1.8	No	Yes	2	7	8	1	Yes
3	Mayo Clinic, Rochester, Minn.	79.1	32.5	0.64	1	3,726	3.0	Yes	Yes	2	7	8	1	Yes
4	Johns Hopkins Hospital, Baltimore	75.1	31.3	0.61	1	1,657	2.1	Yes	Yes	2	7	8	1	Yes
5	University of Washington Medical Center, Seattle	60.6	15.8	0.61	1	891	2.2	Yes	Yes	2	7	8	1	Yes
6	Dana-Farber Cancer Institute, Boston	58.5	25.1	1.00	5	270	1.0	Yes	Yes	2	7	8	0	Yes
7	Massachusetts General Hospital, Boston	57.1	15.1	0.76	1	1,986	2.1	Yes	Yes	2	7	8	1	Yes
8	University of California, San Francisco Medical Center	56.2	12.4	0.64	3	1,363	2.5	No	Yes	2	7	8	1	Yes
9	Cleveland Clinic	52.6	9.5	0.67	3	2,581	2.2	Yes	Yes	2	7	8	1	Yes +4 S.D.s
10	Ronald Reagan UCLA Medical Center, Los Angeles	51.8	7.9	0.58	3	1,030	2.6	Yes	Yes	2	7	8	1	Yes
11	Stanford Hospital and Clinics, Stanford, Calif.	49.0	11.2	0.83	1	1,151	2.5	Yes	Yes	2	7	8	1	Yes
12	Duke University Medical Center, Durham, N.C.	48.9	9.7	0.79	1	2,352	1.9	Yes	Yes	2	7	8	1	Yes
13	University of Michigan Hospitals and Health Centers, Ann Arbor	46.4	6.4	0.64	1	1,751	2.7	No	Yes	2	7	8	1	Yes
14	Hospital of the University of Pennsylvania, Philadelphia	44.4	7.2	0.73	2	1,413	1.7	Yes	Yes	2	7	8	1	Yes
15	University of Chicago Medical Center	44.4	6.3	0.75	2	1,646	2.6	Yes	Yes	2	7	8	1	Yes +3 S.D.s
16	Brigham and Women's Hospital, Boston	43.0	5.9	0.72	1	2,066	2.3	No	Yes	2	7	8	1	Yes
17	Barnes-Jewish Hospital/Washington University, St. Louis	41.7	3.5	0.69	2	3,298	2.0	Yes	Yes	2	7	8	1	Yes
18	Vanderbilt University Medical Center, Nashville	40.4	4.5	0.73	4	1,227	2.1	Yes	Yes	2	7	8	0	Yes
19	Moffitt Cancer Center, Tampa	39.0	3.7	0.63	1	1,421	1.0	No	Yes	2	7	8	1	Yes
20	City of Hope, Duarte, Calif.	38.1	3.8	0.71	1	950	2.2	No	Yes	2	7	8	1	Yes
21	University of Maryland Medical Center, Baltimore	37.8	2.1	0.61	3	933	2.1	Yes	Yes	2	7	8	1	Yes
22	University of Iowa Hospitals and Clinics, Iowa City	37.5	0.9	0.50	4	1,338	1.7	Yes	Yes	2	7	8	1	Yes
23	Yale-New Haven Hospital, New Haven, Conn.	37.3	3.0	0.71	2	1,311	2.6	No	Yes	2	7	8	1	Yes
24	New York-Presbyterian University Hospital of Columbia and Cornell	36.8	2.2	0.70	1	3,246	2.0	No	Yes	2	7	8	1	Yes
25	NYU Langone Medical Center, New York	36.2	2.2	0.64	2	1,201	1.7	Yes	Yes	1	7	7	1	Yes
26	Ohio State University James Cancer Hospital, Columbus	35.9	2.2	0.76	2	2,672	2.0	Yes	Yes	2	7	8	1	Yes
27	Northwestern Memorial Hospital, Chicago	35.8	3.6	0.83	1	1,909	1.6	Yes	Yes	2	7	8	1	Yes
28	Fox Chase Cancer Center, Philadelphia	35.8	5.0	0.87	1	828	1.6	Yes	Yes	2	7	7	1	Yes
29	Shands at the University of Florida, Gainesville	35.7	3.1	0.68	1	1,200	1.8	Yes	No	2	7	8	1	Yes
30	University of Wisconsin Hospital and Clinics, Madison	35.2	3.0	0.73	1	1,187	1.8	Yes	Yes	2	7	7	0	Yes
31	UPMC-University of Pittsburgh Medical Center	35.1	3.6	0.86	2	2,748	1.8	No	Yes	2	7	8	1	Yes
32	University of Virginia Medical Center, Charlottesville	32.3	2.1	0.71	1	1,440	2.1	Yes	Yes	0	6	8	1	Yes
33	Roswell Park Cancer Institute, Buffalo	32.3	2.3	0.77	1	733	2.0	No	Yes	2	7	8	1	Yes
34	University Hospitals Case Medical Center, Cleveland	32.3	1.1	0.69	1	1,294	1.9	Yes	Yes	2	7	8	1	Yes
35	Thomas Jefferson University Hospital, Philadelphia	32.1	1.3	0.78	5	1,179	2.1	Yes	Yes	2	7	8	0	Yes
36	Wake Forest University Baptist Medical Center, Winston-Salem, N.C.	32.1	0.6	0.71	5	1,565	1.5	Yes	Yes	2	7	8	1	Yes
37	University of Minnesota Medical Center, Fairview	31.9	0.9	0.69	2	1,027	1.9	Yes	Yes	2	7	8	0	Yes
38	Virginia Commonwealth University Medical Center, Richmond	31.7	1.7	0.81	4	838	2.4	Yes	Yes	2	7	7	1	Yes
39	University of Alabama Hospital at Birmingham	31.6	1.6	0.77	1	1,577	1.9	Yes	Yes	2	7	8	1	Yes
40	Clarian Health, Indianapolis	30.8	0.9	0.82	4	1,765	2.0	Yes	Yes	2	7	8	1	Yes
41	Emory University Hospital, Atlanta	30.8	1.4	0.76	1	1,313	2.1	No	Yes	2	7	8	1	Yes
42	Magee-Womens Hospital of UPMC, Pittsburgh	30.7	0.0	0.46	4	435	1.5	No	No	0	7	8	1	Yes
43	Rush University Medical Center, Chicago	30.5	0.9	0.68	2	1,529	2.0	Yes	No	2	5	8	1	Yes
44	University of Colorado Hospital, Aurora	30.4	2.1	0.82	1	694	1.6	Yes	Yes	2	6	7	1	Yes
45	Methodist Hospital, Houston	30.4	0.6	0.67	3	1,388	1.8	Yes	No	2	7	8	1	Yes
46	Beth Israel Deaconess Medical Center, Boston	30.3	0.6	0.67	1	1,464	1.5	No	Yes	2	6	8	1	Yes
47	University of North Carolina Hospitals, Chapel Hill	29.7	1.7	0.79	1	1,189	1.8	No	Yes	2	7	8	0	Yes
48	Mount Sinai Medical Center, New York	29.7	0.9	0.72	2	1,960	1.9	Yes	No	2	7	8	1	Yes
49	Cedars-Sinai Medical Center, Los Angeles	29.6	1.2	0.81	5	1,889	2.2	Yes	No	2	7	7	0	Yes
50	University of California, Davis Medical Center, Sacramento	29.5	1.2	0.75	1	740	2.8	No	Yes	2	7	8	1	Yes

Final IHQ-Driven Rankings 2010/11—Diabetes & Endocrinology

Rank	Hospital	U.S. News Score	Reputation (%)	Relative mortality (below 1.00 is better)	Patient safety index (higher is better)	Discharges (3 years)	Nurse staffing	Nurse Magnet hospital	Technologies (of 4)	Patient services (of 8)	Intensivists	Current AHA responder
1	Mayo Clinic, Rochester, Minn.	100.0	63.9	0.52	1	772	3.0	Yes	4	8	1	Yes
2	Massachusetts General Hospital, Boston	90.7	49.6	0.58	1	607	2.1	Yes	4	8	1	Yes
3	Johns Hopkins Hospital, Baltimore	80.3	31.2	0.49	1	483	2.1	Yes	4	8	1	Yes
4	University of California, San Francisco Medical Center	67.4	20.2	0.61	3	294	2.5	No	3	8	1	Yes
5	Ronald Reagan UCLA Medical Center, Los Angeles	66.3	13.8	0.33	3	204	2.6	Yes	4	8	1	Yes
6	Cleveland Clinic	63.6	16.4	0.80	3	835	2.2	Yes	4	8	1	Yes
7	New York-Presbyterian University Hospital of Columbia and Cornell	63.4	14.6	0.55	1	865	2.0	No	4	8	1	Yes
8	Yale-New Haven Hospital, New Haven, Conn.	61.2	10.7	0.40	2	802	2.6	No	4	8	1	Yes
9	Barnes-Jewish Hospital/Washington University, St. Louis	56.8	11.6	0.74	2	555	2.0	Yes	4	8	1	Yes
10	Brigham and Women's Hospital, Boston	56.2	9.2	0.44	1	419	2.3	No	4	8	1	Yes
11	University of Virginia Medical Center, Charlottesville	55.9	11.8	0.77	1	489	2.1	Yes	4	8	1	Yes +4 S.D.s
12	Hospital of the University of Pennsylvania, Philadelphia	51.1	7.1	0.57	2	346	1.7	Yes	4	8	1	Yes
13	Vanderbilt University Medical Center, Nashville	49.0	6.3	0.62	4	519	2.1	Yes	4	8	0	Yes +3 S.D.s
14	Joslin Clinic and Beth Israel Deaconess Medical Center, Boston	48.1	5.6	0.51	1	475	1.5	No	4	8	1	Yes
15	University of Washington Medical Center, Seattle	47.5	9.0	0.94	1	242	2.2	Yes	4	8	1	Yes
16	Washington Hospital Center, Washington, D.C.	46.4	3.6	0.43	1	755	1.7	No	4	8	1	Yes
17	Ohio State University Hospital, Columbus	45.1	2.4	0.41	2	608	2.0	Yes	4	8	1	Yes
18	University of Chicago Medical Center	43.7	5.7	0.92	2	448	2.6	Yes	4	8	1	Yes
19	University of Michigan Hospitals and Health Centers, Ann Arbor	43.1	3.1	0.53	1	385	2.7	No	4	8	1	Yes
20	Mount Sinai Medical Center, New York	42.8	5.8	0.94	2	635	1.9	Yes	4	8	1	Yes
21	University of Texas M.D. Anderson Cancer Center, Houston	42.4	8.7	1.39	2	206	2.1	Yes	4	8	1	Yes
22	University of California, San Diego Medical Center	41.8	2.2	0.34	1	155	1.9	No	3	8	1	Yes
23	Northwestern Memorial Hospital, Chicago	41.7	2.6	0.56	1	373	1.6	Yes	4	8	1	Yes
24	University of Texas Southwestern Medical Center, Dallas	41.0	3.5	0.64	4	408	1.6	No	4	7	0	Yes
25	Greenville Memorial Hospital, Greenville, S.C.	40.9	1.3	0.42	5	326	2.0	No	4	7	1	Yes
26	University of Iowa Hospitals and Clinics, Iowa City	40.7	0.8	0.37	4	203	1.7	Yes	4	8	1	Yes
27	Duke University Medical Center, Durham, N.C.	40.5	3.7	0.83	1	506	1.9	Yes	4	8	1	Yes
28	Stanford Hospital and Clinics, Stanford, Calif.	39.8	4.0	0.87	1	228	2.5	Yes	4	8	1	Yes
29	University of Illinois Medical Center at Chicago	39.7	1.0	0.24	3	208	1.5	No	2	6	1	Yes
30	UPMC-University of Pittsburgh Medical Center	39.2	3.0	0.78	2	605	1.8	No	4	8	1	Yes
31	Tampa General Hospital	39.0	0.0	0.30	1	272	2.3	Yes	4	8	1	Yes
32	Montefiore Medical Center, New York	38.4	2.0	0.74	2	979	1.5	No	4	8	1	Yes
33	Cedars-Sinai Medical Center, Los Angeles	38.4	2.3	0.79	5	541	2.2	Yes	4	7	0	Yes
34	Hennepin County Medical Center, Minneapolis	38.2	0.3	0.17	1	278	2.3	No	1	8	1	Yes
35	Oregon Health and Science University, Portland	37.9	1.5	0.48	1	315	2.0	No	4	8	0	Yes
36	NYU Langone Medical Center, New York	37.8	2.9	0.83	2	283	1.7	Yes	4	7	1	Yes
37	Banner Good Samaritan Medical Center, Phoenix	37.8	0.0	0.44	3	351	2.2	Yes	4	8	1	Yes
38	University of Maryland Medical Center, Baltimore	37.8	0.0	0.40	3	265	2.1	Yes	4	8	1	Yes
39	Emory University Hospital, Atlanta	37.5	1.6	0.60	1	388	2.1	No	4	8	1	Yes
40	Cleveland Clinic Florida, Weston	36.8	0.0	0.21	3	180	1.7	No	2	7	1	Yes
41	University Hospital, Cincinnati	36.7	0.9	0.42	1	308	1.8	No	3	8	0	Yes
42	Good Samaritan Hospital, Cincinnati	36.7	0.0	0.16	2	219	1.7	No	1	8	0	Yes
43	Sanford USD Medical Center, Sioux Falls, S.D.	36.5	0.0	0.46	4	258	2.4	Yes	4	8	0	Yes
44	Methodist Hospital, Houston	36.4	0.0	0.59	3	719	1.8	Yes	4	8	1	Yes
45	Mayo Clinic Hospital, Phoenix	36.4	0.5	0.53	2	248	3.8	No	3	7	1	Yes
46	Tufts Medical Center, Boston	36.3	0.0	0.23	3	171	1.9	No	2	7	0	Yes
47	Memorial Sloan-Kettering Cancer Center, New York	36.2	5.4	1.22	3	236	1.8	No	4	8	1	Yes
48	Clarian Health, Indianapolis	36.2	0.3	0.66	4	581	2.0	Yes	4	8	1	Yes
49	LDS Hospital, Salt Lake City	36.1	0.0	0.32	3	168	1.8	No	4	8	0	Yes
50	Willis-Knighton Medical Center, Shreveport, La.	36.1	0.0	0.47	5	475	1.5	No	3	8	1	Yes

