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Methodology: U.S. News & World Report Best Hospitals 2014-15

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Executive Summary

U.S. News & World Report began publishing hospital rankings in 1990 to identify the best medical centers for the most difficult patients—those whose illnesses pose unusual challenges because of underlying conditions, procedure difficulty or other medical issues that add risk. More than one factor can be in play for particular patients. The rankings, originally named "America's Best Hospitals" but now simply "Best Hospitals," have appeared annually from the start. The focus on the most difficult patients has not changed.

U.S News ranks the top hospitals in 16 different specialties from Cancer to Urology. For 12 of the 16 specialties, an extensive analysis combines measures of performance in three primary dimensions of healthcare: structure, process and outcomes. Rankings in the four remaining specialties are based on hospital reputation, determined by a physician survey.

Structural measures include hospital volume, technology and other resources that define the hospital environment. The source of the majority of structural measures is the American Hospital Association (AHA) Annual Survey, supplemented by additional resources such as the National Cancer Institute's list of designated cancer centers.

Process is represented mostly by a hospital's reputation for developing and sustaining a system that delivers high-quality care, determined by a survey of board-certified physicians. It also shares with the outcomes dimension an indicator of patient safety; the extent to which patients are safe is largely a function of process. The rationale is that harm to patients reflects both process performance and an outcomes result.

Outcomes performance relies mostly on survival (i.e., risk-adjusted mortality). These data come from the Medicare Provider Analysis and Review (MedPAR) database maintained by the Centers for Medicare & Medicaid Services (CMS). As noted above, patient safety is included in both outcomes and in process.

All community hospitals included in the AHA universe are automatically considered for ranking. Applying, submitting a request or performing another action is unnecessary.

Initial eligibility requires a hospital to meet at least one of four requirements: to be a teaching hospital, be affiliated with a medical school, have at least 200 beds, or have at least 100 beds as well as four or more medical technologies out of eight deemed significant for this patient population.

Eligibility in a particular specialty requires hospitals to meet a specialty-dependent volume/discharge threshold. Setting discharge minimums ensures that ranking-eligible hospitals

have demonstrable experience in treating a set number of complex cases in a given specialty. A hospital that does not meet the minimum requirement in a specialty is still eligible if nominated by at least 1% of the physicians who responded to the survey.

Rankings in Ophthalmology, Psychiatry, Rehabilitation and Rheumatology do not depend on hard data. In these four specialties, hospitals are ranked solely on reputation as determined by the physician survey cited above.

For the 2014-15 rankings, 144 of the approximately 5,000 U.S. hospitals evaluated were ranked in at least one specialty. Seventeen of the 144 qualified for the Honor Roll by ranking very high in six or more specialties. "Very high" was defined in the 12 data-driven specialties as ranking among the top 20 hospitals and in Ophthalmology, Psychiatry, Rehabilitation and Rheumatology as ranking among the top 10.

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I. Introduction

For families facing a serious or complex medical problem, the choice of hospital can be critical. Yet until 1990, when *U.S. News & World Report* introduced "America's Best Hospitals," few tools or resources were available to inform families' decisions beyond a doctor's recommendation. The first assessment took the form of alphabetical lists of "rated" hospitals in 12 specialties. Hospitals were ranked starting in 1991.

The 2014-15 Best Hospitals rankings are drawn from a universe of 4,743 medical facilities.* The defined universe derives from information in the American Hospital Association's (AHA's) Annual Survey of Hospitals, which also provides some data used in the rankings. Under rare circumstances, we combine two or more AHA hospitals for ranking purposes when they function as one but report separately to AHA for specific, meaningful and verifiable reasons.

In 12 of the 16 adult specialty rankings, hospitals received a composite score based on data from multiple sources. (Best Children's Hospitals,[†] which ranks hospitals in 10 pediatric specialties, is a separate project.) Both ranked and unranked hospitals, with substantial data, are published online at www.usnews.com/besthospitals/rankings. Ranked hospitals and a lesser amount of data are published in a print edition.

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, for example, or replacement of a heart valve in an elderly patient with comorbidities. 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 created by 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. RTI International in Research Triangle Park, N.C., has produced the rankings from 2005 to the present. Over time, the methodology has been refined and extended, for example, by incorporating patient safety data in 2009. Large-scale enhancements are always under consideration.

^{*} 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 as well. AIDS was dropped in 1998, for example, because it was clear that most 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 2014-15 rankings. §

For 2014-15, hospitals are ranked in 16 adult specialties:

- Cancer
- Cardiology & Heart Surgery
- Diabetes & Endocrinology
- Ear, Nose & Throat
- Gastroenterology & GI Surgery
- Geriatrics
- Gynecology
- Nephrology

- Neurology & Neurosurgery
- Ophthalmology
- Orthopedics
- Pulmonology
- Psychiatry
- Rehabilitation
- Rheumatology
- Urology

A. Index of Hospital Quality

Rankings in 12 of the 16 specialties 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 12 specialties: Cancer; Cardiology & Heart Surgery; Diabetes & Endocrinology; Ear, Nose & Throat; Gastroenterology & GI Surgery; Geriatrics; Gynecology; Nephrology; Neurology & Neurosurgery; Orthopedics; Pulmonology; Urology.

The IHQ reflects performance in three interlocked dimensions of healthcare: structure, process and outcomes.¹⁻⁵ Their relationship was described by Avedis Donabedian in 1966 in a model whose fundamentals have become widely accepted.

Structure refers to hospital resources related directly to patient care. Examples factored into the Best Hospitals rankings include intensity of nurse staffing, availability of desirable technologies and patient services and also 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 by the National Institutes of Health (NIH).

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

Excellent healthcare also is shaped by the *process* of delivering care, encompassing diagnosis, treatment, prevention and patient education. Process is represented by a hospital's reputation for developing and sustaining a system that delivers high-quality care.

Structure and process are related to *outcomes*, the most obvious of which is death but that have been extended in recent years to include harm to patients, incidence of preventable readmissions and other consequences of inadequate care. Outcomes are typically measured by *risk-adjusted mortality* (the likelihood of death when the patient's condition and the complexity of the case are taken into account) as well as related indicators such as complications, readmissions, patient safety and infection rates.

Available metrics do not always fit neatly into a single dimension. Complications of care that compromise patient safety are one example. They are outcomes that also reflect a flaw in the process of delivering care and may be affected by structural elements. In the Best Hospitals methodology, patient safety is therefore considered a fourth component, evaluated separately from structure, process and outcomes.

Many of the measures that make up the IHQ come from secondary data sources such as the AHA Annual Survey Database, which provides information about various structural hospital characteristics.

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

Structure

These specialty-specific 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 2014-15 rankings is the most recent AHA Annual Survey Database from fiscal year (FY) 2012. 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 fee-for-service Medicare beneficiaries who use hospital inpatient services.

Process

The process component of the IHQ score is represented by a hospital's reputation. For these rankings, the concept of reputation speaks to an institutional ability to develop and sustain a system that delivers high-quality care to especially challenging patients. It can be seen as a form of peer review.

A hospital's reputational score is based on the average of responses from the three most recent annual surveys of board-certified physicians conducted for the Best Hospitals rankings, which for the 2014-15 rankings were conducted in 2012, 2013 and 2014.

A random sample of 200 board-certified physicians is selected in each specialty from the American Medical Association (AMA) Physician Masterfile, a database of more than 850,000 physicians.** The physician sample is stratified by census region—West, Northeast, South and Midwest (http://www.census.gov/geo/maps-data/maps/pdfs/reference/us_regdiv.pdf)—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.

The surveyed physicians were asked to nominate the hospitals in their specific field of care, irrespective of expense or location, they consider best for patients with serious or difficult conditions. Up to five hospitals could be listed. (The 2014-15 questionnaire and associated contact materials are shown in *Appendix A*.)

For the 2014-15 rankings, a new initiative was added to address declining response rates by the survey sample drawn from the AMA database and to evaluate a broader set of physician responses. An additional survey was conducted with the Doximity online panel of physicians. The results were analyzed separately and incorporated as a small percentage of the reputation score for 2014 (see *Section II.D*).

Outcomes

The primary outcomes measure is mortality 30 days after admission for all IHQ-driven specialties. Like the volume indicator, the mortality measure is based on MedPAR data. For each hospital and specialty, Truven Health Analytics (formerly the Healthcare Division of Thomson Reuters) computes an adjusted mortality rate based on observed and expected mortality rates using the All Patient Refined Diagnosis Related Group (APR-DRG) and Medicare Severity (MS) Grouper software created by 3M Health Information Systems. APR-DRGs and MS-DRGs use the patient's principal and secondary diagnoses to adjust the value for expected deaths by severity of illness. The method is applied to the three most recent fiscal years (FY2010, FY2011 and FY2012) of Medicare reimbursement claims submitted by hospitals to CMS.

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

Patient Safety

Patient safety is related to the process of healthcare delivery and is used to determine instances where patients may be harmed or put at risk but do not die. The patient safety score was developed by RTI using the framework described in the *Patient Safety Quality Indicators Composite Measure Workshop Final Report*, with a few project-specific modifications. This report summarizes the steps taken to construct an index to be reported in the annual *National Healthcare Quality Report* and *National Healthcare Disparities Report*, and the Healthcare Cost and Utilization Project (HCUP) initiative.

Weighting

When the data-driven methodology was created, equal weighting was given to structure, process and outcomes. When the patient safety measure was introduced in 2009, its weight was evenly split between outcomes and process. For 2014-15, because the number of elements of the patient safety component has been increased, weighting has been revised to give patient safety more (and reputation less) of the overall weight, as shown in *Table 1*. This shift reflects improved reliability and accuracy of the data-driven measures.

Table 1. 2014-15 Overall Weight by Component

Component	Weight (%)
Outcomes	32.5
Structure	30.0
Process	27.5
Patient Safety	10.0

B. Reputation-Only Rankings

In 4 of the 16 specialties—Ophthalmology, Psychiatry, Rehabilitation and Rheumatology—the rankings 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* and the associated rankings 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 detailed 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." ¹⁰)
- **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 2005 to the present.
- *Section VI* describes improvements under consideration.

II. 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 2014-15 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 4,743 community hospitals included in the FY2012 AHA universe were automatically considered for ranking;^{††} no request, application or other action was necessary. For the IHQ-driven specialties, the methodology involved two stages of eligibility criteria; hospitals had to satisfy the requirements of each stage to be eligible in a given specialty.

Stage 1. A hospital was initially eligible if it met *any* of the following criteria:

- Member, Council of Teaching Hospitals (COTH);
- Medical school affiliation (AMA or American Osteopathic Association);
- At least 200 hospital beds set up and staffed;
- Availability of at least four of eight important key technologies (see *Technology*) and at least 100 hospital beds set up and staffed.

Hospitals that met a Stage 1 requirement and responded to the AHA Annual Survey of Hospitals in 2010 and 2011 but not in 2012 remained eligible. For such hospitals, we used survey

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

data from 2011. Nonresponders lacking data from the current survey and one of the previous two surveys were evaluated without AHA data. A total of 2,280 hospitals successfully passed the first stage of the eligibility process.

Stage 2. To be eligible for ranking in a particular specialty, hospitals needed a specified number of discharges across a defined list of specialty-specific diagnoses submitted for CMS reimbursement in FY2010, FY2011 and FY2012 combined. If the calculated minimum total discharge value for a specialty was lower than 25, then 25 was set as the minimum for that specialty to ensure a sufficient number of discharges. Through 2002, the threshold for determining eligibility included all discharges, regardless of the balance of medical-to-surgical discharges. Since 2002, specific proportions of medical and surgical discharges have been specified for Cancer; Gastroenterology & GI Surgery; Ear, Nose & Throat; Gynecology; Neurology & Neurosurgery; Orthopedics; 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 calculated minimum total discharge threshold to determine the minimum surgical discharges needed to be considered eligible.

Setting discharge minimums involving complex care ensures that ranking-eligible hospitals have demonstrable experience in treating a set number of challenging cases in a given specialty. As in past years, the discharge minimums this year include only cases that meet the minimum severity of illness thresholds set by the project using APR-DRGs. Minimums for all specialties will be reviewed for future rankings and adjusted as needed.

A hospital with below-minimum volume was considered eligible for a specialty if it had a reputation score of 1% or greater. *Table 2* presents discharge volumes and numbers of hospitals meeting the volume criteria for the IHQ-driven specialties. *Table 2* also shows the total number of hospitals in each specialty that did not meet the volume eligibility but became eligible because they had a reputation score that was 1% or higher.

[#] Prior to RTI's involvement in the rankings in 2005, the minimum number of surgical discharges in Cardiology & Heart Surgery was set to 500. For hospitals meeting the minimum, a ratio of total-to-surgical discharges was calculated. The median of this ratio was then multiplied by 500 to determine a minimum number for all discharges.

M The exception was Cardiology & Heart Surgery, where surgical discharges alone determined the threshold for eligibility.

Table 2. Minimum Discharges by Specialty

Specialty	Minimum Discharges, Total (Surgical)	Number of Eligible Hospitals Based on Minimum Discharges	Additional Hospitals with ≥ 1% Reputation Score	Final Total Eligible
Cancer	249 (47)	899	1	900
Cardiology & Heart Surgery ^a	1,335 (500)	708	0	708
Diabetes & Endocrinology	172 (0)	1,119	0	1,119
Ear, Nose & Throat	25 (3)	706	3	709
Gastroenterology & GI Surgery	563 (148)	1,586	0	1,586
Geriatrics ^b	2,492 (0)	1,553	1	1,554
Gynecology	25 (8)	1,096	3	1,099
Nephrology	194 (0)	1,674	0	1,674
Neurology & Neurosurgery	332 (46)	1,358	0	1,358
Orthopedics	338 (310)	1,645	1	1,646
Pulmonology	1,033 (0)	1,679	1	1,680
Urology	43 (19)	1,570	0	1,570
Total (unique hospitals) ^c	Not Applicable	1,906	10	1,907

^a In addition to discharge- or reputation-based eligibility, a hospital must offer cardiac intensive care, adult interventional cardiac catheterization and adult cardiac surgery to be considered in this specialty.

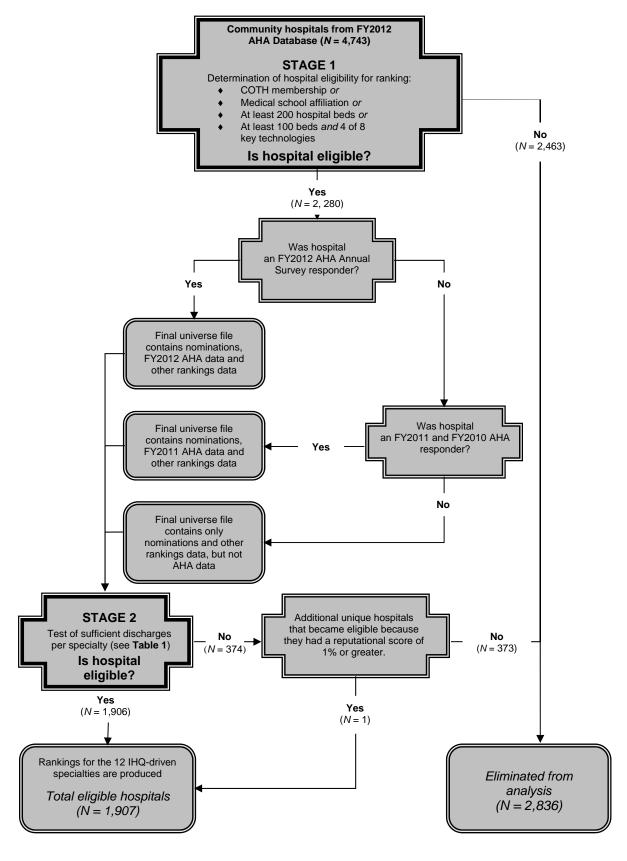
A total of 1,906 hospitals met the volume criteria in at least one specialty, and 1 other hospital became eligible because it had a 1% or higher reputation score in at least one specialty. In all, 1,907 unique hospitals were deemed eligible for at least 1 of the 12 IHQ-driven specialties under the full criteria.

We then conducted separate analyses for each specialty. The top 50 hospitals in each IHQ specialty are published in a special Best Hospitals print issue each summer. *Figure 1* illustrates the eligibility and analysis process for the IHQ-driven specialties, as described in the steps above.

^b In addition to discharge- or reputation-based eligibility, a hospital must offer at least one of the following services to be considered in this specialty: arthritis treatment center, adult day care program, patient representative services, geriatric services, meals on wheels, assisted living, transportation to health facility or Alzheimer's center service.

^c The total values are not sums. The same hospitals may be eligible for multiple specialties. This line represents the total unique hospitals in each category across all specialties.

Figure 1. Eligibility and Analysis Process, 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 2014-15 rankings, most structural elements were derived from the FY2012 AHA Annual Survey Database. Additional components came from external organizations including NCI, ANCC, Foundation for the Accreditation of Cellular Therapy (FACT), National Institute on Aging (NIA), National Association of Epilepsy Centers (NAEC) and CMS.

AHA Annual Survey

AHA has surveyed hospitals annually since 1946. The AHA Annual Survey of Hospitals is the most comprehensive and dependable database of information on institutional healthcare, with an average annual response rate of 85%. The database contains hospital-specific data items for more than 6,500 hospitals and healthcare systems. More than 700 data fields cover organizational structure, personnel, hospital facilities and services and financial performance. (For the specific mapping of Best Hospitals variables to AHA data elements, see *Appendix B*.) The following items from the AHA Annual Survey Database provided most of the structural score for the IHQ specialties.

Advanced Technologies

The elements in this 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 for a key technology or advanced service available off-site. Many hospitals provide off-site access through their parent health system, local community network or contractual arrangement or joint venture with another provider in the community. In 2008, the provision was changed again to award full credit 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 technologies that are relevant in one or more specialties, 8 comprise the Technology index that is one of the eligibility doorways: hospitals that provide at least 4 of the 8

relevant technologies and have 100 beds or more are eligible for ranking (see *Section II.A. Eligibility*).

Brief descriptions of the technologies in the 2014-15 index follow. The definitions are taken largely from the AHA Annual Survey, expanded as necessary:

- 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.
- Computer-assisted orthopedic surgery). 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. 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 anus. Combined with needle biopsy, the procedure can assist in diagnosis of disease and staging of cancer.
- Full-field digital mammography. 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. An automated system that provides high-resolution x-ray images to pinpoint tumor sites adjusts patient positioning as necessary and completes treatment within the standard treatment time slot, allowing for more effective cancer treatments.
- Intensity-modulated radiation therapy (IMRT). A type of radiation therapy used to treat tumors. IMRT manipulates beams of radiation to the shape of the tumor. Beams of varying intensity can be used to radiate the tumor with precision. By using IMRT, physicians can focus on the tumor and avoid exposing healthy tissue to radiation, which causes a variety of negative treatment side effects.

- 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 positron emission tomography (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. Includes Medicare-approved organ transplant programs in heart, liver, lung or kidney transplant recognized by CMS. In addition, hospitals listed as bone marrow and tissue transplant centers by AHA are recognized. Transplant services are specific to the specialty. In the Cancer specialty, transplant services include bone marrow and other tissue transplants; Gastroenterology & GI Surgery includes liver transplant; Cardiology & Heart Surgery includes heart transplant and tissue transplant; Nephrology includes kidney transplant; Pulmonology includes lung transplant; Orthopedics includes tissue transplant.

Specialty-specific mixes of key technologies are used in computing the U.S. News scores (see *Section II.F. Calculation of the Index of Hospital Quality*). *Table 3* presents the complete list of key technologies considered for each specialty in 2014-15.

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^{***} 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.

Table 3. Technologies by Specialty

Technology	Technology Index	Cancer	Cardiology & Heart Surgery + † †	Diabetes & Endocrinology	Ear, Nose & Throat	Gastroenterology & GI Surgery	Geriatrics	Gynecology	Nephrology	Neurology & Neurosurgery	Orthopedics	Pulmonology	Urology
Ablation of Barrett's esophagus						•							
Computer-assisted orthopedic surgery											•		
Diagnostic radioisotope services	•			•		•			•	•		•	•
Endoscopic retrograde cholangiopancreatography						•							
Endoscopic ultrasound						•							
Full-field digital mammography	•	•						•					
Image-guided radiation therapy	•	•		•		•		•	•	•		•	•
Intensity-modulated radiation therapy		•											•
Multislice spiral CT	•		•						•			•	
PET/CT scanner	•	•	•	•				•	•	•		•	•
Robotic surgery	•	•	•					•	•				•
Shaped-beam radiation		•											
Single-photon-emission CT	•		•							•			
Stereotactic radiosurgery	•	•		•	•	•		•	•	•		•	•
Transplant services		•	•			•			•		•	•	
Total Elements	8	8	6	4	1	7	0	5	7	5	2	6	6

• Included in the index for the specialty.

[†] Five measures are listed, but hospitals can receive up to six points in Cardiology & Heart Surgery because two points are possible for transplant services—one point for heart transplant services, and one point for tissue transplant services.

Patient Volume

The volume measure reflects medical and surgical discharges in indicated specialty-specific MS-DRG groupings submitted for CMS reimbursement in FY2010, FY2011 and FY2012 combined. The list of MS-DRGs in each specialty is displayed in *Appendix C*. Volume is part of the structural score in all 12 IHQ-driven specialties. The volume used in the structural score includes all cases, including transfers, that appear in MedPAR for the specified MS-DRGs that meet the minimum severity thresholds (see *Appendix C*). To reduce the effect of extreme values, or outliers, we adjusted the observed volume used in the IHQ. Hospitals with a volume at or above the 75th percentile in each specialty (see *Table 4*) were assigned an *adjusted volume*, created from a weighted average of the hospital's observed volume and the volume for all hospitals at or above the 75th percentile. The weight placed on the all-hospital volume varies from 0 to 0.25; each increase in the volume percentile of 1 percentage point increases the all-hospital volume weight by 1 percentage point. For example, a hospital with volume in the 76th percentile has an all-hospital volume weight of 0.01. A hospital with a volume in the 80th percentile has an all-hospital volume weight of 0.05. The maximum weight for all-hospital volume under this adjustment is 0.25.

Table 4. Discharge Distribution by Specialty

Specialty	Minimum Volume	75th Percentile Volume	Maximum Volume
Cancer	216	819	6,288
Cardiology & Heart Surgery	1,372	4,857	17,991
Diabetes & Endocrinology	172	416	1,770
Ear, Nose & Throat	5	69	526
Gastroenterology & GI Surgery	563	2,082	12,367
Geriatrics	1,981	9,401	46,271
Gynecology	16	129	756
Nephrology	194	803	5,305
Neurology & Neurosurgery	333	1,774	8,283
Orthopedics	334	1,679	9,644
Pulmonology	794	3,389	14,398
Urology	43	241	1,978

Nurse Intensity

The nurse staffing index is a ratio that reflects the combined intensity of inpatient and outpatient nursing. The numerator is the total number of on-staff registered nurses (RNs), expressed as full-time equivalents (FTEs), for example, two half-time nurses are the equivalent of 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. As with volume, extreme values (i.e., the top 25%) were adjusted to reduce the influence of wide variation.

Trauma Center

In a U.S. News 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 the resulting high-factor loadings supported inclusion of these data in Ear, Nose & Throat; Gastroenterology & GI Surgery; Cardiology & Heart Surgery; Nephrology; Neurology & Neurosurgery; Orthopedics; Pulmonology; Urology.

The trauma center indicator is derived from two variables in the AHA Annual Survey Database: (1) presence of a state-certified trauma center in the hospital (as opposed to trauma services provided only as part of a health system, network or joint venture), and (2) trauma center level. The trauma center indicator is dichotomous: To receive credit of 1 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." 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."

Patient Services

Patient services 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 2014-15 index follow. The definitions are taken from the AHA Annual Survey of Hospitals (and, if necessary, have been expanded).

- Alzheimer's center. A facility that cares for individuals with Alzheimer's disease
 and the patients' 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 AHA's description. This index differs from NIA
 designation as an Alzheimer's center. Such designation represents a higher order of
 service and is treated as a separate structural measure in Geriatrics and in 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 a 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 patients who do not speak English.
- Wound-management services. Services for patients with chronic and nonhealing
 wounds that often result from diabetes, poor circulation, sitting or reclining
 improperly 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 are included in each specialty. Hospitals receive 1 point for each specified service provided on- or off-site by the hospital or by another institution through some formal arrangement. *Table 5* presents the list of patient services by specialty.

Table 5. Patient Services by Specialty

Service	Cancer	Cardiology & Heart Surgery	Diabetes & Endocrinology	Ear, Nose & Throat	Gastroenterology & GI Surgery	Geriatrics	Gynecology	Nephrology	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	7	8	8	8	9	9	8	9	7	8	9

[•] Included in the index for the specialty.

Intensivist on Staff

Intensivists are board-certified physicians with subspecialty or fellowship training in critical-care medicine. They specialize in managing critically ill patients in hospital intensive care units (ICUs). Recent research indicates that better outcomes are associated with the presence of intensivists. The intensivist on staff measure was added in 2009. Hospitals receive 1 point for having at least one FTE 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.

External Organizations

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

NCI-Designated Cancer Center

This indicator was added in 2002. NCI, an arm of 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.¹⁴

NCI-designated centers have three classification levels. The lowest is "cancer center," denoting a facility that conducts a high volume of advanced federally funded laboratory research. Credit is not awarded for this designation. A "clinical cancer center," the second level, adds clinical ("bench-to-bedside") research. "Comprehensive cancer center," the highest level, adds prevention research, community outreach and service activities.¹⁴

Hospitals designated as NCI clinical or comprehensive cancer centers as of March 1, 2014, were awarded 1 point. NCI updates the list throughout the year. The current list is provided in *Appendix D*.

^{##} Variable used in ranking calculations but not displayed in print or online.

Nurse Magnet Recognition

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 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 received credit based on status by the Magnet Recognition Program as of March 1, 2014. The current list is shown at http://www.nursecredentialing.org/Magnet/FindaMagnetFacility.

NAEC-Designated Epilepsy Center

This index was added to Neurology & Neurosurgery in 2004. One point was awarded to hospitals designated by NAEC as Level 4 epilepsy centers as of March 1, 2014. 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. The list of hospitals is updated throughout the year. The current list is shown at http://www.naec-epilepsy.org/find.htm.

NIA-Designated 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 NIA, an arm of 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, 2014, received 1 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-Accredited for BMT and Tissue Transplant

FACT accreditation was added to Cancer in 2007. This designation indicates that as of March 1, 2014, 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 were 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.

Normalization

Starting with the 2012-13 rankings, all structural measure values were normalized prior to weighting. Normalization is the process of transforming index values into a distribution between 0 and 1 based on the range of possible values for a given measure. The formula for normalization is provided in Equation (1):

Normalized Value =
$$X_i/(Maximum_i - Minimum_i)$$
, (1)

where

 X_i = the value for measure i,

 $Maximum_i$ = the highest possible value for measure i and

 $Minimum_i$ = the lowest possible value for measure i.

For example, the Technology index for Cancer is worth a maximum of 8 points. If a given hospital received 5 out of 8 points, the normalized value for the Technology index in Cancer would be (5/8) = 0.0.63.

Weighting

Individual measure weights were revised in the 2012-13 rankings. Previously, factor analysis had assigned relative weights. Our analyses and other healthcare-quality research led us to believe that measures of high quality are often correlated—improvement in one area often leads to improvement in another. We sought to develop a new approach to construct ranking weights that reflect the relative significance of each measure on its own rather than its association (or lack of one) with other measures within structure or another structural measure.

To address this question, we convened an expert panel to determine how much weight each of the measures should receive. The evaluation was done both across specialties for consistency in weighting and within specialties to identify key measures of quality in a particular specialty. Overall, the weights were determined based on how important each measure was in defining the structural measure of quality of care within hospitals. *Table 6* shows the relative weight for each of the

measures that make up the structural component of the rankings, by specialty. For all specialties, the sum of the weights is 30%, which is the overall weight for the structural component in the IHQ.

Table 6. Structural Elements and Percentages (%) of Total Score by Specialty

Item	Cancer	Cardiology & Heart Surgery	Diabetes & Endocrinology	Ear, Nose & Throat	Gastroenterology & GI Surgery	Geriatrics	Gynecology	Nephrology	Neurology & Neurosurgery	Orthopedics	Pulmonology	Urology
Advanced technologies	4.3	5.0	5.3	5.0	5.0		5.3	5.0	4.1	5.0	5.0	5.0
Epilepsy center									2.7			
Intensivist on staff	2.9	3.3	3.5	3.3	3.3	5.0	3.5	3.3	2.7	3.3	3.3	3.3
NCI cancer center	2.9											
NIA Alzheimer's center						5.0			2.7			
Nurse Magnet recognition	2.9	3.3	3.5	3.3	3.3	5.0	3.5	3.3	2.7	3.3	3.3	3.3
Nursing intensity	5.7	6.7	7.1	6.7	6.7	10.0	7.1	6.7	5.5	6.7	6.7	6.7
Patient services	2.9	3.3	3.5	3.3	3.3	5.0	3.5	3.3	2.7	3.3	3.3	3.3
Patient volume	5.7	6.7	7.1	6.7	6.7		7.1	6.7	5.5	6.7	6.7	6.7
Transplant accreditation	2.9											
Trauma center		1.7		1.7	1.7			1.7	1.4	1.7	1.7	1.7

NOTE: Percentages may not sum to 30 due to rounding.

C. Outcomes

The correlation between quality of care and risk-adjusted mortality is both self-evident and supported in the literature. Using risk adjustment to take volume of cases and severity of illness into account, we calculate specialty-specific, risk-adjusted mortality rates for each hospital as an outcomes measure for the IHQ. Mortality is worth 32.5% of the overall IHQ score.

A patient's medical condition (both the principal condition for which the patient is being treated as well as other comorbidities) strongly affects the chance of death while in the hospital. For a given condition, therefore, using raw mortality rates would unfairly penalize hospitals that treat high-risk patients.

Ideally, we would compare the mortality rates of a standardized set of patients across all hospitals in the Best Hospitals universe. This is unfeasible because hospitals vary in the mix of conditions, both principal and comorbid, for which they treat their patients. Instead, we construct an "expected" mortality rate. It is what the hospital's mortality rate would be if all patients with the same diagnoses had the mortality risk of the Best Hospitals universe instead of their hospital's mortality risk for those patients. Hospitals with observed mortality rates below the expected, case-mix-adjusted rate would, on this metric, be judged to have quality higher than average, and those hospitals with observed mortality rates above the expected rate would be judged to have quality lower than average.

Observed and expected mortality rates were provided by Truven Health Analytics using the pooled FY2010, FY2011 and FY2012 MedPAR data sets, the latest available for analysis. MedPAR data are derived from reimbursement claims submitted by hospitals to Medicare. The MedPAR file contains information on all fee-for-service Medicare patients' diagnoses, procedures, length 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 29.0, which aggregates tens of thousands of possible diagnosis and procedure combinations into roughly 1,000 clinically coherent groups. These groups, defined by APR-DRGs, severity-of-illness level and mortality risk, take into account the severity of the patient's illness, risk of death and hospital resources used. 6,26,27

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. 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. ²⁹

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 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. On reviewing the APR-DRG threshold assignments for CMS DRGs in the U.S. News &

World Report 2010/11 Best Hospitals Ranking 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 2014-15). The MS-DRG groupings are applied to each year of data included in the analysis.

For the Best Hospitals analysis, only MS-DRGs that represent challenging and/or critical procedures are included. For example, most inguinal hernia repairs pose relatively low risk and demand modest expertise, so all but the most serious cases are excluded. The process used to identify MS-DRGs is outlined below.****

- 1. Exclude MS-DRGs for very-low-intensity cases.
- 2. Exclude MS-DRGs that generally do not apply to a Medicare or elderly population.
 - Evaluate excluded and included MS-DRGs on their embedded diagnoses.
 - Refine excluded and included categorizations based on within-MS-DRG variation in diagnostic complexity.
 - Evaluate MS-DRGs not assigned to a specific specialty to determine whether they should be categorized more specifically.
 - Perform a final evaluation for clinical consistency.
- 3. Attribute MS-DRGs to multiple specialties if patients assigned to the DRGs are commonly treated by physicians in multiple specialties, or assign specific diagnoses or procedures to specific specialties based on principal diagnosis or procedures.
- 4. Include the APR-DRG severity measure to refine cases further by taking severity of illness, as measured by comorbidities and interaction with the principal diagnosis, into account. A lower number means lower severity. Therefore if the severity of illness is 1, all cases will be included. If the severity of illness is 3, on the other hand, only cases with a severity of illness of 3 or 4 will be included.

Mortality Methodology

Changes over the years have addressed specific issues in calculating mortality. These changes have addressed either specialty-specific issues (such as the definition of a specific population to use

⁵⁵⁵ The 2010/11 Best Hospitals Ranking Methodology Report is available at www.rti.org/besthospitals.

^{****} For a more detailed review of these procedures, see the 2005 Best Hospitals Ranking Methodology Report at www.rti.org/besthospitals.

in Geriatrics as opposed to using all cases) or more general issues that can affect mortality outcomes (such as exclusion of transfers and 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 omitted in 2006 but were reintroduced in 2007, using a new approach to identify the target population and account for their mortality rates. Rather than using a small subset of MS-DRGs typical of geriatric patients, we elected to focus on how well hospitals treat older patients across a wider range of MS-DRGs. Therefore, the Geriatrics specialty includes all MS-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, starting in 2007, also is limited to patients who are at least 75 years old. This allows more accurate reflection of the quality of inpatient hospital care received by older patients across different 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 MS-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." 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" (transfer from a hospital) or "A" (transfer from a critical access hospital) were used to identify transfers from acute hospitals or 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 (see *Table 7*), we adjusted 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 varies from 0 to 0.5, with each increase of 1 percentage point in the transfer-in rate

percentile increasing the weight by 2 percentage points. The maximum weight of 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 in the bottom quartile of transfer-in rates (see *Table 7*), we used the specialty average transfer-free mortality rate as the blending rate. We applied the same algorithm as for the top quartile transfer-in hospitals. However, to avoid unduly penalizing 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.

Table 7. Transfer Rate Distribution by Specialty

Specialty	Minimum	25th Percentile	75th Percentile	Maximum
Cancer	0.00	0.96	7.91	39.13
Cardiology & Heart Surgery	0.00	2.07	13.49	63.57
Diabetes & Endocrinology	0.00	0.06	3.65	33.50
Ear, Nose & Throat	0.00	0.39	6.33	38.46
Gastroenterology & GI Surgery	0.00	0.28	4.97	39.64
Geriatrics	0.00	0.46	6.82	67.60
Gynecology	0.00	0.27	2.99	41.67
Nephrology	0.00	0.21	4.21	53.14
Neurology & Neurosurgery	0.00	0.67	8.70	62.82
Orthopedics	0.00	0.24	3.01	31.74
Pulmonology	0.00	0.26	4.88	45.06
Urology	0.00	0.17	3.45	38.04

4. 30-day mortality. Prior to 2007, mortality in the Best Hospitals methodology was defined as the rate of 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 post-discharge, however, has not declined markedly.³¹ Quality of care in the inpatient setting can affect patients' health and functional status for many weeks following discharge. The Agency for Healthcare Research and Quality (AHRQ) states in *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."³²

Thirty-day mortality may reflect factors unrelated to care provided in the hospital (e.g., quality of postacute care and lack of patient compliance with treatment regimen). However, inpatient mortality omits factors that tend to manifest in full 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 consistent. Starting in 2008, 30-day mortality has been used for all IHQ-driven specialties. [111]

5. Adjustment of mortality values for low-volume hospitals. 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, we adjust mortality for low-volume hospitals. 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.

For hospitals with discharge volumes below the 25th percentile (see *Table 8*), we adjust the observed transfer-free mortality rate by averaging the all-hospital mortality rate (for hospitals at or above the 25th percentile) with a weight based on our confidence in the hospital's observed mortality weight. The weight placed on the all-hospital mortality rate will vary from 0 to 0.25, with each 1 percentage point decrease in the volume percentile increasing the all-case mortality weight by 1 percentage point. For example, a hospital with volume in the 24th percentile has an all-hospital mortality rate of 0.01. A hospital with a volume in the 20th percentile has an all-hospital weight of 0.05. The maximum weight on the all-hospital mortality is 0.25.

6. 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.

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^{††††} Note that the mortality methodology does not exclude palliative care (V66.5) or hospice cases due to significant inconsistencies in the way in which palliative and hospice care services are documented, defined and coded across providers.

To address this discrepancy, weights were applied starting in 2007 to the MedPAR data based on the relative over- or underrepresentation of the MS-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 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.³³

For the 2014-15 rankings, weights were calculated based on the most recently available 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 in all specialties.

Table 8. Discharges Excluding Transfers and Distribution by Specialty

Specialty	Minimum Volume	25th Percentile Volume	Maximum Volume
Cancer	168	380	6,239
Cardiology & Heart Surgery	989	2,198	17,738
Diabetes & Endocrinology	135	220	1,764
Ear, Nose & Throat	5	49	509
Gastroenterology & GI Surgery	472	966	12,285
Geriatrics	1,522	4,098	45,777
Gynecology	16	49	725
Nephrology	97	332	5,286
Neurology & Neurosurgery	321	717	7,478
Orthopedics	275	648	9,583
Pulmonology	791	1,626	14,294
Urology	35	87	1,896

Risk-adjusted mortality ratios were computed by dividing the observed transfer-free mortality rate (including adjustments for hospitals in the top or bottom quartile of transfer-in rates as 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. For calculating IHQ, mortality ratios were

transformed into survival ratios by subtracting each specialty-specific mortality ratio from 1 to create a survival ratio. A mortality ratio of 0.25 produced a survival ratio of 0.75, a mortality ratio of 0.05 produced a survival ratio 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 pooled 3 years of data to compute the survival ratios.

Survival Score

The survival score provides an alternative format for presenting information about hospital performance with regard to patient mortality. For display purposes in the rankings tables, the mortality ratio was transformed into a survival score representing survival of patients at 30 days after admission. Survival scores were based on the percentile distribution of the most recent 3-year mortality ratio for all hospitals. Hospitals with the best (closest to 0) mortality scores received higher survival scores. The mortality ratio cut-offs used to determine survival scores are shown in *Table 9*. Hospitals were assigned points based on the lowest cut-off value below which the mortality ratio fell. For example, a mortality ratio of 0.78 in Cancer would have been assigned a survival score of 8 because 0.78 is lower than the 0.82 cut-off value.

