

**The 1996  
Index of  
Hospital  
Quality**

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## 1996 Index of Hospital Quality

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## THE 1996 INDEX OF HOSPITAL QUALITY

### *I. Introduction*

The value of an accurate measure of the quality of health care at hospitals cannot be denied; in fact, the utility of a practical way to compare the content and quality of care among and within provider organizations has been called for repeatedly over the last 25 years<sup>1,2</sup>. A standardized, reliable and accurate measure of quality of care would provide information to consumers of health care to better inform their decisions about their care. The hospital, or care provider, would use the measure as a solid basis for a comparative evaluation with peer hospitals, allowing the identification of appropriate corrective actions. In addition, health care policy makers would use a reliable and well-defined index of hospital quality to measure the effects of policy decisions on the quality of care provided.

Since 1991, NORC has been actively involved in developing a measure of the quality of health care available in tertiary care hospitals to answer this need. Such a measure, if well-grounded in theory and possessing validity and comparative capacity, would serve to ultimately improve the quality of care delivered by American hospitals. In 1993, NORC first developed a model of the indicators of high quality care within a hospital setting. Each year since 1993, the *U.S. News and World Reports* has published the results of our model as "America's Best Hospitals". This methodology report summarizes our initial model construction and our implementation of the model for 1996. The reader may wish to refer to the methodology reports written for the 1991-1995 studies as well. This report has three main sections: the first describes the theoretical approach we employed in constructing our model; the second summarizes necessary changes made to the implementation of the model this year; finally, the third section suggests directions for our model in upcoming iterations.

## *II. The Index of Hospital Quality: Theory and Methodology*

Although the necessity and value of a measure of the quality of care available in tertiary care hospitals is evident, the manner in which quality can be measured is less clear. Underlying the assumption that a measurement of quality will ultimately promote greater quality is the fundamental assumption that we can define quality and that we can measure it, monitor it, and ensure it. While the presence or absence of quality is easily recognizable, the factors that "cause" quality health care delivery are less obvious. Our first step in the initial construction of a usable summary measure of quality is the identification of the components or dimensions of hospital quality.

For guidance in delineating the dimensions of hospital quality, we turned first to extant work in health services research. Donabedian's<sup>3,4</sup> paradigm, used by many in health services research when attempting to evaluate quality is composed of a triad of the structure, process, and outcomes of care. Neither structure, process, or outcome can alone represent--accurately and completely--the quality of care at a hospital. In fact, we contend that the three components are actually a sequence, the failure of which can be attributed to its weakest link. This sequence, as applied to hospitals, begins with the structural characteristics of an institution, carries through the process of care, and results in an outcome for the patient.

Having thus established a firm theoretical approach for our model of quality, we then undertook to identify robust measures for each of the three components of quality -- process, structure, and outcomes. These measures needed to be readily available for the entire universe of hospitals and, of course, based in research about the correlates of quality care. After identifying and obtaining these indicators, we then determined how to combine the three measures to form an Index of Hospital Quality.

In the course of identifying these indicators and determining how to combine them, we have designed and implemented studies that included focus groups with nurses (1993), surveys of physicians (1991-1995), analysis and interpretation of the physician data, analysis of objective data from secondary sources, and a review of extant literature. These pieces form the foundation for the construction of an Index of Hospital Quality (IHQ) for medical/surgical specialties. Below we describe the process by which we identified the indicators for each of

the critical Donabedian elements that were used in developing our model of hospital quality. In each iteration of the IHQ, we have enhanced these measures; due to our reliance on publicly available datasets, we have also lost valuable indicators throughout the history of the IHQ. In each iteration of the IHQ, however, we have been guided by our initial modeling and the rationale discussed below.

**A. The structure dimension** The evidence in favor of employing structural variables as indicators of hospital quality is overwhelming<sup>23</sup>. In determining the exact set of indicators of structure to use for the computation of the IHQ, we were guided first by researchers in the field. Florence Nightingale first pioneered the use of structural measures to detect variations in the quality of hospital care in the 19th century<sup>24</sup>. Until recently, the JCAHO relied solely on structural measures to evaluate quality<sup>7</sup>. In addition, such factors as the percentage of board-certified physicians on staff, type of ownership, and the number and type of technological equipment available, among others, have all been cited as indicators of the structural basis for quality<sup>9,11,13,25-28</sup>. In order to winnow this plethora of possible indicators from health services research, we sought the opinion about the relative importance of these indicators from experts in care, board certified physicians.