Final IHQ-Driven Rankings 2010/11—Ear, Nose & Throat

Rank	Hospital	U.S. News Score	Reputation (%)	Relative mortality (below 1.00 is better)	Patient safety index (higher is better)	Discharges (3 years)	Nurse staffing	Nurse Magnet hospital	Technology (of 1)	Patient services (of 8)	Trauma center	Intensivists	Current AHA responder
1	Johns Hopkins Hospital, Baltimore	100.0	47.3	0.40	1	220	2.1	Yes	1	8	Yes	1	Yes
2	Massachusetts Eye and Ear Infirmary, Massachusetts General Hospital, Boston	80.5	23.1	0.39	1	271	2.1	Yes	1	8	Yes	1	Yes
3	UPMC-University of Pittsburgh Medical Center	80.3	27.7	0.96	2	298	1.8	No	1	8	No	1	Yes
4	University of Iowa Hospitals and Clinics, Iowa City	78.9	20.9	0.29	4	224	1.7	Yes	1	8	Yes	1	Yes
5	Mayo Clinic, Rochester, Minn.	78.4	19.9	0.35	1	310	3.0	Yes	1	8	Yes	1	Yes
6	University of Texas M.D. Anderson Cancer Center, Houston	78.2	20.3	0.32	2	403	2.1	Yes	1	8	No	1	Yes
7	Hospital of the University of Pennsylvania, Philadelphia	71.8	17.9	0.81	2	247	1.7	Yes	1	8	Yes	1	Yes
8	Cleveland Clinic	68.3	16.7	1.08	3	213	2.2	Yes	1	8	No	1	Yes
9	University of Michigan Hospitals and Health Centers, Ann Arbor	66.2	14.5	0.86	1	273	2.7	No	1	8	Yes	1	Yes
10	Barnes-Jewish Hospital/Washington University, St. Louis	66.0	13.3	0.66	2	235	2.0	Yes	1	8	Yes	1	Yes
11	Ronald Reagan UCLA Medical Center, Los Angeles	61.9	9.2	0.25	3	233	2.6	Yes	1	8	Yes	1	Yes
12	Memorial Sloan-Kettering Cancer Center, New York	59.4	9.9	0.51	3	268	1.8	No	1	8	No	1	Yes
13	University of Washington Medical Center, Seattle	58.1	10.1	0.55	1	135	2.2	Yes	1	8	No	1	Yes
14	Vanderbilt University Medical Center, Nashville	57.5	8.6	0.57	4	202	2.1	Yes	1	8	Yes	0	Yes
15	University of California, San Francisco Medical Center	55.4	8.0	0.17	3	109	2.5	No	1	8	No	1	Yes +4 S.D.s
16	Stanford Hospital and Clinics, Stanford, Calif.	52.3	6.9	0.69	1	113	2.5	Yes	1	8	Yes	1	Yes
17	Methodist Hospital, Houston	51.9	7.1	0.67	3	91	1.8	Yes	1	8	No	1	Yes
18	Ohio State University Hospital, Columbus	51.3	4.3	0.54	2	420	2.0	Yes	1	8	Yes	1	Yes
19	Mount Sinai Medical Center, New York	49.5	5.6	0.72	2	225	1.9	Yes	1	8	Yes	1	Yes +3 S.D.s
20	New York-Presbyterian University Hospital of Columbia and Cornell	47.1	4.7	0.42	1	136	2.0	No	1	8	Yes	1	Yes
21	University of North Carolina Hospitals, Chapel Hill	46.2	5.2	0.74	1	187	1.8	No	1	8	Yes	0	Yes
22	University Hospital, Cincinnati	44.8	4.5	0.59	1	161	1.8	No	1	8	Yes	0	Yes
23	NYU Langone Medical Center, New York	44.0	2.8	0.25	2	113	1.7	Yes	1	7	Yes	1	Yes
24	Duke University Medical Center, Durham, N.C.	43.9	3.4	0.66	1	148	1.9	Yes	1	8	Yes	1	Yes
25	Clarian Health, Indianapolis	42.9	1.9	0.47	4	222	2.0	Yes	1	8	Yes	1	Yes
26	University of Virginia Medical Center, Charlottesville	42.6	3.9	1.12	1	141	2.1	Yes	1	8	Yes	1	Yes
27	Northwestern Memorial Hospital, Chicago	41.0	2.3	0.35	1	88	1.6	Yes	1	8	Yes	1	Yes
28	Ochsner Medical Center, New Orleans	40.5	1.4	0.24	4	70	1.9	Yes	1	8	Yes	1	Yes
29	University of Kansas Hospital, Kansas City	40.4	1.3	0.34	3	180	2.0	Yes	1	7	Yes	1	Yes
30	University of Miami, Jackson Memorial Hospital	40.3	2.9	0.66	1	174	1.8	No	1	8	Yes	1	Yes
31	Thomas Jefferson University Hospital, Philadelphia	40.3	1.8	0.72	5	207	2.1	Yes	1	8	Yes	0	Yes
32	Rush University Medical Center, Chicago	40.0	1.6	0.37	2	126	2.0	Yes	1	8	Yes	1	Yes
33	University of Maryland Medical Center, Baltimore	39.9	1.0	0.31	3	201	2.1	Yes	1	8	Yes	1	Yes
34	Oregon Health and Science University, Portland	39.6	2.6	0.58	1	138	2.0	No	1	8	Yes	0	Yes
35	Wake Forest University Baptist Medical Center, Winston-Salem, N.C.	38.7	1.0	0.73	5	226	1.5	Yes	1	8	Yes	1	Yes
36	Emory University Hospital, Atlanta	38.6	1.7	0.21	1	195	2.1	No	1	8	No	1	Yes
37	University Hospitals Case Medical Center, Cleveland	38.5	1.8	0.79	1	151	1.9	Yes	1	8	Yes	1	Yes
38	University of Chicago Medical Center	38.2	1.0	0.50	2	143	2.6	Yes	1	8	Yes	1	Yes
39	University of Wisconsin Hospital and Clinics, Madison	38.2	1.7	0.58	1	174	1.8	Yes	1	7	Yes	0	Yes
40	Medical University of South Carolina, Charleston	37.8	1.2	0.58	5	191	2.3	No	1	7	Yes	0	Yes
41	New York Eye and Ear Infirmary	37.8	1.3	0.00	2	15	1.3	Yes	1	8	Yes	0	Yes
42	University of Alabama Hospital at Birmingham	37.1	1.0	0.96	1	306	1.9	Yes	1	8	Yes	1	Yes
43	Loyola University Medical Center, Maywood, Ill.	36.8	1.3	0.57	1	142	2.1	Yes	1	8	Yes	0	Yes
44	University of Minnesota Medical Center, Fairview	36.7	1.1	0.45	2	109	1.9	Yes	1	8	Yes	0	Yes
45	Beth Israel Medical Center, New York	36.6	1.5	0.80	3	223	1.3	No	1	8	No	1	Yes
46	University of California, Irvine Medical Center, Orange	36.3	1.3	0.65	1	65	2.2	Yes	1	8	Yes	1	Yes
47	Yale-New Haven Hospital, New Haven, Conn.	35.9	0.4	0.56	2	220	2.6	No	1	8	Yes	1	Yes
48	Beaumont Hospital, Royal Oak, Mich.	35.7	0.0	0.30	4	125	1.6	Yes	1	8	Yes	1	Yes
49	University of Utah Health Care, Salt Lake City	35.5	1.0	0.39	1	111	1.1	No	1	8	Yes	1	Yes
50	University of Texas Southwestern Medical Center, Dallas	35.3	1.7	0.80	4	141	1.6	No	1	7	No	0	Yes