Table 9. Survival Scores Based on Mortality Ratios

	Survival Score											
Specialty	1	2	3	4	5	6	7	8	9	10		
	if <u>></u>	if <										
Cancer	1.35	1.35	1.09	1.27	1.18	1.00	0.91	0.82	0.73	0.65		
Cardiology & Heart Surgery	1.35	1.35	1.09	1.26	1.17	1.00	0.91	0.83	0.74	0.65		
Diabetes & Endocrinology	1.56	1.56	1.14	1.42	1.28	1.00	0.86	0.72	0.58	0.44		
Ear, Nose & Throat	1.62	1.62	1.16	1.47	1.31	1.00	0.84	0.69	0.53	0.38		
Gastroenterology & GI Surgery	1.33	1.33	1.08	1.25	1.17	1.00	0.92	0.83	0.75	0.67		
Geriatrics	1.34	1.34	1.09	1.26	1.17	1.00	0.91	0.83	0.74	0.66		
Gynecology	1.64	1.64	1.16	1.48	1.32	1.00	0.84	0.68	0.52	0.36		
Nephrology	1.48	1.48	1.12	1.36	1.24	1.00	0.88	0.76	0.64	0.52		
Neurology & Neurosurgery	1.51	1.51	1.13	1.38	1.25	1.00	0.87	0.75	0.62	0.49		
Orthopedics	1.55	1.55	1.14	1.42	1.28	1.00	0.86	0.72	0.58	0.45		
Pulmonology	1.30	1.30	1.07	1.22	1.15	1.00	0.93	0.85	0.78	0.70		
Urology	1.59	1.59	1.15	1.44	1.30	1.00	0.85	0.70	0.56	0.41		

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 also 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. As with past years, the 2014-15 rankings use nominations from the most recent 3 years of physician surveys (2012, 2013 and 2014). The approaches used for the 2012 and 2013 surveys are provided in the corresponding methodology reports for those years, which are available at www.rti.org/besthospitals.

The reputation score was calculated in the same manner for both the IHQ-driven and reputation-only specialties in the rankings. Therefore, this section presents the methodology and results for both. For the 2014 survey, we used two distinct samples for surveying physicians. The first sample was selected from the AMA Physician Masterfile, the source of the survey sample for many years.

The second sample was selected from a database of all practicing U.S. physicians compiled by Doximity, the largest online professional network for U.S. physicians. Similar to the AMA Physician Masterfile, Doximity's comprehensive Physician Database includes every U.S. physician, identified by National Provider Identifier (NPI) number (N = 1,144,599). Sources from which physician information is compiled include the U.S. Department of Health and Human Services NPI Registry, state medical boards and specialty boards (e.g., the American Board of Medical Specialties and the American Board of Surgery). Doximity's proprietary database is augmented by more than 300,000 registered and verified physician members who review and update their profiles to provide another set of primary data.

There were two reasons for using the Doximity Physician Database as a sampling source. First, 10% to 20% of the samples selected from the AMA Physician Masterfile typically are ineligible or undeliverable. We compared a sample drawn from the Doximity Physician Database with a sample from the AMA Masterfile to determine if the ineligible and undeliverable rate could be reduced. Second, the Doximity Physician Database allowed us to supplement the traditional Best

Hospitals survey process by surveying a subset of the 300,000 registered Doximity members whose specialties match those in the Best Hospitals rankings.

For both samples (AMA and Doximity), we first defined the target population as boardcertified physicians with a primary specialty in one of the specialties or subspecialties identified as eligible for the Best Hospitals rankings. Table 10 compares the population counts obtained from the AMA Physician Masterfile and the Doximity Physician Database as of January 2014. Minimal differences in population counts between the two sampling frames were due to differences in the processes used to determine and verify board certification, ineligibility (retired, deceased or otherwise nonpracticing) and primary specialty.

Since the two sampling frames were not mutually exclusive and all Doximity members were selected to participate in the survey, it is possible that a physician could have responded to more than one survey. To address this, respondents from each of the two sampling frames were compared, and duplicate responses were removed from the Doximity sample. The results from each sampling frame were analyzed and evaluated separately, and the results were combined to create a unified reputation score, as described below.

Sample Selection

AMA Masterfile Sample

The AMA sample consisted of 1,600 board-certified physicians selected from the AMA Physician Masterfile. From within the AMA Physician Masterfile of 850,000 physicians, we selected a target population of 190,038 board-certified physicians who met defined eligibility requirements (see Table 10). Stratifying by census region and by specialty within region, we selected a probability (i.e., random) sample of 100 physicians from each of the 16 specialty areas. For specialties that include multiple subspecialties, we selected the subspecialty samples with a probability proportional to the size of the subspecialty population. **** The final sample included federal and nonfederal medical and osteopathic physicians practicing in all 50 states and Washington, D.C. 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. Twenty-five physicians were selected from each of the 16 specialties in each census regions (http://www.census.gov/geo/maps-data/maps/pdfs/reference/us regdiv.pdf). Equal-size groups allow for adequate representation among regions and specialties.

^{###} For example, if there are twice as many Diabetes & Endocrinology specialists than Diabetes specialists in the population, the sample will have twice as many Diabetes & Endocrinology specialists as Diabetes specialists.

Table 10. Population Counts by Best Hospitals Specialty

Specialty	Subspecialties Included	AMA Doximity Population Count Count		
	Hematology, hematology/oncology,			
Cancer	medical oncology, surgical oncology,			
	gynecologic oncology, radiation oncology	14,234	13,414	
	Cardiovascular diseases, interventional			
Cardiology & Heart	cardiology, cardiac electrophysiology,			
Surgery	thoracic surgery	24,794	22,572	
Diabetes & Endocrinology	Diabetes & endocrinology, diabetes	4,400	4,511	
Ear, Nose & Throat	Otolaryngology, otology/neurotology	6,857	7,657	
Gastroenterology	Gastroenterology, hepatology, colon and			
& GI Surgery	rectal surgery	12,304	11,599	
Geriatrics	Geriatrics	3,385	6,648	
C	Gynecology, obstetrics and gynecology,			
Gynecology	maternal and fetal medicine	29,917	28,211	
Nephrology	Nephrology	7,096 6,914		
Neurology &	Neurology, neurology/diagnostic,			
Neurosurgery	neurological surgery	12,213	13,152	
Ophthalmology	Ophthalmology	13,455 14,564		
	Orthopedic surgery, sports medicine—			
	orthopedics, hand surgery, adult			
Orthopedics	reconstructive orthopedics, foot & ankle			
	orthopedics, spine surgery, orthopedic			
	trauma surgery	17,594	17,874	
Doughiatry	Geriatric psychiatry, addiction psychiatry,			
Psychiatry	psychiatry	21,234 27,945		
Pulmonology	Pulmonary diseases	4,296 6,856		
	Physical medicine & rehabilitation, spinal			
Rehabilitation	cord injury, sports medicine-PMR, sports			
	medicine	6,889	6,605	
Rheumatology	Rheumatology	3,879	3,771	
Urology	Urological surgery	7,250	7,861	
All Specialties	All subspecialties	190,038	200,155	

Doximity Physician Database Sample

The Doximity Physician Database was divided into two strata: registered Doximity members, and nonmembers. Separate survey procedures were used to survey physicians in each stratum. At the time of the survey in January 2014, Doximity members represented 25% of the population of all physicians.

From the nonmember stratum, physicians were sampled using the same procedures used for sampling from the AMA Physician Masterfile. The sample consisted of a total of 1,600 board-certified physicians selected from the Doximity Physician Database who were not Doximity members. A stratified random sample of 100 physicians (25 from each region) was selected from each of the 16 medical specialties. Steps were taken to ensure that the same physicians were not selected for both the AMA and Doximity nonmember samples.

From the Doximity registered member stratum, all physicians (n = 49,881) were selected to participate in the survey.

Survey Procedures

The 3,200 physicians selected from the AMA Physician Masterfile and from the nonmember stratum of the Doximity Physician Database were surveyed simultaneously using the same procedures—a mixed-mode (mail and Web) survey. The 49,881 Doximity members were surveyed separately using an online-only survey.

Mixed-Mode Survey

The physician survey mailings were conducted in stages over several weeks starting at the beginning of 2014. Physicians were initially sent a prenotification letter by U.S. Postal Service (USPS) First Class metered mail. The prenotification letter alerted physicians to the study and indicated that they would soon be receiving an email invitation to participate in the survey. Within 1 week of sending the prenotification letters, physicians were emailed an invitation with a link to complete the survey online. Participating physicians were asked to nominate up to five hospitals in their specialty that provide the best care to patients with serious conditions, regardless of location or expense (see *Appendix A*).

To follow up, six days after the initial email invitation, nonresponding physicians were sent a reminder email with another link to the complete the survey online. Instead of a prenotification letter and email invitation, physicians lacking valid email addresses were sent a hard copy of the survey along with a cover letter, a \$2 incentive and a prepaid business reply envelope.

- One week after the reminder email message, nonresponding physicians were mailed, by USPS First Class mail, a hard copy of the survey along with a cover letter and a prepaid business reply envelope.
- Two weeks following the hardcopy reminder, we sent a USPS Priority Mail package to all nonresponders along with another copy of the questionnaire, a new cover letter and a prepaid business reply envelope.
- Two weeks after the USPS Priority Mail shipment, a third and final survey mailing was sent by UPS 2-day delivery to the remaining nonresponders; the packet included the questionnaire, a cover letter and a prepaid return envelope. (See *Table 11* for a schedule of the physician survey mailing.)

Table 11. Physician Survey Mailing Schedule (Web/Mail)

Materials Mailed	Sent Via	Materials Included	Date
Prenotification Letter	USPS, First Class mail	Cover letter, \$2 incentive*	January 9, 2014
Initial email invitation	Email	Email with link to web survey	January 15, 2014
Email reminder	Email	Email with link to web survey	January 21, 2014
1st reminder mailing	USPS, First Class mail	Cover letter, \$2 incentive,* survey, return envelope	January 28, 2014
2nd reminder mailing	USPS, Priority Mail	Cover letter, survey, return envelope	February 11, 2014
3rd reminder mailing	UPS 2-day	Cover letter, survey, return envelope	February 25, 2014

^{*} An experiment was conducted in which half of the physicians received the \$2 incentive with the prenotification letter, and the other half received the incentive in the first reminder mailing.

An incentive experiment was conducted as part of the survey. Half the sampled physicians were randomly assigned to receive the \$2 incentive in the survey prenotification letter. The other half received the \$2 incentive with the first hardcopy reminder mailing (if they were nonresponders).

Table 12 shows the response rate by region and specialty. The average response rate for 2014 was 31.9%, using American Association for Public Opinion Research (AAPOR) Response Rate 6, 5555 which treats undeliverables as ineligible cases.

Table 12. Mixed-Mode Response Rates by Region and Specialty

Specialty	Midwest (%)	Northeast (%)	South (%)	West (%)	Total (%)
Cancer	31.3	28.9	32.6	32.6	31.3
Cardiology & Heart Surgery	39.1	40.0	26.5	26.8	33.1
Diabetes & Endocrinology	38.6	41.9	26.7	34.0	35.2
Ear, Nose & Throat	51.1	29.8	40.8	27.7	37.4
Gastroenterology & GI Surgery	31.1	34.1	36.4	27.7	32.2
Geriatrics	37.0	37.8	22.7	18.2	29.1
Gynecology	12.5	36.4	22.2	25.5	23.9
Nephrology	43.8	33.3	22.2	24.4	31.3
Neurology & Neurosurgery	43.8	41.3	25.5	37.0	36.9
Ophthalmology	29.2	34.0	24.5	37.5	31.3
Orthopedics	38.3	33.3	42.2	45.5	39.7
Psychiatry	18.6	37.0	26.1	25.6	27.0
Rehabilitation	43.8	31.9	35.0	31.1	35.6
Pulmonology	28.9	20.4	34.7	29.8	28.4
Rheumatology	33.3	39.1	27.1	27.9	31.9
Urology	37.0	24.5	23.4	22.2	26.7
Overall Response Rate	34.9%	33.8%	29.3%	29.7%	31.9%

The mixed-mode survey was stratified by specialty and census region (West, Northeast, South and Midwest). For physicians selected from the AMA Physician Masterfile, weights were constructed and applied to each physician's survey response to make nominations representative at

http://www.aapor.org/Content/aapor/AdvocacyandInitiatives/StandardsandEthics/StandardDefinitions/StandardDefinitions2011.pdf.

^{§§§§} Standard definitions are located on the Web at:

the national level. For physicians selected from Doximity Physician Database, weights were constructed to make nominations representative of Doximity nonmembers. Weights were based on the probability of selection within each unique specialty-region combination, with an adjustment to account for nonresponses.

Online Survey of Doximity Members

The Doximity member survey was conducted with a total of 49,881 physicians across the 16 specialties. The survey was conducted from January to March 2014.

Physicians received an initial email invitation with a link to the survey, which used the same question as the probability-based mixed-mode survey. Nonresponding physicians were sent up to three follow-up email reminders with links to the survey. In addition, eligible Doximity members received alerts upon login to Doximity.com or use of the Doximity app inviting them to participate. Members who registered during the survey period were given the opportunity to provide nominations; it was determined, however, that response bias affected many of these responses, and they were excluded from the final analysis.

Doximity members were randomly assigned to one of four incentive conditions: a print edition of the Best Hospitals guidebook, an electronic copy of the Best Hospitals guidebook, a lottery chance for an iPad or no incentive.**** All incentives were delivered after the end of the survey period. *Table 13* shows the participation rate by region and specialty.††††† Overall participation rate for the Doximity member survey was 16.2%. Survey responses were weighted by sex, age and region to be representative of Doximity members.

Reputation Score Weighting

For the 2014 physician survey, samples were selected from two sources: the AMA Physician Masterfile and the Doximity Physician Database. Responses from physicians in each sample received 50% of the weight for the 2014 reputation score.

^{*****} Although physicians in the last group were not promised an incentive, all responding physicians received a version of the Best Hospitals guidebook.

^{†††††} *Participation rate* is defined as "the number of respondents who have provided a useable response divided by the total number of initial personal invitations requesting participation." AAPOR standard definitions are located on the Web at: http://www.aapor.org/Content/aapor/AdvocacyandInitiatives/StandardsandEthics/StandardDefinitions/StandardDefinitions2011.pdf.

The sample from the Doximity Physician Database was further divided into separately weighted populations for members and nonmembers. Since Doximity members comprised 25% of the eligible physician population when the survey was initiated, that population received 25% of the Doximity weight and nonmembers received the remaining 75% of the Doximity weight.

Table 13. Participation Rates for Doximity Physicians by Region and Specialty

Specialty	Midwest (%)	Northeast (%)	South (%)	West (%)	Total (%)
Cancer	25.7	22.0	13.8	15.4	18.6
Cardiology & Heart Surgery	20.6	24.2	13.3	19.7	17.5
Diabetes & Endocrinology	15.7	17.7	10.7	10.2	13.4
Ear, Nose & Throat	23.8	25.7	17.9	17.4	20.8
Gastroenterology & GI Surgery	20.1	19.9	12.0	13.8	16.1
Geriatrics	14.2	10.2	10.4	9.6	11.0
Gynecology	14.3	12.9	9.1	8.9	11.0
Nephrology	22.6	16.9	12.8	12.8	15.9
Neurology & Neurosurgery	24.7	28.1	15.3	18.2	20.9
Ophthalmology	24.3	25.1	20.5	18.5	21.9
Orthopedics	22.9	18.3	13.2	13.2	16.4
Psychiatry	15.3	10.9	7.1	7.4	10.3
Pulmonology	18.1	21.0	12.8	16.5	16.6
Rehabilitation	23.1	22.7	17.5	15.6	19.6
Rheumatology	25.7	20.1	13.1	13.3	17.9
Urology	24.2	23.9	14.5	18.1	19.3
Overall Response Rate	20.3%	19.3%	13.2%	13.3%	16.2%

Table 14 shows the weight of each of the three sources of the 2014 reputation score, and *Table 15* shows the weight of each source in the overall score, which includes the 2012 and 2013 physician surveys.

Table 14. 2014 Reputation Weight by Sample Source

Sample Source	Reputation Weight (%)
Doximity Physician Database: Doximity members	12.5
Doximity Physician Database: Nonmembers	37.5
American Medical Association Physician Masterfile	50.0

Table 15. 2012-2014 Reputation Weight by Sample Source

Sample Source	2012-2014 Reputation Weight (%)
2014 Doximity Physician Database: Doximity members	4.2
2014 Doximity Physician Database: Nonmembers	12.5
2014 American Medical Association Physician Masterfile	16.7
2013 American Medical Association Physician Masterfile	33.3
2012 American Medical Association Physician Masterfile	33.3

Log Transformation

The weighted reputation values are displayed in the ranking tables. However, before incorporating them into the IHQ scoring for the 12 data-driven specialties, we implemented a log transformation to adjust for the skewed distribution of reputation values. The log transformation was not applied to reputation values in the four reputation-only specialties.

By its nature, a survey that solicits recommendations for "bests" will result in data that do not follow a normal distribution. Relatively few hospitals will receive even one "best" recommendation, and of those that do, an even smaller number will receive a significant number of nominations. This produces a highly skewed distribution. Since the other ranking components, such as structural measures and mortality, are not similarly skewed, reputation would have a disproportionate impact if the extreme skewness was not taken into account.

Log transformation reshapes the distribution to more closely match reputation data to those of the other components in the data-driven rankings. Transformation is applied to the weighted

reputation data using the formula $log(R_X + 10) - 1$, where R_X is the weighted reputation score for hospital X. A constant of 10 is applied to moderate the effect of the transformation.

The transformed data are then scaled to a minimum of 0 and maximum of 100. *Figure 2* demonstrates the impact of the log transformation reputation data. As is evident, the transformed reputation scores are higher than the untransformed reputation scores, but the degree of inflation is greater for low scores than for high ones, as shown by the following examples:

- An untransformed reputation score of 1% has a transformed value of 4 (4 times greater),
- An untransformed reputation score of 10% has a transformed value of 29 (2.9 times greater) and
- An untransformed reputation score of 60% has a transformed value of 81 (1.35 times greater).

Skewness is thereby reduced, and the overall impact of the reputation score on hospitals' final standing in the rankings is slightly diminished.

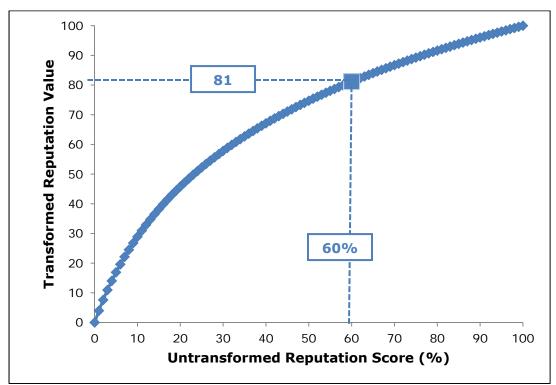


Figure 2. Reputation Data Before and After Log Transformation

Normalization and Weighting

For the 2014-15 rankings, the weight of reputation in each data-driven specialty was reduced to 27.5% of the overall score compared with 32.5% in 2013-14.

As with the structural measures, reputation data were normalized before being combined with other metrics. Normalization transforms index values into a distribution between 0 and 1 based on a measure's range of *possible* values. The possible values for reputation score range from 0% (no surveyed physicians nominated the hospital) to 100% (every surveyed physician nominated the hospital). A hospital's normalized reputation score, after log transformation, determined the number of points the hospital received for reputation. If its normalized reputation score in a given specialty was 80, for example, it received 0.80 x 27.5, or 22 points, for reputation.

E. Patient Safety Score

For the 2014-15 rankings, the weight of the patient safety score was increased to 10% of the total score from 5% the prior year. Care that harms patients is an important aspect of both outcomes and process. It is a critical component in evaluating and determining the best hospitals.

Background

Prior to the 2009 rankings, mortality was the sole outcome measure in the IHQ analysis. Death rates are key, but other adverse events befall hospitalized patients and may not result in death. In its 2000 report *To Err Is Human*,³⁴ the Institute of Medicine (IOM) identified three domains of quality: (1) safety, (2) practice consistent with current medical knowledge and (3) customizing care to patients' values and expectations.

The first of these domains, patient safety, is defined by the IOM as "freedom from accidental injury." The IOM has identified preventable adverse events 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.³⁵ 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.³⁶⁻³⁸ 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 involving harm to patients and increased service utilization (for example, to correct such harm), but not causing patients' deaths Hospital stays with patient safety events have been found to be more costly and longer in length than stays without patient safety events. Patient safety events have also been associated with higher 90-day readmission rates, compared to patients without safety events. ³⁹

Development of the Patient Safety Score

The patient safety score was developed by RTI using the framework described in the *Patient Safety Quality Indicators Composite Measure Workshop Final Report*,⁴⁴ with some project-specific modifications. This report summarizes the steps taken by AHRQ to construct an overall performance index that were reported in the annual *National Healthcare Quality Report* and *National Healthcare Disparities Report*^{45,46}. The *Patient Safety Quality Indicators Composite Measure Workshop 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 16.* These PSIs were chosen based on codes likely to be reported, not already part of existing composites, and not related to obstetric care.

The initial Best Hospitals patient safety score included five indicators in the AHRQ's PSI index. For 2014-15, two PSIs were added: PSI 03 (pressure ulcer), and PSI 08 (postoperative hip fracture).

These PSIs were previously excluded due to concerns that these events might reflect diagnoses prior to admission rather than diagnoses during the hospital stay. The Medicare data used in the rankings now includes a present on admission (POA) indicator for these measures, allowing these items to be calculated accurately by excluding cases where the condition is known to have occurred prior to admission. As a result, these two PSIs were added to the rankings this year. The other five PSIs from the AHRQ index, all endorsed by the National Quality Forum, were retained.

Table 16. Comparison of AHRQ Patient Safety Index and Best Hospitals
Patient Safety Score

All Patient Safety Indicators	Included in the AHRQ PSI Composite Index	Included in the Best Hospitals Patient Safety Score
PSI 03: Pressure ulcer	✓	✓
PSI 04: Death among surgical inpatients with serious treatable complications		✓
PSI 06: latrogenic pneumothorax	✓	✓
PSI 07: Central venous catheter-related blood stream infections rate	✓	
PSI 08: Postoperative hip fracture	✓	✓
PSI 09: Postoperative hemorrhage or hematoma	✓	✓
PSI 10: Postoperative physiological and metabolic derangement	✓	
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	✓	√

The Best Hospitals patient safety score also includes PSI 04 (death among surgical inpatients with serious treatable complications), which is not part of the composite AHRQ PSI measure. PSI 04 was included because it identifies deaths generally deemed to be avoidable. Note that PSI 02 (death in low mortality DRGs) was dropped from the Best Hospitals patient safety score in 2012 after additional analyses revealed large fluctuations in the observance of this PSI from year to year. Additional indicators may be added to the patient safety score as the measures become more refined.

The data source for the Best Hospitals patient safety score is the same 3-year sample from the MedPAR data set that is used for volume and mortality analyses in the Best Hospitals rankings. For the 2014-15 rankings, the MedPAR files used were for federal FY 2010, 2011 and 2012 files. Data were analyzed using the AHRQ PSI grouper software version 4.4.

Weighting the Score Components

An index (or score) is generally a weighted sum or mean of its components. In the Best Hospitals methodology, the patient safety score is an aggregation of eight individual PSIs. Until the 2011-12 rankings, each PSI was weighted according to each hospital's population at risk, as is done for mortality. (A hospital's mortality score is a weighted average of observed-to-expected mortality for a set of MS-DRGs, with weights equal to the proportion of the hospital's patients in each MS-DRG.) Subsequent analysis, however, has revealed that this process results in significant year-to-year variability in the weights assigned to individual PSIs. Therefore, starting in 2011-12, each PSI included in the score has received equal weighting. The constant weighting reduces volatility and maintains consistency in the PSI calculation.

Controlling for the Influence of Hospital Case Mix on Measured PSIs

The more complex the medical condition or procedure, the more complex the care. Assuming the same quality of every "touch" by a hospital staff person, the more complex the care, the greater the likelihood of error. Therefore, patient safety score values for a hospital with a complex case mix cannot be compared fairly to those for a hospital with a simple case mix. The hospital with a simple case mix might have a better patient safety score but worse underlying quality. The Best Hospitals methodology controls for case mix by performing a simple linear regression of the individual patient safety measures on the Medicare case-mix index—the average MS-DRG weight of the Medicare patients treated in each hospital. The resulting values were multiplied by -1 to invert the distribution so that higher values would reflect higher quality. In addition, the values were standardized with a mean of 0 and standard deviation of 1 so they would be on comparable scales for combination in the patient safety score.

The patient safety score used in the rankings reflects the average of the inverted residual values. Higher values of the adjusted patient safety score indicate fewer adverse events than expected (higher quality); lower values indicate more adverse events than expected (lower quality).

Construction of the Patient Safety Score for Display

For display purposes, the patient safety score was recoded into five equal groups based on quintiles (i.e., the cut points are at the 20th, 40th, 60th and 80th percentiles). Hospitals with score values below the 20th percentile receive a display score of 1, indicating lowest quality and hospitals with score values at or above the 80th percentile receive a display score of 5, indicating highest quality. The adjusted patient safety values relating to these scores are shown in *Table 17*. Note that the percentiles are used for display purposes only. For the 2014-15 rankings, the continuous PSI value was used in calculating a hospital's IHQ.

Table 17. Patient Safety Scores based on PSI Value

Indicator	1 if <	2 if <	3 if <	4 if <	5 if ≥
PSI 03: Pressure ulcer	-0.67	0.14	0.49	0.77	0.77
PSI 04: Death among surgical inpatients with serious treatable complications	-0.76	-0.07	0.20	0.80	0.80
PSI 06: latrogenic pneumothorax	-0.83	-0.06	0.41	0.93	0.93
PSI 08: Postoperative hip fracture	0.09	0.24	0.38	0.57	0.57
PSI 09: Postoperative hemorrhage or hematoma	-0.79	-0.17	0.31	0.92	0.92
PSI 11: Postoperative respiratory failure	-0.84	-0.14	0.33	0.92	0.92
PSI 14: Postoperative wound dehiscence	-0.86	0.01	0.42	0.91	0.91
PSI 15: Accidental puncture or laceration	-0.89	-0.15	0.38	0.92	0.92
Patient Safety Score	-0.31	-0.09	0.11	0.34	0.34

F. Calculation of the Index of Hospital Quality

Prior to 2009, structure, process and outcomes each received one-third of the weight in IHQ scores. In 2009, weights were adjusted to integrate the patient safety index. For the 2014-15 rankings, the weights were further adjusted to increase the value of the patient safety index and reduce the weight for the process component. Currently, the outcomes component receives the most weight at 32.5%, with structure receiving 30%, process receiving 27.5% and patient safety receiving 10%.

The rankings for the top 50 hospitals in each specialty, by U.S. News score, are shown in **Appendix E**. The formula for calculating the U.S. News score is shown in Equation (2). The score can be thought of as a simple weighted sum of structural, process and outcome measures, as shown below:

$$IHQ_{i} = \{.3(\sum_{i=1}^{n_{s}} S_{i}) + .275\sum_{i=1}^{n_{p}} P_{i} + .325(\sum_{i=1}^{n_{o}} O_{i}) + .10PS_{i}\},\tag{2}$$

where

 IHQ_i = index for hospital quality for specialty I,

 S_i = normalized value for specialty structural measure i,

 P_i = normalized value for specialty process measure i,

 O_i = normalized value for specialty outcomes measure i and

 PS_i = normalized hospital-wide patient safety score.

Please note that the IHQ formula is meant for illustrative purposes only; it *cannot* be used to directly calculate a score for an individual hospital. For presentation purposes, we transformed the raw U.S. News scores to a scale that assigns a score of 100 to the top hospital. The formula for the transformation is shown in Equation (3):

$$U.S. \ News \ Score = (score - minimum)/range.$$
 (3)

III. Reputation-Only Specialties

Available data for the four reputation-only specialties are more limited than for the IHQ specialties. Mortality is irrelevant in Ophthalmology, Psychiatry and Rehabilitation; life-threatening conditions and procedures are rare. Inpatient volume in Rheumatology is extremely low, making it difficult to calculate reliable mortality measures. Reliable structural measures also are unavailable. Therefore, reputation alone—the process component—determines the rankings. This section describes the eligibility and procedures used to develop the rankings for these four specialties.

A. Eligibility

Hospitals ranked solely by reputation did not have to meet the same eligibility standards as the IHQ-driven specialties. In previous years, a hospital was eligible if it received one or more physician nominations in the past 3 years. In 2014-15, for these four specialties, a hospital was eligible if it had a reputation score of 1% or greater, which equates to about three nominations in the past 3 years. This change was made to restrict eligibility to hospitals that are more consistently nominated. Hospitals nominated by at least 5% of responding physicians in a specialty are ranked.

B. Process

The IHQ-driven specialties and the reputation-only specialties share the same process component (see *Section II.D. Process* 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).

IV. Honor Roll

This year, 144 different hospitals were ranked in at least one specialty. The Honor Roll recognizes excellence across a broad range of specialties. In previous years, the methodology for assigning Honor Roll points was based on the number of standard deviations above the mean of a hospital's score. Since the number of eligible hospitals varied significantly by specialty, there was variability across specialties in the number of hospitals that received points. In some specialties, twice as many hospitals received points as other hospitals. Starting with the 2012-13 rankings, the methodology was revised to assign points based on position in the rankings. This allowed an equal number of hospitals to receive points in each of the data-driven specialties and in each of the reputation-only specialties.

For the 12 data-driven specialties, hospitals received 2 points if ranked among the top 10 hospitals in a specialty and 1 point for being ranked in the next 10 (i.e., 11-20). For the four reputation-only specialties, hospitals received 2 points if ranked among the top five hospitals in a specialty and 1 point if ranked among the next five. Hospitals were included in the final Honor Roll only if they received points in at least six specialties. *Appendix G* lists this year's 17 Honor Roll hospitals.

V. History of Methodology Changes by RTI

RTI began working with *U.S. News* on the Best Hospitals rankings in 2005. The methodological changes introduced to the rankings for each project year since then are described below. For complete information on the project, we recommend reviewing the project methodology reports, which are available online at www.rti.org/besthospitals.

Summary of 2014-15 Changes

- Component weighting. The weight for the process component was reduced from 32.5% to 27.5%. and the weight for the patient safety score was increased from 5% to 10%. This was done in recognition of the increased importance of patient safety to the quality of care provided by hospitals.
- **Technology**. Cardiac ICU was removed in Cardiology & Heart Surgery, as it already served as a requirement for hospitals to be eligible for ranking in this specialty.

IMRT was added as a new technology to the Cancer and Urology specialties, recognizing the importance of this treatment modality to care in both specialties.

- Patient Safety Score. Two patient safety indicators were added to the patient safety score due to the availability of the POA indicator in the MedPAR dataset. Additionally, for display purposes, PSIs were converted from a 3-point scale to a 5-point scale to provide more nuanced information to consumers on the differences in patient safety performance between hospitals. For scoring, the IHQ now uses a continuous value for PSI rather than a discrete value shown in the ranking tables.
- **MS-DRG deletions.** MS-DRG 689 (Kidney and Urinary Tract Infections with MCC) was removed from the Urology specialty due to not reflecting the quality of care of a urology service. A review of hospital data showed that the code is frequently used by other specialties within the institution to identify significant medical comorbidities rather than for identifying performance by the institution's urology service.
- Eligibility for reputation-only specialties. In previous years, a hospital was eligible if it received one or more physician nominations in the past 3 years. In 2014-15, a hospital was eligible for a reputation-only specialty only if it had a reputation score of 1% or greater, which equates to about 3 nominations in the past 3 years. This change was made to restrict eligibility to hospitals that are more consistently nominated.

Summary of 2013-14 Changes

- "Present on admission" data included in patient safety calculations. Starting with the 2013-14 rankings, patient safety data were analyzed using the AHRQ PSI grouper software version 4.3. This version of the software incorporates POA data found in Medicare claims. This allows the software to remove cases where POA is indicated so that they do not count against a hospital in the assessment of patient safety events.
- Neurology & Neurosurgery MS-DRG deletions. Several spinal procedures involving spinal fusion were removed: MS-DRGs 028, 029, 030, 453, 453, 455, 456, 457, 458, 459, 460, 471, 472, 473, 490 and 491. This decision was made after *U.S. News* received feedback that these MS-DRGs are more appropriately assigned only to the Orthopedics specialty because the role of neurologists in these procedures, if any, is minimal.

Summary of 2012-13 Changes

• Surgical volume discharge minimums. If the minimum total discharge value for a specialty was lower than 25, then 25 was set as the minimum for that specialty to ensure a sufficient number of discharges.

- **Normalization.** Normalization is the process of transforming index values into a distribution between 0 and 1 based on the range of possible values for a given measure. Individual measures were normalized before incorporating into the IHQ. In previous years, standardization was used instead of normalization.
- New weighting procedures for structural measures. In previous years, factor analysis determined the relative weights of the structural measures. Starting in 2012-13, weights are based on the relative significance of each measure.
- Reputation. In previous years, the hospital with the highest reputation score received the full point total (i.e., 32.5 points) for the reputation component. Starting in 2012-13, hospitals received a normalized reputation score. For example, if the highest reputation score in a given specialty is 80%, the hospital receives a normalized score of 0.80. Since reputation is worth 32.5% of the overall score, the hospital receives 0.80 x 32.5, or 26 points, for reputation instead of the full 32.5 points possible.
- Survey response weighting. Beginning in 2012-13, we calculated reputation values for each year of the survey independently and averaged the 3 years rather than pooling nominations across years. This was done to reduce the year-to-year fluctuation of reputation scores within specialties.
- **Honor Roll.** The methodology for assigning Honor Roll points was revised. For data-driven specialties, hospitals now receive 2 points for ranking among the top 10 hospitals and 1 point for ranking in the next 10 (i.e., 11-20). For reputation-only specialties, hospitals receive 2 points for ranking in among the top 5 and 1 point for ranking in the next 5 (i.e., 6-10).

Summary of 2011-12 Changes

- **Ties allowed.** For 2011-12, we instituted a new rule that allows for ranking ties for hospitals with the same IHQ score. Previously, ties were not allowed and were broken by examining the scores out to 3 decimal points.
- Cutoffs for reputation-only specialties. In previous years, hospitals representing 3% or more of the total nominations in a specialty were published in print for the reputation-only specialties. For the 2011-12 rankings, this was revised to 5% to be more discerning.
- Mortality displayed as survival scores. The values displayed in the rankings tables for mortality were changed from mortality ratios to decile-based survival scores. The top 10% of hospitals—with the lowest relative mortality and highest 30-day survival—received a survival score value of 10, the next 10% of hospitals received a value of 9, and so on. The method for using the mortality scores to calculate the IHQ score did not change from what was used in 2010.

• Updated scoring for the patient safety index. The patient safety index has been revised to include 6 rather than 7 indicators (PSI 02: Death in low-mortality DRGs is no longer included). The approach to weighting individual PSIs also changed from the population at risk to equal weighting. The index scoring was also updated from the quintile scoring used in 2009-10 to a new 3-point scale that represents ≥ 75th percentile, 25th-74th percentile and < 25th percentile.

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 structural volume measure. The criteria used to determine volume for the structural variable have 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.
- Low-discharge hospitals adjustment changed. The method for adjusting the scores for hospitals with low discharges on both volume and mortality was revised. In previous years, we used an inverse-logit transformation. Starting in 2010, for hospitals with a discharge volume below the 25th percentile, we adjusted the observed volume score and transfer-free mortality rate by creating an average weight based on the hospitals observed score and the score for all hospitals at or above the 25th percentile in volume.
- "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.

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*).
- **Intensivist on staff 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 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 2007 Changes

Changes for 2007 were more substantial but still in keeping with the goal of maintaining consistency and continuity. Many of the changes were discussed at length at a day-long meeting convened by *U.S. News* in fall 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.

- 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-atdischarge 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 2005-06 Changes

To maintain consistency in the previous ranking process, RTI replicated the preexisting methodology in the 2005 rankings and implemented only minor operational improvements in 2006.

VI. Future Improvements

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

• Reevaluate process component. We will continue to evaluate potential new process measures that might enhance the physician survey proxy measure. For example, the Hospital Consumer Assessment of Health Care Providers and Systems survey of hospital inpatients, implemented by CMS in 2008, obtains patient feedback

on the quality of care received during a recent hospital stay. The Hospital Compare website has also introduced new process measures that might offer useful data.

- Add structural data to reputation-only specialties. We are examining resources and measures that would add structural data to the current reputation-only specialties to 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, AHA, CMS 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 all others from 2005 forward, can be viewed or downloaded from the RTI International website at www.rti.org/BestHospitals. Specific questions or comments about this report can be sent to BestHospitals@rti.org.

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Appendix A 2014-15 Physician Survey Materials

Prenotification Letter

January 9, 2014

«Full name»
«addr2»
«addr1»
«city», «st» «zip»

Dear Dr. «last>>.

You likely have strong views about which hospitals are best for the sickest patients in «specialty». That is why we are asking you, as part of a select group of specialists in «specialty», to name them for the annual *U.S. News & World Report* Best Hospitals rankings. With your help, we will identify the hospitals that provide the highest quality of care for <u>adult patients</u> with the most challenging conditions and/or surgical procedures associated with «specialty».

In the next week, we will send you an email from "U.S. News Best Hospitals Rankings" with a link to the online survey where you can provide your responses.

Survey results will be combined with quality indicators from the Centers for Medicare & Medicaid Services, the American Hospital Association, and other data sources to produce the 2014-15 Best Hospitals rankings. Your responses will be kept confidential and will be released only as part of a summary of the overall responses from our national sample.

If you do not receive the email or have any questions about the study, please feel free to contact us at (866) 309-4561 or at <u>BestHospitals@rti.org</u>. The enclosed two-dollar bill is a small token of our appreciation for your help.

The survey is being conducted by RTI International on behalf of *U.S. News*. Thank you for your time and expertise.

Sincerely,

Dr. Murrey Olmsted

Best Hospitals Project Director

RTI International

Initial email

Dear Dr. «Last»,

You have been randomly selected to represent «specialty» specialists in identifying the hospitals that provide the highest quality of care for the sickest adult patients in «specialty». We will weigh your nominations, along with quality indicators from the Centers for Medicare & Medicaid Services, the American Hospital Association, and other data sources to produce the 2014-15 Best Hospitals rankings.

To submit your nominations, please visit: «Custom_URL_Link»

This survey is being conducted by RTI International on behalf of *U.S. News & World Report*. Your responses to the survey will be kept confidential. If you have any questions, please feel free to contact us at (866) 309-4561 or at BestHospitals@rti.org.

Please submit responses by January 31, 2014. Thank you in advance for your time, and especially for your input.

Sincerely,

Dr. Murrey Olmsted Best Hospitals Project Director RTI International



Best Hospitals

Your nominations will be reflected in the 2014-15 U.S. News & World Report << SPECIALTY>> rankings.

Please name up to five U.S. hospitals that you believe provide the best care in <<specialty>> for patients who have the most challenging conditions or who need particularly difficult procedures. Do not consider location or cost. Individual hospitals should be listed, not hospital systems or medical schools.

	Hospital	City	State
a.			
b.			
C.			
d.			
e.			

Fax response to (800) XXX-XXXX or return in postpaid envelope.