Since 1991, the National Opinion Research Center (NORC) at the University of Chicago has conducted an annual survey of board-certified physicians, on behalf of *U.S. News & World Report*, to inform our exploration of hospital quality. For the 1993 data collection effort, we presented our sample of board certified physicians with a four-page questionnaire, worded appropriately for their specialty, which asked physicians to rate a variety of known indicators on an eight point Likert scale.

Since our primary purpose in seeking the opinion of these physicians was to use these ratings to help inform our further exploration of the correlates of quality in hospitals, we included only indicators that met the following criteria:

- was known or suspected to have impact on hospital quality;
- was available in publicly-accessible data sets;
- exhibited some variation across tertiary care hospitals;
- could be reasonably evaluated by our physician respondents.

Based on these criteria, our questionnaire included twenty-six indicators of structure for ranking. The weighted mean results are displayed in Table 1.

Table 1. Weighted means for quality indicators (all respondents).	
INDICATOR	MEAN
Ratio of board-certified physicians to medical staff	5.96
Number of technological services on-site	5.70
Ratio of RNs to beds	5.35
Presence of emergency room	5.30
JCAHO accreditation	5.27
Membership in COTH/medical school affiliation	4.94
Volume of surgical operations	4.91
Presence of discharge planning services	4.79
Trauma provider level	4.71
Occupancy rate	4.66
Ratio of Rns to LPNs	4.66
Investment (capital expenditures per bed)	4.49
Number of admissions	4.45
Ratio of interns and residents to beds	4.24
Service mix (e.g., hospice, social work)	4.19
Urban/metropolitan location	4.15
Number of beds	4.10
Range of geriatric services	3.84
Sociodemographic characteristics (community)	3.76
Average length of stay	3.75
Ratio of payroll expenses to beds	3.73
Ownership status	3.68
Paid physician liaison	3.60
HCFA mortality rate	3.53
Ratio of Medicaid/Medicare/private payer mix	3.42
Intensity of competition (HMO penetration)	3.23

The results of the rating exercise are consonant with prior research in this area. The responding physicians gave the highest rating to the ratio of board-certified physicians to medical staff<sup>6-13</sup>. Physicians also rated the number of on-site technological services<sup>10,11,13,14</sup> and the ratio of registered nurses (Rns) to beds<sup>10,11,13</sup>; in addition, the presence of an emergency room and accreditation by the Joint Commission of Accreditation of Health Care Organizations (JCAHO) "scored" a mean of above 5.0 on the eight-point scale.

Interesting to note is that the responding physicians attribute little import to the notion of sheer size, as represented by the number of beds or the number of admissions, or to the notion of fiscal responsibility (investment ratios or payroll). The latter finding is especially intriguing, given the emphasis devoted to controlling costs--or, at the very least, spending efficiently--in the health reform effort, and despite the fact that a sizeable body of literature suggests that there is a relationship between profitability and quality<sup>15-20</sup>.

We found little variation in the ratings by specialty; indeed, consensus among the various specialties as to which of the objective indicators were most explicative was high. For example, the ratio of board-certified physicians to medical staff was cited by every specialty; the ratio of registered nurses (Rns) to beds appears on 14 of the lists; JCAHO accreditation is on 13 lists; and, Council of Teaching Hospitals (COH) membership was highly valued by ten specialties. Only two of the specialties chose to rate highly indicators that were not selected by other specialties: psychiatrists rated the ratio of Rns to LPNs very highly, while geriatricians settled on service mix as a top indicator.

Such a degree of consensus among quite varied specialties, including both medical and surgical specialties, suggests that the set of variables chosen by these physicians have universal appeal as important indicators of quality. In fact, not only was there little difference by specialty, but also there were no significant differences among sociodemographic characteristics. Analysis of the quality indicator scores by age, sex, and region revealed no significant differences.