Final IHQ-Driven Rankings 2010/11—Gastroenterology

Rank	Hospital	U.S. News Score	Reputation (%)	Relative mortality (below 1.00 is better)	Patient safety index (higher is better)	Discharges (3 years)	Nurse staffing	Nurse Magnet hospital	Technologies (of 7)	Patient services (of 8)	Trauma center	Intensivists	Current AHA responder
1	Mayo Clinic, Rochester, Minn.	100.0	55.3	0.72	1	6,667	3.0	Yes	7	8	Yes	1	Yes
2	Cleveland Clinic	84.1	36.4	0.74	3	5,152	2.2	Yes	7	8	No	1	Yes
3	Johns Hopkins Hospital, Baltimore	76.7	24.8	0.58	1	3,099	2.1	Yes	7	8	Yes	1	Yes
4	Massachusetts General Hospital, Boston	72.0	24.2	0.84	1	4,284	2.1	Yes	7	8	Yes	1	Yes
5	Mount Sinai Medical Center, New York	57.6	14.3	0.90	2	5,197	1.9	Yes	7	8	Yes	1	Yes
6	University of Chicago Medical Center	57.6	12.8	0.78	2	2,668	2.6	Yes	7	8	Yes	1	Yes
7	Hospital of the University of Pennsylvania, Philadelphia	54.9	13.8	0.97	2	2,029	1.7	Yes	7	8	Yes	1	Yes
8	Ronald Reagan UCLA Medical Center, Los Angeles	52.5	9.6	0.75	3	1,919	2.6	Yes	7	8	Yes	1	Yes
9	New York-Presbyterian University Hospital of Columbia and Cornell	47.7	7.4	0.80	1	6,235	2.0	No	7	8	Yes	1	Yes
10	Cedars-Sinai Medical Center, Los Angeles	47.3	7.3	0.83	5	3,883	2.2	Yes	7	7	Yes	0	Yes
11	UPMC-University of Pittsburgh Medical Center	46.8	8.3	0.87	2	6,129	1.8	No	7	8	No	1	Yes
12	Barnes-Jewish Hospital/Washington University, St. Louis	46.1	7.9	0.97	2	5,213	2.0	Yes	7	8	Yes	1	Yes +4 S.D.s
13	University of Michigan Hospitals and Health Centers, Ann Arbor	44.3	6.6	0.83	1	3,503	2.7	No	7	8	Yes	1	Yes
14	Clarian Health, Indianapolis	42.6	4.8	0.82	4	4,861	2.0	Yes	7	8	Yes	1	Yes
15	University of California, San Francisco Medical Center	42.4	6.8	0.90	3	2,073	2.5	No	6	8	No	1	Yes
16	Brigham and Women's Hospital, Boston	41.7	5.4	0.78	1	3,090	2.3	No	6	8	Yes	1	Yes
17	Cleveland Clinic Florida, Weston	40.7	3.2	0.46	3	1,111	1.7	No	4	7	No	1	Yes
18	Duke University Medical Center, Durham, N.C.	39.7	6.6	1.07	1	3,403	1.9	Yes	7	8	Yes	1	Yes +3 S.D.s
19	University of Texas M.D. Anderson Cancer Center, Houston	38.2	4.0	0.58	2	2,021	2.1	Yes	6	8	No	1	Yes
20	Methodist Hospital, Houston	37.5	2.4	0.66	3	3,635	1.8	Yes	7	8	No	1	Yes
21	Thomas Jefferson University Hospital, Philadelphia	37.4	3.4	0.82	5	2,848	2.1	Yes	7	8	Yes	0	Yes
22	Northwestern Memorial Hospital, Chicago	37.1	4.8	0.97	1	2,872	1.6	Yes	7	8	Yes	1	Yes
23	Beth Israel Deaconess Medical Center, Boston	35.9	2.4	0.68	1	3,845	1.5	No	7	8	Yes	1	Yes
24	Medical University of South Carolina, Charleston	35.2	5.0	1.06	5	1,996	2.3	No	7	7	Yes	0	Yes
25	Vanderbilt University Medical Center, Nashville	34.4	2.7	0.83	4	2,298	2.1	Yes	7	8	Yes	0	Yes
26	Mayo Clinic Hospital, Phoenix	33.9	2.4	0.81	2	2,250	3.8	No	7	7	No	1	Yes
27	University of North Carolina Hospitals, Chapel Hill	33.1	4.3	0.99	1	2,520	1.8	No	7	8	Yes	0	Yes
28	University Hospitals Case Medical Center, Cleveland	32.7	0.9	0.66	1	2,895	1.9	Yes	7	8	Yes	1	Yes
29	University of Minnesota Medical Center, Fairview	32.3	1.4	0.70	2	1,874	1.9	Yes	7	8	Yes	0	Yes
30	Yale-New Haven Hospital, New Haven, Conn.	32.0	1.3	0.77	2	3,042	2.6	No	7	8	Yes	1	Yes
31	Ochsner Medical Center, New Orleans	31.9	0.9	0.73	4	2,071	1.9	Yes	7	8	Yes	1	Yes
32	Virginia Mason Medical Center, Seattle	31.2	2.8	0.84	1	2,211	1.0	No	6	7	No	1	Yes
33	University of Virginia Medical Center, Charlottesville	31.1	1.5	0.80	1	2,936	2.1	Yes	7	8	Yes	1	Yes
34	Froedtert Hospital, Milwaukee	30.9	1.5	0.80	2	2,183	1.8	Yes	7	8	Yes	1	Yes
35	Rush University Medical Center, Chicago	30.8	1.0	0.79	2	2,292	2.0	Yes	7	8	Yes	1	Yes
36	NYU Langone Medical Center, New York	30.7	1.9	0.90	2	2,188	1.7	Yes	7	7	Yes	1	Yes
37	Christiana Care Hospital, Newark, Del.	30.4	0.5	0.81	3	5,227	2.0	Yes	6	8	Yes	1	Yes
38	St. Luke's Episcopal Hospital, Houston	30.4	0.5	0.66	5	3,343	1.8	Yes	5	7	No	0	Yes
39	Greenville Memorial Hospital, Greenville, S.C.	30.3	0.5	0.73	5	2,572	2.0	No	6	7	Yes	1	Yes
40	Mayo Clinic, Jacksonville, Fla.	30.2	1.6	0.77	1	2,305	2.2	No	7	7	No	1	Yes
41	Shands at the University of Florida, Gainesville	30.1	1.1	0.83	1	3,001	1.8	Yes	7	8	Yes	1	Yes
42	University of Alabama Hospital at Birmingham	30.0	3.1	1.08	1	2,675	1.9	Yes	7	8	Yes	1	Yes
43	Baylor University Medical Center, Dallas	29.7	1.9	0.91	1	3,739	1.8	Yes	7	8	Yes	0	Yes
44	California Pacific Medical Center, San Francisco	29.7	2.7	0.84	1	2,205	2.5	No	3	7	No	0	Yes
45	Banner Good Samaritan Medical Center, Phoenix	29.7	0.3	0.71	3	2,109	2.2	Yes	7	8	Yes	1	Yes
46	Good Samaritan Hospital, Baltimore	29.7	0.0	0.52	5	1,634	1.2	No	2	8	No	1	Yes
47	Henry Ford Hospital, Detroit	29.6	1.4	0.85	1	4,099	1.7	No	7	8	Yes	1	Yes
48	Stony Brook University Medical Center, Stony Brook, N.Y.	29.6	0.3	0.62	2	1,257	2.1	No	6	7	Yes	1	Yes
49	Franklin Square Hospital Center, Baltimore	29.4	0.0	0.61	4	2,569	1.2	Yes	6	8	No	1	Yes
50	John Muir Medical Center, Walnut Creek, Calif.	29.2	0.0	0.67	2	1,712	2.0	Yes	6	8	Yes	1	Yes

Final IHQ-Driven Rankings 2010/11—Geriatrics

Rank	Hospital	U.S. News Score	Reputation (%)	Relative mortality (below 1.00 is better)	Patient safety index (higher is better)	Discharges (3 years)	Nurse staffing	Nurse Magnet hospital	NIA Alzheimer's center	Patient services (of 9)	Intensivists	Current AHA responder
1	Mount Sinai Medical Center, New York	100.0	35.5	0.83	2	18,474	1.9	Yes	Yes	9	1	Yes
2	Ronald Reagan UCLA Medical Center, Los Angeles	100.0	32.6	0.72	3	5,543	2.6	Yes	Yes	9	1	Yes
3	Johns Hopkins Hospital, Baltimore	95.8	27.0	0.56	1	7,460	2.1	Yes	Yes	9	1	Yes
4	Massachusetts General Hospital, Boston	74.7	14.4	0.70	1	17,773	2.1	Yes	Yes	9	1	Yes
5	Mayo Clinic, Rochester, Minn.	66.8	9.5	0.71	1	23,350	3.0	Yes	Yes	9	1	Yes
6	Duke University Medical Center, Durham, N.C.	66.8	13.1	0.87	1	9,500	1.9	Yes	Yes	9	1	Yes
7	New York-Presbyterian University Hospital of Columbia and Cornell	65.9	10.0	0.70	1	27,378	2.0	No	Yes	9	1	Yes
8	UPMC-University of Pittsburgh Medical Center	63.2	11.1	0.84	2	21,453	1.8	No	Yes	9	1	Yes
9	Yale-New Haven Hospital, New Haven, Conn.	59.4	10.0	0.76	2	12,896	2.6	No	No	8	1	Yes
10	Cleveland Clinic	58.8	7.2	0.56	3	15,583	2.2	Yes	No	9	1	Yes
11	University of California, San Francisco Medical Center	54.3	7.7	0.84	3	5,855	2.5	No	Yes	9	1	Yes
12	University of Michigan Hospitals and Health Centers, Ann Arbor	53.3	6.5	0.75	1	8,584	2.7	No	Yes	9	1	Yes
13	University of Washington Medical Center, Seattle	52.9	6.7	0.76	1	3,069	2.2	Yes	Yes	9	1	Yes
14	Johns Hopkins Bayview Medical Center, Baltimore	52.3	8.0	0.78	4	7,679	1.0	No	No	9	1	Yes
15	NYU Langone Medical Center, New York	52.1	4.0	0.57	2	12,109	1.7	Yes	Yes	8	1	Yes +4 S.D.s
16	Hospital of the University of Pennsylvania, Philadelphia	49.3	5.1	0.70	2	6,164	1.7	Yes	Yes	9	1	Yes
17	Barnes-Jewish Hospital/Washington University, St. Louis	46.4	3.7	0.78	2	14,054	2.0	Yes	Yes	9	1	Yes
18	Hospital for Special Surgery, New York	44.7	0.0	0.08	5	3,889	2.3	Yes	No	9	0	Yes
19	Brigham and Women's Hospital, Boston	42.8	3.2	0.74	1	11,312	2.3	No	Yes	9	1	Yes +3 S.D.s
20	Methodist Hospital, Houston	41.1	2.2	0.62	3	14,840	1.8	Yes	No	8	1	Yes
21	St. Louis University Hospital	41.1	7.2	1.01	2	3,571	1.4	No	No	8	0	Yes
22	Rush University Medical Center, Chicago	40.3	1.3	0.61	2	7,661	2.0	Yes	Yes	9	1	Yes
23	Emory University Hospital, Atlanta	40.0	3.4	0.87	1	9,521	2.1	No	Yes	9	1	Yes
24	University of Alabama Hospital at Birmingham	39.9	3.3	0.88	1	6,655	1.9	Yes	Yes	9	1	Yes
25	Clarian Health, Indianapolis	39.8	1.8	0.77	4	13,064	2.0	Yes	Yes	8	1	Yes
26	Beth Israel Deaconess Medical Center, Boston	39.5	3.6	0.80	1	14,910	1.5	No	No	9	1	Yes
27	Northwestern Memorial Hospital, Chicago	38.4	1.4	0.69	1	9,535	1.6	Yes	Yes	9	1	Yes
28	University Hospitals Case Medical Center, Cleveland	38.1	2.5	0.75	1	11,225	1.9	Yes	No	9	1	Yes
29	University of Chicago Medical Center	37.8	2.2	0.72	2	6,003	2.6	Yes	No	9	1	Yes
30	Boston Medical Center	37.3	4.1	0.87	1	5,376	1.3	No	Yes	5	0	Yes
31	Montefiore Medical Center, New York	37.0	3.8	0.95	2	21,939	1.5	No	No	7	1	Yes
32	Tampa General Hospital	36.6	2.4	0.79	1	7,061	2.3	Yes	No	9	1	Yes
33	Hackensack University Medical Center, Hackensack, N.J.	36.5	2.0	0.85	4	17,461	2.0	Yes	No	9	1	Yes
34	Beaumont Hospital, Royal Oak, Mich.	36.4	1.0	0.76	4	31,827	1.6	Yes	No	8	1	Yes
35	St. Francis Hospital, Roslyn, N.Y.	36.4	0.5	0.57	4	11,754	2.3	Yes	No	8	1	Yes
36	University of Wisconsin Hospital and Clinics, Madison	36.3	2.4	0.82	1	5,827	1.8	Yes	Yes	8	0	Yes
37	Stanford Hospital and Clinics, Stanford, Calif.	34.8	2.9	0.93	1	7,308	2.5	Yes	No	8	1	Yes
38	Banner Good Samaritan Medical Center, Phoenix	34.3	0.3	0.68	3	6,191	2.2	Yes	Yes	8	1	Yes
39	Shands at the University of Florida, Gainesville	34.0	2.3	0.87	1	8,931	1.8	Yes	No	9	1	Yes
40	Mount Sinai Medical Center, Miami Beach, Fla.	32.9	0.5	0.71	5	11,155	1.0	No	Yes	8	1	Yes
41	Ochsner Medical Center, New Orleans	32.6	1.0	0.74	4	6,184	1.9	Yes	No	8	1	Yes
42	University of Maryland Medical Center, Baltimore	32.6	1.3	0.77	3	4,919	2.1	Yes	No	9	1	Yes
43	Lehigh Valley Hospital, Allentown, Pa.	32.0	0.5	0.76	1	17,715	2.7	Yes	No	9	1	Yes
44	St. Luke's Episcopal Hospital, Houston	31.7	0.5	0.63	5	11,460	1.8	Yes	No	5	0	Yes
45	North Shore University Hospital, Manhasset, N.Y.	31.7	2.0	0.99	2	30,044	1.5	No	No	9	1	Yes
46	University of California, San Diego Medical Center	31.6	0.7	0.73	1	3,929	1.9	No	Yes	9	1	Yes
47	University of Kansas Hospital, Kansas City	31.1	0.3	0.64	3	4,067	2.0	Yes	No	8	1	Yes
48	Vanderbilt University Medical Center, Nashville	31.1	1.2	0.80	4	6,240	2.1	Yes	No	9	0	Yes
49	Good Samaritan Hospital, Baltimore	31.1	0.0	0.58	5	9,932	1.2	No	No	8	1	Yes
50	Thomas Jefferson University Hospital, Philadelphia	30.5	0.5	0.77	5	11,349	2.1	Yes	No	9	0	Yes