Conducted by:



RTI International 3040 Cornwallis Rd, PO Box 12194, Research Triangle Park, NC 27709-2194

Appendix B Structural Variable Map

The following variables used to construct structural elements of the 2014-15 IHQ were taken from the 2011 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 (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 Advanced Technologies (8 points possible)

1 point awarded if
FFDMHOS, FFDMSYS, FFDMNET or FFDMVEN=1
IGRTHOS, IGRTSYS, IGRTNET or IGRTVEN=1
IMRTHOS, IMRTSYS, IMRTNET or IMRTVEN=1
ROBOHOS, ROBOSYS, ROBONET or ROBOVEN=1
PETCTHOS, PETCTSYS, PETCTNET or PETCTVEN=1
BEAMHOS, BEAMSYS, BEAMNET or BEAMVEN=1
SRADHOS, SRADSYS, SRADNET or SRADVEN=1
OTBONHOS, OTBONSYS, OTBONNET or OTBONVEN=1

Cardiology & Heart Surgery Advanced Technologies (6 points possible)

1 point awarded if
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 or TISUNET=1
CMS Heart Transplant Center=1

Diabetes & Endocrinology Advanced Technologies (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 Advanced Technologies (1 point possible)

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

Gastroenterology & GI Surgery Advanced Technologies (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 Advanced Technologies (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

Nephrology Advanced Technologies (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 Advanced Technologies (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 Advanced Technologies (2 points possible)

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

Pulmonology Advanced Technologies (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 Advanced Technologies (6 points possible)

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

Nursing Intensity

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 (8 points possible)

1 point awarded if
GNTCHOS, GNTCSYS, GNTCNET or GNTCVEN=1
HOSPCHOS, HOSPCSYS, HOSPCNET or HOSPCVEN=1
PAINHOS, PAINSYS, PAINNET or PAINVEN=1
PALHOS, PALSYS, PALNET or PALVEN=1
PCAHOS, PCASYS, PCANET or PCAVEN=1
LINGHOS, LINGSYS, LINGNET or LINGVEN=1
AIRBHOS, AIRBSYS, AIRBNET or AIRBVEN=1
WMGTHOS WMGTSYS WMGTNET or WMGTVEN=1

Cardiology & Heart Surgery Patient Services (7 points possible)

1 point awarded if
CHABHOS, CHABSYS, CHABNET or CHABVEN=1
HOSPCHOS, HOSPCSYS, HOSPCNET or HOSPCVEN=1
PAINHOS, PAINSYS, PAINNET or PAINVEN=1
PALHOS, PALSYS, PALNET or PALVEN=1
PCAHOS, PCASYS, PCANET or PCAVEN=1
LINGHOS, LINGSYS, LINGNET or LINGVEN=1
WMGTHOS, WMGTSYS, WMGTNET or WMGTVEN=1

Diabetes & Endocrinology Patient Services (8 points possible)

1 point awarded if
GNTCHOS, GNTCSYS, GNTCNET or GNTCVEN=1
HOSPCHOS, HOSPCSYS, HOSPCNET or HOSPCVEN=1
PAINHOS, PAINSYS, PAINNET or PAINVEN=1
PALHOS, PALSYS, PALNET or PALVEN=1
PCAHOS, PCASYS, PCANET or PCAVEN=1
LINGHOS, LINGSYS, LINGNET or LINGVEN=1
AIRBHOS, AIRBSYS, AIRBNET or AIRBVEN=1
WMGTHOS, WMGTSYS, WMGTNET or WMGTVEN=1

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

1 point awarded if					
GNTCHOS, GNTCSYS, GNTCNET or GNTCVEN=1					
HOSPCHOS, HOSPCSYS, HOSPCNET or HOSPCVEN=1					
PAINHOS, PAINSYS, PAINNET or PAINVEN=1					
PALHOS, PALSYS, PALNET or PALVEN=1					
PCAHOS, PCASYS, PCANET or PCAVEN=1					
LINGHOS, LINGSYS, LINGNET or LINGVEN=1					
AIRBHOS, AIRBSYS, AIRBNET or AIRBVEN=1					
WMGTHOS, WMGTSYS, WMGTNET or WMGTVEN=1					

Gastroenterology & GI Surgery Patient Services (8 points possible)

1 point awarded if					
GNTCHOS, GNTCSYS, GNTCNET or GNTCVEN=1					
HOSPCHOS, HOSPCSYS, HOSPCNET or HOSPCVEN=1					
PAINHOS, PAINSYS, PAINNET or PAINVEN=1					
PALHOS, PALSYS, PALNET or PALVEN=1					
PCAHOS, PCASYS, PCANET or PCAVEN=1					
LINGHOS, LINGSYS, LINGNET or LINGVEN=1					
AIRBHOS, AIRBSYS, AIRBNET or AIRBVEN=1					
WMGTHOS, WMGTSYS, WMGTNET or WMGTVEN=1					

Geriatric Care Patient Services (9 points possible)

1 point awarded if				
ALZHOS, ALZSYS, ALZNET or ALZVEN=1				
ARTHCHOS, ARTHCSYS, ARTHCNET or ARTHCVEN=1				
HOSPCHOS, HOSPCSYS, HOSPCNET or HOSPCVEN=1				
PAINHOS, PAINSYS, PAINNET or PAINVEN=1				
PALHOS, PALSYS, PALNET or PALVEN=1				
PCAHOS, PCASYS, PCANET or PCAVEN=1				
PSYGRHOS, PSYGRSYS, PSYGRNET or PSYGRVEN=1				
LINGHOS, LINGSYS, LINGNET or LINGVEN=1				
WMGTHOS, WMGTSYS, WMGTNET or WMGTVEN=1				

Gynecology Patient Services (9 points possible)

1 point awarded if					
FRTCHOS, FRTCSYS, FRTCNET or FRTCVEN=1					
GNTCHOS, GNTCSYS, GNTCNET or GNTCVEN=1					
HOSPCHOS, HOSPCSYS, HOSPCNET or HOSPCVEN=1					
PAINHOS, PAINSYS, PAINNET or PAINVEN=1					
PALHOS, PALSYS, PALNET or PALVEN=1					
PCAHOS, PCASYS, PCANET or PCAVEN=1					
LINGHOS, LINGSYS, LINGNET or LINGVEN=1					
AIRBHOS, AIRBSYS, AIRBNET or AIRBVEN=1					
WMGTHOS, WMGTSYS, WMGTNET or WMGTVEN=1					

Nephrology Patient Services (8 points possible)

1 point awarded if					
GNTCHOS, GNTCSYS, GNTCNET or GNTCVEN=1					
HOSPCHOS, HOSPCSYS, HOSPCNET or HOSPCVEN=1					
PAINHOS, PAINSYS, PAINNET or PAINVEN=1					
PALHOS, PALSYS, PALNET or PALVEN=1					
PCAHOS, PCASYS, PCANET or PCAVEN=1					
LINGHOS, LINGSYS, LINGNET or LINGVEN=1					
AIRBHOS, AIRBSYS, AIRBNET or AIRBVEN=1					
WMGTHOS, WMGTSYS, WMGTNET or WMGTVEN=1					

Neurology & Neurosurgery Patient Services (9 points possible)

1 point awarded if					
ALZHOS, ALZSYS, ALZNET or ALZVEN=1					
GNTCHOS, GNTCSYS, GNTCNET or GNTCVEN=1					
HOSPCHOS, HOSPCSYS, HOSPCNET or HOSPCVEN=1					
PAINHOS, PAINSYS, PAINNET or PAINVEN=1					
PALHOS, PALSYS, PALNET or PALVEN=1					
PCAHOS, PCASYS, PCANET or PCAVEN=1					
LINGHOS, LINGSYS, LINGNET or LINGVEN=1					
AIRBHOS, AIRBSYS, AIRBNET or AIRBVEN=1					
WMGTHOS, WMGTSYS, WMGTNET or WMGTVEN=1					

Orthopedics Patient Services (7 points possible)

1 point awarded if					
ARTHCHOS, ARTHCSYS, ARTHCNET or ARTHCVEN=1					
HOSPCHOS, HOSPCSYS, HOSPCNET or HOSPCVEN=1					
PAINHOS, PAINSYS, PAINNET or PAINVEN=1					
PALHOS, PALSYS, PALNET or PALVEN=1					
PCAHOS, PCASYS, PCANET or PCAVEN=1					
LINGHOS, LINGSYS, LINGNET or LINGVEN=1					
WMGTHOS, WMGTSYS, WMGTNET or WMGTVEN=1					

Pulmonology Patient Services (8 points possible)

1 point awarded if					
GNTCHOS, GNTCSYS, GNTCNET or GNTCVEN=1					
HOSPCHOS, HOSPCSYS, HOSPCNET or HOSPCVEN=1					
PAINHOS, PAINSYS, PAINNET or PAINVEN=1					
PALHOS, PALSYS, PALNET or PALVEN=1					
PCAHOS, PCASYS, PCANET or PCAVEN=1					
LINGHOS, LINGSYS, LINGNET or LINGVEN=1					
AIRBHOS, AIRBSYS, AIRBNET or AIRBVEN=1					
WMGTHOS, WMGTSYS, WMGTNET or WMGTVEN=1					

Urology Patient Services (9 points possible)

1 point awarded if
FRTCHOS, FRTCSYS, FRTCNET or FRTCVEN=1
GNTCHOS, GNTCSYS, GNTCNET or GNTCVEN=1
HOSPCHOS, HOSPCSYS, HOSPCNET or HOSPCVEN=1
PAINHOS, PAINSYS, PAINNET or PAINVEN=1
PALHOS, PALSYS, PALNET or PALVEN=1
PCAHOS, PCASYS, PCANET or PCAVEN=1
LINGHOS, LINGSYS, LINGNET or LINGVEN=1
AIRBHOS, AIRBSYS, AIRBNET or AIRBVEN=1
WMGTHOS, WMGTSYS, WMGTNET or WMGTVEN=1

Intensivists

1 point awarded if
FTEMSI, FTECIC or FTEOIC > 0

Appendix C

2014-15 Diagnosis Related Group (DRG)

Groupings by Specialty

Cancer

MS- DRG	Medical/ Surgical	DRG Title	ICD-9-CM	Severity	Weight
014	S	Allogeneic bone marrow transplant	Include all	1	2.1248
016	S	Autologous bone marrow transplant w CC/MCC	Include all	1	2.0984
017	S	Autologous bone marrow transplant w/o CC/MCC	Include all	1	2.1248
000		Cranio w major dev impl/acute complex CNS PDX w MCC or chemo	Include	1	1 0000
023	S	implant	procedures: 0010	1	1.0000
054	M	Nervous system neoplasms w MCC	Include all	1	0.9711
055	M	Nervous system neoplasms w/o MCC	Include all	2	1.0816
146	M	Ear, nose, mouth & throat malignancy w MCC	Include all	1	0.9843
147	M	Ear, nose, mouth & throat malignancy w CC	Include all	2	1.1439
148	M	Ear, nose, mouth & throat malignancy w/o CC/MCC	Include all	2	1.1352
180	M	Respiratory neoplasms w MCC	Include all	1	0.8003
181	M	Respiratory neoplasms w CC	Include all	2	0.8480
182	M	Respiratory neoplasms w/o CC/MCC	Include all	2	0.8662
374	M	Digestive malignancy w MCC	Include all	1	0.8607
375	M	Digestive malignancy w CC	Include all	2	0.9058
376	M	Digestive malignancy w/o CC/MCC	Include all	2	0.9255
435	M	Malignancy of hepatobiliary system or pancreas w MCC	Include all	1	0.8717
436	M	Malignancy of hepatobiliary system or pancreas w CC	Include all	2	0.9143
437	M	Malignancy of hepatobiliary system or pancreas w/o CC/MCC	Include all	2	0.9240
			Include diagnoses: 1702,		
456	S	Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w MCC	1985, 20973	1	1.0755
457	S	Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w CC	See MS-DRG 456	2	1.2680
458	S	Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w/o CC/MCC	See MS-DRG 456	2	0.8680
542	М	Pathological fractures & musculoskelet & conn tiss malig w MCC	Exclude diagnoses: 4463- 4, 7331, 73310-6, 73319, 73393-8	1	0.8517
543	M	Pathological fractures & musculoskelet & conn tiss malig w MCC	See MS-DRG 542	2	0.9810
544	M	Pathological fractures & musculoskelet & conn tiss malig w/o CC/MCC	See MS-DRG 542	2	0.9295
582	S	Mastectomy for malignancy w CC/MCC	Include all	2	0.9971
583	S	Mastectomy for malignancy w/o CC/MCC	Include all	2	1.3300
595	M	Major skin disorders w MCC	Include diagnoses: 1720, 1722-9, 20931-6	1	1.1561
596	М	Major skin disorders w/o MCC	See MS-DRG 595	2	1.2625
597	М	Malignant breast disorders w MCC	Include all	1	1.1156
598	М	Malignant breast disorders w CC	Include all	2	1.1700
599	М	Malignant breast disorders w/o CC/MCC	Include all	2	0.9383
656	S	Kidney & ureter procedures for neoplasm w MCC	Include all	1	0.7860
657	S	Kidney & ureter procedures for neoplasm w CC	Include all	2	0.9834
658	S	Kidney & ureter procedures for neoplasm w/o CC/MCC	Include all	2	1.1346
686	М	Kidney & urinary tract neoplasms w MCC	Include all	2	0.8071
687	M	Kidney & urinary tract neoplasms w CC	Include all	2	0.8288
688	М	Kidney & urinary tract neoplasms w/o CC/MCC	Include all	3	0.9148
715	S	Other male reproductive system O.R. proc for malignancy w CC/MCC	Include all	2	0.9179
716	S	Other male reproductive system O.R. proc for malignancy w/o CC/MCC	Include all	2	1.1021
722	M	Malignancy, male reproductive system w MCC	Include all	1	0.7287
723	М	Malignancy, male reproductive system w CC	Include all	2	0.7692

MS- DRG	Medical/ Surgical	DRG Title	ICD-9-CM	Severity	Weight
724	М	Malignancy, male reproductive system w/o CC/MCC	Include all	2	0.8478
736	S	Uterine & adnexa proc for ovarian or adnexal malignancy w MCC	Include all	1	1.0200
737	S	Uterine & adnexa proc for ovarian or adnexal malignancy w CC Uterine & adnexa proc for ovarian or adnexal malignancy w/o	Include all	2	1.3264
738	S	CC/MCC	Include all	2	1.6453
739	S	Uterine, adnexa proc for non-ovarian/adnexal malig w MCC	Include all	1	0.8833
740	S	Uterine, adnexa proc for non-ovarian/adnexal malig w CC	Include all	2	1.1093
741	S	Uterine,adnexa proc for non-ovarian/adnexal malig w/o CC/MCC	Include all	2	1.2076
754	М	Malignancy, female reproductive system w MCC	Include all	1	0.9588
755	М	Malignancy, female reproductive system w CC	Include all	2	1.0188
756	М	Malignancy, female reproductive system w/o CC/MCC	Include all	2	1.1965
808	M	Major hematol/immun diag exc sickle cell crisis & coagul w MCC	Include diagnoses: 99685	1	1.1160
809	M	Major hematol/immun diag exc sickle cell crisis & coagul w CC	See MS-DRG 809	2	1.9096
810	M	Major hematol/immun diag exc sickle cell crisis & coagul w/o CC/MCC	See MS-DRG 809	2	2.1248
820	S	Lymphoma & leukemia w major O.R. procedure w MCC	Include all	1	0.9769
821	S	Lymphoma & leukemia w major O.R. procedure w CC	Include all	2	1.0907
822	S	Lymphoma & leukemia w major O.R. procedure w/o CC/MCC	Include all	2	1.1317
823	S	Lymphoma & non-acute leukemia w other O.R. proc w MCC	Include all	1	0.9146
824	S	Lymphoma & non-acute leukemia w other O.R. proc w CC	Include all	2	0.9670
825	S	Lymphoma & non-acute leukemia w other O.R. proc w/o CC/MCC	Include all	2	1.0568
			9, v1000-9, v1011-2, v1020-2, v1029, v1040-9, v1050-3, v1059, v1060-3, v1069, v1071-2, v1079, v1081-8, v1090-		
826	S	Myeloprolif disord or poorly diff neopl w maj O.R. proc w MCC	1,v1322	1	1.1710
827	S	Myeloprolif disord or poorly diff neopl w maj O.R. proc w CC	See MS-DRG 826	2	1.1972
828	S	Myeloprolif disord or poorly diff neopl w maj O.R. proc w/o CC/MCC	See MS-DRG 826	2	1.1741
829	S	Myeloprolif disord or poorly diff neopl w other O.R. proc w CC/MCC	See MS-DRG 826	2	1.5382
830	S	Myeloprolif disord or poorly diff neopl w other O.R. proc w/o CC/MCC	See MS-DRG 826	2	1.0645
834	M	Acute leukemia w/o major O.R. procedure w MCC	Include all	1	1.1951
835	M	Acute leukemia w/o major O.R. procedure w CC	Include all	2	1.0887
836	M	Acute leukemia w/o major O.R. procedure w/o CC/MCC	Include all	2	1.4691
837	M	Chemo w acute leukemia as sdx or w high dose chemo agent w MCC	Include all	1	1.5593
838	M	Chemo w acute leukemia as sdx w CC or high dose chemo agent	Include all	2	2.1248
839	M	Chemo w acute leukemia as sdx w/o CC/MCC	Include all	2	2.1248
840	M	Lymphoma & non-acute leukemia w MCC	Include all	1	0.8276
841	М	Lymphoma & non-acute leukemia w CC	Include all	2	0.8482
842	M	Lymphoma & non-acute leukemia w/o CC/MCC	Include all	2	0.9660
843 844	M M	Other myeloprolif dis or poorly diff neopl diag w MCC Other myeloprolif dis or poorly diff neopl diag w CC	Exclude diagnosis: v10, v711 See MS-DRG 844	3	0.9514 0.9095
845	M	Other myeloprolif dis or poorly diff neopl diag w/o CC/MCC	See MS-DRG 844	3	0.7999
846	M	Chemotherapy w/o acute leukemia as secondary diagnosis w MCC	Include all	3	1.3408
847	M	Chemotherapy w/o acute leukemia as secondary diagnosis w CC	Include all	3	1.6690
848	M	Chemotherapy w/o acute leukemia as secondary diagnosis w/o CC/MCC	Include all	3	1.4466

Cardiology & Heart Surgery

MS-	Medical/				
DRG	Surgical	DRG Title	ICD-9-CM	Severity	Weight
001	S	Heart transplant or implant of heart assist system w MCC	Include all	1	1.6472
002	S	Heart transplant or implant of heart assist system w/o MCC	Include all	1	1.9315
			Include procedures: 3712, 3724, 3731, 3791, 3805, 3815, 3835, 3845, 3855, 3865,		
163	S	Major chest procedures w MCC	3885, 3954	1	1.9901
164	S	Major chest procedures w CC	See MS-DRG: 163	2	1.6947
165	S	Major chest procedures w/o CC/MCC	See MS-DRG: 164	2	1.9901
215	S	Other heart assist system implant	Include all	1	1.7795
216	S	Cardiac valve & oth maj cardiothoracic proc w card cath w MCC	Include all	1	1.0744
217	S	Cardiac valve & oth maj cardiothoracic proc w card cath w CC	Include all	2	1.1347
218	S	Cardiac valve & oth maj cardiothoracic proc w card cath w/o CC/MCC	Include all	2	1.2142
219	S	Cardiac valve & oth maj cardiothoracic proc w/o card cath w MCC	Include all	1	1.1849
220	S	Cardiac valve & oth maj cardiothoracic proc w/o card cath w CC	Include all	2	1.2166
221	S	Cardiac valve & oth maj cardiothoracic proc w/o card cath w/o CC/MCC	Include all	2	1.2817
222	S	Cardiac defib implant w cardiac cath w AMI/HF/shock w MCC	Include all	1	1.2385
223	S	Cardiac defib implant w cardiac cath w AMI/HF/shock w/o MCC	Include all	1	1.2175
224	S	Cardiac defib implant w cardiac cath w/o AMI/HF/shock w MCC	Include all	3	1.3206
225	S	Cardiac defib implant w cardiac cath w/o AMI/HF/shock w/o MCC	Include all	3	1.1910
226	S	Cardiac defibrillator implant w/o cardiac cath w MCC	Include all	1	1.0613
227	S	Cardiac defibrillator implant w/o cardiac cath w/o MCC	Include all	1	1.1161
228	S	Other cardiothoracic procedures w MCC	Include all	1	1.9901
229	S	Other cardiothoracic procedures w CC	Include all	2	1.9901
230	S	Other cardiothoracic procedures w/o CC/MCC	Include all	2	1.9901
231	S	Coronary bypass w PTCA w MCC	Include all	1	1.5233
232	S	Coronary bypass w PTCA w/o MCC	Include all	2	1.8413
233	S	Coronary bypass w cardiac cath w MCC	Include all	2	1.2537
234	S	Coronary bypass w cardiac cath w/o MCC	Include all	3	1.3048
235	S	Coronary bypass w/o cardiac cath w MCC	Include all	2	1.2151
236	S	Coronary bypass w/o cardiac cath w/o MCC	Include all	3	1.2656
237	S	Major cardiovasc procedures w MCC	Include all	1	1.2634
238	S	Major cardiovascular procedures w/o MCC	Include all	2	1.1699
242	S	Permanent cardiac pacemaker implant w MCC	Include all	2	0.8361
243	S	Permanent cardiac pacemaker implant w CC	Include all	2	0.8450
244	S	Permanent cardiac pacemaker implant w/o CC/MCC	Include all	3	0.8477
245	S	AICD Generator Procedures	Include all	2	0.9491
246	S	Perc cardiovasc proc w drug-eluting stent w MCC or 4+ vessels/stents	Include all	2	1.1305
247	S	Perc cardiovasc proc w drug-eluting stent w/o MCC	Include all	3	1.1303
241	J	Perc cardiovasc proc w non-drug-eluting stent w/o MCC or 4+	molude all	J	1.0737
248	S	ves/stents	Include all	2	1.1193
249	S	Perc cardiovasc proc w non-drug-eluting stent w/o MCC	Include all	3	1.0738
250	S	Perc cardiovasc proc w/o coronary artery stent w MCC	Include all	3	1.0827
251	S	Perc cardiovasc proc w/o coronary artery stent or AMI w/o MCC	Include all	3	1.1353
252	S	Other vascular procedures w MCC	Include all	2	0.9527
253	S	Other vascular procedures w CC	Include all	2	1.0682
254	S	Other vascular procedures w/o CC/MCC	Include all	3	1.0279
260	S	Cardiac pacemaker revision except device replacement w MCC	Include all	1	0.9536

MS- DRG	Medical/ Surgical	DRG Title	ICD-9-CM	Severity	Weight
261	S	Cardiac pacemaker revision except device replacement w CC	Include all	2	1.0242
		Cardiac pacemaker revision except device replacement w/o			
262	S	CC/MCC	Include all	2	1.0282
265	S	ACID lead procedures	Include all	2	1.0098
280	М	Acute myocardial infarction, discharged alive w MCC	Include all	1	0.8791
281	М	Acute myocardial infarction, discharged alive w CC	Include all	2	0.9707
282	М	Acute myocardia infarction, discharged alive w/o CC/MCC	Include all	2	1.1065
283	М	Acute myocardial infarction, expired w MCC	Include all	1	0.8687
284	М	Acute myocardial infarction, expired w CC	Include all	2	0.8487
285	М	Acute myocardial infarction, expired w/o CC/MCC	Include all	2	0.8480
286	М	Circulatory disorders except AMI, w card cath w MCC	Include all	2	1.1087
287	М	Circulatory disorders except AMI, w card cath w/o MCC	Include all	3	1.2296
288	М	Acute & subacute endocarditis w MCC	Include all	1	1.2374
289	М	Acute & subacute endocarditis w CC	Include all	2	1.4740
290	М	Acute & subacute endocarditis w/o CC/MCC	Include all	2	1.7902
291	М	Heart failure & shock w MCC	Include all	1	0.8756
292	М	Heart failure & shock w CC	Include all	2	0.9306
293	М	Heart failure & shock w/o CC/MCC	Include all	2	0.9017
306	М	Cardiac congenital & valvular disorders w MCC	Include all	1	1.0201
308	М	Cardiac arrhythmia & conduction disorders w MCC	Include all	1	0.9038
309	М	Cardiac arrhythmia & conduction disorders w CC	Include all	2	0.9842
314	М	Other circulatory system diagnoses w MCC	Include all	2	1.0754
315	М	Other circulatory system diagnoses w CC	Include all	2	1.3286
316	М	Other circulatory system diagnoses w/o CC/MCC	Include all	3	1.2888

Diabetes & Endocrinology

MS- DRG	Medical/ Surgical	DRG Title	ICD-9-CM	Severity	Weight
614	S	Adrenal & pituitary procedures w CC/MCC	Include all	2	1.8705
615	S	Adrenal & pituitary procedures w/o CC/MCC	Include all	2	1.5774
619	S	O.R. procedures for obesity w MCC	Include all	1	1.6077
620	S	O.R. procedures for obesity w CC	Include all	2	2.3303
621	S	O.R. procedures for obesity w/o CC/MCC	Include all	2	2.3303
622	S	Skin grafts & wound debrid for endoc, nutrit & metab dis w MCC	Include all	1	0.7735
623	S	Skin grafts & wound debrid for endoc, nutrit & metab dis w CC	Include all	2	1.1177
		Skin grafts & wound debrid for endoc, nutrit & metab dis w/o			
624	S	CC/MCC	Include all	2	1.3146
625	S	Thyroid, parathyroid & thyroglossal procedures w MCC	Include all	1	0.8042
626	S	Thyroid, parathyroid & thyroglossal procedures w CC	Include all	2	1.5242
627	S	Thyroid, parathyroid & thyroglossal procedures w/o CC/MCC	Include all	2	1.2640
628	S	Other endocrine, nutrit & metab O.R. proc w MCC	Include all	1	0.7654
629	S	Other endocrine, nutrit & metab O.R. proc w CC	Include all	2	1.0163
630	S	Other endocrine, nutrit & metab O.R. proc w/o CC/MCC	Include all	2	1.2667
637	М	Diabetes w MCC	Include all	3	0.9225
638	М	Diabetes w CC	Include all	3	1.1050
639	М	Diabetes w/o CC/MCC	Include all	3	0.9720
640	M	Misc disorders of nutrition, metabolism, fluids/electrolyes w MCC	Exclude diagnosis: 77934	3	0.7387
643	М	Endocrine disorders w MCC	Include all	3	0.7591
644	М	Endocrine disorders w CC	Include all	3	0.8115

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	1.0034
012	S	Tracheostomy for face, mouth & neck diagnoses w CC	Include all	1	1.1346
013	S	Tracheostomy for face, mouth & neck diagnoses w/o CC/MCC	Include all	1	1.4204
129	S	Major head & neck procedures w CC/MCC or major device	Include all	2	0.9597
130	S	Major head & neck procedures w/o CC/MCC	Include all	2	0.9813
131	S	Cranial/Facial Procedures w CC/MCC	Include all	3	1.8400
132	S	Cranial/Facial Procedures w/o CC/MCC	Include all	3	1.8665
133	S	Other ear, nose, mouth & throat O.R. procedures w CC/MCC	Include all	3	1.5204
134	S	Other ear, nose, mouth & throat O.R. procedures w/o CC/MCC	Include all	3	1.3721
139	S	Salivary gland procedures	Include all	3	0.6705
146	М	Ear, nose, mouth & throat malignancy w MCC	Include all	1	0.8740
147	М	Ear, nose, mouth & throat malignancy w CC	Include all	2	1.0158
148	M	Ear, nose, mouth & throat malignancy w/o CC/MCC	Include all	2	1.0080
152	М	Otitis media & URI w MCC	Include all	3	1.0814
154	M	Other ear, nose, mouth and throat diagnosis w MCC	Include all	3	0.7077
155	М	Other ear, nose, mouth and throat diagnosis w CC	Include all	3	0.6810
156	М	Other ear, nose, mouth and throat diagnosis w/o CC/MCC	Include all	3	0.6977

Gastroenterology & GI Surgery

MS- DRG	Medical/ Surgical	DRG Title	ICD-9-CM	Severity	Weight
326	S	Stomach, esophageal & duodenal proc w MCC	Include all	2	1.0722
327	S	Stomach, esophageal & duodenal proc w CC	Include all	2	1.2702
328	S	Stomach, esophageal & duodenal proc w/o CC/MCC	Include all	3	1.3138
329	S	Major small & large bowel procedures w MCC	Include all	1	0.9559
330	S	Major small & large bowel procedures w CC	Include all	2	1.1371
331	S	Major small & large bowel procedures w/o CC/MCC	Include all	2	1.2491
332	S	Rectal resection w MCC	Include all	1	0.9237
333	S	Rectal resection w CC	Include all	1	1.1437
334	S	Rectal resection w/o CC/MCC	Include all	2	1.2882
335	S	Peritoneal adhesiolysis w MCC	Include all	1	0.8727
336	S	Peritoneal adhesiolysis w CC	Include all	2	1.1690
337	S	Peritoneal adhesiolysis w/o CC/MCC	Include all	2	1.3344
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 Include procedures: 4502- 3, 4515, 4526,	2	1.0040
345	S S	Minor small & large bowel procedures w CC	4534, 4549, 465, 4650-2, 466, 4660- 4, 4791, 480, 4825, 5783	2 3	1.2819
346		Minor small & large bowel procedures w/o CC/MCC	See MS-DRG 345		0.7348
356	S	Other digestive system O.R. procedures w MCC	Include all	2	0.8726
357	S	Other digestive system O.R. procedures w CC	Include all	2	1.0550
358	S	Other digestive system O.R. procedures w/o CC/MCC	Include all	3	0.8245

MS- DRG	Medical/ Surgical	DRG Title	ICD-9-CM	Severity	Weight
368	М	Major esophageal disorders w MCC	Include all	1	1.0522
369	М	Major esophageal disorders w CC	Include all	2	1.1845
370	М	Major esophageal disorders w/o CC/MCC	Include all	2	1.3721
371	М	Major gastrointestinal disorders & peritoneal infections w MCC	Include all	1	0.7771
372	М	Major gastrointestinal disorders & peritoneal infections w CC	Include all	2	0.8613
373	М	Major gastrointestinal disorders & peritoneal infections w/o CC/MCC	Include all	2	1.1495
374	М	Digestive malignancy w MCC	Include all	1	0.9425
375	М	Digestive malignancy w CC	Include all	2	0.9919
376	М	Digestive malignancy w/o CC/MCC	Include all	2	1.0135
377	М	G.I. hemorrhage w MCC	Include all	1	0.7376
378	М	G.I. hemorrhage w CC	Include all	2	0.7724
379	М	G.I. hemorrhage w/o CC/MCC	Include all	2	0.8271
380	М	Complicated peptic ulcer w MCC	Include all	1	0.8690
381	М	Complicated peptic ulcer w CC	Include all	2	0.9540
382	М	Complicated peptic ulcer w/o CC/MCC	Include all	2	1.1726
383	М	Uncomplicated peptic ulcer w MCC	Include all	3	0.8842
385	М	Inflammatory bowel disease w MCC	Include all	1	1.5725
386	М	Inflammatory bowel disease w CC	Include all	2	1.8129
387	М	Inflammatory bowel disease w/o CC/MCC	Include all	2	1.8129
388	М	G.I. obstruction w MCC	Include all	3	0.7374
389	М	G.I. obstruction w CC	Include all	3	0.7391
391	М	Esophagitis, gastroent & misc digest disorders w MCC	Include all	3	0.8694
393	М	Other digestive system diagnoses w MCC	Include all	1	0.8673
394	М	Other digestive system diagnoses w CC	Include all	2	0.9226
405	S	Pancreas, liver & shunt procedures w MCC	Include all	1	1.2878
406	S	Pancreas, liver & shunt procedures w CC	Include all	1	1.2842
407	S	Pancreas, liver & shunt procedures w/o CC/MCC	Include all	2	1.4698
408	S	Biliary tract proc except only cholecyst w or w/o c.d.e. w MCC	Include all	2	0.9596
409	S	Biliary tract proc except only cholecyst w or w/o c.d.e. w CC	Include all	2	1.1531
410	S	Biliary tract proc except only cholecyst w or w/o c.d.e. w/o CC/MCC	Include all	3	1.4742
411	S	Cholecystectomy w c.d.e. w MCC	Include all	1	0.9729
412	S	Cholecystectomy w c.d.e. w CC	Include all	2	1.1052
413	S	Cholecystectomy w c.d.e. w/o CC/MCC	Include all	2	1.2442
414	S	Cholecystectomy except by laparoscope w/o c.d.e. w MCC	Include all	1	0.9099
415	S	Cholecystectomy except by laparoscope w/o c.d.e. w CC	Include all	2	1.0767
417	S	Laparoscopic cholecystectomy w/o c.d.e. w MCC	Include all	3	0.9329
418	S	Laparoscopic cholecystectomy w/o c.d.e. w CC	Include all	3	1.0947
420	S	Hepatobiliary diagnostic procedures w MCC	Include all	1	1.1923
421	S	Hepatobiliary diagnostic procedures w CC	Include all	2	1.2246
422	S	Hepatobiliary diagnostic procedures w/o CC/MCC	Include all	2	1.3090
423	S	Other hepatobiliary or pancreas O.R. procedures w MCC	Include all	3	1.1122
424	S	Other hepatobiliary or pancreas O.R. procedures w CC	Include all	3	1.0262
425	S	Other hepatobiliary or pancreas O.R. procedures w/o CC/MCC	Include all	3	1.7602
432	M	Cirrhosis & alcoholic hepatitis w MCC	Include all	1	1.6934
433	M	Cirrhosis & alcoholic hepatitis w CC	Include all	2	1.8129
434	М	Cirrhosis & alcoholic hepatitis w/o CC/MCC	Include all	2	1.8129
435	М	Malignancy of hepatobiliary system or pancreas w MCC	Include all	1	0.9545
436	М	Malignancy of hepatobiliary system or pancreas w CC	Include all	2	1.0012
437	М	Malignancy of hepatobiliary system or pancreas w/o CC/MCC	Include all	2	1.0118
438	М	Disorders of pancreas except malignancy w MCC	Include all	1	1.2270
439	М	Disorders of pancreas except malignancy w CC	Include all	2	1.5278
440	М	Disorders of pancreas except malignancy w/o CC/MCC	Include all	2	1.7186

MS- DRG	Medical/ Surgical	DRG Title	ICD-9-CM	Severity	Weight
			Exclude diagnosis:		
441	M	Disorders of liver except malig,cirr,alc hepa w MCC	7948	1	1.2583
442	M	Disorders of liver except malig,cirr,alc hepa w CC	See MS-DRG 442	2	1.3742

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	1.0847
002	S	Heart transplant or implant of heart assist system w/o MCC	Include all	1	1.0677
003	S	ECMO or trach w MV 96+ hrs or PDX exc face, mouth & neck w maj O.R.	Include all	1	1.0469
004	S	Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R.	Include all	1	1.0297
005	S	Liver transplant w MCC or intestinal transplant	Include all	1	1.1493
006	S	Liver transplant w/o MCC	Include all	1	1.0000
007	S	Lung transplant	Include all	1	1.0000
800	S	Simultaneous pancreas/kidney transplant	Include all	1	1.0000
010	S	Pancreas transplant	Include all	1	1.0000
011	S	Tracheostomy for face, mouth & neck diagnoses w MCC	Include all	1	1.0027
012	S	Tracheostomy for face, mouth & neck diagnoses w CC	Include all	1	0.9941
013	S	Tracheostomy for face, mouth & neck diagnoses w/o CC/MCC	Include all	1	0.9964
014	S	Allogeneic bone marrow transplant	Include all	1	1.1493
016	S	Autologous bone marrow transplant w CC/MCC	Include all	1	1.1493
017	S	Autologous bone marrow transplant w/o CC/MCC	Include all	1	
020	S	Intracranial vascular procedures w PDX hemorrhage w MCC	Include all	1	1.0460
021	S	Intracranial vascular procedures w PDX hemorrhage w CC	Include all	1	0.9915
022	S	Intracranial vascular procedures w PDX hemorrhage w/o CC/MCC	Include all	1	1.1316
		Cranio w major dev impl/acute complex CNS PDX w MCC or chemo			
023	S	implant	Include all	1	1.0372
024	S	Cranio w major dev impl/acute complex CNS PDX w/o MCC	Include all	1	1.0206
025	S	Craniotomy & endovascular intracranial procedures w MCC	Include all	1	1.0149
026	S	Craniotomy & endovascular intracranial procedures w CC	Include all	1	1.0246
027	S	Craniotomy & endovascular intracranial procedures w/o CC/MCC	Include all	1	1.0440
028	S	Spinal procedures w MCC	Include all	1	1.0290
029	S	Spinal procedures w CC or spinal neurostimulators	Include all	2	1.0140
030	S	Spinal procedures w/o CC/MCC	Include all	2	1.0177
031	S	Ventricular shunt procedures w MCC	Include all	1	0.9781
032	S	Ventricular shunt procedures w CC	Include all	2	0.9850
033	S	Ventricular shunt procedures w/o CC/MCC	Include all	2	0.9714
034	S	Carotid artery stent procedure w MCC	Include all	1	1.0326
035	S	Carotid artery stent procedure w CC	Include all	2	1.0117
036	S	Carotid artery stent procedure w/o CC/MCC	Include all	2	0.9960
037	S	Extracranial procedures w MCC	Include all	2	0.9942
038	S	Extracranial procedures w CC	Include all	2	0.9966
039	S	Extracranial procedures w/o CC/MCC	Include all	3	1.0173
040	S	Periph & cranial nerve & other nerv syst proc w MCC	Include all	2	1.0202
041	S	Periph/cranial nerve & other nerv syst proc w CC or periph neurostim	Include all	2	0.9981
042	S	Periph & cranial nerve & other nerv syst proc w/o CC/MCC	Include all	3	0.9869
052	М	Spinal disorders & injuries w CC/MCC	Include all	2	1.0200
053	М	Spinal disorders & injuries w/o CC/MCC	Include all	2	1.1288
054	М	Nervous system neoplasms w MCC	Include all	1	1.0052