No prior research has revealed a single indicator of quality that summarizes all others or represents the structure construct alone. Therefore, we concluded that the structure component of the IHQ must be represented by a composite variable, comprised of a set of structural indicators, weighted relative to each other. As a result, and on the basis of a literature



review and analysis of our physician data, we have selected a set of variables, slightly different for each specialty (though with a large degree of commonality), to represent the structure aspect of the quality triangle. In our initial calculation of the IHQ, the structure component for each specialty took into account:

- COTH membership
- ratio of interns and residents to beds set up and staffed
- technology index score
- ratio of registered nurses to beds set up and staffed
- ratio of board-certified MDs and Dos to beds set up and staffed

In addition, the structure component for each of the medical/surgical specialties included additional variables, deemed important to quality output for that particular specialty. For example, in 1995, we also include a measure of volume<sup>56-58</sup> (ratio of admissions for relevant procedures to beds); for cancer, cardiology, gastroenterology, gynecology, orthopedics, otolaryngology, and urology. For AIDS, we typically calculate a discharge planning services index; and, for geriatrics, we use the discharge planning index, plus a service mix index and a separate geriatric services index.

Thus, the choice of indicators for each specialty-specific IHQ each year is driven primarily by the results of the rating procedure in the survey of physicians, modified slightly by our knowledge of previous research and the availability of these indicators in a publicly available dataset. The items chosen for our measure of structure differ from those items rated highly by physicians only where their inclusion added little to the analysis or their reformulation greatly increased the power of the variable. For example, both JCAHO membership and the presence of an emergency room, two variables manifesting a high degree of consensus across specialties as important indicators of quality, showed little variability among this class of hospitals and, thus, added little to analytic clarity. Hence, these variables were dropped from consideration in the IHQ. In addition, in the several iterations, we have included the ratio of interns and residents to beds based on the strength exhibited by this element in other research<sup>11,25,27,29-32</sup>, despite its relatively poor showing in the physicians' survey results.

The objective indicators comprising this component (structure) of the IHQ are "weighted" independently of each other. As previously discussed, we found consensus across specialty-specific ratings of indicators of structure. Nonetheless, each year, we perform factor analyses

of the structural indicators (principal components, varimax rotation), imposing a one-factor solution, for each specialty, in order to assess each item's independent contribution to the percent of variance explained. The resultant factor loading became the basis for the weight assigned to that variable in the structure portion of the IHQ. Thus, a hospital's structure "score" is the sum of the normalized (z-scored) value for each of the selected indicators of structure multiplied by its corresponding factor loading.

**B. The process dimension** One definition of the process component of the quality equation is the sum or net effect of physicians' clinical decision-making. Physicians' choices as to the use of medication or diagnostic tests, admission to the hospital or one of its units, and length of stay account for a large fraction of hospital expenses<sup>36</sup>; in fact, some<sup>28</sup> put this figure at between 60 and 80 percent. Even if the actual proportion is somewhat lower, it still accounts for a huge portion of the quality equation; as such, it must be included in any attempt to assay quality. A number of other researchers agree that understanding variations in the quality of care requires a detailed understanding of the processes of care<sup>33</sup>. The authors suggested that differences in patient death rates across hospitals could not be attributed solely to differences in case mix, but concluded that differences in process were causal. In a study of process differences by sex, where no differences in process were found, outcomes were the same, but the reverse also held true--where process choices parted ways, differences in outcomes were observed<sup>53</sup>. Moreover, many complications can be traced to errors in process<sup>48</sup>.

Measurements of process, though, are extremely difficult to come by and have, so far, been restricted to case-by-case analysis or controlled experiments in a small number of settings. Attempts to measure process have included a case-by-case analysis of care history for CABG patients<sup>33</sup>; peer ratings to assess physician performance<sup>34</sup>; both implicit and explicit review to

measure differences in process<sup>27</sup>; and rates of inappropriate use of procedures<sup>35-37</sup>. However, these efforts have not generated, nor are sourced from, a database large or expansive enough for a nationwide evaluation of hospital quality.

Given the inherent difficulty in finding a valid and accurate measure of process differences across a nationwide set of hospitals, we offer an alternative measure to act as a proxy for "process." We contend that the nomination of a hospital by a qualified expert as one of the "best" is, in essence, an endorsement of the process choices made at that hospital. As evidence, note that more than three-quarters of the physicians responding to the 1991 survey stated that their nomination of a particular hospital was based on their own experience or that of a colleague<sup>38</sup>. One hypothesis might be that this remembered and recalled "experience" has more to do with process, *i.e.*, clinical decision-making (or the ability and wherewithal to make, and carry out, a clinical decision). Thus, we have, in every year since 1991, conducted a survey of physicians in which we elicit nominations of the five "best" hospitals--regardless of location or expense--in the physician's particular specialty.