Final IHQ-Driven Rankings 2010/11—Gynecology

Rank	Hospital	U.S.		Relative	Patient	Discharges	Nurse	Nurse	Technologies	Patient	Intensivists	Current
		News	Reputation	mortality	safety index							
		Score	(%)	(below 1.00 is better)	(higher is better)	(3 years)	staffing	hospital	(of 5)	(of 9)		responder
1	Johns Hopkins Hospital, Baltimore	100.0	24.2	0.42	1	201	2.1	Yes	5	9	1	Yes
2	Mayo Clinic, Rochester, Minn.	99.6	20.3	0.34	1	630	3.0	Yes	5	9	1	Yes
3	Brigham and Women's Hospital, Boston	93.7	18.8	0.18	1	347	2.3	No	5	9	1	Yes
4	Cleveland Clinic	88.7	15.1	0.20	3	328	2.2	Yes	5	9	1	Yes
5	Massachusetts General Hospital, Boston	82.1	12.8	0.26	1	251	2.1	Yes	5	9	1	Yes
6	Magee-Womens Hospital of UPMC, Pittsburgh	77.1	10.4	0.28	4	384	1.5	No	5	9	1	Yes
7	Duke University Medical Center, Durham, N.C.	75.9	10.5	0.42	1	275	1.9	Yes	5	9	1	Yes
8	University of California, San Francisco Medical Center	75.8	10.1	0.21	3	198	2.5	No	5	9	1	Yes
9	New York-Presbyterian University Hospital of Columbia and Cornell	73.2	9.9	0.39	1	243	2.0	No	5	9	1	Yes
10	Memorial Sloan-Kettering Cancer Center, New York	72.7	8.5	0.27	3	434	1.8	No	5	8	1	Yes
11	University of Texas M.D. Anderson Cancer Center, Houston	72.0	8.8	0.40	2	263	2.1	Yes	5	9	1	Yes
12	Stanford Hospital and Clinics, Stanford, Calif.	67.1	7.6	0.53	1	142	2.5	Yes	5	9	1	Yes
13	Ronald Reagan UCLA Medical Center, Los Angeles	65.3	5.4	0.06	3	106	2.6	Yes	5	9	1	Yes +4 S.D.s
14	Northwestern Memorial Hospital, Chicago	63.3	5.7	0.27	1	157	1.6	Yes	5	9	1	Yes
15	Yale-New Haven Hospital, New Haven, Conn.	62.4	5.2	0.45	2	421	2.6	No	5	9	1	Yes
16	Hospital of the University of Pennsylvania, Philadelphia	61.3	5.2	0.39	2	158	1.7	Yes	5	9	1	Yes
17	University of Alabama Hospital at Birmingham	60.7	5.2	0.62	1	387	1.9	Yes	5	9	1	Yes
18	University of Michigan Hospitals and Health Centers, Ann Arbor	60.0	5.2	0.47	1	201	2.7	No	5	9	1	Yes
19	University of Washington Medical Center, Seattle	58.5	3.9	0.21	1	258	2.2	Yes	5	8	1	Yes
20	Ohio State University Hospital, Columbus	57.8	3.8	0.49	2	395	2.0	Yes	5	9	1	Yes
21	Barnes-Jewish Hospital/Washington University, St. Louis	57.5	3.6	0.49	2	432	2.0	Yes	5	9	1	Yes
22	Emory University Hospital, Atlanta	57.2	4.1	0.22	1	130	2.1	No	5	9	1	Yes +3 S.D.s
23	Parkland Memorial Hospital, Dallas	56.7	5.7	0.58	2	54	1.6	No	1	8	1	Yes
24	Inova Fairfax Hospital, Falls Church, Va.	54.2	2.7	0.27	1	239	2.0	Yes	5	9	1	Yes
25	University of Texas Southwestern Medical Center, Dallas	53.2	3.9	0.55	4	118	1.6	No	5	8	0	Yes
26	Women and Infants Hospital of Rhode Island, Providence	52.9	3.2	0.50	2	382	2.2	No	5	9	0	Yes
27	University of North Carolina Hospitals, Chapel Hill	52.9	3.7	0.51	1	255	1.8	No	5	9	0	Yes
28	Mount Sinai Medical Center, New York	52.3	2.9	0.46	2	258	1.9	Yes	5	9	1	Yes
29	USC University Hospital, Los Angeles	52.0	3.0	0.00	3	10	2.1	No	5	5	1	Yes
30	University of California, Irvine Medical Center, Orange	51.6	3.0	0.59	1	90	2.2	Yes	5	9	1	Yes
31	Cedars-Sinai Medical Center, Los Angeles	51.4	3.0	0.86	5	265	2.2	Yes	5	8	0	Yes
32	Georgetown University Hospital, Washington, D.C.	51.1	2.3	0.15	1	57	1.7	Yes	5	8	1	Yes
33	University of Iowa Hospitals and Clinics, Iowa City	50.7	1.5	0.40	4	374	1.7	Yes	5	9	1	Yes
34	University of Chicago Medical Center	49.7	2.5	0.78	2	179	2.6	Yes	5	9	1	Yes
35	Banner Good Samaritan Medical Center, Phoenix	49.2	1.8	0.37	3	124	2.2	Yes	4	9	1	Yes
36	Methodist Hospital, Houston	49.0	1.6	0.37	3	181	1.8	Yes	5	9	1	Yes
37	University of Virginia Medical Center, Charlottesville	48.9	1.6	0.43	1	338	2.1	Yes	5	9	1	Yes
38	Memorial Hermann-Texas Medical Center, Houston	47.8	1.2	0.00	3	43	2.3	No	5	9	1	Yes
39	Ochsner Medical Center, New Orleans	47.6	1.2	0.38	4	152	1.9	Yes	5	9	1	Yes
40	Washington Hospital Center, Washington, D.C.	47.4	2.4	0.72	1	234	1.7	No	5	9	1	Yes
41	Rush University Medical Center, Chicago	47.4	1.1	0.34	2	377	2.0	Yes	3	9	1	Yes
42	Wake Forest University Baptist Medical Center, Winston-Salem, N.C.	47.4	1.2	0.55	5	266	1.5	Yes	5	9	1	Yes
43	Harper University Hospital, Detroit	47.2	2.3	0.43	5	50	0.7	No	5	9	0	Yes
44	Dartmouth-Hitchcock Medical Center, Lebanon, N.H.	46.7	1.0	0.23	1	175	2.3	Yes	5	9	1	Yes
45	Mayo Clinic Hospital, Phoenix	46.6	1.2	0.23	2	146	3.8	No	3	7	1	Yes
46	Thomas Jefferson University Hospital, Philadelphia	46.2	1.4	0.50	5	79	2.1	Yes	5	9	0	Yes
47	Medical University of South Carolina, Charleston	46.0	1.2	0.31	5	167	2.3	No	5	8	0	Yes
48	University Hospitals Case Medical Center, Cleveland	46.0	1.1	0.54	1	302	1.9	Yes	5	9	1	Yes
49	NYU Langone Medical Center, New York	45.9	1.4	0.51	2	137	1.7	Yes	5	8	1	Yes
50	Vanderbilt University Medical Center, Nashville	45.9	1.0	0.36	4	194	2.1	Yes	5	9	0	Yes

Final IHQ-Driven Rankings 2010/11—Heart & Heart Surgery

Rank	Hospital	U.S. News Score	Reputation (%)	Relative mortality (below 1.00 is better)	Patient safety index (higher is better)	Discharges (3 years)	Nurse staffing	Nurse Magnet hospital	Technologies (of 7)	Patient services (of 7)	Trauma center	Intensivists	Current AHA responder
1	Cleveland Clinic	100.0	70.8	0.47	3	12,433	2.2	Yes	7	7	No	1	Yes
2	Mayo Clinic, Rochester, Minn.	88.1	54.1	0.72	1	10,199	3.0	Yes	7	7	Yes	1	Yes
3	Johns Hopkins Hospital, Baltimore	70.1	26.4	0.61	1	4,120	2.1	Yes	7	7	Yes	1	Yes
4	Texas Heart Institute at St. Luke's Episcopal Hospital, Houston	70.0	24.8	0.61	5	8,220	1.8	Yes	7	6	No	0	Yes
5	Massachusetts General Hospital, Boston	65.3	22.5	0.73	1	8,073	2.1	Yes	7	7	Yes	1	Yes
6	New York-Presbyterian University Hospital of Columbia and Cornell	62.6	16.3	0.60	1	13,061	2.0	No	7	7	Yes	1	Yes +4 S.D.s
7	Brigham and Women's Hospital, Boston	55.4	15.2	0.72	1	5,919	2.3	No	7	7	Yes	1	Yes
8	Ronald Reagan UCLA Medical Center, Los Angeles	54.9	9.3	0.57	3	2,736	2.6	Yes	7	7	Yes	1	Yes
9	Duke University Medical Center, Durham, N.C.	54.0	13.3	0.76	1	7,237	1.9	Yes	7	7	Yes	1	Yes
10	Hospital of the University of Pennsylvania, Philadelphia	49.2	10.1	0.71	2	4,032	1.7	Yes	7	7	Yes	1	Yes +3 S.D.s
11	University of Michigan Hospitals and Health Centers, Ann Arbor	44.6	6.6	0.71	1	5,246	2.7	No	7	7	Yes	1	Yes
12	Barnes-Jewish Hospital/Washington University, St. Louis	44.4	4.5	0.64	2	8,148	2.0	Yes	7	7	Yes	1	Yes
13	Mount Sinai Medical Center, New York	44.1	5.6	0.67	2	7,883	1.9	Yes	7	7	Yes	1	Yes
14	Northwestern Memorial Hospital, Chicago	43.3	4.2	0.60	1	4,190	1.6	Yes	7	7	Yes	1	Yes
15	Cedars-Sinai Medical Center, Los Angeles	42.0	5.4	0.77	5	5,639	2.2	Yes	7	6	Yes	0	Yes
16	Stanford Hospital and Clinics, Stanford, Calif.	41.8	9.2	0.97	1	2,526	2.5	Yes	7	7	Yes	1	Yes
17	Emory University Hospital, Atlanta	39.3	7.9	0.90	1	4,857	2.1	No	7	7	No	1	Yes
18	NYU Langone Medical Center, New York	38.8	2.8	0.62	2	3,859	1.7	Yes	6	6	Yes	1	Yes
19	Washington Hospital Center, Washington, D.C.	38.0	2.1	0.59	1	10,538	1.7	No	7	7	Yes	1	Yes
20	Ohio State University Hospital, Columbus	38.0	2.5	0.69	2	7,377	2.0	Yes	7	7	Yes	1	Yes
21	Yale-New Haven Hospital, New Haven, Conn.	37.1	3.2	0.75	2	5,432	2.6	No	7	7	Yes	1	Yes
22	UPMC-University of Pittsburgh Medical Center	36.9	4.6	0.80	2	9,342	1.8	No	7	7	No	1	Yes
23	Ochsner Medical Center, New Orleans	36.4	2.4	0.75	4	3,401	1.9	Yes	7	7	Yes	1	Yes
24	Vanderbilt University Medical Center, Nashville	36.3	2.6	0.70	4	4,697	2.1	Yes	7	7	Yes	0	Yes
25	Rush University Medical Center, Chicago	35.7	0.8	0.55	2	2,954	2.0	Yes	6	6	Yes	1	Yes
26	Beth Israel Deaconess Medical Center, Boston	35.3	4.1	0.76	1	6,251	1.5	No	4	7	Yes	1	Yes
27	University of Chicago Medical Center	35.3	0.8	0.61	2	3,690	2.6	Yes	7	7	Yes	1	Yes
28	Beaumont Hospital, Royal Oak, Mich.	35.3	2.6	0.84	4	10,644	1.6	Yes	6	7	Yes	1	Yes
29	Loyola University Medical Center, Maywood, Ill.	34.8	0.5	0.52	1	3,803	2.1	Yes	6	7	Yes	0	Yes
30	St. Francis Hospital, Roslyn, N.Y.	34.7	0.4	0.59	4	9,399	2.3	Yes	5	7	No	1	Yes
31	University of Alabama Hospital at Birmingham	34.4	4.3	0.90	1	4,697	1.9	Yes	7	7	Yes	1	Yes
32	Shands at the University of Florida, Gainesville	34.2	3.1	0.84	1	5,165	1.8	Yes	7	7	Yes	1	Yes
33	Banner Good Samaritan Medical Center, Phoenix	34.1	0.3	0.59	3	3,826	2.2	Yes	6	7	Yes	1	Yes
34	Scripps La Jolla Hospitals and Clinics, La Jolla, Calif.	33.6	1.8	0.71	2	3,398	2.4	Yes	6	7	Yes	0	Yes
35	Hahnemann University Hospital, Philadelphia	32.7	0.8	0.55	1	2,886	1.6	Yes	6	5	Yes	0	Yes
36	Tampa General Hospital	32.4	1.2	0.74	1	3,753	2.3	Yes	7	7	Yes	1	Yes
37	University of Kansas Hospital, Kansas City	32.1	0.0	0.58	3	2,434	2.0	Yes	6	6	Yes	1	Yes
38	Union Memorial Hospital, Baltimore	32.1	0.6	0.58	2	5,510	1.7	No	4	7	Yes	1	Yes
39	Minneapolis Heart Institute at Abbott Northwestern Hospital	31.8	1.0	0.73	1	5,933	3.0	Yes	6	7	Yes	0	Yes
40	University of Maryland Medical Center, Baltimore	31.8	1.2	0.76	3	3,419	2.1	Yes	7	7	Yes	1	Yes
41	Virginia Commonwealth University Medical Center, Richmond	31.7	0.6	0.74	4	3,355	2.4	Yes	7	6	Yes	1	Yes
42	Methodist Hospital, Houston	31.5	0.0	0.65	3	8,202	1.8	Yes	7	7	No	1	Yes
43	Sentara Norfolk General Hospital-Sentara Heart Hospital, Norfolk, Va.	31.4	0.0	0.65	1	5,148	1.6	Yes	7	7	Yes	1	Yes
44	Harper University Hospital, Detroit	31.4	0.5	0.56	5	4,075	0.7	No	6	7	No	0	Yes
45	Greenville Memorial Hospital, Greenville, S.C.	31.2	0.0	0.62	5	5,907	2.0	No	4	6	Yes	1	Yes
46	Memorial Hermann-Texas Medical Center, Houston	31.1	1.2	0.74	3	3,563	2.3	No	6	7	Yes	1	Yes
47	Newark Beth Israel Medical Center, N.J.	31.0	0.8	0.60	3	4,491	1.5	No	6	7	No	0	Yes
48	Hackensack University Medical Center, Hackensack, N.J.	31.0	0.0	0.73	4	6,927	2.0	Yes	6	7	Yes	1	Yes
49	Clarian Health, Indianapolis	30.8	0.0	0.75	4	6,498	2.0	Yes	7	7	Yes	1	Yes
50	Wake Forest University Baptist Medical Center, Winston-Salem, N.C.	30.3	1.2	0.87	5	4,830	1.5	Yes	7	7	Yes	1	Yes