MS- DRG	Medical/ Surgical	DRG Title	ICD-9-CM	Severity	Weight
055	М	Nervous system neoplasms w/o MCC	Include all	2	1.0112
056	М	Degenerative nervous system disorders w MCC	Include all	1	1.0254
057	М	Degenerative nervous system disorders w/o MCC	Include all	2	0.9965
058	М	Multiple sclerosis & cerebellar ataxia w MCC	Include all	1	1.0308
059	М	Multiple sclerosis & cerebellar ataxia w CC	Include all	2	1.0170
060	М	Multiple sclerosis & cerebellar ataxia w/o CC/MCC	Include all	2	0.9494
061	М	Acute ischemic stroke w use of thrombolytic agent w MCC	Include all	1	1.0304
062	М	Acute ischemic stroke w use of thrombolytic agent w CC	Include all	2	1.0044
063	М	Acute ischemic stroke w use of thrombolytic agent w/o CC/MCC	Include all	2	1.0155
064	М	Intracranial hemorrhage or cerebral infarction w MCC	Include all	1	1.0181
065	М	Intracranial hemorrhage or cerebral infarction w CC	Include all	2	1.0100
066	М	Intracranial hemorrhage or cerebral infarction w/o CC/MCC	Include all	2	1.0137
067	М	Nonspecific cva & precerebral occlusion w/o infarct w MCC	Include all	1	0.9779
068	М	Nonspecific cva & precerebral occlusion w/o infarct w/o MCC	Include all	2	0.9938
069	М	Transient ischemia	Include all	3	0.9855
070	М	Nonspecific cerebrovascular disorders w MCC	Include all	2	0.9963
071	М	Nonspecific cerebrovascular disorders w CC	Include all	2	0.9841
072	М	Nonspecific cerebrovascular disorders w/o CC/MCC	Include all	3	0.9827
073	М	Cranial & peripheral nerve disorders w MCC	Include all	1	0.9823
074	М	Cranial & peripheral nerve disorders w/o MCC	Include all	2	0.9921
075	М	Viral meningitis w CC/MCC	Include all	2	1.0009
076	М	Viral meningitis w/o CC/MCC	Include all	2	0.9696
077	М	Hypertensive encephalopathy w MCC	Include all	1	1.0104
078	М	Hypertensive encephalopathy w CC	Include all	2	1.0012
079	М	Hypertensive encephalopathy w/o CC/MCC	Include all	2	1.0058
080	М	Nontraumatic stupor & coma w MCC	Include all	1	1.0298
081	М	Nontraumatic stupor & coma w/o MCC	Include all	2	1.0046
082	М	Traumatic stupor & coma, coma >1 hr w MCC	Include all	1	1.0869
083	М	Traumatic stupor & coma, coma >1 hr w CC	Include all	1	1.0866
084	М	Traumatic stupor & coma, coma >1 hr w/o CC/MCC	Include all	1	1.0870
085	М	Traumatic stupor & coma, coma <1 hr w MCC	Include all	1	1.0364
086	М	Traumatic stupor & coma, coma <1 hr w CC	Include all	2	1.0141
087	М	Traumatic stupor & coma, coma <1 hr w/o CC/MCC	Include all	2	1.0410
088	М	Concussion w MCC	Include all	3	1.0476
089	М	Concussion w CC	Include all	3	1.0518
090	М	Concussion w/o CC/MCC	Include all	3	1.0790
091	М	Other disorders of nervous system w MCC	Include all	3	1.0107
092	М	Other disorders of nervous system w CC	Include all	3	0.9900
093	М	Other disorders of nervous system w/o CC/MCC	Include all	3	1.0380
094	М	Bacterial & tuberculous infections of nervous system w MCC	Include all	1	0.9941
095	М	Bacterial & tuberculous infections of nervous system w CC	Include all	2	1.0420
096	М	Bacterial & tuberculous infections of nervous system w/o CC/MCC	Include all	2	1.0199
097	М	Non-bacterial infect of nervous sys exc viral meningitis w MCC	Include all	1	0.9940
098	M	Non-bacterial infect of nervous sys exc viral meningitis w CC	Include all	2	1.0134
099	M	Non-bacterial infect of nervous sys exc viral meningitis w/o CC/MCC	Include all	2	1.0092
100	М	Seizures w MCC	Include all	2	1.0006
101	М	Seizures w/o MCC	Include all	3	0.9983
102	М	Headaches w MCC	Include all	3	1.0034
103	М	Headaches w/o MCC	Include all	3	1.0122
113	S	Orbital procedures w CC/MCC	Include all	2	1.0234
114	S	Orbital procedures w/o CC/MCC	Include all	2	0.9890
115	S	Extraocular procedures except orbit	Include all	3	0.9825

117	MS- DRG	Medical/ Surgical	DRG Title	ICD-9-CM	Severity	Weight
121	116		Intraocular procedures w CC/MCC	Include all	3	0.9779
122	117	S	Intraocular procedures w/o CC/MCC	Include all		1.0000
123	121	M	Acute major eye infections w CC/MCC	Include all	2	0.9840
125	122	M	Acute major eye infections w/o CC/MCC	Include all	2	1.0188
125	123	M	Neurological eye disorders	Include all		1.0024
199	124	M	Other disorders of the eye w MCC	Include all	2	1.0290
130	125	M	Other disorders of the eye w/o MCC	Include all	3	1.0109
131 S	129	S	Major head & neck procedures w CC/MCC or major device	Include all	2	1.0006
132 S	130	S	Major head & neck procedures w/o CC/MCC	Include all	2	0.9969
133 S	131	S	Cranial/facial procedures w CC/MCC	Include all	3	1.1493
134	132	S	Cranial/facial procedures w/o CC/MCC	Include all	3	1.1493
135 S Sinus & mastoid procedures w CC/MCC Include all 2 0.9731	133	S	Other ear, nose, mouth & throat O.R. procedures w CC/MCC	Include all	3	1.0032
136	134	S	Other ear, nose, mouth & throat O.R. procedures w/o CC/MCC	Include all	3	1.0630
137 S Mouth procedures w/o CC/MCC Include all 3 0.9743	135	S	Sinus & mastoid procedures w CC/MCC	Include all	2	0.9731
138	136	S	Sinus & mastoid procedures w/o CC/MCC	Include all	2	0.9802
139 S Salivary gland procedures Include all 3 0.9194 146 M Ear, nose, mouth & throat malignancy w MCC Include all 1 1.1435 147 M Ear, nose, mouth & throat malignancy w CC Include all 2 1.0783 148 M Ear, nose, mouth & throat malignancy w CC Include all 2 1.1083 149 M Dysequilibrium Include all 3 0.9804 150 M Epistaxis w MCC Include all 3 0.9804 151 M Epistaxis w MCC Include all 3 0.9934 152 M Oiliis media & URI w MCC Include all 3 0.9703 153 M Oiliis media & URI w MCC Include all 3 0.9934 154 M Other Ear, Nose, Mouth, and Throat Diagnoses with MCC Include all 3 0.9934 155 M Other Ear, Nose, Mouth, and Throat Diagnoses with CC Include all 3 0.9942 156 M Other Ear, Nose, Mouth, and Throat Diagnoses without CC/MCC Include all 3 0.9965 157 M Dental & Oral Diseases w MCC Include all 3 0.9986 158 M Dental & Oral Diseases w MCC Include all 3 0.9986 159 M Dental & Oral Diseases w MCC Include all 3 0.9986 159 M Dental & Oral Diseases w MCC Include all 3 0.9986 163 S Major chest procedures w MCC Include all 3 0.9488 164 S Major chest procedures w MCC Include all 1 1.0035 165 S Major chest procedures w MCC Include all 2 0.9981 166 S Other resp system O.R. procedures w MCC Include all 2 0.9996 168 S Other resp system O.R. procedures w MCC Include all 2 0.9996 175 M Pulmonary embolism w MCC Include all 1 0.0978 176 M Pulmonary embolism w MCC Include all 1 0.9998 177 M Respiratory infections & inflammations w MCC Include all 1 0.9998 178 M Respiratory infections & inflammations w MCC Include all 1 0.9998 180 M Respiratory infections & inflammations w MCC Include all 1 0.9998 181 M Respiratory neoplasms w MCC Include all 1 1.0384 181 M Respiratory ne	137	S	Mouth procedures w CC/MCC	Include all	3	0.9743
146	138	S	Mouth procedures w/o CC/MCC	Include all	3	1.1033
147 M Ear, nose, mouth & throat malignancy w CC Include all 2 1.0783 148 M Ear, nose, mouth & throat malignancy w/o CC/MCC Include all 2 1.1083 149 M Dysequilibrium Include all 3 0.9804 150 M Epistaxis w MCC Include all 3 1.0077 151 M Epistaxis w/o MCC Include all 3 0.9984 152 M Otlitis media & URI w/o MCC Include all 3 0.9703 153 M Otlitis media & URI w/o MCC Include all 3 0.9703 154 M Other Ear, Nose, Mouth, and Throat Diagnoses with MCC Include all 3 0.9895 155 M Other Ear, Nose, Mouth, and Throat Diagnoses without CC/MCC Include all 3 0.9896 155 M Other Ear, Nose, Mouth, and Throat Diagnoses without CC/MCC Include all 3 0.9961 156 M Other Ear, Nose, Mouth, and Throat Diagnoses without CC/MCC Include all 3 0.912 <td>139</td> <td>S</td> <td>Salivary gland procedures</td> <td>Include all</td> <td>3</td> <td>0.9194</td>	139	S	Salivary gland procedures	Include all	3	0.9194
147 M Ear, nose, mouth & throat malignancy w CC Include all 2 1.0783 148 M Ear, nose, mouth & throat malignancy w/o CC/MCC Include all 2 1.1083 149 M Dysequilibrium Include all 3 0.9804 150 M Epistaxis w MCC Include all 3 1.0077 151 M Epistaxis w/o MCC Include all 3 0.9984 152 M Olitis media & URI w/o MCC Include all 3 0.9703 153 M Olitis media & URI w/o MCC Include all 3 0.9703 154 M Olther Ear, Nose, Mouth, and Throat Diagnoses with MCC Include all 3 0.9895 155 M Other Ear, Nose, Mouth, and Throat Diagnoses without CC/MCC Include all 3 0.9868 155 M Other Ear, Nose, Mouth, and Throat Diagnoses without CC/MCC Include all 3 0.9961 156 M Other Ear, Nose, Mouth, and Throat Diagnoses without CC/MCC Include all 3 0.912	146	М	, , ,	Include all	1	1.1435
148 M Ear, nose, mouth & throat malignancy w/o CC/MCC Include all 2 1.1083 149 M Dysequilibrium Include all 3 0.9804 150 M Epistaxis w MCC Include all 3 0.9984 151 M Epistaxis w/o MCC Include all 3 0.9984 152 M Oittis media & URI w/o MCC Include all 3 0.9703 153 M Oittis media & URI w/o MCC Include all 3 0.9924 154 M Other Ear, Nose, Mouth, and Throat Diagnoses with MCC Include all 3 0.9984 155 M Other Ear, Nose, Mouth, and Throat Diagnoses without CC/MCC Include all 3 0.9984 156 M Other Ear, Nose, Mouth, and Throat Diagnoses without CC/MCC Include all 3 0.9980 158 M Other Ear, Nose, Mouth, and Throat Diagnoses without CC/MCC Include all 3 0.9988 159 M Dental & Oral Diseases w/c C Include all 3 0.9928<	1	М	V - 2	Include all	2	
149	148	М				
150	1	М	5 3			
151	1		3 1			
152	1					
153 M	*	1				
154	1					
155 M	1					
156 M Other Ear, Nose, Mouth, and Throat Diagnoses without CC/MCC Include all 3 1.0121 157 M Dental & Oral Diseases w MCC Include all 3 0.9960 158 M Dental & Oral Diseases w CC Include all 3 0.9988 159 M Dental & Oral Diseases w/o CC/MCC Include all 3 0.9428 163 S Major chest procedures w MCC Include all 1 1.0035 164 S Major chest procedures w CC Include all 2 1.0095 165 S Major chest procedures w CC Include all 2 1.0995 166 S Other resp system O.R. procedures w MCC Include all 2 1.0906 167 S Other resp system O.R. procedures w CC Include all 2 0.9992 168 S Other resp system O.R. procedures w CC Include all 2 0.9992 168 S Other resp system O.R. procedures w CC Include all 2 0.9993 17	*	М	-			
157 M Dental & Oral Diseases w MCC Include all 3 0.9960 158 M Dental & Oral Diseases w CC Include all 3 0.9888 159 M Dental & Oral Diseases w/o CC/MCC Include all 3 0.9428 163 S Major chest procedures w MCC Include all 1 1.0035 164 S Major chest procedures w CC Include all 2 1.0095 165 S Major chest procedures w/o CC/MCC Include all 2 0.9981 166 S Other resp system O.R. procedures w MCC Include all 2 0.99981 166 S Other resp system O.R. procedures w CC Include all 2 0.9999 168 S Other resp system O.R. procedures w/o CC/MCC Include all 2 0.9993 175 M Pulmonary embolism w/o MCC Include all 3 0.9730 175 M Pulmonary embolism w/o MCC Include all 1 1.0015 177 M	1		y			
158	1	М				
159 M Dental & Oral Diseases W/o CC/MCC Include all 3 0.9428 163 S Major chest procedures w MCC Include all 1 1.0035 164 S Major chest procedures w CC Include all 2 1.0095 165 S Major chest procedures w CC Include all 2 0.9981 166 S Other resp system O.R. procedures w MCC Include all 2 0.9969 167 S Other resp system O.R. procedures w CC Include all 2 0.9969 168 S Other resp system O.R. procedures w CC Include all 3 0.9730 175 M Pulmonary embolism w MCC Include all 1 0.9993 176 M Pulmonary embolism w MCC Include all 1 1.0015 177 M Respiratory infections & inflammations w MCC Include all 1 0.9928 178 M Respiratory infections & inflammations w CC Include all 2 0.9991 180 <t< td=""><td>*</td><td>М</td><td>Dental & Oral Diseases w CC</td><td>Include all</td><td></td><td></td></t<>	*	М	Dental & Oral Diseases w CC	Include all		
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MS- DRG	Medical/ Surgical	DRG Title	ICD-9-CM	Severity	Weight
189	M	Pulmonary edema & respiratory failure	Include all	2	1.0181
190	M	Chronic obstructive pulmonary disease w MCC	Include all	3	0.9927
191	M	Chronic obstructive pulmonary disease w CC	Include all	3	0.9900
192	M	Chronic obstructive pulmonary disease w/o CC/MCC	Include all	3	0.9922
193	M	Simple pneumonia & pleurisy w MCC	Include all	3	0.9975
194	M	Simple pneumonia & pleurisy w CC	Include all	3	0.9954
195	М	Simple pneumonia & pleurisy w/o CC/MCC	Include all	3	0.9949
196	М	Interstitial lung disease w MCC	Include all	3	1.0202
197	M	Interstitial lung disease w CC	Include all	3	0.9999
198	М	Interstitial lung disease w/o CC/MCC	Include all	3	1.0033
199	М	Pneumothorax w MCC	Include all	1	1.0036
200	М	Pneumothorax w CC	Include all	2	1.0392
201	М	Pneumothorax w/o CC/MCC	Include all	2	1.0166
202	М	Bronchitis & asthma w CC/MCC	Include all	3	0.9870
203	М	Bronchitis & asthma w/o CC/MCC	Include all	3	1.0009
204	М	Respiratory signs & symptoms	Include all	3	1.0020
205	М	Other respiratory system diagnoses w MCC	Include all	3	1.0028
206	M	Other respiratory system diagnoses w/o MCC	Include all	3	1.0058
207	М	Respiratory system diagnosis w ventilator support 96+ hours	Include all	2	1.0183
208	M	Respiratory system diagnosis w ventilator support <96 hours	Include all	2	1.0125
215	S	Other heart assist system implant	Include all	1	1.1493
216	S	Cardiac valve & oth maj cardiothoracic proc w card cath w MCC	Include all	1	0.9912
217	S	Cardiac valve & oth maj cardiothoracic proc w card cath w CC	Include all	2	0.9966
218	S	Cardiac valve & oth maj cardiothoracic proc w card cath w/o CC/MCC	Include all	2	0.9777
219	S	Cardiac valve & oth maj cardiothoracic proc w/o card cath w MCC	Include all	1	1.0066
220	S	Cardiac valve & oth maj cardiothoracic proc w/o card cath w CC	Include all	2	1.0031
221	S	Cardiac valve & oth maj cardiothoracic proc w/o card cath w/o CC/MCC	Include all	2	1.0110
222	S	Cardiac defib implant w cardiac cath w AMI/HF/shock w MCC	Include all	1	0.9970
223	S	Cardiac defib implant w cardiac cath w AMI/HF/shock w/o MCC	Include all	1	1.0281
224	S	Cardiac defib implant w cardiac cath w/o AMI/HF/shock w MCC	Include all	3	1.0127
225	S	Cardiac defib implant w cardiac cath w/o AMI/HF/shock w/o MCC	Include all	3	1.0087
226	S	Cardiac defibrillator implant w/o cardiac cath w MCC	Include all	1	0.9986
227	S	Cardiac defibrillator implant w/o cardiac cath w/o MCC	Include all	1	0.9857
228	S	Other cardiothoracic procedures w MCC	Include all	1	1.0421
229	S	Other cardiothoracic procedures w CC	Include all	2	1.0162
230	S	Other cardiothoracic procedures w/o CC/MCC	Include all	2	1.0448
231	S	Coronary bypass w PTCA w MCC	Include all	1	1.0500
232	S	Coronary bypass w PTCA w/o MCC	Include all	2	1.0343
233	S	Coronary bypass w cardiac cath w MCC	Include all	2	1.0273
234	S	Coronary bypass w cardiac cath w/o MCC	Include all	3	1.0249
235	S	Coronary bypass w/o cardiac cath w MCC	Include all	2	1.0124
236	S	Coronary bypass w/o cardiac cath w/o MCC	Include all	3	1.0260
237	S	Major cardiovasc procedures w MCC	Include all	1	1.0212
238	S	Major cardiovascular procedures w/o MCC	Include all	2	0.9995
239	S	Amputation for circ sys disorders exc upper limb & toe w MCC	Include all	1	1.0060
240	S	Amputation for circ sys disorders exc upper limb & toe w CC	Include all	2	1.0084
241	S	Amputation for circ sys disorders exc upper limb & toe w/o CC/MCC	Include all	2	1.0156
242	S	Permanent cardiac pacemaker implant w MCC	Include all	2	0.9941
243	S	Permanent cardiac pacemaker implant w CC	Include all	2	0.9890
244	S	Permanent cardiac pacemaker implant w/o CC/MCC	Include all	3	0.9977
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MS- DRG	Medical/ Surgical	DRG Title	ICD-9-CM	Severity	Weight
245	S	AICD generator procedures	Include all	2	0.9785
		Perc cardiovasc proc w drug-eluting stent w MCC or 4+			
246	S	vessels/stents	Include all	2	1.0015
247	S	Perc cardiovasc proc w drug-eluting stent w/o MCC	Include all	3	1.0023
248	S	Perc cardiovasc proc w non-drug-eluting stent w MCC or 4+ ves/stents	Include all	2	1.0056
249	S	Perc cardiovasc proc w non-drug-eluting stent w/o MCC	Include all	3	1.0030
250	S	Perc cardiovasc proc w/o coronary artery stent w/o MCC	Include all	3	0.9917
251	S	Perc cardiovasc proc w/o coronary artery stent w/o MCC	Include all	3	1.0023
252	S	Other vascular procedures w MCC	Include all	2	0.9974
253	S	Other vascular procedures w CC	Include all	2	0.9962
254	S	Other vascular procedures w/o CC/MCC	Include all	3	0.7762
255	S	Upper limb & toe amputation for circ system disorders w MCC	Include all	1	0.9809
256	S	Upper limb & toe amputation for circ system disorders w MCC	Include all	2	0.9999
257	S	Upper limb & toe amputation for circ system disorders w/o CC/MCC	Include all	2	1.0027
258	S	Cardiac pacemaker device replacement w MCC	Include all	3	0.9831
259	S	Cardiac pacemaker device replacement w/mos	Include all	3	0.9660
260	S	Cardiac pacemaker revision except device replacement w MCC	Include all	1	0.9955
261	S	Cardiac pacemaker revision except device replacement w CC	Include all	2	0.7733
201	J	Cardiac pacemaker revision except device replacement w/o	moduc dii		0.7007
262	S	CC/MCC	Include all	2	1.0046
263	S	Vein ligation & stripping	Include all	3	0.9194
264	S	Other circulatory system O.R. procedures	Include all	2	0.9927
265	S	AICD lead procedures	Include all	2	0.9537
280	М	Acute myocardial infarction, discharged alive w MCC	Include all	1	0.9897
281	М	Acute myocardial infarction, discharged alive w CC	Include all	2	0.9972
282	М	Acute myocardia infarction, discharged alive w/o CC/MCC	Include all	2	0.9990
283	M	Acute myocardial infarction, expired w MCC	Include all	1	1.0037
284	М	Acute myocardial infarction, expired w CC	Include all	2	1.0127
285	M	Acute myocardial infarction, expired w/o CC/MCC	Include all	2	1.0015
286	M	Circulatory disorders except AMI, w card cath w MCC	Include all	2	1.0001
287	M	Circulatory disorders except AMI, w card cath w/o MCC	Include all	3	1.0027
288	M	Acute & subacute endocarditis w MCC	Include all	1	1.0130
289	M	Acute & subacute endocarditis w CC	Include all	2	0.9788
290	M	Acute & subacute endocarditis w/o CC/MCC	Include all	2	1.0420
291	М	Heart failure & shock w MCC	Include all	1	0.9924
292	M	Heart failure & shock w CC	Include all	2	0.9932
293	M	Heart failure & shock w/o CC/MCC	Include all	2	1.0001
294	M	Deep vein thrombophlebitis w CC/MCC	Include all	3	0.9885
295	M	Deep vein thrombophlebitis w/o CC/MCC	Include all	3	0.9194
296	М	Cardiac arrest, unexplained w MCC	Include all	1	1.0463
297	M	Cardiac arrest, unexplained w CC	Include all	2	1.0389
298	M	Cardiac arrest, unexplained w/o CC/MCC	Include all	2	1.0469
299	M	Peripheral vascular disorders w MCC	Include all	1	1.0024
300	M	Peripheral vascular disorders w CC	Include all	2	0.9960
301	M	Peripheral vascular disorders w/o CC/MCC	Include all	2	0.9987
302	M	Atherosclerosis w MCC	Include all	3	0.9881
303	M	Atherosclerosis w/o MCC	Include all	3	1.0046
304	M	Hypertension w MCC	Include all	3	1.0050
305	M	Hypertension w/o MCC	Include all	3	0.9919
306	M	Cardiac congenital & valvular disorders w MCC	Include all	1	1.0031
307	M	Cardiac congenital & valvular disorders w/o MCC	Include all	2	0.9917

308 M Cardiac arrhythmia & conduction disorders w MCC Include all 309 M Cardiac arrhythmia & conduction disorders w CC Include all 310 M Cardiac arrhythmia & conduction disorders w/o CC/MCC Include all 311 M Angina pectoris Include all 312 M Syncope & collapse Include all 313 M Chest pain Include all 314 M Other circulatory system diagnoses w MCC Include all 315 M Other circulatory system diagnoses w CC Include all	1 2 2 3 2 3 2 2 2	0.9925 0.9890 0.9940 1.0100 0.9925 0.9983
310 M Cardiac arrhythmia & conduction disorders w/o CC/MCC Include all 311 M Angina pectoris Include all 312 M Syncope & collapse Include all 313 M Chest pain Include all 314 M Other circulatory system diagnoses w MCC Include all 315 M Other circulatory system diagnoses w CC Include all	2 3 2 3 2 2 2	0.9940 1.0100 0.9925
311MAngina pectorisInclude all312MSyncope & collapseInclude all313MChest painInclude all314MOther circulatory system diagnoses w MCCInclude all315MOther circulatory system diagnoses w CCInclude all	3 2 3 2 2	1.0100 0.9925
312 M Syncope & collapse Include all 313 M Chest pain Include all 314 M Other circulatory system diagnoses w MCC Include all 315 M Other circulatory system diagnoses w CC Include all	2 3 2 2	0.9925
313 M Chest pain Include all 314 M Other circulatory system diagnoses w MCC Include all 315 M Other circulatory system diagnoses w CC Include all	3 2 2	
314 M Other circulatory system diagnoses w MCC Include all 315 M Other circulatory system diagnoses w CC Include all	2 2	0.9983
315 M Other circulatory system diagnoses w CC Include all	2	
		0.9952
04/		1.0003
316 M Other circulatory system diagnoses w/o CC/MCC Include all	3	1.0018
326 S Stomach, esophageal & duodenal proc w MCC Include all	2	1.0042
327 S Stomach, esophageal & duodenal proc w CC Include all	2	1.0104
328 S Stomach, esophageal & duodenal proc w/o CC/MCC Include all	3	1.0869
329 S Major small & large bowel procedures w MCC Include all	1	1.0028
330 S Major small & large bowel procedures w CC Include all	2	0.9924
331 S Major small & large bowel procedures w/o CC/MCC Include all	2	0.9977
332 S Rectal resection w MCC Include all	1	0.9921
333 S Rectal resection w CC Include all	1	0.9932
334 S Rectal resection w/o CC/MCC Include all	2	1.0082
335 S Peritoneal adhesiolysis w MCC Include all	1	0.9985
336 S Peritoneal adhesiolysis w CC Include all	2	0.9889
337 S Peritoneal adhesiolysis w/o CC/MCC Include all	2	0.9903
338 S Appendectomy w complicated principal diag w MCC Include all	3	1.0279
339 S Appendectomy w complicated principal diag w CC Include all	3	0.9989
340 S Appendectomy w complicated principal diag w/o CC/MCC Include all	3	0.9194
341 S Appendectomy w/o complicated principal diag w MCC Include all	3	1.0241
342 S Appendectomy w/o complicated principal diag w CC Include all	3	1.0306
343 S Appendectomy w/o complicated principal diag w/o CC/MCC Include all	3	1.0507
344 S Minor small & large bowel procedures w MCC Include all	2	1.0197
345 S Minor small & large bowel procedures w CC Include all	2	0.9921
346 S Minor small & large bowel procedures w/o CC/MCC Include all	3	1.1033
347 S Anal & stomal procedures w MCC Include all	1	1.0212
348 S Anal & stomal procedures w CC Include all	2	1.0064
349 S Anal & stomal procedures w/o CC/MCC Include all	2	0.9887
350 S Inquinal & femoral hernia procedures w MCC Include all	3	0.9926
351 S Inquinal & femoral hernia procedures w CC Include all	3	1.0250
352 S Inguinal & femoral hernia procedures w/o CC/MCC Include all	3	1.0986
353 S Hernia procedures except inquinal & femoral w MCC Include all	1	1.0216
354 S Hernia procedures except inguinal & femoral w CC Include all	2	0.9893
355 S Hernia procedures except inguinal & femoral w/o CC/MCC Include all	2	0.9884
356 S Other digestive system O.R. procedures w MCC Include all	2	0.9922
357 S Other digestive system O.R. procedures w CC Include all	2	1.0069
358 S Other digestive system O.R. procedures w/o CC/MCC Include all	3	1.0123
368 M Major esophageal disorders w MCC Include all	1	0.9974
369 M Major esophageal disorders w MCC Include all	2	1.0028
370 M Major esophageal disorders w/o CC/MCC Include all	2	0.9790
371 M Major gastrointestinal disorders & peritoneal infections w MCC Include all	1	0.9865
372 M Major gastrointestinal disorders & peritoneal infections w CC Include all	2	0.9846
373 M Major gastrointestinal disorders & peritoneal infections w/o CC/MCC Include all	2	0.9978
374 M Digestive malignancy w MCC Include all	1	1.0395
375 M Digestive malignancy w CC Include all	2	1.0435
376 M Digestive malignancy w/o CC/MCC Include all	2	1.1168
377 M G.I. hemorrhage w MCC Include all	1	0.9912

MS- DRG	Medical/ Surgical	DRG Title	ICD-9-CM	Severity	Weight
378	M	G.I. hemorrhage w CC	Include all	2	0.9941
379	М	G.I. hemorrhage w/o CC/MCC	Include all	2	0.9980
380	М	Complicated peptic ulcer w MCC	Include all	1	0.9818
381	М	Complicated peptic ulcer w CC	Include all	2	0.9954
382	М	Complicated peptic ulcer w/o CC/MCC	Include all	2	0.9841
383	М	Uncomplicated peptic ulcer w MCC	Include all	3	1.0128
384	М	Uncomplicated peptic ulcer w/o MCC	Include all	3	1.0051
385	М	Inflammatory bowel disease w MCC	Include all	1	0.9752
386	М	Inflammatory bowel disease w CC	Include all	2	0.9763
387	М	Inflammatory bowel disease w/o CC/MCC	Include all	2	0.9850
388	М	G.I. obstruction w MCC	Include all	3	0.9951
389	М	G.I. obstruction w CC	Include all	3	0.9880
390	М	G.I. obstruction w/o CC/MCC	Include all	3	1.0045
391	М	Esophagitis, gastroent & misc digest disorders w MCC	Include all	3	0.9923
392	М	Esophagitis, gastroent & misc digest disorders w/o MCC	Include all	3	0.9893
393	М	Other digestive system diagnoses w MCC	Include all	1	0.9936
394	М	Other digestive system diagnoses w CC	Include all	2	0.9947
395	М	Other digestive system diagnoses w/o CC/MCC	Include all	2	0.9978
405	S	Pancreas, liver & shunt procedures w MCC	Include all	1	0.9987
406	S	Pancreas, liver & shunt procedures w CC	Include all	1	1.0351
407	S	Pancreas, liver & shunt procedures w/o CC/MCC	Include all	2	0.9781
408	S	Biliary tract proc except only cholecyst w or w/o c.d.e. w MCC	Include all	2	1.0310
409	S	Biliary tract proc except only cholecyst w or w/o c.d.e. w CC	Include all	2	1.0462
410	S	Biliary tract proc except only cholecyst w or w/o c.d.e. w/o CC/MCC	Include all	3	0.9194
411	S	Cholecystectomy w c.d.e. w MCC	Include all	1	1.0072
412	S	Cholecystectomy w c.d.e. w CC	Include all	2	0.9852
413	S	Cholecystectomy w c.d.e. w/o CC/MCC	Include all	2	0.9826
414	S	Cholecystectomy except by laparoscope w/o c.d.e. w MCC	Include all	1	1.0116
415	S	Cholecystectomy except by laparoscope w/o c.d.e. w CC	Include all	2	1.0189
416	S	Cholecystectomy except by laparoscope w/o c.d.e. w/o CC/MCC	Include all	2	1.0275
417	S	Laparoscopic cholecystectomy w/o c.d.e. w MCC	Include all	3	0.9976
418	S	Laparoscopic cholecystectomy w/o c.d.e. w CC	Include all	3	1.0108
419	S	Laparoscopic cholecystectomy w/o c.d.e. w/o CC/MCC	Include all	3	1.0160
420	S	Hepatobiliary diagnostic procedures w MCC	Include all	1	1.0215
421	S	Hepatobiliary diagnostic procedures w CC	Include all	2	1.0171
422	S	Hepatobiliary diagnostic procedures w/o CC/MCC	Include all	2	1.1493
423	S	Other hepatobiliary or pancreas O.R. procedures w MCC	Include all	3	1.0280
424	S	Other hepatobiliary or pancreas O.R. procedures w CC	Include all	3	0.9942
425	S	Other hepatobiliary or pancreas O.R. procedures w/o CC/MCC	Include all	3	1.0000
432	М	Cirrhosis & alcoholic hepatitis w MCC	Include all	1	1.0242
433	М	Cirrhosis & alcoholic hepatitis w CC	Include all	2	1.0295
434	М	Cirrhosis & alcoholic hepatitis w/o CC/MCC	Include all	2	1.1493
435	М	Malignancy of hepatobiliary system or pancreas w MCC	Include all	1	1.0344
436	M	Malignancy of hepatobiliary system or pancreas w CC	Include all	2	1.0362
437	M	Malignancy of hepatobiliary system or pancreas w/o CC/MCC	Include all	2	1.0920
438	М	Disorders of pancreas except malignancy w MCC	Include all	1	1.0101
439	М	Disorders of pancreas except malignancy w CC	Include all	2	1.0043
440	М	Disorders of pancreas except malignancy w/o CC/MCC	Include all	2	0.9980
441	М	Disorders of liver except malig,cirr,alc hepa w MCC	Include all	1	1.0316
442	М	Disorders of liver except malig,cirr,alc hepa w CC	Include all	2	1.0179
443	М	Disorders of liver except malig,cirr,alc hepa w/o CC/MCC	Include all	2	1.0521
444	М	Disorders of the biliary tract w MCC	Include all	3	1.0151

MS- DRG	Medical/ Surgical	DRG Title	ICD-9-CM	Severity	Weight
445	М	Disorders of the biliary tract w CC	Include all	3	0.9962
446	M	Disorders of the biliary tract w/o CC/MCC	Include all	3	0.9670
453	S	Combined anterior/posterior spinal fusion w MCC	Include all	1	1.0079
454	S	Combined anterior/posterior spinal fusion w CC	Include all	2	0.9913
455	S	Combined anterior/posterior spinal fusion w/o CC/MCC	Include all	2	0.9854
456	S	Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w MCC	Include all	1	1.0180
457	S	Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w CC	Include all	2	0.9783
458	S	Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w/o CC/MCC	Include all	2	0.9960
459	S	Spinal fusion except cervical w MCC	Include all	1	0.9993
460	S	Spinal fusion except cervical w/o MCC	Include all	2	0.9961
461	S	Bilateral or multiple major joint procs of lower extremity w MCC	Include all	1	0.9805
462	S	Bilateral or multiple major joint procs of lower extremity w/o MCC	Include all	2	0.9858
463	S	Wnd debrid & skn grft exc hand, for musculo-conn tiss dis w MCC	Include all	1	1.0143
464	S	Wnd debrid & skn grft exc hand, for musculo-conn tiss dis w CC	Include all	2	1.0144
465	S	Wnd debrid & skn grft exc hand, for musculo-conn tiss dis w/o CC/MCC	Include all	2	1.0207
466	S	Revision of hip or knee replacement w MCC	Include all	3	0.9877
467	S	Revision of hip or knee replacement w CC	Include all	3	0.9804
468	S	Revision of hip or knee replacement w/o CC/MCC	Include all	3	1.0053
469	S	Major joint replacement or reattachment of lower extremity w MCC	Include all	1	0.9931
470	S	Major joint replacement or reattachment of lower extremity w/o MCC	Include all	2	0.9947
471	S	Cervical spinal fusion w MCC	Include all	1	1.0117
472	S	Cervical spinal fusion w CC	Include all	2	1.0022
473	S	Cervical spinal fusion w/o CC/MCC	Include all	2	1.0157
474	S	Amputation for musculoskeletal sys & conn tissue dis w MCC	Include all	1	1.0002
475	S	Amputation for musculoskeletal sys & conn tissue dis w CC	Include all	2	0.9919
476	S	Amputation for musculoskeletal sys & conn tissue dis w/o CC/MCC	Include all	2	1.0536
477	S	Biopsies of musculoskeletal system & connective tissue w MCC	Include all	3	0.9957
478	S	Biopsies of musculoskeletal system & connective tissue w CC	Include all	3	0.9811
479	S	Biopsies of musculoskeletal system & connective tissue w/o CC/MCC	Include all	3	0.9777
480	S	Hip & femur procedures except major joint w MCC	Include all	2	0.9986
481	S	Hip & femur procedures except major joint w CC	Include all	2	0.9957
482	S	Hip & femur procedures except major joint w/o CC/MCC	Include all	3	0.9930
483	S	Major joint & limb reattachment proc of upper extremity w CC/MCC	Include all	1	0.9839
484	S	Major joint & limb reattachment proc of upper extremity w/o CC/MCC	Include all	1	1.0018
485	S	Knee procedures w pdx of infection w MCC	Include all	1	0.9702
486	S	Knee procedures w pdx of infection w CC	Include all	2	0.9842
487	S	Knee procedures w pdx of infection w/o CC/MCC	Include all	2	1.0238
488	S	Knee procedures w/o pdx of infection w CC/MCC	Include all	3	1.0073
489	S	Knee procedures w/o pdx of infection w/o CC/MCC	Include all	3	0.9194
490	S	Back & neck proc exc spinal fusion w CC/MCC or disc device/neurostim	Include all	2	0.9966
491	S	Back & neck proc exc spinal fusion w/o CC/MCC	Include all	3	1.0116
492	S	Lower extrem & humer proc except hip,foot,femur w MCC	Include all	2	1.0483
493	S	Lower extrem & humer proc except hip,foot,femur w CC	Include all	2	1.0329
494	S	Lower extrem & humer proc except hip,foot,femur w/o CC/MCC	Include all	3	1.0485
495	S	Local excision & removal int fix devices exc hip & femur w MCC	Include all	2	1.0395
496	S	Local excision & removal int fix devices exc hip & femur w CC Local excision & removal int fix devices exc hip & femur w/o	Include all	2	0.9973
497	S	CC/MCC .	Include all	3	0.9832
498	S	Local excision & removal int fix devices of hip & femur w CC/MCC	Include all	3	1.0268

MS- DRG	Medical/ Surgical	DRG Title	ICD-9-CM	Severity	Weight
499	S	Local excision & removal int fix devices of hip & femur w/o CC/MCC	Include all	3	0.9194
500	S	Soft tissue procedures w MCC	Include all	3	0.9903
501	S	Soft tissue procedures w CC	Include all	3	0.9918
502	S	Soft tissue procedures w/o CC/MCC	Include all	3	1.0709
503	S	Foot procedures w MCC	Include all	3	0.9757
504	S	Foot procedures w CC	Include all	3	1.0186
505	S	Foot procedures w/o CC/MCC	Include all	3	0.9890
506	S	Major thumb or joint procedures	Include all	3	1.0142
507	S	Major shoulder or elbow joint procedures w CC/MCC	Include all	2	1.0703
508	S	Major shoulder or elbow joint procedures w/o CC/MCC	Include all	2	1.0896
509	S	Arthroscopy	Include all	3	1.0315
510	S	Shoulder, elbow or forearm proc, exc major joint proc w MCC	Include all	1	1.0400
511	S	Shoulder,elbow or forearm proc,exc major joint proc w CC	Include all	2	1.0348
512	S	Shoulder, elbow or forearm proc, exc major joint proc w/o CC/MCC	Include all	2	1.0275
513	S	Hand or wrist proc, except major thumb or joint proc w CC/MCC	Include all	3	1.0056
514	S	Hand or wrist proc, except major thumb or joint proc w/o CC/MCC	Include all	3	0.9194
515	S	Other musculoskelet sys & conn tiss O.R. proc w MCC	Include all	3	1.0019
516	S	Other musculoskelet sys & conn tiss O.R. proc w CC	Include all	3	0.9880
517	S	Other musculoskelet sys & conn tiss O.R. proc w/o CC/MCC	Include all	3	0.9925
533	M	Fractures of femur w MCC	Include all	1	0.9958
534	M	Fractures of femur w/o MCC	Include all	2	0.9917
535	M	Fractures of hip & pelvis w MCC	Include all	1	0.9993
536	M	Fractures of hip & pelvis w/o MCC	Include all	2	1.0019
537	M	Sprains, strains, & dislocations of hip, pelvis & thigh w CC/MCC	Include all	3	0.9617
538	M	Sprains, strains, & dislocations of hip, pelvis & thigh w/o CC/MCC	Include all	3	1.1493
539	M	Osteomyelitis w MCC	Include all	3	0.9946
540	M	Osteomyelitis w CC	Include all	3	0.9932
541	M	Osteomyelitis w/o CC/MCC	Include all	3	1.0123
542	M	Pathological fractures & musculoskelet & conn tiss malig w MCC	Include all	1	1.0093
543	M	Pathological fractures & musculoskelet & conn tiss malig w MCC	Include all	2	0.9882
544	M	Pathological fractures & musculoskelet & conn tiss malig w/o CC/MCC	Include all	2	0.9887
545	М	Connective tissue disorders w MCC	Include all	3	0.9977
546	М	Connective tissue disorders w CC	Include all	3	0.9872
547	М	Connective tissue disorders w/o CC/MCC	Include all	3	0.9761
548	М	Septic arthritis w MCC	Include all	1	0.9902
549	М	Septic arthritis w CC	Include all	2	0.9775
550	М	Septic arthritis w/o CC/MCC	Include all	2	0.9747
551	М	Medical back problems w MCC	Include all	3	1.0041
552	М	Medical back problems w/o MCC	Include all	3	1.0109
553	М	Bone diseases & arthropathies w MCC	Include all	2	0.9908
554	М	Bone diseases & arthropathies w/o MCC	Include all	3	0.9946
555	М	Signs & symptoms of musculoskeletal system & conn tissue w MCC	Include all	3	0.9931
556	M	Signs & symptoms of musculoskeletal system & conn tissue w/o MCC	Include all	3	0.9868
557	M	Tendonitis, myositis & bursitis w MCC	Include all	3	0.9943
558	M	Tendonitis, myositis & bursitis w/o MCC	Include all	3	0.9953
559	M	Aftercare, musculoskeletal system & connective tissue w MCC	Include all	3	0.9955
560	M	Aftercare, musculoskeletal system & connective tissue w CC	Include all	3	0.9709
561	M	Aftercare, musculoskeletal system & connective tissue w/o CC/MCC	Include all	3	0.9868
562	M	Fx, sprn, strn & disl except femur, hip, pelvis & thigh w MCC	Include all	3	1.0026
563	M	Fx, sprn, strn & disl except femur, hip, pelvis & thigh w/o MCC	Include all	3	0.9979
505	IVI	1 - A, Spiri, Stiri & districted from the politic & triight with well	morado dii	J	0.7717

MS- DRG	Medical/ Surgical	DRG Title	ICD-9-CM	Severity	Weight
564	М	Other musculoskeletal sys & connective tissue diagnoses w MCC	Include all	3	1.0326
565	M	Other musculoskeletal sys & connective tissue diagnoses w CC	Include all	3	0.9699
		Other musculoskeletal sys & connective tissue diagnoses w/o			
566	M	CC/MCC	Include all	3	1.0288
570	S	Skin debridement with MCC	Include all	1 1	
571	S	Skin debridement with CC	Include all	2	
572	S	Skin debridement without CC/MCC	Include all	2	
573	S	Skin graft for skin ulcer or cellulitis w MCC	Include all	1	0.9930
574	S	Skin graft for skin ulcer or cellulitis w CC	Include all	2	0.9848
575	S	Skin graft for skin ulcer or cellulitis w/o CC/MCC	Include all	2	1.0190
576	S	Skin graft except for skin ulcer or cellulitis w MCC	Include all	1	0.9989
577	S	Skin graft except for skin ulcer or cellulitis w CC	Include all	2	1.0327
578	S	Skin graft except for skin ulcer or cellulitis w/o CC/MCC	Include all	2	1.0100
579	S	Other skin, subcut tiss & breast proc w MCC	Include all	2	0.9986
580	S	Other skin, subcut tiss & breast proc w CC	Include all	2	0.9990
581	S	Other skin, subcut tiss & breast proc w/o CC/MCC	Include all	3	1.0153
582	S	Mastectomy for malignancy w CC/MCC	Include all	2	1.0062
583	S	Mastectomy for malignancy w/o CC/MCC	Include all	2	0.9857
584	S	Breast biopsy, local excision & other breast procedures w CC/MCC	Include all	2	0.9572
		Breast biopsy, local excision & other breast procedures w/o			
585	S	CC/MCC	Include all	3	0.9194
592	М	Skin ulcers w MCC	Include all	1	1.0063
593	М	Skin ulcers w CC	Include all	2	0.9877
594	М	Skin ulcers w/o CC/MCC	Include all	2	0.9913
595	М	Major skin disorders w MCC	Include all	1	0.9911
596	М	Major skin disorders w/o MCC	Include all	2	1.0050
597	М	Malignant breast disorders w MCC	Include all	1	1.0858
598	М	Malignant breast disorders w CC	Include all	2	1.1274
599	М	Malignant breast disorders w/o CC/MCC	Include all	2	1.0616
600	М	Non-malignant breast disorders w CC/MCC	Include all	3	0.9828
601	М	Non-malignant breast disorders w/o CC/MCC	Include all	3	0.9194
602	М	Cellulitis w MCC	Include all	1	0.9864
603	М	Cellulitis w/o MCC	Include all	2	0.9899
604	М	Trauma to the skin, subcut tiss & breast w MCC	Include all	1	1.0284
605	М	Trauma to the skin, subcut tiss & breast w/o MCC	Include all	2	1.0224
606	М	Minor skin disorders w MCC	Include all	3	1.0095
607	М	Minor skin disorders w/o MCC	Include all	3	0.9913
614	S	Adrenal & pituitary procedures w CC/MCC	Include all	2	0.9727
615	S	Adrenal & pituitary procedures w/o CC/MCC	Include all	2	1.0280
616	S	Amputat of lower limb for endocrine,nutrit,& metabol dis w MCC	Include all	1	1.0195
617	S	Amputat of lower limb for endocrine, nutrit, & metabol dis w CC	Include all	2	1.0106
017	J	Amputat of lower limb for endocrine, nutrit, & metabol dis w/o	molade dii		1.0100
618	S	CC/MCC	Include all	2	0.9194
619	S	O.R. procedures for obesity w MCC	Include all	1	0.9194
620	S	O.R. procedures for obesity w CC	Include all	2	0.9629
621	S	O.R. procedures for obesity w/o CC/MCC	Include all	2	1.1493
622	S	Skin grafts & wound debrid for endoc, nutrit & metab dis w MCC	Include all	1	0.9851
623	S	Skin grafts & wound debrid for endoc, nutrit & metab dis w CC	Include all	2	0.9799
	-	Skin grafts & wound debrid for endoc, nutrit & metab dis w/o			
624	S	СС/ЙСС	Include all	2	1.0038
625	S	Thyroid, parathyroid & thyroglossal procedures w MCC	Include all	1	0.9707
626	S	Thyroid, parathyroid & thyroglossal procedures w CC	Include all	2	1.0224
627	S	Thyroid, parathyroid & thyroglossal procedures w/o CC/MCC	Include all	2	0.9924

MS- DRG	Medical/ Surgical	DRG Title	ICD-9-CM	Severity	Weight
628	S	Other endocrine, nutrit & metab O.R. proc w MCC	Include all	1	0.9890
629	S	Other endocrine, nutrit & metab O.R. proc w CC	Include all	2	1.0141
630	S	Other endocrine, nutrit & metab O.R. proc w/o CC/MCC	Include all	2	0.9986
637	M	Diabetes w MCC	Include all	3	1.0031
638	M	Diabetes w CC	Include all	3	0.9961
639	M	Diabetes w/o CC/MCC	Include all	3	1.0002
640	M	Misc disorders of nutrition, metabolism, fluids/electrolyes w MCC	Include all	3	0.9982
641	M	Misc disorders of nutrition, metabolism, fluids/electrolyes w/o MCC	Include all	3	0.9932
642	M	Inborn and other disorders of metabolism	Include all	3	0.9978
643	М	Endocrine disorders w MCC	Include all	3	1.0012
644	М	Endocrine disorders w CC	Include all	3	0.9900
645	M	Endocrine disorders w/o CC/MCC	Include all	3	0.9889
652	S	Kidney transplant	Include all	1	0.9789
653	S	Major bladder procedures w MCC	Include all	1	0.9827
654	S	Major bladder procedures w CC	Include all	2	1.0247
655	S	Major bladder procedures w/o CC/MCC	Include all	2	1.1277
656	S	Kidney & ureter procedures for neoplasm w MCC	Include all	1	1.0144
657	S	Kidney & ureter procedures forneoplasm w CC	Include all	2	1.0053
658	S	Kidney & ureter procedures for neoplasm w/o CC/MCC	Include all	2	1.0198
659	S	Kidney & ureter procedures for non-neoplasm w MCC	Include all	2	0.9892
660	S	Kidney & ureter procedures for non-neoplasm w CC	Include all	2	1.0194
661	S	Kidney & ureter procedures for non-neoplasm w/o CC/MCC	Include all	3	1.0907
662	S	Minor bladder procedures w MCC	Include all	3	1.0016
663	S	Minor bladder procedures w CC	Include all	3	0.9875
664	S	Minor bladder procedures w/o CC/MCC	Include all	3	1.0343
665	S	Prostatectomy w MCC	Include all	3	0.9812
666	S	Prostatectomy w CC	Include all	3	1.0287
667	S	Prostatectomy w/o CC/MCC	Include all	3	0.9590
668	S	Transurethral procedures w MCC	Include all	3	0.9937
669	S	Transurethral procedures w CC	Include all	3	0.9872
670	S	Transurethral procedures w/o CC/MCC	Include all	3	0.9692
671	S	Urethral procedures w.C.C/MCC	Include all	3	0.9825
672	S	Urethral procedures w/o CC/MCC	Include all	3	1.0677
673	S	Other kidney & urinary tract procedures w MCC	Include all	3	0.9936
674	S	Other kidney & urinary tract procedures w Mice	Include all	3	0.9809
675	S	Other kidney & urinary tract procedures w/o CC/MCC	Include all	3	0.9791
682	M	Renal failure w MCC	Include all	1	1.0028
683	M	Renal failure w CC	Include all	2	0.9983
684	M	Renal failure w/o CC/MCC	Include all	2	1.0073
685	M	Admit for renal dialysis	Include all	3	0.9958
686	M	Kidney & urinary tract neoplasms w MCC	Include all	2	1.0853
687	M		Include all	2	1.0510
688	M	Kidney & urinary tract neoplasms w CC Kidney & urinary tract neoplasms w/o CC/MCC	Include all	3	1.0891
689	M			3	
690	M	Kidney & urinary tract infections w MCC Kidney & urinary tract infections w/o MCC	Include all Include all	3	0.9861
4					0.9868
691	M	Urinary stones w esw lithotripsy w CC/MCC	Include all	3	0.9963
692 693	M	Urinary stones w esw lithotripsy w/o CC/MCC	Include all	3	0.9194
4	M	Urinary stones w/o esw lithotripsy w MCC	Include all		0.9946
694	M	Urinary stones w/o esw lithotripsy w/o MCC	Include all	3	0.9919
695	M	Kidney & urinary tract signs & symptoms w MCC	Include all	3	1.0007
696	M	Kidney & urinary tract signs & symptoms w/o MCC	Include all	3	0.9867
697	M	Urethral stricture	Include all	3	0.9522

MS- DRG	Medical/ Surgical	DRG Title	ICD-9-CM	Severity	Weight
698	М	Other kidney & urinary tract diagnoses w MCC	Include all	3	0.9886
699	М	Other kidney & urinary tract diagnoses w CC	Include all	3	0.9922
700	М	Other kidney & urinary tract diagnoses w/o CC/MCC	Include all	3	0.9773
707	S	Major male pelvic procedures w CC/MCC	Include all	2	1.0544
708	S	Major male pelvic procedures w/o CC/MCC	Include all	2	1.0123
709	S	Penis procedures w CC/MCC	Include all	3	1.1087
710	S	Penis procedures w/o CC/MCC	Include all	3	0.9194
711	S	Testes procedures w CC/MCC	Include all	2	1.0720
712	S	Testes procedures w/o CC/MCC	Include all	3	0.9194
713	S	Transurethral prostatectomy w CC/MCC	Include all	2	0.9913
714	S	Transurethral prostatectomy w/o CC/MCC	Include all	3	0.9947
715	S	Other male reproductive system O.R. proc for malignancy w	Include all	2	1.0332
713	3	Other male reproductive system O.R. proc for malignancy w/o	ilicidde all		1.0332
716	S	CC/MCC Other male reproductive system O.R. proc exc malignancy w	Include all	2	1.0071
717	S	CC/MCC	Include all	3	1.0106
718	S	Other male reproductive system O.R. proc exc malignancy w/o CC/MCC	Include all	3	0.9194
722	М	Malignancy, male reproductive system w MCC	Include all	1	1.1297
723	М	Malignancy, male reproductive system w CC	Include all	2	1.0935
724	М	Malignancy, male reproductive system w/o CC/MCC	Include all	2	1.1493
725	М	Benign prostatic hypertrophy w MCC	Include all	3	1.0409
726	М	Benign prostatic hypertrophy w/o MCC	Include all	3	1.0095
727	М	Inflammation of the male reproductive system w MCC	Include all	3	0.9858
728	М	Inflammation of the male reproductive system w/o MCC	Include all	3	1.0037
729	М	Other male reproductive system diagnoses w CC/MCC	Include all	3	0.9761
730	M	Other male reproductive system diagnoses w/o CC/MCC	Include all	3	1.1492
734	S	Pelvic evisceration, rad hysterectomy & rad vulvectomy w CC/MCC	Include all	1	1.0170
735	S	Pelvic evisceration, rad hysterectomy & rad vulvectomy w/o CC/MCC	Include all	1	0.9960
736	S	Uterine & adnexa proc for ovarian or adnexal malignancy w MCC	Include all	1	0.9912
737	S	Uterine & adnexa proc for ovarian or adnexal malignancy w CC	Include all	2	0.9912
738	S	Uterine & adnexa proc for ovarian or adnexal malignancy w/o CC/MCC	Include all	2	0.9894
	S			1	
739		Uterine, adnexa proc for non-ovarian/adnexal malig w MCC	Include all	1	1.0439
740	S	Uterine, adnexa proc for non-ovarian/adnexal malig w CC	Include all	2	0.9756
741	S	Uterine,adnexa proc for non-ovarian/adnexal malig w/o CC/MCC	Include all	2	0.9861
742	S	Uterine & adnexa proc for non-malignancy w CC/MCC	Include all	2	0.9847
743	S	Uterine & adnexa proc for non-malignancy w/o CC/MCC	Include all	3	1.1033
744	S	D&C, conization, laparoscopy & tubal interruption w CC/MCC	Include all	2	0.9994
745	S	D&C, conization, laparoscopy & tubal interruption w/o CC/MCC	Include all	3	0.9194
746	S	Vagina, cervix & vulva procedures w CC/MCC	Include all	3	0.9841
747	S	Vagina, cervix & vulva procedures w/o CC/MCC	Include all	3	1.0204
748	S	Female reproductive system reconstructive procedures	Include all	3	0.9663
749	S	Other female reproductive system O.R. procedures w CC/MCC	Include all	2	0.9994
750	S	Other female reproductive system O.R. procedures w/o CC/MCC	Include all	2	0.9194
754	M	Malignancy, female reproductive system w MCC	Include all	1	1.0645
755	M	Malignancy, female reproductive system w CC	Include all	2	1.0467
756	M	Malignancy, female reproductive system w/o CC/MCC	Include all	2	1.1493
757	M	Infections, female reproductive system w MCC	Include all	3	0.9661
758	M	Infections, female reproductive system w CC	Include all	3	0.9792
759	М	Infections, female reproductive system w/o CC/MCC	Include all	3	0.9771

MS- DRG	Medical/ Surgical	DRG Title	ICD-9-CM	Severity	Weight
760	M	Menstrual & other female reproductive system disorders w CC/MCC	Include all	3	0.9926
		Menstrual & other female reproductive system disorders w/o			
761	M	CC/MCC	Include all	3	0.9751
799	S	Splenectomy w MCC	Include all	1	1.0769
800	S	Splenectomy w CC	Include all	2	1.0012
801	S	Splenectomy w/o CC/MCC	Include all	2	1.0459
802	S	Other O.R. proc of the blood & blood forming organs w MCC	Include all	3	0.9936
803	S	Other O.R. proc of the blood & blood forming organs w CC	Include all	3	1.0433
804	S	Other O.R. proc of the blood & blood forming organs w/o CC/MCC	Include all	3	1.1383
808	M	Major hematol/immun diag exc sickle cell crisis & coagul w MCC	Include all	1	0.9949
809	M	Major hematol/immun diag exc sickle cell crisis & coagul w CC	Include all	2	0.9938
810	М	Major hematol/immun diag exc sickle cell crisis & coagul w/o CC/MCC	Include all	2	0.9901
811	M	Red blood cell disorders w MCC	Include all	3	0.9963
812	M	Red blood cell disorders w/o MCC	Include all	3	0.9929
813	M	Coagulation disorders	Include all	2	1.0041
814	M	Reticuloendothelial & immunity disorders w MCC	Include all	1	0.9714
815	M	Reticuloendothelial & immunity disorders w CC	Include all	2	0.9922
816	M	Reticuloendothelial & immunity disorders w/o CC/MCC	Include all	2	1.0309
820	S	Lymphoma & leukemia w major O.R. procedure w MCC	Include all	1	1.0270
821	S	Lymphoma & leukemia w major O.R. procedure w MCC	Include all	2	1.0133
822	S	Lymphoma & leukemia w major O.R. procedure w/o CC/MCC	Include all	2	1.0557
823	S	Lymphoma & non-acute leukemia w other O.R. proc w MCC	Include all	1	1.0046
824	S	Lymphoma & non-acute leukemia w other O.R. proc w MCC	Include all	2	1.0103
825	S	Lymphoma & non-acute leukemia w other O.R. proc w/o CC/MCC	Include all	2	1.0086
826	S	Myeloprolif disord or poorly diff neopl w maj O.R. proc w MCC	Include all	1	1.0504
827	S	Myeloprolif disord or poorly diff neopl w maj O.R. proc w MCC	Include all	2	0.9915
828	S	Myeloprolif disord or poorly diff neopl w maj O.R. proc w/o CC/MCC	Include all	2	1.0458
829	S	Myeloprolif disord or poorly diff neopl w other O.R. proc w CC/MCC	Include all	2	1.0438
027	3	Myeloprolif disord or poorly diff neopl w other O.R. proc w/o	include all		1.0170
830	S	CC/MCC	Include all	2	0.9732
834	M	Acute leukemia w/o major O.R. procedure w MCC	Include all	1	1.0685
835	M	Acute leukemia w/o major O.R. procedure w CC	Include all	2	1.0323
836	M	Acute leukemia w/o major O.R. procedure w/o CC/MCC	Include all	2	1.0471
		Chemo w acute leukemia as sdx or w high dose chemo agent w			
837	M	MCC	Include all	1	0.9826
838	M	Chemo w acute leukemia as sdx w CC or high dose chemo agent	Include all	2	1.0787
839	M	Chemo w acute leukemia as sdx w/o CC/MCC	Include all	2	1.0409
840	M	Lymphoma & non-acute leukemia w MCC	Include all	1	1.0244
841	M	Lymphoma & non-acute leukemia w CC	Include all	2	1.0180
842	М	Lymphoma & non-acute leukemia w/o CC/MCC	Include all	2	1.0554
843	М	Other myeloprolif dis or poorly diff neopl diag w MCC	Include all	3	1.0410
844	М	Other myeloprolif dis or poorly diff neopl diag w CC	Include all	3	1.0158
845	M	Other myeloprolif dis or poorly diff neopl diag w/o CC/MCC	Include all	3	1.0626
846	M	Chemotherapy w/o acute leukemia as secondary diagnosis w MCC	Include all	3	0.9981
847	M	Chemotherapy w/o acute leukemia as secondary diagnosis w CC	Include all	3	1.0112
0.40	N 4	Chemotherapy w/o acute leukemia as secondary diagnosis w/o	Include all	2	1 1 402
848 849	M	CC/MCC Padiothorany	Include all	3	1.1493
4	M S	Radiotherapy	Include all		0.9856
853 054	S	Infectious & parasitic diseases w O.R. procedure w MCC	Include all	1	1.0047
854		Infectious & parasitic diseases w O.R. procedure w CC	Include all	2	1.0062
855	S	Infectious & parasitic diseases w O.R. procedure w/o CC/MCC	Include all	2	1.0001
856	S	Postoperative or post-traumatic infections w O.R. proc w MCC	Include all	1	0.9780

MS- DRG	Medical/ Surgical	DRG Title	ICD-9-CM	Severity	Weight
857	S	Postoperative or post-traumatic infections w O.R. proc w CC	Include all	2	0.9985
858	S	Postoperative or post-traumatic infections w O.R. proc w/o CC/MCC	Include all	2	0.9822
862	M	Postoperative & post-traumatic infections w MCC	Include all	1	1.0163
863	M	Postoperative & post-traumatic infections w/o MCC	Include all	2	0.9923
864	M	Fever of unknown origin	Include all	2	0.9862
865	M	Fever	Include all	1	0.9903
866	М	Viral illness w/o MCC	Include all	2	0.9805
867	М	Other infectious & parasitic diseases diagnoses w MCC	Include all	1	1.0096
868	М	Other infectious & parasitic diseases diagnoses w CC	Include all	2	0.9725
869	М	Other infectious & parasitic diseases diagnoses w/o CC/MCC	Include all	2	1.0451
870	М	Septicemia or severe sepsis w MV 96+ hours	Include all	1	1.0052
871	M	Septicemia or severe sepsis w/o MV 96+ hours w MCC	Include all	1	1.0022
872	М	Septicemia or severe sepsis w/o MV 96+ hours w/o MCC	Include all	1	0.9954
876	S	O.R. procedure w principal diagnoses of mental illness	Include all	3	1.0256
880	М	Acute adjustment reaction & psychosocial dysfunction	Include all	3	0.9874
881	M	Depressive neuroses	Include all	3	0.9959
882	M	Neuroses except depressive	Include all	3	0.9960
883	M	Disorders of personality & impulse control	Include all	3	1.0459
884	M	Organic disturbances & mental retardation	Include all	3	1.0011
885	M	Psychoses	Include all	3	1.0085
886	M	Behavioral & developmental disorders	Include all	3	0.9638
887	M	Other mental disorder diagnoses	Include all	3	1.1400
894	M	Alcohol/drug abuse or dependence, left ama	Include all	3	1.1493
895	M	Alcohol/drug abuse or dependence w rehabilitation therapy	Include all	3	1.1493
896	M	Alcohol/drug abuse or dependence w/o rehabilitation therapy w MCC	Include all	3	1.0039
897	M	Alcohol/drug abuse or dependence w/o rehabilitation therapy w/o MCC	Include all	3	1.0145
901	S	Wound debridements for injuries w MCC	Include all	1	0.9878
902	S	Wound debridements for injuries w CC	Include all	2	0.9941
903	S	Wound debridements for injuries w/o CC/MCC	Include all	2	1.0123
904	S	Skin grafts for injuries w CC/MCC	Include all	2	1.0172
905	S	Skin grafts for injuries w/o CC/MCC	Include all	2	1.0259
906	S	Hand procedures for injuries	Include all	3	1.0113
907	S	Other O.R. procedures for injuries w MCC	Include all	1	1.0084
908	S	Other O.R. procedures for injuries w CC	Include all	2	1.0069
909	S	Other O.R. procedures for injuries w/o CC/MCC	Include all	2	0.9949
913	М	Traumatic injury w MCC	Include all	1	1.0112
914	М	Traumatic injury w/o MCC	Include all	2	1.0105
915	M	Allergic reactions w MCC	Include all	3	1.0424
916	М	Allergic reactions w/o MCC	Include all	3	0.9983
917	M	Poisoning & toxic effects of drugs w MCC	Include all	2	0.9885
918	M	Poisoning & toxic effects of drugs w/o MCC	Include all	3	1.0058
919	M	Complications of treatment w MCC	Include all	3	0.9889
920	M	Complications of treatment w CC	Include all	3	1.0102
921	M	Complications of treatment w/o CC/MCC	Include all	3	0.9682
922	M	Other injury, poisoning & toxic effect diag w MCC	Include all	3	1.0579
923	M	Other injury, poisoning & toxic effect diag w/wec	Include all	3	1.0225
927	S	Extensive burns or full thickness burns w MV 96+ hrs w skin graft	Include all	1	1.1470
928	S	Full thickness burn w skin graft or inhal inj w CC/MCC	Include all	1	1.0076
929	S	Full thickness burn w skin graft or inhal inj w/o CC/MCC	Include all	2	0.9865
933	M	Extensive burns or full thickness burns w MV 96+ hrs w/o skin graft	Include all	1	1.0998
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MS- DRG	Medical/ Surgical	DRG Title	ICD-9-CM	Severity	Weight
934	М	Full thickness burn w/o skin grft or inhal inj	Include all	2	1.0266
935	М	Non-extensive burns	Include all	2	1.0103
939	S	O.R. proc w diagnoses of other contact w health services w MCC	Include all	3	0.9748
940	S	O.R. proc w diagnoses of other contact w health services w CC	Include all	3	0.9991
941	S	O.R. proc w diagnoses of other contact w health services w/o CC/MCC	Include all	3	1.1129
945	М	Rehabilitation w CC/MCC	Include all	3	1.0011
946	М	Rehabilitation w/o CC/MCC	Include all	3	1.0180
947	М	Signs & symptoms w MCC	Include all	3	1.0043
948	М	Signs & symptoms w/o MCC	Include all	3	0.9937
949	М	Aftercare w CC/MCC	Include all	3	0.9586
950	М	Aftercare w/o CC/MCC	Include all	3	0.9654
951	М	Other factors influencing health status	Include all	3	1.1493
955	S	Craniotomy for multiple significant trauma	Include all	1	1.1242
956	S	Limb reattachment, hip & femur proc for multiple significant trauma	Include all	1	1.0462
957	S	Other O.R. procedures for multiple significant trauma w MCC	Include all	1	1.1493
958	S	Other O.R. procedures for multiple significant trauma w CC	Include all	2	1.1493
959	S	Other O.R. procedures for multiple significant trauma w/o CC/MCC	Include all	2	1.1493
963	М	Other multiple significant trauma w MCC	Include all	1	1.1493
964	М	Other multiple significant trauma w CC	Include all	2	1.1493
965	М	Other multiple significant trauma w/o CC/MCC	Include all	2	1.1493
969	S	HIV w extensive O.R. procedure w MCC	Include all	1	0.9194
970	S	HIV w extensive O.R. procedure w/o MCC	Include all	1	1.0000
974	М	HIV w major related condition w MCC	Include all	1	1.0229
975	М	HIV w major related condition w CC	Include all	1	1.0126
976	М	HIV w major related condition w/o CC/MCC	Include all	1	1.0288
977	М	HIV w or w/o other related condition	Include all	2	1.1222
981	S	Extensive O.R. procedure unrelated to principal diagnosis w MCC	Include all	1	1.0080
982	S	Extensive O.R. procedure unrelated to principal diagnosis w CC	Include all	2	1.0152
983	S	Extensive O.R. procedure unrelated to principal diagnosis w/o CC/MCC	Include all	2	0.9938
984	S	Prostatic O.R. procedure unrelated to principal diagnosis w MCC	Include all	3	0.9920
985	S	Prostatic O.R. procedure unrelated to principal diagnosis w CC	Include all	3	1.0057
986	S	Prostatic O.R. procedure unrelated to principal diagnosis w/o CC/MCC	Include all	3	1.1493
987	S	Non-extensive O.R. proc unrelated to principal diagnosis w MCC	Include all	3	0.9923
988	S	Non-extensive O.R. proc unrelated to principal diagnosis w CC	Include all	3	1.0038
989	S	Non-extensive O.R. proc unrelated to principal diagnosis w/o CC/MCC	Include all	3	1.0295

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	0.9712
735	S	Pelvic evisceration, rad hysterectomy & rad vulvectomy w/o CC/MCC	Include all	1	1.2389
736	S	Uterine & adnexa proc for ovarian or adnexal malignancy w MCC	Include all	1	0.6515
737	S	Uterine & adnexa proc for ovarian or adnexal malignancy w CC	Include all	2	0.8471
738	S	Uterine & adnexa proc for ovarian or adnexal malignancy w/o CC/MCC	Include all	2	1.0508
739	S	Uterine,adnexa proc for non-ovarian/adnexal malig w MCC	Include all	1	0.5641
740	S	Uterine,adnexa proc for non-ovarian/adnexal malig w CC	Include all	2	0.7085

741	S	Uterine,adnexa proc for non-ovarian/adnexal malig w/o CC/MCC	Include all	2	0.7713
742	S	Uterine & adnexa proc for non-malignancy w CC/MCC	Include all	2	1.3507
743	S	Uterine & adnexa proc for non-malignancy w/o CC/MCC	Include all	3	0.6454
746	S	Vagina, cervix & vulva procedures w CC/MCC	Include all	3	0.6121
747	S	Vagina, cervix & vulva procedures w/o CC/MCC	Include all	3	0.6304
749	S	Other female reproductive system O.R. procedures w CC/MCC	Include all	2	0.9216
750	S	Other female reproductive system O.R. procedures w/o CC/MCC	Include all	2	1.3507
754	М	Malignancy, female reproductive system w MCC	Include all	1	0.6124
755	М	Malignancy, female reproductive system w CC	Include all	2	0.6507
756	М	Malignancy, female reproductive system w/o CC/MCC	Include all	2	0.7642
757	М	Infections, female reproductive system w MCC	Include all	3	0.4724
758	М	Infections, female reproductive system w CC	Include all	3	0.5494
759	М	Infections, female reproductive system w/o CC/MCC	Include all	3	0.5677
760	М	Menstrual & other female reproductive system disorders w CC/MCC	Include all	3	0.5535
7/4		Menstrual & other female reproductive system disorders w/o			0.5447
761	М	CC/MCC	Include all	3	0.5416

Nephrology

MS- DRG	Medical/ Surgical	DRG Title	ICD-9-CM	Severity	Weight
800	S	Simultaneous pancreas/kidney transplant	Include all	1	1.3206
652	S	Kidney transplant	Include all	1	1.0764
653	S	Major bladder procedures w MCC	Include all	1	1.0223
654	S	Major bladder procedures w CC	Include all	2	1.2198
655	S	Major bladder procedures w/o CC/MCC	Include all	2	1.4973
			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,		
656	S	Kidney & ureter procedures for neoplasm w MCC	5599	1	1.0327
657	S	Kidney & ureter procedures forneoplasm w CC	See MS-DRG 656	2	1.3060
658	S	Kidney & ureter procedures for neoplasm w/o CC/MCC	See MS-DRG 656	2	1.5032
659	S	Kidney & ureter procedures for non-neoplasm w MCC	See MS-DRG 656	2	1.1209
660	S	Kidney & ureter procedures for non-neoplasm w CC	See MS-DRG 656	2	1.5380
661	S	Kidney & ureter procedures for non-neoplasm w/o CC/MCC	See MS-DRG 656	3	1.3040
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	0.9968
070	3	Carol Marioy & Gilliary a dot procedures w mice	Include procedures 3807, 3816, 3836- 7, 3846-7,3866-7, 387, 3886-7, 3927, 3942-3, 3949-50, 3952, 3956-9,	3	0.7700
674	S	Other kidney & urinary tract procedures w CC	3971	3	1.0803
675	S	Other kidney & urinary tract procedures w/o CC/MCC	See MS-DRG 674	3	0.8920
682	M	Renal failure w MCC	Include all	1	0.9178

MS- DRG	Medical/ Surgical	DRG Title	ICD-9-CM	Severity	Weight
683	M	Renal failure w CC	Include all	2	0.9611
684	М	Renal failure w/o CC/MCC	Include all	2	1.0488
686	M	Kidney & urinary tract neoplasms w MCC	Include diagnoses: 1890-1, 1980, 2230	2	1.1685
687	M	Kidney & urinary tract neoplasms w CC	See MS-DRG 686	2	1.2396
688	M	Kidney & urinary tract neoplasms w/o CC/MCC	See MS-DRG 686	3	1.6622
689	M	Kidney & urinary tract infections w MCC	Include diagnoses: 0160, 590, 0786, 0954, 5900-3, 5908-9, 59010-11, 59080-1	3	1.2811
695	M	Kidney & urinary tract signs & symptoms w MCC	Include all	3	0.9193
			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,		
698	M	Other kidney & urinary tract diagnoses w MCC	V594	3	1.1651
699	M	Other kidney & urinary tract diagnoses w CC	See MS-DRG 698	3	1.2852
700	M	Other kidney & urinary tract diagnoses w/o CC/MCC	See MS-DRG 698	3	1.6622

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	2.1332
021	S	Intracranial vascular procedures w PDX hemorrhage w CC	Include all	1	2.9502
022	S	Intracranial vascular procedures w PDX hemorrhage w/o CC/MCC	Include all	1	2.9954
		Cranio w major dev impl/acute complex CNS PDX w MCC or chemo			
023	S	implant	Include all	1	1.4258
024	S	Cranio w major dev impl/acute complex CNS PDX w/o MCC	Include all	1	1.5043
025	S	Craniotomy & endovascular intracranial procedures w MCC	Include all	1	1.3693
026	S	Craniotomy & endovascular intracranial procedures w CC	Include all	1	1.6141
027	S	Craniotomy & endovascular intracranial procedures w/o CC/MCC	Include all	1	2.0590
031	S	Ventricular shunt procedures w MCC	Include all	1	2.1264
032	S	Ventricular shunt procedures w CC	Include all	2	2.0009
033	S	Ventricular shunt procedures w/o CC/MCC	Include all	2	1.1442
034	S	Carotid artery stent procedure w MCC	Include all	1	0.8497
035	S	Carotid artery stent procedure w CC	Include all	2	0.8199
036	S	Carotid artery stent procedure w/o CC/MCC	Include all	2	0.7850
037	S	Extracranial procedures w MCC	Include all	1	0.7965

MS- DRG	Medical/ Surgical	DRG Title	ICD-9-CM	Severity	Weight
038	S	Extracranial procedures w CC	Include all	2	0.8322
039	S	Extracranial procedures w/o CC/MCC	Include all	2	0.7971
040	S	Periph & cranial nerve & other nerv syst proc w MCC	Include all	1	1.0646
041	S	Periph/cranial nerve & other nerv syst proc w CC or periph neurostim	Include all	2	1.2076
042	S	Periph & cranial nerve & other nerv syst proc w/o CC/MCC	Include all	2	1.2440
052	M	Spinal disorders & injuries w CC/MCC	Include all	2	1.1645
053	M	Spinal disorders & injuries w/o CC/MCC	Include all	2	1.7805
054	М	Nervous system neoplasms w MCC	Include all	1	1.1552
055	М	Nervous system neoplasms w/o MCC	Include all	2	1.2867
056	М	Degenerative nervous system disorders w MCC	Include all	1	0.7575
057	М	Degenerative nervous system disorders w/o MCC	Include all	2	0.7233
058	М	Multiple sclerosis & cerebellar ataxia w MCC	Include all	1	1.2496
059	М	Multiple sclerosis & cerebellar ataxia w CC	Include all	2	1.3255
060	М	Multiple sclerosis & cerebellar ataxia w/o CC/MCC	Include all	2	1.6417
061	М	Acute ischemic stroke w use of thrombolytic agent w MCC	Include all	1	0.8490
062	М	Acute ischemic stroke w use of thrombolytic agent w CC	Include all	2	0.9523
063	М	Acute ischemic stroke w use of thrombolytic agent w/o CC/MCC	Include all	2	0.9873
064	М	Intracranial hemorrhage or cerebral infarction w MCC	Include all	1	0.8539
065	М	Intracranial hemorrhage or cerebral infarction w CC	Include all	2	0.8916
066	М	Intracranial hemorrhage or cerebral infarction w/o CC/MCC	Include all	2	0.9340
067	М	Nonspecific cva & precerebral occlusion w/o infarct w MCC	Include all	1	0.7525
068	М	Nonspecific cva & precerebral occlusion w/o infarct w/o MCC	Include all	2	0.8060
069	М	Transient ischemia	Include all	3	0.7353
070	М	Nonspecific cerebrovascular disorders w MCC	Include all	2	0.7821
071	М	Nonspecific cerebrovascular disorders w CC	Include all	2	0.7879
073	М	Cranial & peripheral nerve disorders w MCC	Include all	1	0.9167
074	М	Cranial & peripheral nerve disorders w/o MCC	Include all	2	1.2450
075	М	Viral meningitis w CC/MCC	Include all	2	2.7639
076	М	Viral meningitis w/o CC/MCC	Include all	2	2.9954
077	М	Hypertensive encephalopathy w MCC	Include all	1	0.9265
078	М	Hypertensive encephalopathy w CC	Include all	2	0.9253
079	М	Hypertensive encephalopathy w/o CC/MCC	Include all	2	1.0788
080	М	Nontraumatic stupor & coma w MCC	Include all	1	0.9369
081	М	Nontraumatic stupor & coma w/o MCC	Include all	2	0.9807
082	М	Traumatic stupor & coma, coma >1 hr w MCC	Include all	1	1.4476
083	М	Traumatic stupor & coma, coma >1 hr w CC	Include all	1	1.4858
084	М	Traumatic stupor & coma, coma >1 hr w/o CC/MCC	Include all	1	2.3149
085	М	Traumatic stupor & coma, coma <1 hr w MCC	Include all	1	0.9490
086	М	Traumatic stupor & coma, coma <1 hr w CC	Include all	2	0.9378
087	М	Traumatic stupor & coma, coma <1 hr w/o CC/MCC	Include all	2	1.0582
091	М	Other disorders of nervous system w MCC	Include all	3	1.0001
092	М	Other disorders of nervous system w CC	Include all	3	0.8913
093	М	Other disorders of nervous system w/o CC/MCC	Include all	3	0.9174
094	М	Bacterial & tuberculous infections of nervous system w MCC	Include all	1	1.6701
095	M	Bacterial & tuberculous infections of nervous system w CC	Include all	2	1.9547
096	M	Bacterial & tuberculous infections of nervous system w/o CC/MCC	Include all	2	2.9954
097	М	Non-bacterial infect of nervous sys exc viral meningitis w MCC	Include all	1	1.4240
098	M	Non-bacterial infect of nervous sys exc viral meningitis w CC	Include all	2	1.9057
099	M	Non-bacterial infect of nervous sys exc viral meningitis w/o CC/MCC	Include all	2	2.9954
100	M	Seizures w MCC	Include all	2	1.2861
955	S	Craniotomy for multiple significant trauma	Include all	1	2.9954

Orthopedics

MS- DRG	Medical/ Surgical	DRG Title	ICD-9-CM	Severity	Weight
			Exclude		
			procedures: 0301- 2, 0309, 031,		
			0321, 0329, 0332,		
			0339, 034, 0351-3,		
			0359, 036, 0371-2,		
028	S	Spinal procedures w MCC	0379, 0393, 0394, 0397-9	1	2.2144
029	S	Spinal procedures w CC or spinal neurostimulators	See MS-DRG 028	2	1.9779
030	S	Spinal procedures w/o CC/MCC	See MS-DRG 028	2	2.2144
453	S	Combined anterior/posterior spinal fusion w MCC	Include all	1	1.2879
454	S	Combined anterior/posterior spinal fusion w CC	Include all	2	1.6325
455	S	Combined anterior/posterior spinal fusion w/o CC/MCC	Include all	2	2.2144
456	S	Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w MCC	Include all	1	1.3974
457	S	Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w CC	Include all	2	1.4292
458	S	Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w/o CC/MCC	Include all	2	1.8042
459	S	Spinal fusion except cervical w MCC	Include all	1	1.1021
460	S	Spinal fusion except cervical w/o MCC	Include all	2	1.2813
461	S	Bilateral or multiple major joint procs of lower extremity w MCC	Include all	1	0.9605
462	S	Bilateral or multiple major joint procs of lower extremity w/o MCC	Include all	2	1.2812
463	S	Wound Debridement and Skin Graft Except Hand, for Musculo-	Include procedures:	1	0.0400
		Connective Tissue Disease w MCC Wound Debridement and Skin Graft Except Hand, for Musculo-	8005, 8006 Include procedures:		0.8428
464	S	Connective Tissue Disease w CC	8005, 8006	2	0.9498
4/5	S	Wound Debridement and Skin Graft Except Hand, for Musculo-	Include procedures:	2	
465	3	Connective Tissue Disease w/o CC/MCC	8005, 8006	2	1.0974
466	S	Revision of hip or knee replacement w MCC	Include all	3	0.7964
467	S	Revision of hip or knee replacement w CC	Include all	3	0.8773
468	S	Revision of hip or knee replacement w/o CC/MCC	Include all	3	1.0697
469	S	Major joint replacement or reattachment of lower extremity w MCC	Include all	1	0.7549
470	S	Major joint replacement or reattachment of lower extremity w/o MCC	Include all	2	1.0096
471	S	Cervical spinal fusion w MCC	Include all	1	1.1717
472	S	Cervical spinal fusion w CC	Include all	2	1.4853
473	S	Cervical spinal fusion w/o CC/MCC	Include all	2	1.4983
480 481	S S	Hip & femur procedures except major joint w MCC	Include all Include all	2 2	0.7639
482	S	Hip & femur procedures except major joint w CC Hip & femur procedures except major joint w/o CC/MCC	Include all	3	0.7714 0.8746
483	S	Major joint & limb reattachment proc of upper extremity w CC/MCC	Include all	1	0.8404
484	S	Major joint & limb reattachment proc of upper extremity w cc/Mcc	Include all	1	0.9456
485	S	Knee procedures w pdx of infection w MCC	Include all	1	0.9212
486	S	Knee procedures w pdx of infection w CC	Include all	2	1.2023
487	S	Knee procedures w pdx of infection w/o CC/MCC	Include all	2	1.4739
		Back & neck proc exc spinal fusion w CC/MCC or disc		<u> </u>	
490	S	device/neurostim	Include all	2	1.1724
491	S	Back & neck proc exc spinal fusion w/o CC/MCC	Include all	3	0.8712
492	S	Lower extrem & humer proc except hip,foot,femur w MCC	Include all	2	1.1713
493	S	Lower extrem & humer proc except hip,foot,femur w CC	Include all	2	1.4131
494	S	Lower extrem & humer proc except hip,foot,femur w/o CC/MCC	Include all	3	2.2144
495	S	Local excision & removal int fix devices exc hip & femur w MCC	Include all	2	1.1505
496	S	Local excision & removal int fix devices exc hip & femur w CC	Include all	2	1.5129
497	S	Local excision & removal int fix devices exc hip & femur w/o CC/MCC	Include all	2	1 2575
47/	<u> </u>	CONVICE	Include all	3	1.3575