Final IHQ-Driven Rankings 2010/11—Kidney

Rank	Hospital	U.S. News Score	Reputation (%)	Relative mortality (below 1.00 is better)	Patient safety index (higher is better)	Discharges (3 years)	Nurse staffing	Nurse Magnet hospital	Technologies (of 7)	Patient services (of 8)	Trauma center	Intensivists	Current AHA responder
1	Mayo Clinic, Rochester, Minn.	100.0	31.9	0.65	1	2,235	3.0	Yes	7	8	Yes	1	Yes
2	Johns Hopkins Hospital, Baltimore	97.1	28.9	0.51	1	1,431	2.1	Yes	7	8	Yes	1	Yes
3	Cleveland Clinic	95.3	26.5	0.49	3	2,294	2.2	Yes	7	8	No	1	Yes
4	New York-Presbyterian University Hospital of Columbia and Cornell	93.7	27.1	0.66	1	3,353	2.0	No	7	8	Yes	1	Yes
5	Massachusetts General Hospital, Boston	93.1	30.7	0.85	1	1,268	2.1	Yes	7	8	Yes	1	Yes
6	Brigham and Women's Hospital, Boston	90.2	27.8	0.74	1	1,163	2.3	No	7	8	Yes	1	Yes
7	Ronald Reagan UCLA Medical Center, Los Angeles	82.2	15.5	0.31	3	1,123	2.6	Yes	7	8	Yes	1	Yes
8	University of California, San Francisco Medical Center	68.8	11.9	0.54	3	1,284	2.5	No	6	8	No	1	Yes
9	Barnes-Jewish Hospital/Washington University, St. Louis	64.4	9.4	0.74	2	2,964	2.0	Yes	7	8	Yes	1	Yes
10	Vanderbilt University Medical Center, Nashville	60.7	7.7	0.56	4	1,426	2.1	Yes	7	8	Yes	0	Yes
11	Hospital of the University of Pennsylvania, Philadelphia	59.7	7.9	0.56	2	957	1.7	Yes	7	8	Yes	1	Yes
12	Duke University Medical Center, Durham, N.C.	57.9	7.9	0.73	1	1,357	1.9	Yes	7	8	Yes	1	Yes
13	University of Alabama Hospital at Birmingham	57.9	6.4	0.53	1	1,969	1.9	Yes	7	8	Yes	1	Yes
14	University of Washington Medical Center, Seattle	57.7	6.9	0.48	1	694	2.2	Yes	7	8	No	1	Yes +4 S.D.s
15	University of Colorado Hospital, Aurora	55.9	6.4	0.51	1	631	1.6	Yes	6	7	Yes	1	Yes
16	Emory University Hospital, Atlanta	55.4	8.2	0.75	1	1,338	2.1	No	7	8	No	1	Yes
17	UPMC-University of Pittsburgh Medical Center	54.2	6.3	0.63	2	1,843	1.8	No	7	8	No	1	Yes
18	University of Minnesota Medical Center, Fairview	51.0	3.9	0.39	2	866	1.9	Yes	7	8	Yes	0	Yes
19	Cedars-Sinai Medical Center, Los Angeles	51.0	4.2	0.57	5	1,408	2.2	Yes	7	7	Yes	0	Yes
20	University of Michigan Hospitals and Health Centers, Ann Arbor	49.3	3.6	0.50	1	1,855	2.7	No	7	8	Yes	1	Yes
21	University of Chicago Medical Center	48.7	3.1	0.48	2	1,232	2.6	Yes	7	8	Yes	1	Yes
22	Wake Forest University Baptist Medical Center, Winston-Salem, N.C.	48.0	3.2	0.64	5	2,106	1.5	Yes	7	8	Yes	1	Yes +3 S.D.s
23	University of Maryland Medical Center, Baltimore	47.0	1.5	0.23	3	1,178	2.1	Yes	7	8	Yes	1	Yes
24	Methodist Hospital, Houston	46.6	2.8	0.49	3	1,514	1.8	Yes	7	8	No	1	Yes
25	Stanford Hospital and Clinics, Stanford, Calif.	46.4	4.0	0.74	1	685	2.5	Yes	7	8	Yes	1	Yes
26	University of Texas Southwestern Medical Center, Dallas	45.3	4.1	0.64	4	879	1.6	No	7	7	No	0	Yes
27	Beth Israel Deaconess Medical Center, Boston	45.2	3.7	0.66	1	1,652	1.5	No	6	8	Yes	1	Yes
28	University of Wisconsin Hospital and Clinics, Madison	45.2	2.1	0.36	1	1,586	1.8	Yes	7	7	Yes	0	Yes
29	Mount Sinai Medical Center, New York	43.9	2.7	0.68	2	2,204	1.9	Yes	7	8	Yes	1	Yes
30	Memorial Hermann-Texas Medical Center, Houston	43.8	2.2	0.49	3	946	2.3	No	7	8	Yes	1	Yes
31	Ohio State University Hospital, Columbus	42.5	1.6	0.58	2	2,023	2.0	Yes	7	8	Yes	1	Yes
32	University of Kansas Hospital, Kansas City	42.0	0.7	0.27	3	791	2.0	Yes	7	7	Yes	1	Yes
33	Yale-New Haven Hospital, New Haven, Conn.	41.9	2.7	0.75	2	1,419	2.6	No	7	8	Yes	1	Yes
34	Northwestern Memorial Hospital, Chicago	41.3	1.5	0.54	1	1,682	1.6	Yes	7	8	Yes	1	Yes
35	University of Iowa Hospitals and Clinics, Iowa City	41.2	1.2	0.48	4	887	1.7	Yes	7	8	Yes	1	Yes
36	Virginia Commonwealth University Medical Center, Richmond	40.1	1.0	0.53	4	731	2.4	Yes	7	7	Yes	1	Yes
37	Mayo Clinic Hospital, Phoenix	39.9	1.6	0.51	2	756	3.8	No	6	7	No	1	Yes
38	Clarian Health, Indianapolis	39.5	0.3	0.50	4	2,244	2.0	Yes	7	8	Yes	1	Yes
39	Baylor University Medical Center, Dallas	39.5	2.2	0.73	1	1,506	1.8	Yes	7	8	Yes	0	Yes
40	Shands at the University of Florida, Gainesville	39.2	1.5	0.65	1	1,430	1.8	Yes	7	8	Yes	1	Yes
41	Medical University of South Carolina, Charleston	38.8	1.5	0.62	5	1,133	2.3	No	7	7	Yes	0	Yes
42	Tulane University Hospital and Clinic, New Orleans	38.8	1.8	0.46	3	531	1.9	No	5	5	No	1	Yes
43	Rush University Medical Center, Chicago	38.4	0.3	0.39	2	1,026	2.0	Yes	6	8	Yes	1	Yes
44	Banner Good Samaritan Medical Center, Phoenix	37.9	0.0	0.39	3	935	2.2	Yes	7	8	Yes	1	Yes
45	St. Luke's Episcopal Hospital, Houston	37.9	0.7	0.46	5	1,387	1.8	Yes	5	7	No	0	Yes
46	Tufts Medical Center, Boston	37.8	2.2	0.64	3	427	1.9	No	4	7	Yes	0	Yes
47	Hennepin County Medical Center, Minneapolis	37.7	0.9	0.37	1	673	2.3	No	3	8	Yes	1	Yes
48	University Hospital, San Antonio	37.6	0.7	0.36	1	540	1.7	Yes	4	6	Yes	1	Yes
49	University of Miami, Jackson Memorial Hospital	37.5	1.9	0.71	1	1,566	1.8	No	7	8	Yes	1	Yes
50	Tampa General Hospital	37.5	0.0	0.39	1	1,221	2.3	Yes	7	8	Yes	1	Yes

Final IHQ-Driven Rankings 2010/11—Neurology & Neurosurgery

Rank	Hospital	U.S. News Score	Reputation (%)	Relative mortality (below 1.00 is better)	Patient safety index (higher is better)	Discharges (3 years)	Nurse staffing	Nurse Magnet hospital	Epilepsy center	NIA Alzheimer's center	Technologies (of 5)	Patient services (of 9)	Trauma center	Intensivists	Current AHA responder
1	Johns Hopkins Hospital, Baltimore	100.0	40.5	0.51	1	3,143	2.1	Yes	Yes	Yes	5	9	Yes	1	Yes
2	Mayo Clinic, Rochester, Minn.	99.7	45.7	0.82	1	4,690	3.0	Yes	Yes	Yes	5	9	Yes	1	Yes
3	Massachusetts General Hospital, Boston	89.9	37.7	0.89	1	4,373	2.1	Yes	Yes	Yes	5	9	Yes	1	Yes
4	New York-Presbyterian University Hospital of Columbia and Cornell	88.6	30.9	0.69	1	5,306	2.0	No	Yes	Yes	5	9	Yes	1	Yes
5	University of California, San Francisco Medical Center	83.8	31.9	0.84	3	2,757	2.5	No	Yes	Yes	4	9	No	1	Yes
6	Cleveland Clinic	83.7	27.9	0.63	3	4,473	2.2	Yes	Yes	No	5	9	No	1	Yes
7	Ronald Reagan UCLA Medical Center, Los Angeles	63.4	15.3	1.03	3	1,755	2.6	Yes	Yes	Yes	5	9	Yes	1	Yes
8	St. Joseph's Hospital and Medical Center, Phoenix	57.6	14.7	1.29	5	3,957	1.7	No	Yes	Yes	5	8	Yes	1	Yes
9	NYU Langone Medical Center, New York	52.6	4.1	0.45	2	2,342	1.7	Yes	Yes	Yes	5	8	Yes	1	Yes
10	Barnes-Jewish Hospital/Washington University, St. Louis	52.5	7.7	0.90	2	4,359	2.0	Yes	Yes	Yes	5	9	Yes	1	Yes +4 S.D.s
11	Duke University Medical Center, Durham, N.C.	50.4	9.2	1.10	1	3,142	1.9	Yes	Yes	Yes	5	9	Yes	1	Yes
12	Emory University Hospital, Atlanta	49.9	7.3	0.82	1	3,864	2.1	No	Yes	Yes	5	9	No	1	Yes
13	Northwestern Memorial Hospital, Chicago	48.4	4.5	0.64	1	2,344	1.6	Yes	Yes	Yes	5	9	Yes	1	Yes
14	Rush University Medical Center, Chicago	45.8	3.2	0.58	2	2,730	2.0	Yes	Yes	Yes	4	9	Yes	1	Yes
15	Hospital of the University of Pennsylvania, Philadelphia	45.3	6.8	1.10	2	1,867	1.7	Yes	Yes	Yes	5	9	Yes	1	Yes
16	Hospital for Special Surgery, New York	44.9	0.0	0.02	5	1,028	2.3	Yes	No	No	5	9	Yes	0	Yes
17	UPMC-University of Pittsburgh Medical Center	44.8	6.2	1.01	2	6,588	1.8	No	Yes	Yes	5	9	No	1	Yes
18	Brigham and Women's Hospital, Boston	44.1	6.8	1.11	1	3,208	2.3	No	Yes	Yes	5	9	Yes	1	Yes +3 S.D.s
19	University of Washington Medical Center, Seattle	43.2	3.1	0.65	1	817	2.2	Yes	Yes	Yes	5	9	No	1	Yes
20	USC University Hospital, Los Angeles	41.9	1.3	0.31	3	749	2.1	No	Yes	Yes	5	5	No	1	Yes
21	University of Iowa Hospitals and Clinics, Iowa City	41.2	2.9	0.58	4	3,003	1.7	Yes	Yes	No	5	9	Yes	1	Yes
22	University of Michigan Hospitals and Health Centers, Ann Arbor	40.9	5.2	1.07	1	2,257	2.7	No	Yes	Yes	5	9	Yes	1	Yes
23	Cedars-Sinai Medical Center, Los Angeles	40.8	2.3	0.69	5	3,266	2.2	Yes	Yes	No	5	7	Yes	0	Yes
24	Mount Sinai Medical Center, New York	39.7	2.2	0.64	2	2,811	1.9	Yes	No	Yes	5	9	Yes	1	Yes
25	Methodist Hospital, Houston	39.3	1.3	0.55	3	4,434	1.8	Yes	Yes	No	5	8	No	1	Yes
26	University of Chicago Medical Center	39.2	2.3	0.67	2	1,544	2.6	Yes	Yes	No	5	9	Yes	1	Yes
27	Stanford Hospital and Clinics, Stanford, Calif.	38.7	3.8	0.88	1	2,188	2.5	Yes	Yes	No	5	9	Yes	1	Yes
28	University of Texas Southwestern Medical Center, Dallas	38.6	1.9	0.61	4	1,897	1.6	No	Yes	Yes	5	8	No	0	Yes
29	University of Miami, Jackson Memorial Hospital	38.2	3.9	0.96	1	2,218	1.8	No	Yes	Yes	5	9	Yes	1	Yes
30	Harper University Hospital, Detroit	36.8	0.0	0.33	5	1,365	0.7	No	Yes	No	5	9	No	0	Yes
31	University of Alabama Hospital at Birmingham	35.9	3.3	1.07	1	3,110	1.9	Yes	Yes	Yes	5	9	Yes	1	Yes
32	Yale-New Haven Hospital, New Haven, Conn.	34.7	3.3	0.94	2	2,182	2.6	No	No	No	5	9	Yes	1	Yes
33	Columbia Regional Hospital, Columbia, Mo.	34.0	0.0	0.17	5	512	2.0	No	No	No	3	8	No	0	Yes
34	St. Francis Hospital, Roslyn, N.Y.	33.8	0.3	0.53	4	940	2.3	Yes	No	No	5	8	No	1	Yes
35	New England Baptist Hospital, Boston	33.2	0.0	0.18	5	643	1.7	No	No	No	3	8	No	0	Yes
36	Henry Ford Hospital, Detroit	32.9	1.0	0.75	1	3,336	1.7	No	Yes	No	5	9	Yes	1	Yes
37	Santa Monica UCLA Medical Center, Santa Monica, Calif.	32.5	0.0	0.51	5	755	2.1	No	No	No	5	9	No	1	Yes
38	Abbott Northwestern Hospital, Minneapolis	32.5	0.3	0.71	1	3,430	3.0	Yes	Yes	No	5	9	Yes	0	Yes
39	Shands at the University of Florida, Gainesville	32.5	3.1	1.11	1	3,114	1.8	Yes	Yes	No	5	9	Yes	1	Yes
40	Clarian Health, Indianapolis	32.3	0.7	0.96	4	4,045	2.0	Yes	Yes	Yes	5	8	Yes	1	Yes
41	University of Virginia Medical Center, Charlottesville	31.9	3.5	1.20	1	3,900	2.1	Yes	Yes	No	5	9	Yes	1	Yes
42	Lutheran Hospital, Cleveland	31.9	0.0	0.36	5	588	0.8	No	No	No	5	9	No	0	Yes
43	Washington Adventist Hospital, Takoma Park, Md.	31.5	0.0	0.45	4	909	1.5	No	No	No	3	6	No	1	Yes
44	Mayo Clinic, Jacksonville, Fla.	31.4	0.8	0.80	1	2,109	2.2	No	Yes	Yes	5	8	No	1	Yes
45	Loyola University Medical Center, Maywood, Ill.	31.4	1.6	0.86	1	1,568	2.1	Yes	Yes	No	4	9	Yes	0	Yes
46	Ohio State University Hospital, Columbus	31.1	1.7	0.99	2	2,600	2.0	Yes	Yes	No	5	8	Yes	1	Yes
47	Union Memorial Hospital, Baltimore	31.0	0.0	0.55	2	1,074	1.7	No	No	No	5	9	Yes	1	Yes
48	Montefiore Medical Center, New York	30.8	1.2	0.84	2	3,216	1.5	No	Yes	No	5	8	No	1	Yes
49	Mercy Medical Center, Baltimore	30.5	0.0	0.48	4	1,100	1.2	No	No	No	2	7	No	1	Yes
50	Wake Forest University Baptist Medical Center, Winston-Salem, N.C.	30.5	1.4	1.05	5	3,145	1.5	Yes	Yes	No	5	9	Yes	1	Yes

Final IHQ-Driven Rankings 2010/11—Orthopedics

Rank	Hospital	U.S. News Score	Reputation (%)	Relative mortality (below 1.00 is better)	Patient safety index (higher is better)	Discharges (3 years)	Nurse staffing	Nurse Magnet hospital	Technologies (of 2)	Patient services (of 7)	Trauma center	Intensivists	Current AHA responder
1	Hospital for Special Surgery, New York	100.0	42.2	0.12	5	7,877	2.3	Yes	2	7	Yes	0	Yes
2	Mayo Clinic, Rochester, Minn.	94.6	41.6	0.42	1	6,117	3.0	Yes	2	7	Yes	1	Yes
3	Massachusetts General Hospital, Boston	72.0	22.6	0.54	1	2,842	2.1	Yes	2	7	Yes	1	Yes
4	Cleveland Clinic	69.2	21.1	0.62	3	3,093	2.2	Yes	2	7	No	1	Yes
5	Johns Hopkins Hospital, Baltimore	59.3	14.9	0.66	1	1,048	2.1	Yes	2	7	Yes	1	Yes
6	Duke University Medical Center, Durham, N.C.	54.0	11.5	0.70	1	2,136	1.9	Yes	2	7	Yes	1	Yes
7	Barnes-Jewish Hospital/Washington University, St. Louis	53.5	10.0	0.59	2	2,642	2.0	Yes	2	7	Yes	1	Yes
8	UPMC-University of Pittsburgh Medical Center	53.2	11.3	0.59	2	3,623	1.8	No	2	7	No	1	Yes
9	University of Iowa Hospitals and Clinics, Iowa City	50.9	7.8	0.35	4	1,685	1.7	Yes	2	7	Yes	1	Yes
10	Rush University Medical Center, Chicago	49.9	7.7	0.42	2	2,853	2.0	Yes	1	7	Yes	1	Yes
11	Hospital for Joint Diseases, NYU Langone Medical Center, New York	49.7	8.4	0.57	2	2,628	1.7	Yes	2	6	Yes	1	Yes
12	Harborview Medical Center, Seattle	47.9	10.9	0.92	2	971	2.2	No	2	6	Yes	1	Yes
13	Thomas Jefferson University Hospital, Philadelphia	44.3	5.1	0.47	5	2,846	2.1	Yes	2	7	Yes	0	Yes +4 S.D.s
14	Hospital of the University of Pennsylvania, Philadelphia	44.1	7.4	0.71	2	471	1.7	Yes	2	7	Yes	1	Yes
15	New York-Presbyterian University Hospital of Columbia and Cornell	42.9	5.8	0.55	1	2,441	2.0	No	2	7	Yes	1	Yes
16	University of Washington Medical Center, Seattle	42.9	6.7	0.62	1	1,003	2.2	Yes	1	7	No	1	Yes
17	Stanford Hospital and Clinics, Stanford, Calif.	42.3	5.9	0.69	1	2,059	2.5	Yes	2	6	Yes	1	Yes
18	University of California, San Francisco Medical Center	41.8	5.6	0.56	3	1,479	2.5	No	2	7	No	1	Yes
19	Ronald Reagan UCLA Medical Center, Los Angeles	38.7	5.8	1.01	3	320	2.6	Yes	2	7	Yes	1	Yes
20	Brigham and Women's Hospital, Boston	38.1	4.4	0.64	1	2,220	2.3	No	2	7	Yes	1	Yes +3 S.D.s
21	University Hospitals Case Medical Center, Cleveland	37.3	3.0	0.47	1	1,962	1.9	Yes	2	7	Yes	1	Yes
22	Northwestern Memorial Hospital, Chicago	36.2	2.8	0.48	1	1,935	1.6	Yes	2	7	Yes	1	Yes
23	Texas Orthopedic Hospital, Houston	34.5	2.0	0.21	5	1,157	2.4	No	0	5	Yes	0	Yes
24	University of Michigan Hospitals and Health Centers, Ann Arbor	34.0	3.3	0.72	1	1,392	2.7	No	2	7	Yes	1	Yes
25	Tampa General Hospital	33.7	1.2	0.37	1	2,915	2.3	Yes	2	7	Yes	1	Yes
26	Methodist Hospital, Houston	33.4	1.2	0.35	3	3,572	1.8	Yes	2	7	No	1	Yes
27	Methodist Hospitals of Memphis	32.9	3.5	0.92	4	2,158	1.8	No	2	6	Yes	1	Yes
28	Ohio State University Hospital, Columbus	32.4	2.7	0.80	2	1,478	2.0	Yes	2	7	Yes	1	Yes
29	Clarian Health, Indianapolis	32.2	1.7	0.67	4	2,286	2.0	Yes	2	7	Yes	1	Yes
30	New England Baptist Hospital, Boston	32.0	1.3	0.25	5	3,056	1.7	No	2	7	No	0	Yes
31	USC University Hospital, Los Angeles	32.0	1.6	0.23	3	758	2.1	No	1	4	No	1	Yes
32	Union Memorial Hospital, Baltimore	31.7	1.4	0.35	2	1,780	1.7	No	1	7	Yes	1	Yes
33	Beaumont Hospital, Royal Oak, Mich.	31.7	0.7	0.60	4	6,043	1.6	Yes	2	6	Yes	1	Yes
34	University of Maryland Medical Center, Baltimore	31.6	2.4	0.82	3	1,094	2.1	Yes	2	7	Yes	1	Yes
35	University of California, Davis Medical Center, Sacramento	31.1	3.0	0.70	1	949	2.8	No	1	7	Yes	1	Yes
36	Ochsner Medical Center, New Orleans	30.1	1.2	0.64	4	944	1.9	Yes	2	7	Yes	1	Yes
37	Cedars-Sinai Medical Center, Los Angeles	29.9	0.8	0.56	5	3,050	2.2	Yes	2	5	Yes	0	Yes
38	Pennsylvania Hospital, Philadelphia	29.7	0.9	0.29	4	1,802	1.4	No	2	7	No	1	Yes
39	Nebraska Orthopaedic Hospital, Omaha	29.2	0.4	0.07	5	824	2.4	No	1	3	No	0	Yes
40	John Muir Medical Center, Walnut Creek, Calif.	29.0	0.4	0.47	2	2,235	2.0	Yes	2	6	Yes	1	Yes
41	Carolinas Medical Center, Charlotte, N.C.	28.1	1.6	0.84	3	1,967	2.0	No	2	7	Yes	1	Yes
42	Medical University of South Carolina, Charleston	27.9	1.2	0.66	5	1,217	2.3	No	2	6	Yes	0	Yes
43	University of Wisconsin Hospital and Clinics, Madison	27.9	1.5	0.63	1	1,321	1.8	Yes	1	6	Yes	0	Yes
44	Abbott Northwestern Hospital, Minneapolis	27.8	0.0	0.48	1	3,472	3.0	Yes	2	7	Yes	0	Yes
45	University of California, San Diego Medical Center	27.7	1.2	0.61	1	863	1.9	No	2	7	Yes	1	Yes
46	University of Minnesota Medical Center, Fairview	27.5	0.8	0.54	2	1,492	1.9	Yes	1	7	Yes	0	Yes
47	Alaska Regional Hospital, Anchorage	27.4	0.4	0.23	2	503	2.8	No	1	3	Yes	0	Yes
48	Parkland Memorial Hospital, Dallas	27.2	1.8	0.66	2	363	1.6	No	1	6	Yes	1	Yes
49	Good Samaritan Hospital, Baltimore	27.2	0.0	0.36	5	1,770	1.2	No	2	7	No	1	Yes
50	Santa Monica-UCLA Medical Center and Orthopedic Hospital, Santa Monica, Calif.	27.2	0.0	0.34	5	1,440	2.1	No	1	7	No	1	Yes