MS- DRG	Medical/ Surgical	DRG Title	ICD-9-CM	Severity	Weight
498	S	Local excision & removal int fix devices of hip & femur w CC/MCC	Include all	3	1.1023
499	S	Local excision & removal int fix devices of hip & femur w/o CC/MCC	Include all	3	1.4267
500	S	Soft tissue procedures w MCC	Include all	3	1.1396
501	S	Soft tissue procedures w CC	Include all	3	1.3874
503	S	Foot procedures w MCC	Include all	3	1.0484
504	S	Foot procedures w CC	Include all	3	1.2791
505	S	Foot procedures w/o CC/MCC	Include all	3	1.6400
506	S	Major thumb or joint procedures	Include all	3	1.1855
507	S	Major shoulder or elbow joint procedures w CC/MCC	Include all	2	1.3308
508	S	Major shoulder or elbow joint procedures w/o CC/MCC	Include all	2	1.8924
			procedures: 7601, 7631, 7639, 764, 7641-6, 765-6, 7661-70, 7672, 7674, 7679, 7691-2, 7694, 7699, 7700-1, 7709, 7720-1, 7729-31, 7739, 7780-1, 7789-7801, 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,		
515	S	Other musculoskelet sys & conn tiss O.R. proc w MCC	8499	3	0.9374
516	S	Other musculoskelet sys & conn tiss O.R. proc w CC	See MS-DRG 515	3	0.8487
517	S	Other musculoskelet sys & conn tiss O.R. proc w/o CC/MCC	See MS-DRG 515	3	0.7331
533	M	Fractures of femur w MCC	Include all	1	0.7663
534	M	Fractures of femur w/o MCC	Include all	2	1.1851
535	M	Fractures of hip & pelvis w MCC	Include all	1	0.7170
536	M	Fractures of hip & pelvis w/o MCC	Include all	2	0.7318
539	M	Osteomyelitis w MCC	Include all	3	0.9065
540	M	Osteomyelitis w CC	Include all	3	0.9771
541	M	Osteomyelitis w/o CC/MCC	Include all Include diagnoses: 7331, 73310-6,	3	0.9221
542	M	Pathological fractures & musculoskelet & conn tiss malig w MCC	73319, 73393-5	1	0.7309
543	M	Pathological fractures & musculoskelet & conn tiss malig w CC Pathological fractures & musculoskelet & conn tiss malig w/o	See MS-DRG 542	2	0.7425
544	M	CC/MCC	See MS-DRG 542	2	0.6820
956	S	Limb reattachment, hip & femur proc for multiple significant trauma	Include all	1	1.7550

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	1.5669
003	S	Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R.	Include all	1	1.2073
007	S	Lung transplant	Include all	1	1.6004
	3	Lung transplant	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,		1.5004
			3459, 346, 3473-4, 348, 3481-5, 3489,		
163	S	Major chest procedures w MCC	3493	2	1.4096
164	S	Major chest procedures w CC	See MS-DRG 163	2	1.2563
165	S	Major chest procedures w/o CC/MCC	See MS-DRG 163	2	1.4286
166	S	Other resp system O.R. procedures w MCC	Include all	2	1.0617
167	S	Other resp system O.R. procedures w CC	Include all	2	1.1758
168	S	Other resp system O.R. procedures w/o CC/MCC	Include all	3	1.0165
175	M	Pulmonary embolism w MCC	Include all	1	1.1259
176	M	Pulmonary embolism w/o MCC	Include all	1	1.4716
177	M	Respiratory infections & inflammations w MCC	Exclude diagnoses: 7955, V712, 79551, 75952	1	0.8693
178	M	Respiratory infections & inflammations w CC	See MS-DRG 177	2	0.8816
179	M	Respiratory infections & inflammations w/o CC/MCC	See MS-DRG 177	2	0.9886
180	M	Respiratory neoplasms w MCC	Exclude diagnoses: 2122-5, 2128-9, 2133	1	1.0622
181	M	Respiratory neoplasms w CC	See MS-DRG 181	2	1.1256
182	M	Respiratory neoplasms w/o CC/MCC	See MS-DRG 181	2	1.1491
183	M	Major chest trauma w MCC	Include all	1	1.2917
184	M	Major chest trauma w CC	Include all	1	1.5345
185	M	Major chest trauma w/o CC/MCC	Include all	1	1.5925
186	M	Pleural effusion w MCC	Include all	3	0.9439
187	M	Pleural effusion w CC	Include all	3	0.9773
189	M	Pulmonary edema & respiratory failure	Include all	2	0.9568
190	M	Chronic obstructive pulmonary disease w MCC	Include all	3	0.8795
191 192	M	Chronic obstructive pulmonary disease w CC	Include all	3	0.8643
	M	Chronic obstructive pulmonary disease w/o CC/MCC	Include all	3	0.8457
193 194	M M	Simple pneumonia & pleurisy w MCC Simple pneumonia & pleurisy w CC	Include all Include all	3	0.8954 0.9077
194	M	Interstitial lung disease w MCC	Include all	3	0.9077
190	M	Interstitial lung disease w CC	Include all	3	1.0239
197	M	Interstitial lung disease w/o CC/MCC	Include all	3	1.0239
199	M	Pneumothorax w MCC	Exclude diagnoses: 5121	1	1.3208
200	M	Pneumothorax w CC	See MS-DRG 199	2	1.6303

MS- DRG	Medical/ Surgical	DRG Title	ICD-9-CM	Severity	Weight
202	М	Bronchitis & asthma w CC/MCC	Include all	3	1.3237
207	М	Respiratory system diagnosis w ventilator support 96+ hours	Include all	2	1.1124
208	М	Respiratory system diagnosis w ventilator support <96 hours	Include all	2	1.1019
870	М	Septicemia or severe sepsis w MV 96+ hours	Include all	1	1.0402
871	М	Septicemia or severe sepsis w/o MV 96+ hours w MCC	Include all	1	0.9227
872	М	Septicemia or severe sepsis w/o MV 96+ hours w/o MCC	Include all	1	1.0612

Urology

MS- DRG	Medical/ Surgical	DRG Title	IC9-CM	Severity	Weight
653	S	Major bladder procedures w MCC	Include all	1	0.9894
654	S	Major bladder procedures w CC	Include all	2	1.1806
655	S	Major bladder procedures w/o CC/MCC	Include all	2	1.4492
			Include procedures: 561-2, 5640-2, 5651-2, 5661-2, 5671-5, 5679, 5681-6, 5689, 5692-5, 5699, 5900, 5902-3,		
656	S	Kidney & ureter procedures for neoplasm w MCC	5909	1	0.8624
657	S	Kidney & ureter procedures forneoplasm w CC	See MS-DRG 656	2	0.9567
658	S	Kidney & ureter procedures for neoplasm w/o CC/MCC	See MS-DRG 656	2	1.0450
659	S	Kidney & ureter procedures for non-neoplasm w MCC	See MS-DRG 656	2	1.2315
660	S	Kidney & ureter procedures for non-neoplasm w CC	See MS-DRG 656	2	1.6556
661	S	Kidney & ureter procedures for non-neoplasm w/o CC/MCC	See MS-DRG 656	3	1.3285
662	S	Minor bladder procedures w MCC	Include all	3	0.9346
663	S	Minor bladder procedures w CC	Include all	3	1.0035
664	S	Minor bladder procedures w/o CC/MCC	Include all	3	1.3087
665	S	Prostatectomy w MCC	Include all	3	0.7432
666	S	Prostatectomy w CC	Include all	3	0.7661
668	S	Transurethral procedures w MCC	Include all	3	0.9237
669	S	Transurethral procedures w CC	Include all	3	1.0196
671	S	Urethral procedures w CC/MCC	Include all	3	1.0532
			Include procedures: 1756, 3806-7, 3816, 3836-7, 3846-7, 3866-7, 387, 3886-7, 3927, 3942-3, 3949-50, 3952, 3956-9,		
673	S	Other kidney & urinary tract procedures w MCC	3971	3	0.7651
674	S	Other kidney & urinary tract procedures w CC	See MS-DRG 673	3	0.8212
675	S	Other kidney & urinary tract procedures w/o CC/MCC	See MS-DRG 673	3	0.9788
686	M	Kidney & urinary tract neoplasms w MCC	Exclude diagnoses: 1890-1, 1980-1, 2230-1	2	0.9062
687	M	Kidney & urinary tract neoplasms w CC	See MS-DRG 686	2	0.9247
688	M	Kidney & urinary tract neoplasms w/o CC/MCC	See MS-DRG 686	3	1.0760
691	M	Urinary stones w esw lithotripsy w CC/MCC	Include all	3	1.2088

MS- DRG	Medical/ Surgical	DRG Title	IC9-CM	Severity	Weight
692	M	Urinary stones w esw lithotripsy w/o CC/MCC	Include all	3	0.9788
697	М	Urethral stricture	Include all	3	0.8445
			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,		
698	М	Other kidney & urinary tract diagnoses w MCC	27410, 27419, 44323, 44581, 58081, 58089, 58181, 58189, 58281, 58289, 58381, 58389, V420, V594	3	0.8435
699	M	Other kidney & urinary tract diagnoses w CC	See MS-DRG 698	3	0.8997
700	M	Other kidney & urinary tract diagnoses w/o CC/MCC	See MS-DRG 698	3	0.8116
707	S	Major male pelvic procedures w CC/MCC	Include all	2	1.5734
708	S	Major male pelvic procedures w/o CC/MCC	Include all	2	1.6556
709	S	Penis procedures w CC/MCC	Include all	3	1.1756
710	S	Penis procedures w/o CC/MCC	Include all	3	0.8806
711	S	Testes procedures w CC/MCC	Include all	2	1.5448
712	S	Testes procedures w/o CC/MCC	Include all	3	1.6556
713	S	Transurethral prostatectomy w CC/MCC	Include all	2	0.8095
715	S	Other male reproductive system O.R. proc for malignancy w CC/MCC	Include all	2	1.1640
	_	Other male reproductive system O.R. proc for malignancy w/o		_	
716	S	CC/MCC	Include all	2	1.3977
717	S	Other male reproductive system O.R. proc exc malignancy w CC/MCC Other male reproductive system O.R. proc exc malignancy w/o	Include all	3	0.9650
718	S	CC/MCC	Include all	3	0.7500
722	M	Malignancy, male reproductive system w MCC	Include all	1	0.9242
723	M	Malignancy, male reproductive system w CC	Include all	2	0.9755
724	M	Malignancy, male reproductive system w/o CC/MCC	Include all	2	1.0752
727	M	Inflammation of the male reproductive system w MCC	Include all	3	0.9957
728	М	Inflammation of the male reproductive system w/o MCC	Include all	3	1.0385
729	M	Other male reproductive system diagnoses w CC/MCC	Exclude diagnoses: V252	3	1.1915
730	M	Other male reproductive system diagnoses w/o CC/MCC	See MS-DRG 729	3	1.0102
984	S	Prostatic O.R. procedure unrelated to principal diagnosis w MCC	Include all	3	0.7659
985	S	Prostatic O.R. procedure unrelated to principal diagnosis w CC	Include all	3	0.7916
986	S	Prostatic O.R. procedure unrelated to principal diagnosis w/o CC/MCC	Include all	3	0.7102

Appendix D NCI Cancer Centers

NCI Cancer Centers (as of March 1, 2014)

Center Name
Abramson Cancer Center of the University of Pennsylvania, Philadelphia
Albert Einstein Cancer Center
Arizona Cancer Center, University of Arizona, Tucson
Cancer Therapy and Research Center, University of Texas Health Science Center at San Antonio
Case Comprehensive Cancer Center, Case Western Reserve University
Chao Family Comprehensive Cancer Center, UC Irvine
City of Hope National Medical Center & Beckman Research Institute, Duarte, CA
Dana-Farber/Harvard Cancer Center, Boston
Duke Comprehensive Cancer Center, Duke U, Durham, NC
Duncan (Dan L) Cancer Center, Baylor College of Medicine
Fox Chase Cancer Center, Philadelphia
Fred Hutchinson/University of Washington Cancer Consortium
Georgetown Lombardi Comprehensive Cancer Center
Greenebaum Cancer Center, University of Maryland
H. Lee Moffitt Cancer Center & Research Inst, Univ of South Florida, Tampa
Harold Simmons Cancer Center at UT Southwestern
Holden Comprehensive Cancer Center at U of Iowa, Iowa City
Hollings Cancer Center, Medical University of South Carolina
Huntsman Cancer Institute, U of UT, Salt Lake City
Indiana University Cancer Center, Indianapolis
Irving (Herbert) Comprehensive Cancer Center, Columbia U, NY, NY
Jonsson Comprehensive Cancer Center, UCLA
Karmanos (Barbara Ann) Cancer Institute, Wayne State U, Detroit
Kimmel Cancer Center, Thomas Jefferson U, Philadelphia
Laura and Isaac Perlmutter Cancer Center at NYU Langone, NY, NY
M.D. Anderson Cancer Center, University of Texas
Markey Cancer Center
Masonic Cancer Center at the University of Minnesota
Massey Cancer Center, Virginia Commonwealth U, Richmond
Mayo Clinic Cancer Center, Rochester, MN
Memorial Sloan-Kettering Cancer Center, NY, NY
Norris Cotton Cancer Center, Dartmouth-Hitchcock Medical Center, Lebanon, NH
Ohio State University, Comprehensive Cancer Center
OHSU Knight Cancer Institute, Oregon Health & Science University
Robert H Lurie Cancer Center, Northwestern U, Chicago
Roswell Park Cancer Institute, Buffalo, NY
Rutgers Cancer Institute of New Jersey, Robert Wood Johnson Med Sch, New Brunswisk, NJ
Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins

Siteman Cancer Center, Washington University (Barnes Jewish), St. Louis
Stanford Cancer Center
The University of Kansas Cancer Center
UAB Comprehensive Cancer Center, University of Alabama at Birmingham
UC Davis Cancer Center - Sacramento, CA
UC San Diego Moores Cancer Center
UCSF Hellen Diller Family Comprehensive Cancer Center
UNC Lineberger Comprehensive Cancer Center, U NC Chapel Hill
University of Chicago Comprehensive Cancer Center
University of Colorado Cancer Center, U CO Health Science Center, Denver
University of Michigan Comprehensive Cancer Center,
University of New Mexico Cancer Research and Treatment Center
University of Pittsburgh Cancer Institute
UNMC Eppley Cancer Center, University of Nebraska Medical Center, Omaha
USC Norris Comprehensive Cancer Center
UVA Cancer Center, University of Virginia, Health Science Center
UW Paul P. Carbone Comprehensive Cancer Center, Madison
Vanderbilt-Ingram Cancer Center, Vanderbilt U, Nashville, TN
Wake Forest U, Winston-Salem, NC
Winship Cancer Institute, Emory, GA
Yale Cancer Center, New Haven, CT

Appendix E

2014-15 Best Hospitals Rankings, IHQ Specialties

Rank	Best Hospitals 2014-15: Cancer	U.S. News Score	Reputation with specialists	Survival	Patient safety	Patient volume	Nursing intensity	Nurse Magnet recognition	NCI-designated cancer center	FACT-accredited for BMT and tissue transplant	Advanced technologies	Patient services	Intensivist on staff	
1	Memorial Sloan Kettering Cancer Center, New York	100.0	64.7	10	5	4,749	1.9	No	Yes	2	8	8	Yes	
2	University of Texas MD Anderson Cancer Center, Houston	99.9	67.5	10	2	6,288	2.0	Yes	Yes	2	8	8	Yes	1
3	Mayo Clinic, Rochester, Minn.	93.4	29.9	10	5	3,614	3.2	Yes	Yes	2	8	8	Yes	
4	Dana-Farber/Brigham and Women's Cancer Center, Boston	84.6	36.1	8	4	3,350	2.4	Yes	Yes	2	8	8	Yes	1
5	Johns Hopkins Hospital, Baltimore	81.2	28.2	10	1	1,759	2.2	Yes	Yes	2	8	8	Yes	
6	University of Washington Medical Center, Seattle	77.2	13.2	10	3	1,218	2.4	Yes	Yes	2	8	8	Yes	1
7	Massachusetts General Hospital, Boston	75.4	14.3	9	4	2,499	2.3	Yes	Yes	2	8	8	Yes	
8	UCSF Medical Center, San Francisco	75.0	10.1	9	5	1,653	2.6	Yes	Yes	2	8	8	Yes	1
9	UCLA Medical Center, Los Angeles	74.7	9.8	9	4	1,822	3.0	Yes	Yes	2	8	8	Yes	
10	Stanford Hospital and Clinics, Stanford, Calif.	71.5	11.4	9	4	1,441	2.6	Yes	Yes	2	8	8	Yes	Top 10
11	Hospitals of the University of Pennsylvania-Penn Presbyterian, Philadelphia	71.4	6.7	9	5	2,745	2.6	Yes	Yes	2	8	8	Yes	
12	City of Hope, Duarte, Calif.	70.8	4.3	10	5	1,093	2.3	No	Yes	2	8	8	Yes	1
13	Cleveland Clinic	70.1	6.4	9	3	2,684	2.3	Yes	Yes	2	8	8	Yes	
14	New York-Presbyterian University Hospital of Columbia and Cornell, N.Y.	69.9	3.2	10	5	4,312	2.4	No	Yes	2	8	8	Yes	1
15	University of Colorado Hospital, Aurora	69.6	1.7	10	4	1,015	1.8	Yes	Yes	2	8	8	Yes	
16	Moffitt Cancer Center, Tampa	69.4	2.8	10	5	2,029	1.4	No	Yes	2	8	8	Yes	1
17	Northwestern Memorial Hospital, Chicago	67.6	3.3	9	4	2,248	1.8	Yes	Yes	2	8	8	Yes	
18	Seidman Cancer Center at UH Case Medical, Cleveland	67.0	2.9	9	5	1,668	2.2	Yes	Yes	2	8	8	Yes	1
19	Fox Chase Cancer Center, Philadelphia	66.2	3.8	10	3	1,251	1.4	Yes	Yes	2	8	8	Yes	
20	Wake Forest Baptist Medical Center, Winston-Salem, N.C.	66.0	1.6	10	1	2,421	1.6	Yes	Yes	2	8	8	Yes	Top 20
	Barnes-Jewish Hospital/Washington University, St. Louis	65.7	4.7	9	1	3,617	2.1	Yes	Yes	2	8	8	Yes	
	Duke University Hospital, Durham, N.C.	64.1	5.6	8	3	2,726	2.1	Yes	Yes	2	8	8	Yes	
23	USC Norris Cancer Hospital-Keck Medical Center of USC, Los Angeles	64.0	0.9	10	2	851	3.4	No	Yes	2	8	8	Yes	
	Emory University Hospital, Atlanta	63.7	1.2	9	5	1,815	1.8	Yes	Yes	2	8	8	Yes	1
	UC San Diego Medical Center	63.3	0.4	9	5	1,095	2.0	Yes	Yes	2	8	8	Yes	
	Mayo Clinic, Phoenix	63.2	0.1	9	5	1,079	4.0	No	Yes	2	8	8	Yes	
27	Thomas Jefferson University Hospital, Philadelphia	63.0	0.8	9	3	1,871	2.3	Yes	Yes	2	8	8	Yes	
27	University of Iowa Hospitals and Clinics, Iowa City	63.0	0.4	10	4	1,282	1.7	Yes	Yes	2	8	8	Yes	
29	University of Kansas Hospital, Kansas City	62.4	0.2	9	4	1,441	2.1	Yes	Yes	2	8	8	Yes	
	Ohio State University James Cancer Hospital, Columbus	61.8	4.0	9	1	3,445	2.1	Yes	Yes	2	8	8	Yes	
	UPMC-University of Pittsburgh Medical Center	60.8	2.7	8	1	4,241	1.9	Yes	Yes	2	8	8	Yes	
31	University of Chicago Medical Center	60.8	4.9	10	1	1,661	2.5	No	Yes	2	8	8	Yes	1
33	Oregon Health and Science University Hospital, Portland	60.2	0.0	10	1	1,185	2.1	Yes	Yes	2	8	7	Yes	
34	University of California, Davis Medical Center, Sacramento	59.4	0.0	9	2	981	3.0	Yes	Yes	2	8	8	Yes	
34	University of Michigan Hospitals and Health Centers, Ann Arbor	59.4	4.1	9	2	2,400	2.8	No	Yes	2	8	8	Yes	
36	Nebraska Medical Center, Omaha	59.0	0.5	9	3	1,029	2.7	Yes	Yes	2	8	8	Yes	
37	Hackensack University Medical Center, Hackensack, N.J.	58.6	0.5	8	5	2,136	2.3	Yes	No	2	8	8	Yes	1
38	University of North Carolina Hospitals, Chapel Hill	58.5	2.2	10	1	1,635	1.9	Yes	Yes	2	8	8	Yes	1
39	Vanderbilt University Medical Center, Nashville	58.3	2.7	8	1	1,343	2.5	Yes	Yes	2	8	8	Yes	1
39	Yale-New Haven Hospital, New Haven, Conn.	58.3	1.8	8	1	2,565	3.2	Yes	Yes	2	8	8	Yes	1
41	Cedars-Sinai Medical Center, Los Angeles	58.0	1.1	8	5	2,111	2.5	Yes	No	2	8	8	Yes	1
42	Houston Methodist Hospital, Houston	57.5	1.0	9	3	1,449	1.8	Yes	No	2	8	8	Yes	1
	University of Wisconsin Hospital and Clinics, Madison	57.1	0.4	9	2	1,389	1.9	Yes	Yes	2	8	8	Yes	1
44	Beth Israel Deaconess Medical Center, Boston	56.7	2.3	9	2	1,665	1.4	No	Yes	2	8	8	Yes	1
45	Florida Hospital Orlando	56.3	0.0	8	5	3,990	2.0	Yes	No	2	8	8	Yes	1
46	University of Maryland Medical Center, Baltimore	56.2	0.6	10	1	1,200	2.2	Yes	Yes	2	8	8	Yes	1
47	Loyola University Medical Center, Maywood, III.	55.8	1.3	9	3	1,338	1.6	Yes	No	2	8	8	Yes	1
48	Mount Sinai Hospital, New York	55.4	1.3	9	2	2,317	2.1	Yes	No	2	8	8	Yes	1
48	Rush University Medical Center, Chicago	55.4	0.6	10	1	1,759	2.0	Yes	No	2	7	8	Yes	1
_	NYU Langone Medical Center, New York	55.2	0.7	8	4	1,431	2.3	Yes	Yes	1	8	8	Yes	1
	Robert Wood Johnson University Hospital, New Brunswick, N.J.	55.2	0.7	8	1	1,471	2.3	Yes	Yes	2	8	8	Yes	1
	Roswell Park Cancer Institute, Buffalo	55.2	1.1	8	1	1,302	2.2	Yes	Yes	2	8	8	Yes	1
	1 and a second control of the second control		<u> </u>	<u> </u>	·	.,,,,,	·				<u> </u>			1

1 Cleveland Clinic 100.00 63.3 10 3 15,430 2.3 Vee 6 7 No Vee No No No Vee No No No Vee No No No Vee No No No No Vee No No No No No No No	Rank	Best Hospitals 2014-15: Cardiology & Heart Surgery Hospital	U.S. News Score	Reputation with specialists	Survival	Patient safety	Patient volume	Nursing intensity	Nurse Wagnet recognition	Advanced technologies	Patient services	Trauma center	Intensivist on staff	
Mayo Cilnic, Rochester, Mnn. 97.0 52.2 9 5 10,884 3.2 Yes 6 7 Yes Yes 4 Duke University Hospital, Durbam, N.C. 76.6 14.1 9 3 8,329 2.1 Yes 6 7 Yes Yes Yes 4 Duke University Hospital, Boston 76.3 15.2 9 4 7,515 2.4 Yes 6 7 Yes Yes 6 7 Yes Ye													Yes	l
Duke University Hospital, Durham, N.C.	2	Mayo Clinic, Rochester, Minn.	97.0	52.2	9	5	10,884	3.2	Yes	6	7	Yes	Yes	l
Second	3	New York-Presbyterian University Hospital of Columbia and Cornell, N.Y.	85.0	16.9	10	5	17,991	2.4	No	6	7	Yes	Yes	ĺ
6 Massachusetts General Hospital, Boston 74.5 18.9 8 4 8,696 2.3 7es 6 7 7es 7e 7e 7e 7e 7e 7e					9	3	8,329	2.1	Yes	6	7		Yes	l
Propension of the University of Pennsylvania-Penn Presbyterian, Philadelphia 74.0 8.4 8 5 11.833 2.6 Yes 6 7 Yes Yes 8 6 Cedars-Sinal Medical Center, Los Angeles 7.2 7.0 9 5 7.503 2.5 Yes 6 7 Yes Yes 9 9 5 7.503 2.5 Yes 6 7 Yes Yes 9 9 5 7.503 2.5 Yes 6 7 Yes Yes Yes 9 9 5 7.503 2.5 Yes 6 7 Yes Yes Yes Yes 7 Yes													Yes	l
Section Cedars-Sinal Medical Center, Los Angeles													Yes	ĺ
9 St. Francis Hospital, Roslyn, N.Y.													Yes	l
10 Nourt Sinal Hospital, New York													Yes	l
11 NYU Langone Medical Center, New York														Top 10
12 UCLA Medical Center, Los Angeles		•												Top 10
13 Northwestern Memorial Hospital, Chicago 688 2.5 10 4 5.248 1.8 Yes 6 7 Yes Yes 14 Teyes Heart Institute at St. Luke S Episcopal Hospital, Houston 69.3 14.6 9 1 8.519 1.7 Yes 6 7 No. Yes 15 Sames-Jewish Hospital/Mashington University, St. Louis 68.0 4.8 9 1 9.763 2.1 Yes 6 7 Yes Yes 16 Tony University Hospital, Allanta 67.8 8.2 9 5 5.676 1.8 Yes 6 7 Yes Yes 16 Tony University Hospital, Allanta 67.8 8.2 9 5 5.676 1.8 Yes 6 7 Yes Yes 16 Johns Hogkins Hospital, Baltimore 67.8 20.8 7 1 4.350 2.2 Yes 6 7 Yes Yes 18 Houston Methodist Hospital, Houston 67.2 2.4 6 10 3 8.462 1.8 Yes 6 7 Yes Yes							,						Yes	l
Texas Heart Institute at St. Luke's Episcopal Hospital, Houston 68.0 14.6 9 1 8.519 1.7 Yes 6 7 No Yes 15 8 8 8 9 1 9.63 2.1 Yes 6 7 No Yes 16 8 8 9 1 9.63 2.1 Yes 6 7 No Yes 16 8 8 9 1 9.63 2.1 Yes 6 7 No Yes 16 8 8 9 1 9.63 2.1 Yes 6 7 No Yes Yes 16 8 8 9 1 9.63 2.1 Yes 6 7 No Yes Yes 16 8 8 9 1 9.63 2.1 Yes 6 7 No Yes Yes 16 16 16 16 16 16 16 1		, ,											Yes	l
15 Barnes-Jewish Hospital/Mashington University, St. Louis										_			Yes	l
16 Emory University Hospital, Atlanta													Yes	l
16 Johns Hopkins Hospital, Baltimore		7				5	,						Yes	l
18 Scripps La Jolla Hospitals and Clinics, La Jolla, Calif. 67.2 2.9 9 4 5.794 2.7 Ves 5 7 Ves Yes Stanford Hospital and Clinics, Stanford, Calif. 67.2 7.2 8 4 3.518 2.6 Ves 6 7 Ves Yes Ye											7		Yes	l
18 Stanford Hospital and Clinics, Stanford, Calif. 67.2 7.2 8 4 3,518 2.6 Yes 6 7 Yes Yes 7 Yes	18	Houston Methodist Hospital, Houston	67.2	4.6	10	3	8,462	1.8	Yes	6	7	No	Yes	l
21 University of Kansas Hospital, Kansas City 65.6 0.2 10 4 4.519 2.1 Yes 5 7 Yes Ye 22 University Hospitals Case Medical Center, Cleveland 64.8 0.8 9 5 5.280 2.2 Yes 5 7 Yes Ye 24 University of California, Davis Medical Center, Sacramento 64.7 1.0 10 5 2.427 2.0 Yes 6 6 Yes Ye 24 University of California, Davis Medical Center, Sacramento 64.5 0.0 10 2 3.201 3.0 Yes 5 7 Yes Ye 24 University of California, Davis Medical Center, Sacramento 64.5 0.0 10 2 3.201 3.0 Yes 5 7 Yes Ye 25 25 25 25 25 25 25 2	18	Scripps La Jolla Hospitals and Clinics, La Jolla, Calif.	67.2	2.9	9	4	5,794	2.7	Yes	5	7	Yes	Yes	l
22 University Hospitals Case Medical Center, Cleveland 64.8 0.8 9 5 5.280 2.2 Ves 5 7 Ves Ves 23 UC San Diego Medical Center 64.7 1.0 10 5 2.427 2.0 Ves 6 6 6 Ves Ves 24 University of California, Davis Medical Center, Sacramento 64.5 0.0 10 2 3.201 3.0 Ves 5 7 Yes Ves 25 Beaumont Hospital, Royal Oak, Mich. 64.3 1.9 9 4 10,655 1.8 Yes 5 7 Yes Yes 26 University of Vashington Medical Center, Seattle 61.8 1.6 10 3 2,164 2.4 Yes 6 7 Yes Yes 27 Lehigh Valley Hospital, Allentown, Pa. 61.7 0.2 8 5 8,718 2.0 Yes 5 7 Yes Yes 27 Lehigh Valley Hospital, New York 61.7 0.2 8 5 8,718 2.0 Yes 5 7 Yes Yes 29 Loyola University Medical Center, Maywood, Ill. 61.4 0.8 9 3 4,197 1.6 Yes 6 7 Yes Yes Yes 29 Loyola University Medical Center, Maywood, Ill. 61.4 0.8 9 3 4,197 1.6 Yes 6 7 Yes	18	, ,				4	3,518						Yes	Top 20
23 U.S.an Diego Medical Center 64.7 1.0 10 5 2.427 2.0 Yes 6 6 Yes Yes 24 University of California, Davis Medical Center, Sacramento 64.5 0.0 10 2 3.201 3.0 Yes 5 7 Yes Y		,											Yes	
24 University of California, Davis Medical Center, Sacramento													Yes	l
25 Beaumont Hospital, Royal Oak, Mich. 64.3 1.9 9 4 10.655 1.8 Yes 5 7 Yes Ye 26 University of Washington Medical Center, Seattle 61.8 1.6 10 3 2,164 2.4 Yes 6 7 Yes Ye 7 Yes 7 Yes Ye 7 Yes Ye		9											Yes	l
26 University of Washington Medical Center, Seattle							,						Yes	l
27 Lehigh Valley Hospital, Allentown, Pa. 61.7 0.2 8 5 8,718 2.0 Yes 5 7 Yes Yes 7 Lenox Hill Hospital, New York 61.7 2.2 10 3 5,056 2.1 No 4 7 Yes Yes 7 Yes Yes 7 Yes Yes 7 Yes Yes 7 Yes 7 Yes Yes											1		Yes	l
27 Lenox Hill Hospital, New York 61.7 2.2 10 3 5,056 2.1 No 4 7 Yes Yes 29 Loyola University Medical Center, Maywood, Ill. 61.4 0.8 9 3 4,197 1.6 Yes 6 7 Yes Yes Yes 7 Yes Yes 7 Yes Yes 6 7 Yes Yes 7 Yes Ye		•					,							l
29 Loyola University Medical Center, Maywood, III. 61.4 0.8 9 3 4,197 1.6 Yes 6 7 Yes Yes Yes Minneapolis Heart Institute at Abbott Northwestern Hospital 61.4 0.6 10 3 7,578 2.3 Yes 6 7 No Yes Yes 32 Morristown Medical Center, Oak Lawn, III. 60.7 0.0 8 4 8,189 2.3 Yes 5 7 Yes Yes Yes 32 Advocate Christ Medical Center, Oak Lawn, III. 60.7 0.0 8 4 8,189 2.3 Yes 5 7 Yes Yes Yes 32 Hackensack University Medical Center, Hackensack, N.J. 60.7 0.5 8 5 6,912 2.3 Yes 5 7 Yes Yes Yes 34 Yes 44 Yes 44 Yes 46 Yes 47 Yes Yes 47 Yes Yes 48 Yes 48 Yes 49 Ye														l
29 Minneapolis Heart Institute at Abbott Northwestern Hospital 61.4 0.6 10 3 7,578 2.3 Yes 6 7 No Yes 7 Yes Yes 31 Morristown Medical Center, Morristown, N.J. 60.9 0.0 7 5 7,049 2.9 Yes 5 7 Yes Yes Yes 32 Advocate Christ Medical Center, Cak Lawn, Ill. 60.7 0.0 8 4 8,189 2.3 Yes 5 7 Yes Yes Yes 32 Hackensack University Medical Center, Hackensack, N.J. 60.7 0.5 8 5 6,912 2.3 Yes 5 7 Yes Yes Yes 34 Ohio State University Wexner Medical Center, Columbus 60.6 2.0 9 1 7,755 2.1 Yes 6 7 Yes Ye													Yes	l
31 Morristown Medical Center, Morristown, N.J. 60.9 0.0 7 5 7,049 2.9 Yes 5 7 Yes Yes 32 Advocate Christ Medical Center, Cak Lawn, Ill. 60.7 0.0 8 4 8,189 2.3 Yes 5 7 Yes Yes 32 Hackensack University Medical Center, Hackensack, N.J. 60.7 0.5 8 5 6,912 2.3 Yes 5 7 Yes Yes Yes 34 Yale-Naw Haven Medical Center, Columbus 60.6 2.0 9 1 7,755 2.1 Yes 6 7 Yes Ye													Yes	l
32 Advocate Christ Medical Center, Oak Lawn, Ill. 60.7 0.0 8 4 8,189 2.3 Yes 5 7 Yes Yes 32 Hackensack University Medical Center, Hackensack, N.J. 60.7 0.5 8 5 6,912 2.3 Yes 5 7 Yes Yes 4 Yes 5 7 Yes Yes 5 7 Yes Yes 5 7 Yes Yes 6 7 Yes 7 Yes Yes 6 7 Yes Yes 6 7 Yes													Yes	l
32 Hackensack University Medical Center, Hackensack, N.J. 60.7 0.5 8 5 6,912 2.3 Yes 5 7 Yes Yes 34 Ohio State University Wexner Medical Center, Columbus 60.6 2.0 9 1 7,755 2.1 Yes 6 7 Yes Yes Yes 34 Yale-New Haven Hospital, New Haven, Conn. 60.6 1.0 7 1 11,316 3.2 Yes 6 7 Yes Yes Yes 36 Mayo Clinic, Phoenix 60.1 1.1 9 5 2,531 4.0 No 6 7 No Yes Yes 36 MedStar Washington Hospital Center, Washington, D.C. 60.1 4.6 9 1 11,220 2.2 No 5 7 Yes Yes													Yes	l
34 Yale-New Haven Hospital, New Haven, Conn. 60.6 1.0 7 1 11,316 3.2 Yes 6 7 Yes Yes 4 Yes 6 7 Yes Yes 6 7 No Yes 7 Yes Yes 6 7 Yes Yes 6 7 No Yes 7 Yes Yes 6 7 Yes Yes 6 7 Yes Yes 6													Yes	l
36 Mayo Clinic, Phoenix 60.1 1.1 9 5 2,531 4.0 No 6 7 No Ye 36 MedStar Washington Hospital Center, Washington, D.C. 60.1 4.6 9 1 11,220 2.2 No 5 7 Yes Ye 38 Florida Hospital Orlando 60.0 0.5 7 5 17,987 2.0 Yes 5 7 No Ye 39 Kaiser Permanente Los Angeles Medical Center 59.8 2.3 9 5 5,519 2.8 No 5 7 No Ye 40 UPMC-University of Pittsburgh Medical Center 59.7 1.2 8 1 13,259 1.9 Yes 6 7 Yes Ye 41 Aurora St. Luke's Medical Center, Milwaukee 59.2 0.0 9 2 11,320 1.6 Yes 6 7 No Ye 41 Tampa General Hospital 59.2 0.0 10 1 5,417 2.2 Yes 6 7 Yes Ye <	34	Ohio State University Wexner Medical Center, Columbus	60.6	2.0	9	1	7,755	2.1	Yes	6	7	Yes	Yes	l
36 MedStar Washington Hospital Center, Washington, D.C. 60.1 4.6 9 1 11,220 2.2 No 5 7 Yes Yes 38 Florida Hospital Orlando 60.0 0.5 7 5 17,987 2.0 Yes 5 7 No Ye 39 Kaiser Permanente Los Angeles Medical Center 59.8 2.3 9 5 5,519 2.8 No 5 7 No Ye 40 UPMC-University of Pittsburgh Medical Center 59.7 1.2 8 1 13,259 1.9 Yes 6 7 Yes Ye 41 Aurora St. Luke's Medical Center, Milwaukee 59.2 0.0 9 2 11,320 1.6 Yes 6 7 Yes Ye 41 Tampa General Hospital 59.2 0.0 9 2 11,320 1.6 Yes 6 7 Yes Ye 41 UF Health Shands Hospital, Gainesville, Fla. 59.2 1.2 10 1 5,417 2.2 Yes 6 6 Yes	34	Yale-New Haven Hospital, New Haven, Conn.	60.6	1.0	7	1	11,316	3.2	Yes	6	7	Yes	Yes	l
38 Florida Hospital Orlando 60.0 0.5 7 5 17,987 2.0 Yes 5 7 No Yes 39 Kaiser Permanente Los Angeles Medical Center 59.8 2.3 9 5 5,519 2.8 No 5 7 No Yes 40 UPMC-University of Pittsburgh Medical Center 59.7 1.2 8 1 13,259 1.9 Yes 6 7 Yes Yes 41 Aurora St. Luke's Medical Center, Milwaukee 59.2 0.0 9 2 11,320 1.6 Yes 6 7 No Yes 41 Tampa General Hospital 59.2 0.0 10 1 5,417 2.2 Yes 6 7 Yes Yes 41 UF Health Shands Hospital, Gainesville, Fla. 59.2 1.2 10 1 5,417 2.2 Yes 6 7 Yes Yes<												No	Yes	l
39 Kaiser Permanente Los Angeles Medical Center 59.8 2.3 9 5 5,519 2.8 No 5 7 No Yes 40 UPMC-University of Pittsburgh Medical Center 59.7 1.2 8 1 13,259 1.9 Yes 6 7 Yes Yes 41 Aurora St. Luke's Medical Center, Milwaukee 59.2 0.0 9 2 11,320 1.6 Yes 6 7 No Ye 41 Tampa General Hospital 59.2 0.0 10 1 5,417 2.2 Yes 6 7 Yes Ye 41 UF Health Shands Hospital, Gainesville, Fla. 59.2 1.2 10 1 5,006 1.8 Yes 6 6 Yes Yes Yes 6 6 Yes Yes 6 7 Yes Yes 6 7 Yes Yes 6 7 Yes Yes 6 6 Yes Yes 6 7 Yes Yes 6 7 Yes Yes 9 1		MedStar Washington Hospital Center, Washington, D.C.											Yes	l
40 UPMC-University of Pittsburgh Medical Center 59.7 1.2 8 1 13,259 1.9 Yes 6 7 Yes Yes 41 41 Aurora St. Luke's Medical Center, Milwaukee 59.2 0.0 9 2 11,320 1.6 Yes 6 7 No Ye 41 Tampa General Hospital 59.2 0.0 10 1 5,417 2.2 Yes 6 7 Yes Ye 41 UF Health Shands Hospital, Gainesville, Fla. 59.2 1.2 10 1 5,006 1.8 Yes 6 6 Yes Yes Yes Yes 6 6 Yes Yes Yes 6 7 Yes Yes 6 7 Yes Yes 6 7 Yes Yes 6 6 Yes Yes 6 6 Yes Yes Yes Yes 6 7 Yes Yes Yes 4 7 Yes Yes Yes Yes Yes Yes 4 7 Yes Yes													Yes	i
41 Aurora St. Luke's Medical Center, Milwaukee 59.2 0.0 9 2 11,320 1.6 Yes 6 7 No Yes 41 Tampa General Hospital 59.2 0.0 10 1 5,417 2.2 Yes 6 7 Yes Yes 41 UF Health Shands Hospital, Gainesville, Fla. 59.2 1.2 10 1 5,006 1.8 Yes 6 6 Yes Yes 44 Sentara Norfolk General Hospital-Sentara Heart Hospital, Norfolk, Va. 59.0 0.6 9 1 6,542 1.6 Yes 6 7 Yes Yes 45 Medical Center of Central Georgia, Macon 58.8 0.0 9 2 8,521 1.7 Yes 4 7 Yes Yes 46 Rush University Medical Center, Chicago 58.7 0.0 10 1 3,217 2.0 Yes 6 6 Yes Yes 47 St. Luke's Hospital, Kansas City, Mo. 57.6 0.8 8 3 5,025 1.9 Yes 6													Yes	l
41 Tampa General Hospital 59.2 0.0 10 1 5,417 2.2 Yes 6 7 Yes Yes 4 41 UF Health Shands Hospital, Gainesville, Fla. 59.2 1.2 10 1 5,006 1.8 Yes 6 6 Yes Yes Yes 4 Yes 6 6 Yes <													Yes	l
41 UF Health Shands Hospital, Gainesville, Fla. 59.2 1.2 10 1 5,006 1.8 Yes 6 6 Yes Yes 44 44 Sentara Norfolk General Hospital-Sentara Heart Hospital, Norfolk, Va. 59.0 0.6 9 1 6,542 1.6 Yes 6 7 Yes Yes Yes 4 7 Yes Yes </td <td></td> <td>Yes</td> <td>l</td>													Yes	l
44 Sentara Norfolk General Hospital-Sentara Heart Hospital, Norfolk, Va. 59.0 0.6 9 1 6,542 1.6 Yes 6 7 Yes Yes Yes 45 Medical Center of Central Georgia, Macon 58.8 0.0 9 2 8,521 1.7 Yes 4 7 Yes Yes </td <td></td> <td>Yes</td> <td>l</td>													Yes	l
45 Medical Center of Central Georgia, Macon 58.8 0.0 9 2 8,521 1.7 Yes 4 7 Yes Yes 46 Rush University Medical Center, Chicago 58.7 0.0 10 1 3,217 2.0 Yes 6 6 Yes Yes 47 St. Luke's Hospital, Kansas City, Mo. 57.6 0.8 8 3 5,025 1.9 Yes 6 7 Yes Yes													Yes	i
46 Rush University Medical Center, Chicago 58.7 0.0 10 1 3,217 2.0 Yes 6 6 Yes Yes 47 St. Luke's Hospital, Kansas City, Mo. 57.6 0.8 8 3 5,025 1.9 Yes 6 7 Yes Yes													Yes	l
47 St. Luke's Hospital, Kansas City, Mo. 57.6 0.8 8 3 5,025 1.9 Yes 6 7 Yes Ye													Yes	l
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48 Bethesda North Hospital, Cincinnati 57.3 0.0 7 5 4,450 2.0 Yes 5 7 Yes Ye													Yes	l
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Rank	Best Hospitals 2014-15: Diabetes & Endocrinology Hospital	U.S. News Score	Reputation with specialists	Survival	Patient safety	Patient volume	Nursingintensity	Nurse Wagnet recognition	Advanced technologies	Patient services	Intensivist on staff	
1	Mayo Clinic, Rochester, Minn.	100.0	54.9	9	5	800	3.2	Yes	4	8	Yes	
2	Cleveland Clinic	89.6	30.4	9	3	1,215	2.3	Yes	4	8	Yes	1
3	Massachusetts General Hospital, Boston	87.9	35.9	8	4	805	2.3	Yes	4	8	Yes	1
4	Johns Hopkins Hospital, Baltimore	79.2	25.7	9	1	546	2.2	Yes	4	8	Yes	1
5	UCSF Medical Center, San Francisco	77.6	11.8	8	5	349	2.6	Yes	4	8	Yes	
6	New York-Presbyterian University Hospital of Columbia and Cornell, N.Y.	77.2	11.2	8	5	1,541	2.4	No	4	8	Yes	1
7	Yale-New Haven Hospital, New Haven, Conn.	74.6	7.6	8	1	1,460	3.2	Yes	4	8	Yes	1
8	Northwestern Memorial Hospital, Chicago	71.0	4.9	9	4	655	1.8	Yes	4	8	Yes	1
9	UCLA Medical Center, Los Angeles	70.7	6.5	8	4	518	3.0	Yes	4	8	Yes	1
10	University of Washington Medical Center, Seattle	70.4	7.9	9	3	443	2.4	Yes	4	8	Yes	Top 10
11	Hospitals of the University of Pennsylvania-Penn Presbyterian, Philadelphia	69.6	7.2	6	5	898	2.6	Yes	4	8	Yes	
12	Brigham and Women's Hospital, Boston	69.4	12.8	6	4	648	2.4	Yes	4	8	Yes	1
13	Florida Hospital Orlando	68.9	0.0	7	5	1,769	2.0	Yes	4	8	Yes	1
14	Cedars-Sinai Medical Center, Los Angeles	68.3	3.4	7	5	823	2.5	Yes	4	8	Yes	1
15	Barnes-Jewish Hospital/Washington University, St. Louis	67.5	9.2	7	1	1,146	2.1	Yes	4	8	Yes	1
16	Beaumont Hospital, Royal Oak, Mich.	67.3	0.3	9	4	1,187	1.8	Yes	4	8	Yes	1
17	Mount Sinai Hospital, New York	66.3	7.7	6	2	1,084	2.1	Yes	4	8	Yes	1
18	Froedtert Hospital and the Medical College of Wisconsin, Milwaukee	65.6	1.1	9	4	604	1.6	Yes	4	8	Yes	1
18	Lancaster General Hospital, Lancaster, Pa.	65.6	0.0	9	5	559	1.7	Yes	4	8	Yes	1
20	University of Kansas Hospital, Kansas City	65.5	0.0	9	4	532	2.1	Yes	4	8	Yes	Top 20
21	Duke University Hospital, Durham, N.C.	65.3	1.4	9	3	641	2.1	Yes	4	8	Yes	
22	NYU Langone Medical Center, New York	65.0	1.3	9	4	463	2.3	Yes	4	8	Yes	1
23	Emory University Hospital, Atlanta	64.8	2.5	8	5	513	1.8	Yes	4	8	Yes	1
24	Bethesda North Hospital, Cincinnati	64.3	0.0	8	5	364	2.0	Yes	4	8	Yes	1
25	Spectrum Health, Grand Rapids, Mich.	64.2	0.0	7	5	903	2.0	Yes	4	8	Yes	
26	St. Luke's Episcopal Hospital, Houston	64.0	1.6	10	1	571	1.7	Yes	4	8	Yes	1
27	Baystate Medical Center, Springfield, Mass.	63.9	0.0	9	5	648	1.2	Yes	4	8	Yes	
28	Ochsner Medical Center, New Orleans	63.6	0.4	8	4	999	1.7	Yes	4	8	Yes	1
29	John Muir Medical Center, Concord, Calif.	63.5	0.0	8	5	301	2.7	Yes	4	7	Yes	
30	Baylor University Medical Center, Dallas	63.1	1.4	8	1	964	1.7	Yes	4	8	Yes	1
31	Scripps La Jolla Hospitals and Clinics, La Jolla, Calif.	63.0	0.0	9	4	364	2.7	Yes	4	8	Yes	
32	UC San Diego Medical Center	62.9	1.3	8	5	294	2.0	Yes	4	8	Yes	
33	Christiana Care Hospital, Newark, Del.	62.8	0.0	7	4	1,140	2.1	Yes	4	8	Yes	
34	University of Colorado Hospital, Aurora	62.6	3.9	7	4	424	1.8	Yes	4	8	Yes	
35	Houston Methodist Hospital, Houston	62.2	1.5	7	3	863	1.8	Yes	4	8	Yes	
35	Metro Health Medical Center, Cleveland	62.2	0.0	10	1	316	1.0	Yes	4	8	Yes	
37	Long Beach Memorial Medical Center, Long Beach, Calif.	61.7	0.0	9	4	357	2.3	Yes	4	8	Yes	
38	University Hospitals Case Medical Center, Cleveland	61.4	0.3	7	5	714	2.2	Yes	4	8	Yes	
39	UPMC-University of Pittsburgh Medical Center	61.2	3.3	7	1	1,143	1.9	Yes	4	8	Yes	
39	University of Alabama Hospital at Birmingham	61.2	2.3	7	4	851	1.6	Yes	4	7	Yes]
41	Christ Hospital, Cincinnati	61.1	1.0	9	1	466	1.8	Yes	4	8	Yes	
42	Aurora St. Luke's Medical Center, Milwaukee	60.9	0.0	8	2	931	1.6	Yes	4	8	Yes]
42	Lehigh Valley Hospital, Allentown, Pa.	60.9	0.0	7	5	693	2.0	Yes	4	8	Yes	
44	Oregon Health and Science University Hospital, Portland	60.7	3.1	8	1	444	2.1	Yes	4	7	Yes]
44	Summa Akron City and St. Thomas Hospitals, Akron, Ohio	60.7	0.0	7	5	811	1.8	Yes	4	8	Yes	
46	Lankenau Medical Center, Wynnewood, Pa.	60.6	0.0	8	4	349	1.6	Yes	4	8	Yes	
47	Good Samaritan Hospital, Cincinnati	60.5	0.0	8	4	371	1.7	Yes	4	8	Yes	
48	Baptist Medical Center, Jacksonville, Fla.	60.4	0.6	9	2	474	1.7	Yes	4	8	Yes	
48	Scripps Mercy Hospital, San Diego	60.4	0.0	8	5	833	2.4	No	4	8	Yes	
50	Beaumont Hospital, Troy, Mich.	60.3	0.3	7	5	552	1.6	Yes	4	8	Yes]
50	Hackensack University Medical Center, Hackensack, N.J.	60.3	0.0	7	5	620	2.3	Yes	4	8	Yes	