Final IHQ-Driven Rankings 2010/11—Pulmonology

Rank	Hospital	U.S. News Score	Reputation (%)	Relative mortality (below 1.00 is better)	Patient safety index (higher is better)	Discharges (3 years)	Nurse staffing	Nurse Magnet hospital	Technologies (of 6)	Patient services (of 8)	Trauma center	Intensivists	Current AHA responder
1	National Jewish Health, Denver	100.0	47.1	0.59	2	8	6.0	No	3	2	No	0	Yes
2	Mayo Clinic, Rochester, Minn.	95.9	35.9	0.79	1	5,304	3.0	Yes	6	8	Yes	1	Yes
3	Cleveland Clinic	85.9	27.1	0.76	3	3,810	2.2	Yes	6	8	No	1	Yes
4	Johns Hopkins Hospital, Baltimore	84.1	23.7	0.68	1	2,151	2.1	Yes	6	8	Yes	1	Yes
5	Massachusetts General Hospital, Boston	72.2	17.1	0.78	1	4,199	2.1	Yes	6	8	Yes	1	Yes
6	Duke University Medical Center, Durham, N.C.	66.6	15.9	0.89	1	3,894	1.9	Yes	6	8	Yes	1	Yes
7	UPMC-University of Pittsburgh Medical Center	66.4	16.2	0.89	2	6,481	1.8	No	6	8	No	1	Yes
8	University of Colorado Hospital, Aurora	65.3	14.7	0.84	1	1,460	1.6	Yes	6	7	Yes	1	Yes
9	University of California, San Francisco Medical Center	59.4	12.8	0.89	3	1,899	2.5	No	5	8	No	1	Yes
10	Hospital of the University of Pennsylvania, Philadelphia	58.7	11.3	0.86	2	1,911	1.7	Yes	6	8	Yes	1	Yes
11	University of California, San Diego Medical Center	57.4	9.9	0.75	1	1,578	1.9	No	5	8	Yes	1	Yes
12	New York-Presbyterian University Hospital of Columbia and Cornell	57.3	9.6	0.82	1	7,320	2.0	No	6	8	Yes	1	Yes
13	Barnes-Jewish Hospital/Washington University, St. Louis	57.2	10.4	0.92	2	4,908	2.0	Yes	6	8	Yes	1	Yes
14	University of Michigan Hospitals and Health Centers, Ann Arbor	56.7	9.8	0.82	1	3,037	2.7	No	6	8	Yes	1	Yes
15	University of Washington Medical Center, Seattle	54.7	10.0	0.86	1	1,228	2.2	Yes	6	8	No	1	Yes
16	Brigham and Women's Hospital, Boston	54.2	8.6	0.79	1	3,441	2.3	No	6	8	Yes	1	Yes
17	Vanderbilt University Medical Center, Nashville	54.1	7.3	0.74	4	2,919	2.1	Yes	6	8	Yes	0	Yes
18	Ronald Reagan UCLA Medical Center, Los Angeles	52.7	6.6	0.77	3	1,834	2.6	Yes	6	8	Yes	1	Yes +4 S.D.s
19	University of Maryland Medical Center, Baltimore	43.9	3.2	0.67	3	1,814	2.1	Yes	6	8	Yes	1	Yes +3 S.D.s
20	Yale-New Haven Hospital, New Haven, Conn.	42.7	3.5	0.76	2	3,876	2.6	No	5	8	Yes	1	Yes
21	University of Chicago Medical Center	42.4	4.8	0.91	2	2,156	2.6	Yes	6	8	Yes	1	Yes
22	University of Iowa Hospitals and Clinics, Iowa City	41.2	3.1	0.79	4	1,941	1.7	Yes	6	8	Yes	1	Yes
23	University of Minnesota Medical Center, Fairview	40.3	2.2	0.67	2	2,127	1.9	Yes	6	8	Yes	0	Yes
24	University of Alabama Hospital at Birmingham	40.2	3.2	0.82	1	3,572	1.9	Yes	6	8	Yes	1	Yes
25	Thomas Jefferson University Hospital, Philadelphia	37.9	2.1	0.78	5	2,614	2.1	Yes	5	8	Yes	0	Yes
26	Temple University Hospital, Philadelphia	37.7	3.2	0.87	3	1,986	1.6	No	6	8	Yes	1	Yes
27	Methodist Hospital, Houston	36.3	1.6	0.76	3	4,529	1.8	Yes	6	8	No	1	Yes
28	USC University Hospital, Los Angeles	36.2	1.6	0.51	3	566	2.1	No	6	5	No	1	Yes
29	Shands at the University of Florida, Gainesville	36.0	1.9	0.82	1	3,729	1.8	Yes	6	8	Yes	1	Yes
30	University of Kansas Hospital, Kansas City	35.8	0.4	0.60	3	1,765	2.0	Yes	5	7	Yes	1	Yes
31	Beth Israel Deaconess Medical Center, Boston	35.6	2.6	0.85	1	4,082	1.5	No	5	8	Yes	1	Yes
32	Clarian Health, Indianapolis	34.9	0.4	0.73	4	5,593	2.0	Yes	6	8	Yes	1	Yes
33	Cedars-Sinai Medical Center, Los Angeles	34.9	2.0	0.90	5	4,696	2.2	Yes	6	7	Yes	0	Yes
34	Ohio State University Hospital, Columbus	34.7	1.3	0.79	2	5,082	2.0	Yes	5	8	Yes	1	Yes
35	Mount Sinai Medical Center, New York	34.4	3.0	0.99	2	5,269	1.9	Yes	6	8	Yes	1	Yes
36	Ochsner Medical Center, New Orleans	34.2	1.0	0.77	4	1,736	1.9	Yes	5	8	Yes	1	Yes
37	Robert Wood Johnson University Hospital, New Brunswick, N.J.	34.0	2.1	0.91	2	2,771	2.3	Yes	5	8	Yes	1	Yes
38	Boston Medical Center	33.9	2.6	0.79	1	1,843	1.3	No	5	5	Yes	0	Yes
39	Wake Forest University Baptist Medical Center, Winston-Salem, N.C.	33.6	0.6	0.77	5	3,785	1.5	Yes	5	8	Yes	1	Yes
40	Harper University Hospital, Detroit	33.6	0.4	0.56	5	1,292	0.7	No	5	8	No	0	Yes
41	NYU Langone Medical Center, New York	33.3	1.1	0.78	2	2,463	1.7	Yes	5	7	Yes	1	Yes
42	University Hospitals Case Medical Center, Cleveland	33.2	1.0	0.77	1	3,048	1.9	Yes	5	8	Yes	1	Yes
43	Hamot Medical Center, Erie, Pa.	33.0	0.0	0.66	5	2,765	2.1	No	5	7	Yes	1	Yes
44	University of Wisconsin Hospital and Clinics, Madison	33.0	0.7	0.70	1	2,131	1.8	Yes	6	7	Yes	0	Yes
45	University of Utah Health Care, Salt Lake City	32.8	2.0	0.84	1	1,524	1.1	No	6	8	Yes	1	Yes
46	Henry Ford Hospital, Detroit	32.4	1.1	0.80	1	4,889	1.7	No	6	8	Yes	1	Yes
47	Beaumont Hospital, Royal Oak, Mich.	32.3	0.0	0.79	4	9,318	1.6	Yes	5	8	Yes	1	Yes
48	University Medical Center, Tucson, Ariz.	32.2	0.3	0.68	2	1,577	2.0	Yes	5	8	Yes	0	Yes
49	Rush University Medical Center, Chicago	32.1	0.7	0.76	2	2,252	2.0	Yes	4	8	Yes	1	Yes
50	Christ Hospital, Cincinnati	31.9	0.0	0.62	3	3,338	2.0	No	4	8	No	1	Yes