	Best Hospitals 2014-15: Ear, Nose & Throat	U.S. News Scare	Reputation with specialists	Survival	Patient safety	Patient volume	Nursing intensity	Nurse Magnet recognition	. Advanced technologies	Patient services	Trauma center	Intensivist on staff	
1	Mayo Clinic, Rochester, Minn.	100.0	17.5	9	5	375	3.2	Yes	1	8	Yes	Yes	1
2	Johns Hopkins Hospital, Baltimore	96.9	39.8	9	1	206	2.2	Yes	1	8	Yes	Yes	1
3	Hospitals of the University of Pennsylvania-Penn Presbyterian, Philadelphia	96.7	19.3	8	5	372	2.6	Yes	1	8	Yes	Yes	ı
	Massachusetts Eye and Ear Infirmary, Massachusetts General Hospital, Boston	96.6	25.5	7	4	406	2.3	Yes	1	8	Yes	Yes	1
5	University of Texas MD Anderson Cancer Center, Houston	92.9	17.1	9	2	511	2.0	Yes	1	8	No	Yes	1
6	Cleveland Clinic	92.6	20.2	10	3	295	2.3	Yes	1	8	No	Yes	1
7	UPMC-University of Pittsburgh Medical Center	88.9	16.7	7	1	499	1.9	Yes	1	8	Yes	Yes	1
8	UCSF Medical Center, San Francisco	86.2	8.0	10	5	148	2.6	Yes	1	8	No	Yes	1
9	University of Iowa Hospitals and Clinics, Iowa City	85.8	19.6	5	4	195	1.7	Yes	1	8	Yes	Yes	1
10	Mount Sinai Hospital, New York	85.0	7.9	9	2	369	2.1	Yes	1	8	Yes	Yes	Top 10
	Stanford Hospital and Clinics, Stanford, Calif.	84.8	8.7	9	4	215	2.6	Yes	1	8	Yes	Yes	1
	UCLA Medical Center, Los Angeles	84.8	7.0	7	4	301	3.0	Yes	1	8	Yes	Yes	1
13	Barnes-Jewish Hospital/Washington University, St. Louis	83.7	10.9	8	1	346	2.1	Yes	1	8	Yes	Yes	1
14	Vanderbilt University Medical Center, Nashville	82.1	13.2	6	1	297	2.5	Yes	1	8	Yes	Yes	1
15	Ohio State University Wexner Medical Center, Columbus	80.5	7.9	7	1	526	2.1	Yes	1	8	Yes	Yes	1
16	University of Michigan Hospitals and Health Centers, Ann Arbor	79.2	11.0	7	2	403	2.8	No	1	8	Yes	Yes	1
17	University of Kansas Hospital, Kansas City	79.0	0.6	10	4	292	2.1	Yes	1	8	Yes	Yes	1
18	Northwestern Memorial Hospital, Chicago	78.2	1.2	10	4	124	1.8	Yes	1	8	Yes	Yes	1
18	University Hospitals Case Medical Center, Cleveland	78.2	2.3	7	5	303	2.2	Yes	1	8	Yes	Yes	1
20	University of Washington Medical Center, Seattle	78.1	7.6	7	3	164	2.4	Yes	1	8	Yes	Yes	Top 20
21	NYU Langone Medical Center, New York	77.4	1.8	10	4	76	2.3	Yes	1	8	Yes	Yes	
22	Oregon Health and Science University Hospital, Portland	76.2	1.8	10	1	234	2.1	Yes	1	7	Yes	Yes	1
22	UC San Diego Medical Center	76.2	0.8	10	5	109	2.0	Yes	1	8	Yes	Yes	1
24	Emory University Hospital, Atlanta	75.7	1.5	9	5	258	1.8	Yes	1	8	No	Yes	1
25	Loyola University Medical Center, Maywood, III.	75.5	4.5	8	3	164	1.6	Yes	1	8	Yes	Yes	1
25	University of North Carolina Hospitals, Chapel Hill	75.5	6.2	9	1	258	1.9	Yes	1	8	Yes	Yes	1
27	University of Wisconsin Hospital and Clinics, Madison	75.2	2.3	9	2	218	1.9	Yes	1	8	Yes	Yes	1
28	Memorial Sloan Kettering Cancer Center, New York	74.9	5.2	8	5	237	1.9	No	1	8	No	Yes	1
29	Mayo Clinic, Phoenix	74.8	1.2	9	5	212	4.0	No	1	8	No	Yes	1
30	Thomas Jefferson University Hospital, Philadelphia	74.6	0.8	7	3	366	2.3	Yes	1	8	Yes	Yes	1
31	University of California, Davis Medical Center, Sacramento	74.4	2.4	8	2	169	3.0	Yes	1	8	Yes	Yes	1
32	Baystate Medical Center, Springfield, Mass.	74.0	0.0	10	5	59	1.2	Yes	1	8	Yes	Yes	1
33	University of California, Irvine Medical Center, Orange	73.5	0.8	10	2	102	2.7	Yes	1	8	Yes	Yes	1
34	Yale-New Haven Hospital, New Haven, Conn.	73.3	1.3	8	1	347	3.2	Yes	1	8	Yes	Yes	1
35	Cedars-Sinai Medical Center, Los Angeles	73.2	0.4	8	5	101	2.5	Yes	1	8	Yes	Yes	1
36	Ochsner Medical Center, New Orleans	72.9	0.0	9	4	142	1.7	Yes	1	8	Yes	Yes	1
37	New York-Presbyterian University Hospital of Columbia and Cornell, N.Y.	72.8	2.6	8	5	242	2.4	No	1	8	Yes	Yes	1
37	Scripps La Jolla Hospitals and Clinics, La Jolla, Calif.	72.8	0.0	9	4	48	2.7	Yes	1	8	Yes	Yes	1
39	Hackensack University Medical Center, Hackensack, N.J.	72.6	0.3	8	5	98	2.3	Yes	1	8	Yes	Yes	1
40	St. Vincent Hospital and Health Center, Indianapolis	72.5	0.3	9	3	213	1.7	Yes	1	8	Yes	Yes	1
41	Sentara Norfolk General Hospital, Norfolk, Va.	72.3	0.8	10	1	191	1.6	Yes	1	8	Yes	Yes	1
	Wake Forest Baptist Medical Center, Winston-Salem, N.C.	71.5	1.4	8	1	319	1.6	Yes	1	8	Yes	Yes	l
43	University of Cincinnati Medical Center	71.2	2.9	9	2	270	2.0	No	1	8	Yes	Yes	İ
44	Northwest Community Healthcare, Arlington Heights, III.	71.1	0.0	9	5	58	1.3	Yes	1	8	Yes	Yes	ı
45	Akron General Medical Center, Ohio	70.7	0.6	10	2	38	1.5	Yes	1	8	Yes	Yes	ı
46	University of Alabama Hospital at Birmingham	70.3	2.4	4	4	424	1.6	Yes	1	7	Yes	Yes	İ
47	Bethesda North Hospital, Cincinnati	70.1	0.0	7	5	36	2.0	Yes	1	8	Yes	Yes	ı
48	Lehigh Valley Hospital, Allentown, Pa.	69.5	0.0	7	5	157	2.0	Yes	1	8	Yes	Yes	İ
49	Brigham and Women's Hospital, Boston	69.3	0.9	6	4	182	2.4	Yes	1	8	Yes	Yes	İ
49	Froedtert Hospital and the Medical College of Wisconsin, Milwaukee	69.3	0.9	6	4	169	1.6	Yes	1	8	Yes	Yes	İ
49	Spectrum Health, Grand Rapids, Mich.	69.3	0.0	7	5	86	2.0	Yes	1	8	Yes	Yes	İ

	Best Hospitals 2014-15: Gastroenterology & GI Surgery	U.S. News Score	Reputation with specialists	Survival	Patient safety	Patient volume	Nursing intensity	Nurse Magnet recognition	Advanced technologies	Patient services	Trauma center	Intensivist on staff	
1	Mayo Clinic, Rochester, Minn.	100.0	60.5	10	5	7,220	3.2	Yes	7	8	Yes	Yes	į.
2	Cleveland Clinic	85.1	38.6	9	3	6,915	2.3	Yes	7	8	No	Yes	ł
3	Massachusetts General Hospital, Boston	77.9	19.1	8	4	5,015	2.3	Yes	7	8	Yes	Yes	į
4	Johns Hopkins Hospital, Baltimore	76.3	24.3	9	1	3,337	2.2	Yes	7	8	Yes	Yes	ł
5	UCLA Medical Center, Los Angeles	75.3	11.1	9	4	3,944	3.0	Yes	7	8	Yes	Yes	ŀ
6	Cedars-Sinai Medical Center, Los Angeles	75.1	8.9	9	5	5,413	2.5	Yes	7	8	Yes	Yes	ł
7	UPMC-University of Pittsburgh Medical Center	72.8	13.3	7	1	9,826	1.9	Yes	7	8	Yes	Yes	ł
8	New York-Presbyterian University Hospital of Columbia and Cornell, N.Y.	71.9	7.7	9	5	8,071	2.4	No	7	8	Yes	Yes	ł
9	Mount Sinai Hospital, New York	70.9	16.5	6	2	6,438	2.1	Yes	7	8	Yes	Yes	T 40
10	Hospitals of the University of Pennsylvania-Penn Presbyterian, Philadelphia	68.1	7.9	6	5	4,248	2.6	Yes	7	8	Yes	Yes	Top 10
11	Mayo Clinic, Phoenix	68.0	4.1	10	5	2,419	4.0	No	7	8	No	Yes	ŀ
12	Northwestern Memorial Hospital, Chicago	67.5	6.8	8	4	3,594	1.8	Yes	7	8	Yes	Yes	ł
13	Houston Methodist Hospital, Houston	65.9	2.1	10	3	5,065	1.8	Yes	7	8	No	Yes	ł .
14	University Hospitals Case Medical Center, Cleveland	65.8	1.6	8	5	3,495	2.2	Yes	7	8	Yes	Yes	ł
15	Baylor University Medical Center, Dallas	65.1	4.6	9	1	4,918	1.7	Yes	7	8	Yes	Yes	ł
16	St. Francis Hospital, Roslyn, N.Y.	64.9	0.0	10	4	2,410	1.9	Yes	6	8	Yes	Yes	ł
17	Yale-New Haven Hospital, New Haven, Conn.	64.8	2.6	8	1	7,187	3.2	Yes	7	8	Yes	Yes	ł
18	Ochsner Medical Center, New Orleans	64.6	1.9	8	4	4,684	1.7	Yes	7	8	Yes	Yes	ł
19 20	Florida Hospital Orlando Beaumont Hospital, Royal Oak, Mich.	64.4	0.7 0.4	6 8	5 4	12,367 6,581	2.0	Yes Yes	7	8	No Yes	Yes Yes	Top 20
21	Lehigh Valley Hospital, Allentown, Pa.	63.9	0.4	9	5	4,621	2.0	Yes	6	8	Yes	Yes	10p 20
22	St. Alexius Medical Center, Hoffman Estates, III.	63.7	0.0	10	5	1,715	1.6	No	6	8	Yes	Yes	ł
23	Brigham and Women's Hospital, Boston	63.4	4.1	7	4	4,444	2.4	Yes	6	8	Yes	Yes	i
24	University of Kansas Hospital, Kansas City	63.3	0.5	9	4	2,576	2.1	Yes	7	8	Yes	Yes	ł
25	UCSF Medical Center, San Francisco	62.9	6.7	5	5	2,464	2.6	Yes	7	8	No	Yes	i
26	NYU Langone Medical Center, New York	62.8	1.9	8	4	2,734	2.3	Yes	7	8	Yes	Yes	ł
27	University of Washington Medical Center, Seattle	62.6	2.5	9	3	1,873	2.4	Yes	7	8	Yes	Yes	ì
28	Hackensack University Medical Center, Hackensack, N.J.	61.7	0.0	8	5	3,856	2.3	Yes	6	8	Yes	Yes	t
29	Bethesda North Hospital, Cincinnati	61.6	0.0	8	5	3,036	2.0	Yes	6	8	Yes	Yes	i
29	John Muir Medical Center, Walnut Creek, Calif.	61.6	0.0	10	3	2,065	2.5	Yes	6	8	Yes	Yes	i
29	Nebraska Medical Center, Omaha	61.6	0.3	9	3	3,037	2.7	Yes	7	8	Yes	Yes	l
32	Thomas Jefferson University Hospital, Philadelphia	61.4	1.9	7	3	4,601	2.3	Yes	7	8	Yes	Yes	i
33	Lancaster General Hospital, Lancaster, Pa.	61.2	0.0	8	5	3,728	1.7	Yes	6	8	Yes	Yes	l
34	Scripps La Jolla Hospitals and Clinics, La Jolla, Calif.	61.1	0.8	7	4	2,712	2.7	Yes	7	8	Yes	Yes	1
35	St. Luke's Episcopal Hospital, Houston	60.9	3.4	9	1	3,975	1.7	Yes	7	8	No	Yes	1
36	St. Peter's Hospital, Albany, N.Y.	60.8	1.5	9	5	3,291	1.6	Yes	6	6	No	Yes	1
36	Stanford Hospital and Clinics, Stanford, Calif.	60.8	0.7	8	4	3,008	2.6	Yes	7	8	Yes	Yes	ĺ
38	UC San Diego Medical Center	60.6	1.8	7	5	1,949	2.0	Yes	7	8	Yes	Yes	i
39	Aurora St. Luke's Medical Center, Milwaukee	60.4	0.3	9	2	5,074	1.6	Yes	7	8	No	Yes	ĺ
40	Barnes-Jewish Hospital/Washington University, St. Louis	60.1	4.3	6	1	6,651	2.1	Yes	7	8	Yes	Yes	ĺ
41	Emory University Hospital, Atlanta	59.9	2.3	8	5	3,149	1.8	Yes	7	8	No	Yes	i
42	IU Health Academic Health Center, Indianapolis	59.2	3.6	9	1	6,330	2.2	Yes	7	8	Yes	No	ĺ
43	NorthShore Evanston Hospital, Evanston, III.	59.0	0.0	8	4	4,093	1.2	Yes	6	8	Yes	Yes	i
44	Beth Israel Deaconess Medical Center, Boston	58.8	5.6	8	2	4,650	1.4	No	7	8	Yes	Yes	i
44	University of Chicago Medical Center	58.8	7.4	8	1	2,535	2.5	No	7	8	Yes	Yes	i
46	Mercy Hospital, Coon Rapids, Minn.	58.7	0.0	10	5	2,136	2.1	No	6	8	Yes	Yes	İ
46	University of Colorado Hospital, Aurora	58.7	0.7	8	4	1,783	1.8	Yes	7	8	Yes	Yes	i
48	Summa Akron City and St. Thomas Hospitals, Akron, Ohio	58.6	0.0	7	5	3,872	1.8	Yes	6	8	Yes	Yes	i
49	Duke University Hospital, Durham, N.C.	58.5	4.2	5	3	3,915	2.1	Yes	7	8	Yes	Yes	i
49	Froedtert Hospital and the Medical College of Wisconsin, Milwaukee	58.5	2.0	6	4	2,889	1.6	Yes	7	8	Yes	Yes	i
49	Spectrum Health, Grand Rapids, Mich.	58.5	0.0	7	5	5,511	2.0	Yes	4	8	Yes	Yes	i
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Rank	Best Hospitals 2014-15: Geriatrics Hospital	U.S. News Score	Reputation with specialists	Survival	Patient safety	Patient volume	Nursing intensity	Nurse Wagnet recognition	NIA-designated Alzheimer's center	Patient services	Intensivist on staff	
1	Mayo Clinic, Rochester, Minn.	100.0	13.0	9	5	25,738	3.2	Yes	Yes	9	Yes	ĺ
2	Mount Sinai Hospital, New York	96.6	27.6	8	2	24,120	2.1	Yes	Yes	9	Yes	(
	UCLA Medical Center, Los Angeles	96.3	21.0	8	4	15,281	3.0	Yes	Yes	9	Yes	1
4	Johns Hopkins Hospital, Baltimore	92.5	27.3	9	1	7,224	2.2	Yes	Yes	9	Yes	i
5	Massachusetts General Hospital, Boston	91.7	15.4	8	4	20,680	2.3	Yes	Yes	9	Yes	i
	New York-Presbyterian University Hospital of Columbia and Cornell, N.Y.	89.1	6.7	9	5	38,864	2.4	No	Yes	9	Yes	i
	Hospital for Special Surgery, New York	88.9	0.3	10	5	4,408	3.0	Yes	No	9	Yes	ì
8	NYU Langone Medical Center, New York	87.2	3.9	10	4	15,999	2.3	Yes	Yes	9	Yes	ł
9	Cleveland Clinic	82.5	12.8	10	3	19,783	2.3	Yes	No	9	Yes	ł
	Hospitals of the University of Pennsylvania-Penn Presbyterian, Philadelphia	79.5	3.2	8	5	16,931	2.6	Yes	Yes	8	Yes	Top 10
11	Northwestern Memorial Hospital, Chicago	78.9	1.9	10	4	11,420	1.8	Yes	Yes	9	Yes	100 10
	•	78.7	6.4	6	5			Yes	Yes	9	Yes	ł
12	UCSF Medical Center, San Francisco	78.4	7.8	7	1	6,719	2.6	Yes	Yes	9	Yes	ł
13	UPMC-University of Pittsburgh Medical Center	77.0		9		30,288	1.9			9		ł
14	Brigham and Women's Hospital, Boston		2.3	9	4	14,795	2.4	Yes	Yes		Yes	ł
	Mayo Clinic, Phoenix University of Kansas Hospital, Kansas City	76.4	2.0	10	5	8,701	4.0 2.1	No Yes	Yes	9	Yes Yes	ł
		75.6	0.3		4	7,226			Yes	9		ł
17	Rush University Medical Center, Chicago	73.5	3.1	10	1	8,581	2.0	Yes	Yes	9	Yes	ł
18	Yale-New Haven Hospital, New Haven, Conn.	72.5	8.1	7	1	33,115	3.2	Yes	No	9	Yes	ł
19	UC San Diego Medical Center	72.4 71.9	0.9 2.5	8	5 3	5,915	2.0	Yes Yes	Yes Yes	9	Yes Yes	Top 20
20	University of Washington Medical Center, Seattle					3,431						Top 20
21	Emory Wesley Woods Geriatric Hospital, Atlanta	71.1	2.2	7	5	11,180	1.8	Yes	Yes	8	Yes	ł
22	Cedars-Sinai Medical Center, Los Angeles	70.9	1.6	9	5	22,087	2.5	Yes	No	9	Yes	ł
23	Duke University Hospital, Durham, N.C.	70.7	10.7	8	3	11,813	2.1	Yes	No	9	Yes	ł
24	Beaumont Hospital, Royal Oak, Mich.	70.3	1.8	8	4	34,826	1.8	Yes	No	9	Yes	ł
25	University of California, Davis Medical Center, Sacramento	69.8	0.0	9	2	6,430	3.0	Yes	Yes	9	Yes	į.
	Barnes-Jewish Hospital/Washington University, St. Louis	69.6	1.6	8	1	16,532	2.1	Yes	Yes	8	Yes	ł
27	Florida Hospital Orlando	69.2	0.7	6	5	46,271	2.0	Yes	No	9	Yes	į.
28	University Hospitals Case Medical Center, Cleveland	68.4	3.0	8	5	12,752	2.2	Yes	No	9	Yes	ł
29	Lehigh Valley Hospital, Allentown, Pa.	67.0	0.6	9	5	24,897	2.0	Yes	No	9	Yes	ł
30	St. Francis Hospital, Roslyn, N.Y.	66.6	0.0	10	4	15,939	1.9	Yes	No	9	Yes	ł
31	Houston Methodist Hospital, Houston	66.3	1.0	10	3	16,957	1.8	Yes	No	9	Yes	į.
32	University of Wisconsin Hospital and Clinics, Madison	65.6	0.9	8	2	7,725	1.9	Yes	Yes	9	Yes	ł
33	Keck Medical Center of USC, Los Angeles IU Health Academic Health Center, Indianapolis	64.9	1.0	10	2	3,010	3.4	No	Yes	9	Yes	ł
34	Oregon Health and Science University Hospital, Portland	63.9	1.9 0.6	9	1	14,193	2.2	Yes	Yes	9	No	ł
35		62.6		8	1	5,387	2.1	Yes	Yes	8	Yes	ł
	Hackensack University Medical Center, Hackensack, N.J.	62.5	0.0	7	5	19,391	2.3	Yes	No	9	Yes	ł
37	Abbott Northwestern Hospital, Minneapolis	62.3	0.0	9	3	16,329	2.3	Yes	No	9	Yes	ł
	Bethesda North Hospital, Cincinnati	62.1	0.0	7	5	14,566	2.0	Yes	No	9	Yes	ł
	Scripps La Jolla Hospitals and Clinics, La Jolla, Calif.	62.0	0.0	8	4	15,337	2.7	Yes	No	8	Yes	ł
39 41	University of California, Irvine Medical Center, Orange	62.0 61.9	0.6	6	5	3,917	2.7	Yes	Yes No	9	Yes Yes	ł
	Morristown Medical Center, Morristown, N.J.		0.0			17,294		Yes				į.
	Banner Good Samaritan Medical Center, Phoenix	61.6	0.0	9	3	10,077	2.0	Yes	Yes	8 0	No	ł
43	Aurora St. Luke's Medical Center, Milwaukee	61.5	0.0	9	2	25,398	1.6	Yes	No	8	Yes	ł
	Beaumont Hospital, Troy, Mich.	61.4	0.0	8	5	17,812	1.6	Yes	No	9	Yes	ł
	Kaiser Permanente Los Angeles Medical Center	61.2	2.2	9	5	8,764	2.8	No	No	8	Yes	ł
46	Ochsner Medical Center, New Orleans	61.1	1.5	8	4	15,888	1.7	Yes	No	8	Yes	ł
	UT Southwestern Medical Center, Dallas	60.9	1.1	9	2	5,772	1.5	No	Yes	9	Yes	ł
48	Stanford Hospital and Clinics, Stanford, Calif.	59.9	2.5	7	4	10,399	2.6	Yes	No	9	Yes	ł
49	University of Arizona Medical Center, Tucson	59.8	1.2	6	1	6,394	2.0	Yes	Yes	7	Yes	ł
50	Advocate Christ Medical Center, Oak Lawn, III.	59.6	0.0	8	4	19,645	2.3	Yes	No	8	Yes	1

Rank	Best Hospitals 2014-15: Gynecology Hospital	U.S. News Score	Reputation with specialists	Survival	Patient safety	Patient volume	Nursing intensity	Nurse Magnet recognition	Advanced technologies	Patient services	intensivist on staff	
1	Mayo Clinic, Rochester, Minn.	100.0	18.7	10	5	662	3.2	Yes	5	9	Yes	
2	Brigham and Women's Hospital, Boston	91.4	15.6	10	4	479	2.4	Yes	5	9	Yes	
3	Cleveland Clinic	90.6	19.5	9	3	375	2.4	Yes	5	9	Yes	
4	Memorial Sloan Kettering Cancer Center, New York	87.6	8.4	10	5	568	1.9	No	5	8	Yes	
		83.6	6.1	10	4	348	2.3	Yes	5	9		
5	Massachusetts General Hospital, Boston			9	5	195					Yes	
6	UCSF Medical Center, San Francisco	83.1	5.9				2.6	Yes	5	9	Yes	,
/	Magee-Womens Hospital of UPMC, Pittsburgh	82.8	8.8	10	2	756	1.9	No	5	9	Yes	
8	University of Texas MD Anderson Cancer Center, Houston	80.5	15.4	7	2	337	2.0	Yes	5	9	Yes	
9	Florida Hospital Orlando	80.2	2.8	8	5	692	2.0	Yes	5	9	Yes	T 40
10	Hospitals of the University of Pennsylvania-Penn Presbyterian, Philadelphia	79.7	3.8	9	5	256	2.6	Yes	5	9	Yes	Top 10
11	UCLA Medical Center, Los Angeles	78.6	3.9	9	4	184	3.0	Yes	5	9	Yes	
12	Johns Hopkins Hospital, Baltimore	78.0	14.3	8	1	170	2.2	Yes	5	9	Yes	
13	New York-Presbyterian University Hospital of Columbia and Cornell, N.Y.	77.1	6.9	9	5	373	2.4	No	5	9	Yes	
14	Abbott Northwestern Hospital, Minneapolis	76.1	1.7	10	3	378	2.3	Yes	5	9	Yes	
15	University of Iowa Hospitals and Clinics, Iowa City	75.9	2.5	10	4	323	1.7	Yes	5	9	Yes	
16	Barnes-Jewish Hospital/Washington University, St. Louis	75.7	2.7	10	1	572	2.1	Yes	5	9	Yes	
17	Cedars-Sinai Medical Center, Los Angeles	74.6	2.4	8	5	312	2.5	Yes	5	9	Yes	
18	Yale-New Haven Hospital, New Haven, Conn.	74.5	1.4	9	1	571	3.2	Yes	5	9	Yes	
19	University of Colorado Hospital, Aurora	73.9	0.0	10	4	190	1.8	Yes	5	9	Yes	
20	St. Vincent Hospital and Health Center, Indianapolis	73.8	0.7	9	3	631	1.7	Yes	5	8	Yes	Top 20
20	Stanford Hospital and Clinics, Stanford, Calif.	73.8	3.2	9	4	168	2.6	Yes	5	9	Yes	
20	University of Alabama Hospital at Birmingham	73.8	4.0	8	4	499	1.6	Yes	5	8	Yes	
23	Spectrum Health, Grand Rapids, Mich.	73.3	0.5	8	5	289	2.0	Yes	5	9	Yes	
24	Christiana Care Hospital, Newark, Del.	73.2	1.0	9	4	321	2.1	Yes	5	8	Yes	
24	University of Washington Medical Center, Seattle	73.2	1.2	10	3	273	2.4	Yes	5	9	Yes	
26	Northwestern Memorial Hospital, Chicago	73.1	4.2	8	4	195	1.8	Yes	5	9	Yes	
27	University of Wisconsin Hospital and Clinics, Madison	72.9	1.9	9	2	381	1.9	Yes	5	9	Yes	
28	Duke University Hospital, Durham, N.C.	72.5	5.4	7	3	243	2.1	Yes	5	9	Yes	
28	John Muir Medical Center, Walnut Creek, Calif.	72.5	0.0	10	3	207	2.5	Yes	5	8	Yes	
30	Lehigh Valley Hospital, Allentown, Pa.	72.3	0.4	8	5	356	2.0	Yes	5	9	Yes	
30	Sarasota Memorial Hospital, Fla.	72.3	1.2	8	5	225	1.7	Yes	5	9	Yes	
32	Scripps La Jolla Hospitals and Clinics, La Jolla, Calif.	72.1	0.4	10	4	150	2.7	Yes	5	8	Yes	
33	City of Hope, Duarte, Calif.	72.0	0.7	10	5	131	2.3	No	5	8	Yes	
33	Inova Fairfax Hospital, Falls Church, Va.	72.0	3.1	10	1	277	2.0	Yes	5	9	Yes	
35	Morristown Medical Center, Morristown, N.J.	71.6	0.4	7	5	215	2.9	Yes	5	9	Yes	
35	University of California, Davis Medical Center, Sacramento	71.6	0.7	9	2	268	3.0	Yes	5	9	Yes	
37	Mercy Medical Center, Baltimore	71.3	8.0	7	5	414	1.3	Yes	5	8	Yes	
38	University of Kansas Hospital, Kansas City	71.1	0.4	8	4	324	2.1	Yes	5	9	Yes	
39	St. Luke's Hospital, Kansas City, Mo.	70.7	0.7	10	3	268	1.9	Yes	5	8	Yes	
40	Advocate Illinois Masonic Medical Center, Chicago	70.5	0.7	10	4	57	1.6	Yes	5	8	Yes	
40	Mayo Clinic, Phoenix	70.5	1.9	9	5	106	4.0	No	5	8	Yes	
42	Emory University Hospital, Atlanta	70.4	1.1	9	5	145	1.8	Yes	5	9	Yes	
43	Houston Methodist Hospital, Houston	70.3	0.8	9	3	228	1.8	Yes	5	8	Yes	
44	Beaumont Hospital, Royal Oak, Mich.	70.2	1.1	8	4	279	1.8	Yes	5	9	Yes	
44	El Camino Hospital, Mountain View, Calif.	70.2	0.7	10	4	198	2.0	Yes	5	5	Yes	
46	University of Rochester Medical Center, Rochester, N.Y.	70.1	0.7	10	1	60	1.7	Yes	5	9	Yes	
47	Thomas Jefferson University Hospital, Philadelphia	70.0	0.7	10	3	151	2.3	Yes	5	9	Yes	
47	University Hospitals Case Medical Center, Cleveland	70.0	0.5	7	5	366	2.2	Yes	5	9	Yes	
49	Baystate Medical Center, Springfield, Mass.	69.8	0.0	9	5	186	1.2	Yes	5	9	Yes	•
50	Advocate Christ Medical Center, Oak Lawn, III.	69.7	0.5	8	4	254	2.3	Yes	5	9	Yes	
50	Methodist Hospital, Omaha	69.7	0.0	10	2	290	1.5	Yes	5	9	Yes	

Rank	Best Hospitals 2014-15: Nephrology	U.S. News Score	Reputation with specialists	Survival	Patient safety	Patient volume	Nursing intensity	Nurse Wagnet recognition	Advanced technologies	Patient services	Trauma center	Intensivist on staff	
1	Mayo Clinic, Rochester, Minn.	100.0	32.5	9	5	2,251	3.2	Yes	7	8	Yes	Yes	i
2	Cleveland Clinic	93.3	27.5	10	3	2,666	2.3	Yes	7	8	No	Yes	i
3	New York-Presbyterian University Hospital of Columbia and Cornell, N.Y.	92.4	22.0	9	5	4,135	2.4	No	7	8	Yes	Yes	i
4	UCSF Medical Center, San Francisco	85.4	7.9	10	5	1,429	2.6	Yes	7	8	No	Yes	i
5	Brigham and Women's Hospital, Boston	84.4	23.2	8	4	1,241	2.4	Yes	7	8	Yes	Yes	i
6	Johns Hopkins Hospital, Baltimore	83.9	18.1	10	1	1,516	2.2	Yes	7	8	Yes	Yes	i
7	Massachusetts General Hospital, Boston	83.4	22.4	7	4	1,481	2.3	Yes	7	8	Yes	Yes	i
8	UCLA Medical Center, Los Angeles	81.5	6.8	9	4	1,828	3.0	Yes	7	8	Yes	Yes	i
9	Duke University Hospital, Durham, N.C.	80.3	6.6	10	3	1,624	2.1	Yes	7	8	Yes	Yes	i
10	Vanderbilt University Medical Center, Nashville	79.6	13.0	9	1	1,637	2.5	Yes	7	8	Yes	Yes	Top 10
11	Barnes-Jewish Hospital/Washington University, St. Louis	78.4	11.0	8	1	2,921	2.1	Yes	7	8	Yes	Yes	i
12	University of Washington Medical Center, Seattle	77.6	5.2	10	3	825	2.4	Yes	7	8	Yes	Yes	i
13	Hospitals of the University of Pennsylvania-Penn Presbyterian, Philadelphia	77.4	7.3	8	5	1,798	2.6	Yes	7	8	Yes	Yes	i
14	Northwestern Memorial Hospital, Chicago	76.6	2.2	10	4	1,834	1.8	Yes	7	8	Yes	Yes	i
15	UC San Diego Medical Center	76.5	2.0	10	5	792	2.0	Yes	7	8	Yes	Yes	i
16	University of Wisconsin Hospital and Clinics, Madison	76.0	4.5	10	2	1,539	1.9	Yes	7	8	Yes	Yes	i
17	Cedars-Sinai Medical Center, Los Angeles	75.1	4.0	8	5	1,728	2.5	Yes	7	8	Yes	Yes	i
18	University of Colorado Hospital, Aurora	74.8	4.2	9	4	944	1.8	Yes	7	8	Yes	Yes	i
19	University of California, Davis Medical Center, Sacramento	74.0	1.6	10	2	1,193	3.0	Yes	7	8	Yes	Yes	
20	Wake Forest Baptist Medical Center, Winston-Salem, N.C.	73.7	3.8	9	1	2,862	1.6	Yes	7	8	Yes	Yes	Top 20
21	Stanford Hospital and Clinics, Stanford, Calif.	73.1	4.7	8	4	1,025	2.6	Yes	7	8	Yes	Yes	i
22	Florida Hospital Orlando	72.2	1.0	7	5	5,305	2.0	Yes	7	8	No	Yes	i
23	Yale-New Haven Hospital, New Haven, Conn.	71.5	8.1	6	1	2,900	3.2	Yes	7	8	Yes	Yes	i
24	Mayo Clinic, Phoenix	71.4	0.4	10	5	1,144	4.0	No	7	8	No	Yes	i
25	UF Health Shands Hospital, Gainesville, Fla.	71.3	4.2	10	1	1,560	1.8	Yes	7	8	Yes	Yes	i
26	UPMC-University of Pittsburgh Medical Center	71.0	4.2	8	1	3,021	1.9	Yes	7	8	Yes	Yes	i
26	University of Alabama Hospital at Birmingham	71.0	2.7	8	4	2,354	1.6	Yes	7	7	Yes	Yes	i
28	University of Michigan Hospitals and Health Centers, Ann Arbor	70.5	6.0	9	2	1,917	2.8	No	7	8	Yes	Yes	i
29	Nebraska Medical Center, Omaha	70.4	0.0	9	3	1,373	2.7	Yes	7	8	Yes	Yes	i
29	University Hospitals Case Medical Center, Cleveland	70.4 69.8		10	5	1,420	2.2	Yes	7	8	Yes	Yes	i
31	Houston Methodist Hospital, Houston Rush University Medical Center, Chicago	69.8	1.5 6.9	9	1	2,019 1,057	1.8 2.0	Yes Yes	7	8	No Yes	Yes Yes	i
33	University of Kansas Hospital, Kansas City	69.7	0.9	9	4	1,413	2.1	Yes	7	8	Yes	Yes	i
34	Ochsner Medical Center, New Orleans	69.0	0.0	9	4	2,007	1.7	Yes	7	8	Yes	Yes	i
35	Ohio State University Wexner Medical Center, Columbus	67.9	1.9	9	1	2,465	2.1	Yes	7	8	Yes	Yes	i
36	University of Maryland Medical Center, Baltimore	67.5	2.1	10	1	1,417	2.2	Yes	7	8	Yes	Yes	i
37	Beaumont Hospital, Royal Oak, Mich.	67.3	0.4	8	4	2,460	1.8	Yes	7	8	Yes	Yes	i
38	Baylor University Medical Center, Dallas	67.1	1.0	9	1	1,713	1.7	Yes	7	8	Yes	Yes	i
38	NYU Langone Medical Center, New York	67.1	0.8	8	4	863	2.3	Yes	7	8	Yes	Yes	i
40	University of Iowa Hospitals and Clinics, Iowa City	67.0	2.1	8	4	1,103	1.7	Yes	7	8	Yes	Yes	l
41	University Hospital, San Antonio	66.8	0.0	10	1	463	1.5	Yes	7	7	Yes	Yes	i
42	Emory University Hospital, Atlanta	66.3	2.3	8	5	1,648	1.8	Yes	7	8	No	Yes	l
42	Thomas Jefferson University Hospital, Philadelphia	66.3	0.0	8	3	1,600	2.3	Yes	7	8	Yes	Yes	i
44	Tampa General Hospital	66.2	0.0	10	1	1,623	2.2	Yes	7	8	Yes	Yes	l
44	Virginia Commonwealth University Medical Center, Richmond	66.2	2.0	9	1	964	1.9	Yes	7	7	Yes	Yes	i
46	University of Rochester Medical Center, Rochester, N.Y.	66.1	0.4	9	1	1,387	1.7	Yes	7	8	Yes	Yes	l
47	Froedtert Hospital and the Medical College of Wisconsin, Milwaukee	65.7	0.3	8	4	1,256	1.6	Yes	7	8	Yes	Yes	i
47	Hahnemann University Hospital, Philadelphia	65.7	0.0	9	2	627	2.1	Yes	7	8	Yes	Yes	l
47	Mount Sinai Hospital, New York	65.7	0.6	8	2	2,346	2.1	Yes	7	8	Yes	Yes	i
50	University of California, Irvine Medical Center, Orange	65.3	0.0	9	2	512	2.7	Yes	7	8	Yes	Yes	l
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1 Mayo Clinic, Rochester, Minn. 100.0 40.8 7 5 4,445 3.2 Yes Yes 5 2 New York-Presbyterian University Hospital of Columbia and Cornell, N.Y. 93.7 26.1 8 5 6,623 2.4 No Yes Yes 5 3 Johns Hopkins Hospital, Baltimore 92.5 39.5 8 1 2,537 2.2 Yes Yes 5	9 Yes 9 Yes 9 Yes	es Yes	
2 New York-Presbyterian University Hospital of Columbia and Cornell, N.Y. 93.7 26.1 8 5 6,623 2.4 No Yes Yes 5 3 Johns Hopkins Hospital, Baltimore 92.5 39.5 8 1 2,537 2.2 Yes Yes 5	9 Yes 9 Yes		
3 Johns Hopkins Hospital, Baltimore 92.5 39.5 8 1 2,537 2.2 Yes Yes 5	9 Yes		
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20 St. Joseph's Hospital and Medical Center, Phoenix 68.4 15.5 6 1 5,260 1.8 No Yes Yes 4	9 Yes	es Yes	Top 20
21 University of Washington Medical Center, Seattle 67.3 2.0 7 3 624 2.4 Yes Yes 5	9 Yes	es Yes	
22 UT Southwestern Medical Center, Dallas 66.3 1.2 10 2 1,814 1.5 No Yes Yes 5	9 No	o Yes	
23 University Hospitals Case Medical Center, Cleveland 66.2 1.7 6 5 3,345 2.2 Yes Yes No 5	9 Yes		
24 Ochsner Medical Center, New Orleans 65.6 0.0 8 4 3,056 1.7 Yes Yes No 5	8 Yes		
25 UC San Diego Medical Center 65.5 0.4 6 5 1,418 2.0 Yes Yes 5	9 Yes		
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49 University of Rochester Medical Center, Rochester, N.Y. 60.6 1.5 7 1 3,542 1.7 Yes Yes No 5	9 Yes	es Yes	_

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	Best Hospitals 2014-15: Orthopedics	U.S. News Score	Reputation with specialists	Survival	Patient safety	Patient volume	Nursing intensity	Nurse Magnet recognition	Advanced technologies	Patient services	Trauma center	Intensivist on staff	
1	Hospital for Special Surgery, New York	100.0	44.2	10	5	9,644	3.0	Yes	2	7	Yes	Yes	4
2	Mayo Clinic, Rochester, Minn.	89.5	45.0	9	5	7,100	3.2	Yes	2	7	Yes	Yes	4
3	Cleveland Clinic	73.1	21.2	10	3	3,465	2.3	Yes	2	7	No	Yes	4
4	Hospital for Joint Diseases, NYU Langone Medical Center, New York	68.8	6.6	10	4	4,292	2.3	Yes	2	7	Yes	Yes	4
5	Massachusetts General Hospital, Boston	68.7	18.6	7	4	3,511	2.3	Yes	2	7	Yes	Yes	ı
6	Rush University Medical Center, Chicago	65.8	12.8	10	1	3,299	2.0	Yes	2	7	Yes	Yes	ı
7	Cedars-Sinai Medical Center, Los Angeles	63.3	2.2	9	5	4,574	2.5	Yes	2	7	Yes	Yes	
8	Thomas Jefferson University Hospital, Philadelphia	63.2	7.3	8	3	4,599	2.3	Yes	2	7	Yes	Yes	ı
9	Beaumont Hospital, Royal Oak, Mich.	62.6	1.6	9	4	7,796	1.8	Yes	2	7	Yes	Yes	_
9	Duke University Hospital, Durham, N.C.	62.6	10.0	7	3	3,187	2.1	Yes	2	7	Yes	Yes	Top 10
11	Santa Monica-UCLA Medical Center and Orthopedic Hospital, Santa Monica, Calif.	62.3	4.4	8	4	2,321	3.0	Yes	2	7	Yes	Yes	
12	Johns Hopkins Hospital, Baltimore	61.9	13.3	8	1	1,279	2.2	Yes	2	7	Yes	Yes	
13	UPMC-University of Pittsburgh Medical Center	61.8	8.3	8	1	6,845	1.9	Yes	2	7	Yes	Yes	
14	UCSF Medical Center, San Francisco	61.2	3.2	9	5	2,468	2.6	Yes	2	7	No	Yes	
15	Northwestern Memorial Hospital, Chicago	60.5	2.0	9	4	3,146	1.8	Yes	2	7	Yes	Yes	
16	New England Baptist Hospital, Boston	60.3	3.1	10	5	3,820	1.9	No	2	7	No	Yes	
17	University Hospitals Case Medical Center, Cleveland	59.7	1.3	9	5	2,445	2.2	Yes	2	7	Yes	Yes	
18	University of Iowa Hospitals and Clinics, Iowa City	59.6	3.1	9	4	1,939	1.7	Yes	2	7	Yes	Yes	
19	University of Washington Medical Center, Seattle	59.5	3.6	10	3	1,253	2.4	Yes	1	7	Yes	Yes	
20	Brigham and Women's Hospital, Boston	59.3	4.7	8	4	2,862	2.4	Yes	2	7	Yes	Yes	Top 20
21	Lehigh Valley Hospital, Allentown, Pa.	59.2	0.0	9	5	4,676	2.0	Yes	2	7	Yes	Yes	
22	Abbott Northwestern Hospital, Minneapolis	59.1	0.9	10	3	5,119	2.3	Yes	2	7	No	Yes	ı
22	Hospitals of the University of Pennsylvania-Penn Presbyterian, Philadelphia	59.1	3.5	8	5	2,299	2.6	Yes	2	7	Yes	Yes	
24	Barnes-Jewish Hospital/Washington University, St. Louis	58.9	8.8	7	1	3,745	2.1	Yes	2	7	Yes	Yes	ı
25	Stanford Hospital and Clinics, Stanford, Calif.	58.6	3.1	8	4	3,022	2.6	Yes	2	7	Yes	Yes	
26	University of California, Davis Medical Center, Sacramento	58.5	3.2	9	2	1,585	3.0	Yes	2	7	Yes	Yes	ı
27	Scripps La Jolla Hospitals and Clinics, La Jolla, Calif.	58.1	0.3	9	4	3,172	2.7	Yes	2	7	Yes	Yes	
	Cadence Health-Central DuPage Hospital, Winfield, III.	58.0	0.0	9	5	2,743	1.8	Yes	2	6	Yes	Yes	ı
29	Morristown Medical Center, Morristown, N.J.	57.6	0.0	7	5	3,394	2.9	Yes	2	7	Yes	Yes	
	New York-Presbyterian University Hospital of Columbia and Cornell, N.Y.	56.7	3.1	8	5	3,266	2.4	No	2	7	Yes	Yes	ı
31	Houston Methodist Hospital, Houston	55.9	0.5	9	3	4,186	1.8	Yes	2	7	No	Yes	
31	University of Alabama Hospital at Birmingham	55.9	1.6	9	4	2,399	1.6	Yes	2	6	Yes	Yes	ı
33	John Muir Medical Center, Walnut Creek, Calif.	55.6	0.0	9	3	2,726	2.5	Yes	2	6	Yes	Yes	
33	St. Francis Hospital, Roslyn, N.Y.	55.6	0.0	10	4	801	1.9	Yes	2	7	Yes	Yes	ı
	University of Kansas Hospital, Kansas City	55.6	0.3	9	4	1,713	2.1	Yes	2	7	Yes	Yes	
	Bethesda North Hospital, Cincinnati	55.5	0.0	7	5	2,742	2.0	Yes	2	7	Yes	Yes	ı
37	Lancaster General Hospital, Lancaster, Pa.	55.2	0.0	7	5	5,003	1.7	Yes	2	6	Yes	Yes	
	Mayo Clinic, Phoenix	55.2	0.5	9	5	2,103	4.0	No	2	7	No	Yes	
	Hackensack University Medical Center, Hackensack, N.J.	55.1	0.0	7	5	2,930	2.3	Yes	2	7	Yes	Yes	
40	Tampa General Hospital	55.0	1.4	9	1	3,722	2.2	Yes	2	7	Yes	Yes	
41	Baylor University Medical Center, Dallas	54.5	1.6	8	1	4,773	1.7	Yes	2	6	Yes	Yes	l
	Ochsner Medical Center, New Orleans	54.5	0.8	8	4	2,723	1.7	Yes	2	7	Yes	Yes	
41	University of Wisconsin Hospital and Clinics, Madison	54.5	1.5	9	2	1,869	1.9	Yes	2	7	Yes	Yes	l
44	UC San Diego Medical Center	54.4	0.3	8	5	1,261	2.0	Yes	2	7	Yes	Yes	i
45	University of Colorado Hospital, Aurora	54.4	0.3	8	4	1,256	1.8	Yes	2	7	Yes	Yes	l
46	John Muir Medical Center, Concord, Calif.	54.2	0.0	9	5	833	2.7	Yes	2	5	No	Yes	l
47	Advocate Lutheran General Hospital, Park Ridge, III.	53.9	0.5	6	5	2,756	1.6	Yes	2	7	Yes	Yes	l
48	Pennsylvania Hospital, Philadelphia	53.9	0.5	10	5	2,736	1.7	No	2	7	No	Yes	l
49	Magee-Womens Hospital of UPMC, Pittsburgh	53.4	0.4	10	2	1,310	1.7	No	2	7	Yes	Yes	l
	Mercy Medical Center, Baltimore	53.4	0.0	9	5	2,112	1.3	Yes	2	6	No	Yes	i
	Porter Adventist Hospital, Denver	53.2	0.0	8	5	2,756	1.7	Yes	2	6	No	Yes	l
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Rank	Best Hospitals 2014-15: Pulmonology Hospital	U.S. News Score	Reputation with specialists	Survival	Patient safety	Patient volume	Nursing intensity	Nurse Wagnet recognition	Advanced technologies	Patient services	Trauma center	Intensivist on staff	
1	Mayo Clinic, Rochester, Minn.	100.0	43.3	9	5	7,300	3.2	Yes	6	8	Yes	Yes	Ī
2	National Jewish Health, Denver-University of Colorado Hospital, Aurora	96.1	55.8	9	4	2,639	1.8	Yes	6	8	Yes	Yes	1
3	Cleveland Clinic	85.5	29.4	9	3	5,979	2.3	Yes	6	8	No	Yes	1
4	Massachusetts General Hospital, Boston	81.0	20.3	7	4	5,794	2.3	Yes	6	8	Yes	Yes	Ī
5	Duke University Hospital, Durham, N.C.	78.1	12.9	8	3	5,606	2.1	Yes	6	8	Yes	Yes	1
6	UC San Diego Medical Center	77.7	6.9	9	5	2,778	2.0	Yes	6	8	Yes	Yes	1
7	Hospitals of the University of Pennsylvania-Penn Presbyterian, Philadelphia	74.5	11.0	6	5	5,578	2.6	Yes	6	8	Yes	Yes	1
8	New York-Presbyterian University Hospital of Columbia and Cornell, N.Y.	73.1	8.3	7	5	10,189	2.4	No	6	8	Yes	Yes	ì
9	Barnes-Jewish Hospital/Washington University, St. Louis	72.0	10.9	8	1	6,133	2.1	Yes	6	8	Yes	Yes	ì
10	UPMC-University of Pittsburgh Medical Center	71.4	11.0	6	1	10,404	1.9	Yes	6	8	Yes	Yes	Top 10
11	Johns Hopkins Hospital, Baltimore	70.2	22.9	5	1	2,581	2.2	Yes	6	8	Yes	Yes	
12	University of Kansas Hospital, Kansas City	70.0	0.4	10	4	3,366	2.1	Yes	5	8	Yes	Yes	ì
13	Brigham and Women's Hospital, Boston	69.7	5.7	7	4	5,000	2.4	Yes	6	8	Yes	Yes	ì
14	Bethesda North Hospital, Cincinnati	68.9	0.4	8	5	5,693	2.0	Yes	5	8	Yes	Yes	1
15	University of California, Davis Medical Center, Sacramento	68.8	0.0	10	2	3,372	3.0	Yes	5	8	Yes	Yes	1
16	UCLA Medical Center, Los Angeles	68.6	4.6	6	4	4,960	3.0	Yes	6	8	Yes	Yes	ì
16	University of Washington Medical Center, Seattle	68.6	5.8	8	3	1,689	2.4	Yes	6	8	Yes	Yes	1
18	Vanderbilt University Medical Center, Nashville	68.4	6.5	8	1	3,793	2.5	Yes	6	8	Yes	Yes	1
19	Yale-New Haven Hospital, New Haven, Conn.	68.1	1.2	8	1	11,448	3.2	Yes	5	8	Yes	Yes	1
20	Lehigh Valley Hospital, Allentown, Pa.	67.7	0.0	8	5	6,936	2.0	Yes	5	8	Yes	Yes	Top 20
20	Spectrum Health, Grand Rapids, Mich.	67.7	0.0	7	5	8,850	2.0	Yes	6	8	Yes	Yes	·
22	Beaumont Hospital, Royal Oak, Mich.	67.5	0.4	8	4	9,906	1.8	Yes	5	8	Yes	Yes	1
22	Houston Methodist Hospital, Houston	67.5	1.9	9	3	5,477	1.8	Yes	6	8	No	Yes	1
22	Northwestern Memorial Hospital, Chicago	67.5	0.8	9	4	3,771	1.8	Yes	5	8	Yes	Yes	ì
25	Cedars-Sinai Medical Center, Los Angeles	66.7	1.6	7	5	5,928	2.5	Yes	6	8	Yes	Yes	1
26	Ochsner Medical Center, New Orleans	65.8	0.0	8	4	6,010	1.7	Yes	6	8	Yes	Yes	1
27	Beaumont Hospital, Troy, Mich.	65.4	0.4	8	5	6,294	1.6	Yes	5	8	No	Yes	1
28	University of Tennessee Medical Center, Knoxville	65.2	0.0	9	4	5,484	1.5	Yes	5	8	Yes	Yes	ì
29	Froedtert Hospital and the Medical College of Wisconsin, Milwaukee	64.9	0.0	8	4	3,993	1.6	Yes	6	8	Yes	Yes	ì
30	Florida Hospital Orlando	64.8	1.6	5	5	14,398	2.0	Yes	5	8	No	Yes	1
31	Alexian Brothers Medical Center, Elk Grove Village, III.	64.4	0.4	9	5	3,683	1.2	No	5	8	Yes	Yes	1
31	University of Wisconsin Hospital and Clinics, Madison	64.4	1.0	9	2	3,354	1.9	Yes	6	8	Yes	Yes	ì
33	NYU Langone Medical Center, New York	64.3	0.5	8	4	3,518	2.3	Yes	5 6	8	Yes	Yes	1
34	IU Health Academic Health Center, Indianapolis Baylor University Medical Center, Dallas	64.1	_	10	1	7,038	2.2	Yes	_	8	Yes	No	ì
35 36	Hackensack University Medical Center, Hackensack, N.J.	63.9 63.8	0.9	8 7	5	6,757	1.7 2.3	Yes Yes	6 5	8	Yes Yes	Yes Yes	1
36	Stanford Hospital and Clinics, Stanford, Calif.	63.8	6.8	5	4	6,068 3,233	2.6	Yes	6	8	Yes	Yes	1
36	University Hospitals Case Medical Center, Cleveland	63.8	1.3	7	5	3,855	2.0	Yes	5	8	Yes	Yes	1
39	Scripps La Jolla Hospitals and Clinics, La Jolla, Calif.	63.6	0.0	8	4	4,089	2.7	Yes	5	8	Yes	Yes	1
40	Akron General Medical Center, Ohio	63.4	0.0	9	2	5,558	1.5	Yes	5	8	Yes	Yes	1
41	Mission Hospital, Asheville, N.C.	63.3	0.4	8	5	7,836	2.1	No	5	8	Yes	Yes	ì
41	Nebraska Medical Center, Omaha	63.3	0.5	8	3	3,214	2.7	Yes	5	8	Yes	Yes	1
43	Aurora St. Luke's Medical Center, Milwaukee	63.2	0.3	8	2	8,092	1.6	Yes	5	8	No	Yes	i
43	Wake Forest Baptist Medical Center, Winston-Salem, N.C.	63.2	2.5	8	1	5,596	1.6	Yes	5	8	Yes	Yes	i
45	Lancaster General Hospital, Lancaster, Pa.	63.1	0.0	7	5	5,548	1.7	Yes	5	8	Yes	Yes	i
45	Morristown Medical Center, Morristown, N.J.	63.1	0.0	6	5	5,346	2.9	Yes	5	8	Yes	Yes	i
47	UF Health Shands Hospital, Gainesville, Fla.	63.0	1.3	9	1	4,626	1.8	Yes	6	8	Yes	Yes	i
48	Banner Estrella Medical Center, Phoenix	62.9	0.4	10	4	2,837	1.9	No	5	8	No	Yes	i
48	St. Alexius Medical Center, Priderix St. Alexius Medical Center, Hoffman Estates, III.	62.9	0.4	9	5	3,392	1.6	No	5	8	Yes	Yes	i
48	University of Michigan Hospitals and Health Centers, Ann Arbor	62.9	7.6	7	2	4,555	2.8	No	6	8	Yes	Yes	i
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Rank	Best Hospitals 2014-15: Urology	U.S. News Score	Reputation with specialists	Survival	Patient safety	Patient volume	Nursing intensity	Nurse Magnet recognition	Advanced technologies	Patient services	Trauma center	Intensivist on staff	
1	Cleveland Clinic	100.0	53.2	9	3	1,244	2.3	Yes	6	9	No	Yes	İ
2	Mayo Clinic, Rochester, Minn.	93.2	26.4	7	5	1,210	3.2	Yes	6	9	Yes	Yes	1
3	Johns Hopkins Hospital, Baltimore	93.0	43.4	9	1	866	2.2	Yes	6	9	Yes	Yes	
4	UCLA Medical Center, Los Angeles	91.2	19.3	9	4	1,042	3.0	Yes	6	9	Yes	Yes	
5	New York-Presbyterian University Hospital of Columbia and Cornell, N.Y.	83.5	9.7	9	5	1,978	2.4	No	6	9	Yes	Yes	
6	UCSF Medical Center, San Francisco	80.2	9.1	9	5	817	2.6	Yes	6	9	No	Yes	
7	Duke University Hospital, Durham, N.C.	79.4	12.3	8	3	905	2.1	Yes	6	9	Yes	Yes	
8	Hospitals of the University of Pennsylvania-Penn Presbyterian, Philadelphia	76.9	5.6	8	5	772	2.6	Yes	6	9	Yes	Yes	_
9	Memorial Sloan Kettering Cancer Center, New York	75.1	9.9	9	5	991	1.9	No	6	8	No	Yes	4
9	Northwestern Memorial Hospital, Chicago	75.1	5.2	10	4	630	1.8	Yes	6	9	Yes	Yes	Top 10
	Barnes-Jewish Hospital/Washington University, St. Louis	75.0	7.1	9	1	1,205	2.1	Yes	6	9	Yes	Yes	1
12	NYU Langone Medical Center, New York	74.9	6.5	9	4	393	2.3	Yes	6	9	Yes	Yes	1
12	Vanderbilt University Medical Center, Nashville	74.9	9.6	8	1	956	2.5	Yes	6	9	Yes	Yes	4
14 15	University of Michigan Hospitals and Health Centers, Ann Arbor University of Washington Medical Center, Seattle	74.3 71.8	10.8 4.0	9	2	1,154 530	2.8 2.4	No Yes	6	9	Yes Yes	Yes Yes	-
16	Cedars-Sinai Medical Center, Los Angeles	71.5	1.8	8	5	934	2.5	Yes	6	9	Yes	Yes	4
16	UC San Diego Medical Center	71.5	1.7	10	5	382	2.0	Yes	6	9	Yes	Yes	-
	Houston Methodist Hospital, Houston	70.1	4.2	10	3	742	1.8	Yes	6	8	No	Yes	1
	University of Wisconsin Hospital and Clinics, Madison	70.0	1.1	10	2	833	1.9	Yes	6	9	Yes	Yes	1
	Keck Medical Center of USC, Los Angeles	69.9	6.7	10	2	723	3.4	No	6	9	No	Yes	Top 20
21	Massachusetts General Hospital, Boston	69.6	5.1	7	4	703	2.3	Yes	6	9	Yes	Yes	
22	Hackensack University Medical Center, Hackensack, N.J.	69.5	0.6	8	5	729	2.3	Yes	6	9	Yes	Yes	İ
23	Florida Hospital Orlando	69.2	0.8	7	5	1,825	2.0	Yes	6	9	No	Yes	
24	Stanford Hospital and Clinics, Stanford, Calif.	69.1	2.9	8	4	433	2.6	Yes	6	9	Yes	Yes	1
25	Emory University Hospital, Atlanta	68.4	1.2	9	5	922	1.8	Yes	6	9	No	Yes	1
25	Nebraska Medical Center, Omaha	68.4	0.0	10	3	445	2.7	Yes	6	8	Yes	Yes	
27	Mount Sinai Hospital, New York	68.0	1.2	9	2	1,053	2.1	Yes	6	9	Yes	Yes	
28	University of Alabama Hospital at Birmingham	67.8	8.0	9	4	1,007	1.6	Yes	6	8	Yes	Yes]
29	Mayo Clinic, Phoenix	67.7	0.8	10	5	596	4.0	No	6	8	No	Yes	4
	University Hospitals Case Medical Center, Cleveland	67.6	0.8	8	5	540	2.2	Yes	6	9	Yes	Yes	_
31	Thomas Jefferson University Hospital, Philadelphia	67.3	1.6	8	3	700	2.3	Yes	6	9	Yes	Yes	4
32	UPMC-University of Pittsburgh Medical Center	66.7	1.9	8	1	1,200	1.9	Yes	6	9	Yes	Yes	
	Ohio State University Wexner Medical Center, Columbus University of Iowa Hospitals and Clinics, Iowa City	66.4	1.7	8	1	1,351	2.1	Yes	6	9	Yes	Yes Yes	4
33 35	University of Colorado Hospital, Aurora	66.4	3.0 0.5	7 8	4	430 475	1.7	Yes Yes	6	9	Yes Yes	Yes	•
36	University of Kansas Hospital, Kansas City	65.9	1.4	7	4	526	2.1	Yes	6	9	Yes	Yes	4
37	Tampa General Hospital	65.7	0.0	10	1	851	2.2	Yes	6	9	Yes	Yes	ł
	Brigham and Women's Hospital, Boston	65.4	2.9	6	4	594	2.4	Yes	6	9	Yes	Yes	t
	Loyola University Medical Center, Maywood, III.	65.2	2.2	8	3	644	1.6	Yes	6	8	Yes	Yes	1
	Carolinas Medical Center, Charlotte, N.C.	65.0	1.5	9	1	661	1.9	Yes	6	9	Yes	Yes	1
40	Froedtert Hospital and the Medical College of Wisconsin, Milwaukee	65.0	0.9	7	4	667	1.6	Yes	6	9	Yes	Yes	
42	Beaumont Hospital, Royal Oak, Mich.	64.7	1.2	7	4	922	1.8	Yes	6	9	Yes	Yes	İ
43	Rush University Medical Center, Chicago	64.5	1.2	10	1	602	2.0	Yes	6	9	Yes	Yes	1
44	Lehigh Valley Hospital, Allentown, Pa.	64.1	0.0	7	5	738	2.0	Yes	6	9	Yes	Yes	1
45	Yale-New Haven Hospital, New Haven, Conn.	64.0	1.1	7	1	877	3.2	Yes	6	9	Yes	Yes	1
46	Loma Linda University Medical Center, Loma Linda, Calif.	63.8	1.6	10	1	481	2.8	No	6	9	Yes	Yes	
46	Ochsner Medical Center, New Orleans	63.8	0.0	8	4	682	1.7	Yes	6	8	Yes	Yes	
48	St. Luke's Hospital, Kansas City, Mo.	63.4	0.0	9	3	298	1.9	Yes	6	8	Yes	Yes]
48	University of California, Davis Medical Center, Sacramento	63.4	1.2	7	2	468	3.0	Yes	6	9	Yes	Yes	
	Oregon Health and Science University Hospital, Portland	63.2	1.2	9	1	336	2.1	Yes	6	8	Yes	Yes	1
50	St. Alexius Medical Center, Hoffman Estates, III.	63.2	0.0	10	5	184	1.6	No	6	8	Yes	Yes	1

Appendix F 2014-15 Best Hospitals Rankings, Reputation-Only Specialties

Best Hospitals 2014-15: Ophthalmology

Rank	Hospital	Reputation (%)	
1	Bascom Palmer Eye Institute-Anne Bates Leach Eye Hospital, Miami	67.3	
2	Wills Eye Hospital, Philadelphia	58.6	
3	Wilmer Eye Institute, Johns Hopkins Hospital, Baltimore	58.2	
4	Massachusetts Eye and Ear Infirmary, Massachusetts General Hospital, Boston	29.9	
5	Stein and Doheny Eye Institutes, UCLA Medical Center, Los Angeles	27.5	Top 5
6	Duke University Hospital, Durham, N.C.	12.9	
7	Cleveland Clinic	12.6	
8	University of Iowa Hospitals and Clinics, Iowa City	12.0	
9	USC Eye Institute-Keck Medical Center of USC, Los Angeles	9.9	
10	New York Eye and Ear Infirmary, N.Y.	8.5	Top 10
11	W.K. Kellogg Eye Center, University of Michigan, Ann Arbor	8.0	
12	Barnes-Jewish Hospital/Washington University, St. Louis	5.5	

Best Hospitals 2014-15: Psychiatry

Rank	Hospital	Reputation (%)	
1	Massachusetts General Hospital, Boston	26.7	
2	New York-Presbyterian University Hospital of Columbia and Cornell, N.Y.	25.9	
3	Johns Hopkins Hospital, Baltimore	24.5	
4	McLean Hospital, Belmont, Mass.	23.8	
5	Menninger Clinic, Houston	21.7	Top 5
6	Sheppard and Enoch Pratt Hospital, Baltimore	18.3	
7	Mayo Clinic, Rochester, Minn.	12.4	
8	Resnick Neuropsychiatric Hospital at UCLA, Los Angeles	10.7	
9	Austen Riggs Center, Stockbridge, Mass.	9.3	
10	UPMC-University of Pittsburgh Medical Center	8.2	Top 10
11	Yale-New Haven Hospital, New Haven, Conn.	7.6	
12	Hospitals of the University of Pennsylvania-Penn Presbyterian, Philadelphia	5.3	

Best Hospitals 2014-15: Rehabilitation

Rank	Hospital	Reputation (%)	
1	Rehabilitation Institute of Chicago	55.4	
2	Kessler Institute for Rehabilitation, West Orange, N.J.	30.9	
3	TIRR Memorial Hermann, Houston	29.2	
4	Mayo Clinic, Rochester, Minn.	23.6	
4	University of Washington Medical Center, Seattle	23.6	Top 5
6	Spaulding Rehabilitation Hospital, Massachusetts General Hospital, Boston	22.0	
7	Craig Hospital, Englewood, Colo.	16.9	
8	MossRehab, Elkins Park, Pa.	12.9	
9	Rusk Rehabilitation at NYU Langone Medical Center, New York	11.7	
9	Shepherd Center, Atlanta	11.7	Top 10
11	UPMC-University of Pittsburgh Medical Center	8.9	
12	MedStar National Rehabilitation Hospital, Washington, D.C.	8.3	
13	New York-Presbyterian University Hospital of Columbia and Cornell, N.Y.	6.2	
14	Mount Sinai Hospital, New York	5.8	

Best Hospitals 2014-15: Rheumatology

Rank	Hospital	Reputation (%)	
1	Johns Hopkins Hospital, Baltimore	50.2	
2	Cleveland Clinic	47.8	
3	Hospital for Special Surgery, New York-Presbyterian University Hospital of Columbia and Cornell, N.Y	41.0	
4	Mayo Clinic, Rochester, Minn.	34.7	
5	Brigham and Women's Hospital, Boston	22.8	Top 5
6	Hospital for Joint Diseases, NYU Langone Medical Center, New York	17.3	
7	Massachusetts General Hospital, Boston	17.2	
8	UCLA Medical Center, Los Angeles	15.6	
9	UPMC-University of Pittsburgh Medical Center	14.8	
10	UCSF Medical Center, San Francisco	8.6	Top 10
11	University of Alabama Hospital at Birmingham	7.8	
12	Duke University Hospital, Durham, N.C.	6.1	
13	Northwestern Memorial Hospital, Chicago	5.8	
14	University of Michigan Hospitals and Health Centers, Ann Arbor	5.7	
15	Stanford Hospital and Clinics, Stanford, Calif.	5.1	

Appendix H 2014-15 Best Hospitals Honor Roll

2014-15 Best Hospitals Honor Roll

Rank	Hospital	Points	Specialties
1	Mayo Clinic, Rochester, Minn.	29	15
2	Massachusetts General Hospital, Boston	28	15
3	Johns Hopkins Hospital, Baltimore	26	15
4	Cleveland Clinic	26	14
5	UCLA Medical Center, Los Angeles	23	15
6	New York-Presbyterian University Hospital of Columbia and Cornell, N.Y.	22	12
7	Hospitals of the University of Pennsylvania-Penn Presbyterian, Philadelphia	19	11
8	UCSF Medical Center, San Francisco	17	10
9	Brigham and Women's Hospital, Boston	15	10
10	Northwestern Memorial Hospital, Chicago	13	10
11	University of Washington Medical Center, Seattle	12	9
12	Cedars-Sinai Medical Center, Los Angeles	11	8
12	UPMC-University of Pittsburgh Medical Center	11	8
14	Duke University Hospital, Durham, N.C.	11	6
15	NYU Langone Medical Center, New York	10	7
16	Mount Sinai Hospital, New York	10	6
17	Barnes-Jewish Hospital/Washington University, St. Louis	9	8