Final IHQ-Driven Rankings 2010/11—Urology

Rank	Hospital	U.S. News Score	Reputation (%)	Relative mortality (below 1.00 is better)	Patient safety index (higher is better)	Discharges (3 years)	Nurse staffing	Nurse Magnet hospital	Technologies (of 5)	Patient services (of 9)	Trauma center	Intensivists	Current AHA responder
1	Johns Hopkins Hospital, Baltimore	100.0	56.7	0.42	1	894	2.1	Yes	5	9	Yes	1	Yes
2	Cleveland Clinic	99.1	56.0	0.49	3	1,107	2.2	Yes	5	9	No	1	Yes
3	Mayo Clinic, Rochester, Minn.	87.1	34.3	0.48	1	1,368	3.0	Yes	5	9	Yes	1	Yes
4	Ronald Reagan UCLA Medical Center, Los Angeles	79.0	26.4	0.46	3	652	2.6	Yes	5	9	Yes	1	Yes
5	University of California, San Francisco Medical Center	69.8	20.0	0.46	3	725	2.5	No	4	9	No	1	Yes
6	New York-Presbyterian University Hospital of Columbia and Cornell	66.6	15.2	0.45	1	1,684	2.0	No	5	9	Yes	1	Yes
7	Duke University Medical Center, Durham, N.C.	65.0	17.0	0.66	1	867	1.9	Yes	5	9	Yes	1	Yes
8	Memorial Sloan-Kettering Cancer Center, New York	64.9	18.3	0.67	3	820	1.8	No	5	8	No	1	Yes
9	Vanderbilt University Medical Center, Nashville	60.9	13.5	0.61	4	841	2.1	Yes	5	9	Yes	0	Yes
10	University of Texas M.D. Anderson Cancer Center, Houston	56.2	12.5	0.54	2	549	2.1	Yes	5	9	No	1	Yes
11	University of Michigan Hospitals and Health Centers, Ann Arbor	51.9	7.9	0.59	1	1,164	2.7	No	5	9	Yes	1	Yes +4 S.D.s
12	Massachusetts General Hospital, Boston	50.6	9.7	0.88	1	663	2.1	Yes	5	9	Yes	1	Yes
13	Clarian Health, Indianapolis	49.8	5.2	0.46	4	1,205	2.0	Yes	5	9	Yes	1	Yes
14	Hospital of the University of Pennsylvania, Philadelphia	49.6	6.8	0.49	2	557	1.7	Yes	5	9	Yes	1	Yes
15	University of Texas Southwestern Medical Center, Dallas	48.0	6.9	0.42	4	396	1.6	No	5	8	No	0	Yes
16	USC University Hospital, Los Angeles	46.0	4.2	0.00	3	146	2.1	No	5	5	No	1	Yes
17	Barnes-Jewish Hospital/Washington University, St. Louis	44.9	5.5	0.76	2	903	2.0	Yes	5	9	Yes	1	Yes +3 S.D.s
18	Methodist Hospital, Houston	43.4	4.7	0.63	3	790	1.8	Yes	5	9	No	1	Yes
19	University of Iowa Hospitals and Clinics, Iowa City	43.1	4.3	0.68	4	464	1.7	Yes	5	9	Yes	1	Yes
20	UPMC-University of Pittsburgh Medical Center	42.6	5.0	0.71	2	988	1.8	No	5	9	No	1	Yes
21	Brigham and Women's Hospital, Boston	42.0	3.9	0.52	1	671	2.3	No	5	9	Yes	1	Yes
22	Stanford Hospital and Clinics, Stanford, Calif.	41.1	3.9	0.63	1	397	2.5	Yes	5	9	Yes	1	Yes
23	NYU Langone Medical Center, New York	41.0	3.1	0.46	2	404	1.7	Yes	5	8	Yes	1	Yes
24	University of Alabama Hospital at Birmingham	40.3	2.2	0.42	1	910	1.9	Yes	5	9	Yes	1	Yes
25	Shands at the University of Florida, Gainesville	39.8	2.2	0.47	1	898	1.8	Yes	5	9	Yes	1	Yes
26	Northwestern Memorial Hospital, Chicago	39.1	3.4	0.73	1	725	1.6	Yes	5	9	Yes	1	Yes
27	Lahey Clinic, Burlington, Mass.	38.9	4.3	0.77	1	565	1.4	Yes	5	9	Yes	0	Yes
28	University of Chicago Medical Center	37.1	2.1	0.68	2	679	2.6	Yes	5	9	Yes	1	Yes
29	Ohio State University Hospital, Columbus	36.5	0.5	0.42	2	1,173	2.0	Yes	5	9	Yes	1	Yes
30	University of Washington Medical Center, Seattle	36.3	1.1	0.29	1	451	2.2	Yes	5	8	No	1	Yes
31	University of Virginia Medical Center, Charlottesville	35.8	1.7	0.60	1	592	2.1	Yes	5	9	Yes	1	Yes
32	University of California, Irvine Medical Center, Orange	35.8	1.6	0.53	1	306	2.2	Yes	5	9	Yes	1	Yes
33	Emory University Hospital, Atlanta	35.6	2.2	0.61	1	810	2.1	No	5	9	No	1	Yes
34	Henry Ford Hospital, Detroit	35.6	1.6	0.58	1	1,010	1.7	No	5	9	Yes	1	Yes
35	Tampa General Hospital	35.6	0.6	0.39	1	718	2.3	Yes	5	9	Yes	1	Yes
36	Beaumont Hospital, Royal Oak, Mich.	35.5	0.8	0.58	4	1,011	1.6	Yes	5	9	Yes	1	Yes
37	University of Maryland Medical Center, Baltimore	35.1	0.6	0.47	3	762	2.1	Yes	5	9	Yes	1	Yes
38	City of Hope, Duarte, Calif.	34.6	1.4	0.39	1	385	2.2	No	5	8	No	1	Yes
39	St. Luke's Episcopal Hospital, Houston	34.4	1.1	0.43	5	590	1.8	Yes	3	7	No	0	Yes
40	University of Wisconsin Hospital and Clinics, Madison	34.3	1.3	0.54	1	762	1.8	Yes	5	8	Yes	0	Yes
41	Rush University Medical Center, Chicago	34.2	0.3	0.33	2	558	2.0	Yes	4	9	Yes	1	Yes
42	Yale-New Haven Hospital, New Haven, Conn.	34.0	0.3	0.40	2	741	2.6	No	5	9	Yes	1	Yes
43	University of Kansas Hospital, Kansas City	33.8	1.1	0.60	3	395	2.0	Yes	5	8	Yes	1	Yes
44	Loyola University Medical Center, Maywood, Ill.	33.4	1.1	0.47	1	471	2.1	Yes	4	8	Yes	0	Yes
45	Mount Sinai Medical Center, New York	33.2	0.9	0.60	2	843	1.9	Yes	5	9	Yes	1	Yes
46	Wake Forest University Baptist Medical Center, Winston-Salem, N.C.	33.0	0.3	0.59	5	674	1.5	Yes	5	9	Yes	1	Yes
47	Baylor University Medical Center, Dallas	32.8	1.6	0.69	1	535	1.8	Yes	5	8	Yes	0	Yes
48	Memorial Hermann-Texas Medical Center, Houston	32.7	0.0	0.36	3	436	2.3	No	5	9	Yes	1	Yes
49	St. Cloud Hospital, St. Cloud, Minn.	32.7	0.3	0.39	1	333	2.0	Yes	5	9	Yes	1	Yes
50	Christiana Care Hospital, Newark, Del.	32.6	0.0	0.53	3	882	2.0	Yes	5	8	Yes	1	Yes

Appendix F

2010/11 Reputation-Only Rankings

Final Reputation-Only Rankings 2010/11—Ophthalmology

Rank	Hospital	Reputation (%)	
1	Bascom Palmer Eye Institute at the University of Miami	71.8	
2	Wilmer Eye Institute, Johns Hopkins Hospital, Baltimore	67.6	
3	Wills Eye Hospital, Philadelphia	58.4	+3 S.D.s
4	Massachusetts Eye and Ear Infirmary, Massachusetts General Hospital, Boston	30.2	
5	Jules Stein Eye Institute, UCLA Medical Center, Los Angeles	30.1	+2 S.D.s
6	University of Iowa Hospitals and Clinics, Iowa City	17.7	
7	Duke University Medical Center, Durham, N.C.	14.3	
8	Doheny Eye Institute, USC University Hospital, Los Angeles	10.2	
9	University of California, San Francisco Medical Center	8.8	
10	Cleveland Clinic	7.6	
11	Mayo Clinic, Rochester, Minn.	7.5	
12	Methodist Hospital, Houston	6.9	
13	New York Eye and Ear Infirmary	6.8	
14	Emory University Hospital, Atlanta	6.7	
15	Barnes-Jewish Hospital/Washington University, St. Louis	6.6	
16	Hospital of the University of Pennsylvania, Philadelphia	4.7	
17	W.K. Kellogg Eye Center, University of Michigan, Ann Arbor	4.1	
18	New York-Presbyterian University Hospital of Columbia and Cornell	4.0	

Final Reputation-Only Rankings 2010/11—Psychiatry

Rank	Hospital	Reputation (%)
1	Massachusetts General Hospital, Boston	29.7
2	Johns Hopkins Hospital, Baltimore	27.6
3	McLean Hospital, Belmont, Mass.	21.1
4	New York-Presbyterian University Hospital of Columbia and Cornell	20.2
5	Menninger Clinic, Houston	18.7
6	Resnick Neuropsychiatric Hospital at UCLA, Los Angeles	17.2 +3 S.D.s
7	Sheppard and Enoch Pratt Hospital, Baltimore	14.2
8	Mayo Clinic, Rochester, Minn.	13.8
9	UPMC-University of Pittsburgh Medical Center	13.5 +2 S.D.s
10	Yale-New Haven Hospital, New Haven, Conn.	11.0
11	Austen Riggs Center, Stockbridge, Mass.	8.9
12	Duke University Medical Center, Durham, N.C.	7.1
13	Stanford Hospital and Clinics, Stanford, Calif.	7.1
14	Hospital of the University of Pennsylvania, Philadelphia	6.6
15	Emory University Hospital, Atlanta	6.4
16	Barnes-Jewish Hospital/Washington University, St. Louis	6.2
17	NYU Langone Medical Center, New York	5.9
18	Mount Sinai Medical Center, New York	5.5
19	Long Island Jewish Medical Center, New Hyde Park, N.Y.	4.1
20	University of Michigan Hospitals and Health Centers, Ann Arbor	4.0
21	University of California, San Diego Medical Center	3.7
22	Cleveland Clinic	3.6
23	University of California, San Francisco Medical Center	3.5
24	University of Washington Medical Center, Seattle	3.1

Final Reputation-Only Rankings 2010/11—Rehabilitation

Rank	Hospital	Reputation (%)	
1	Rehabilitation Institute of Chicago	64.6	
2	Kessler Institute for Rehabilitation, West Orange, N.J.	39.6	
3	University of Washington Medical Center, Seattle	33.9	+3 S.D.s
4	Spaulding Rehabilitation Hospital, Boston	24.4	
5	TIRR Memorial Hermann, Houston	23.7	
6	Mayo Clinic, Rochester, Minn.	23.2	+2 S.D.s
7	Craig Hospital, Englewood, Colo.	17.0	
8	Rusk Institute, NYU Langone Medical Center, New York	13.7	
9	Shepherd Center, Atlanta	9.4	
10	Moss Rehab, Elkins Park, Pa.	8.6	
11	Ohio State University Hospital, Columbus	8.3	
12	Thomas Jefferson University Hospital, Philadelphia	7.8	
13	National Rehabilitation Hospital, Washington, D.C.	6.3	
14	Johns Hopkins Hospital, Baltimore	6.0	
15	UPMC-University of Pittsburgh Medical Center	5.2	
16	Mount Sinai Medical Center, New York	5.0	
17	Rancho Los Amigos National Rehabilitation Center, Downey, Calif.	4.6	
18	Baylor Institute for Rehabilitation, Dallas	4.5	
19	University of Michigan Hospitals and Health Centers, Ann Arbor	4.4	
20	Virginia Commonwealth University Medical Center, Richmond	3.2	

Final Reputation-Only Rankings 2010/11—Rheumatology

Rank	Hospital	Reputation (%)	
1	Johns Hopkins Hospital, Baltimore	45.7	
2	Cleveland Clinic	43.2	
3	Hospital for Special Surgery, New York	41.0	
4	Mayo Clinic, Rochester, Minn.	40.1	+3 S.D.s
5	Brigham and Women's Hospital, Boston	21.6	+2 S.D.s
6	Ronald Reagan UCLA Medical Center, Los Angeles	19.6	
7	Massachusetts General Hospital, Boston	16.4	
8	Hospital for Joint Diseases, NYU Langone Medical Center, New York	12.7	
9	UPMC-University of Pittsburgh Medical Center	12.7	
10	University of California, San Francisco Medical Center	12.5	
11	University of Alabama Hospital at Birmingham	12.4	
12	Duke University Medical Center, Durham, N.C.	10.3	
13	Stanford Hospital and Clinics, Stanford, Calif.	8.0	
14	University of Michigan Hospitals and Health Centers, Ann Arbor	7.3	
15	Barnes-Jewish Hospital/Washington University, St. Louis	6.2	
16	Northwestern Memorial Hospital, Chicago	5.1	
17	Medical University of South Carolina, Charleston	5.0	
18	New York-Presbyterian University Hospital of Columbia and Cornell	4.5	
19	University of Colorado Hospital, Aurora	4.3	
20	Hospital of the University of Pennsylvania, Philadelphia	4.1	
21	University of Washington Medical Center, Seattle	3.8	

Appendix G

The 2010/11 Honor Roll

Honor Roll 2010/11

Rank	Hospital	Points	Specialties
1	Johns Hopkins Hospital, Baltimore	30	15
2	Mayo Clinic, Rochester, Minn.	28	15
3	Massachusetts General Hospital, Boston	27	15
4	Cleveland Clinic	26	13
5	Ronald Reagan UCLA Medical Center, Los Angeles	24	14
6	New York-Presbyterian University Hospital of Columbia and Cornell	21	11
7	University of California, San Francisco Medical Center	20	11
8	Barnes-Jewish Hospital/Washington University, St. Louis	17	10
9	Hospital of the University of Pennsylvania, Philadelphia	16	12
10	Duke University Medical Center, Durham, N.C.	16	10
11	Brigham and Women's Hospital, Boston	14	10
12	University of Washington Medical Center, Seattle	14	8
13	UPMC-University of Pittsburgh Medical Center	13	8
14	University of Michigan Hospitals and Health Centers, Ann Arbor	12	8