We have chosen to use the physician nomination scores as the indicator of process in the calculation of the IHQs, in large part because no other nationwide measure is extant. While we acknowledge that use of this measure of the process concept is the weakest link in the IHQ chain, there is simply no other way to assess the "process" construct across the universe of tertiary-level hospitals. As noted above, several other measures of process have been essayed, with varying degrees of success; none, however, is based on data collected across all hospitals. The nomination scores do exhibit high face validity; moreover, though they are positively

correlated with the structural and outcomes measures, the nominations scores appear to measure slightly different aspects of the quality equation<sup>51</sup>.

The second component of the IHQ is the nomination score received by individual hospitals. These are the weighted, smoothed nominations provided by our physician respondents for each of the last three years; thus, the 1996 IHQ scores are derived from the 1994-1996 survey results. The nomination scores are specialty-specific; *i.e.*, for the IHQ for the "cancer" specialty, an individual hospital is scored according to the average number of weighted nominations it received from oncologists during the three-year period of data collection.

**C. The outcome dimension** The final element of the IHQ is an indicator of outcome. Among the twenty-six indicators we presented physicians in the 1993 survey was the HCFA mortality rates. Our physicians did not find that the mortality rates calculated and published by HCFA were of any merit as a strong indicator of quality care. However, there is a large body of literature that offsets this criticism of the use of mortality rates in examining quality of care. In fact, this literature strongly suggests that there is indeed a positive correlation between a better than average mortality rate and overall quality. Based on these findings, we use an adjusted mortality rate as the outcome measure for our model of quality of care.

In past years, we have utilized a standardized mortality rate for Medicare patients, based on data provided by the Health Care Financing Administration (HCFA), as the sole yardstick for the outcome component. Though there are other potential indicators of outcome, the HCFA mortality rates were the only nationally available for tertiary level hospitals. HCFA used a multivariate statistical model to predict the expected death rate for a hospital, given certain characteristics of that hospital and its patient population. The expected mortality rate is then

compared to the observed rate for all hospitals billing the agency for treatment of Medicare patients. In early 1995, HCFA, elected not to release the predicted deaths data. As a result, we turned to a respected consulting firm (MEDSTAT) to calculate specialty-specific predicted deaths based on the MEDPARS data. Appendix G details the methods and approach Medstat uses to prepare the mortality data.

Thus, the outcomes portion of the IHQ is comprised of the mortality rate for tertiary hospitals which bill Medicare for their services. We compute a standardized mortality ratio (SMR) for each hospital: the SMR is the ratio of the number of deaths observed compared to the number predicted by HCFA, adjusted for disease stage/case-mix severity (by MEDSTAT), and multiplied by 100. The SMRs are normalized (z-scored), then multiplied by the sum of the factor loadings for each specialty.

The IHQ, then -- following the lead of Donabedian -- has a solid theoretical base using adjusted mortality rates as an outcome measure, a composite of measures of structure and the three year nomination scores provided by physicians as a proxy for process. Careful and complete analysis of the values for each of the indicators among the universe of tertiary care hospitals showed that these indicators were all related to "quality". Correlations between these variables were strong and in the expected direction. Two sets of regression analyses completed in 1993 demonstrated that the three sets of measures were predicative of each other. Thus, in calculating the IHQ each year, we are guided by this original construction to measure and assess quality of care.

**D. Universe Definition.** Since 1993, we have constructed the IHQ as a measure of care available at tertiary care hospitals. Our definition of this level of care is:

Primary care hospitals are hospitals providing only basic primary care, no advanced services such as CT scanners. Secondary care hospitals have some advanced services such as CT scanners and CCE's, but no higher technology services such as megavoltage radiation, hemodialysis, neonatal intensive care, or cardiac catheterization... [T]ertiary care hospitals have all or most of these higher technology services .. Plus burn care, open-heart, and./or organ transplant (and are) primarily major academic teaching centers.

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Thus, each annual iteration of the IHQ has attempted to select from the Annual Hospital Association's 1994 AHA Annual Survey of Hospitals Data Base, hospitals which meet one of the following criteria:

- ◆ COTH member
- ◆ Score of 9 or greater on our hospital-wide high-technology index
- ◆ Medical school affiliate.

In 1995 and again this year, we imposed a second step of this universe definition process to further refine the measure.

**E. Special-service hospitals.** We do not calculate IHQ scores for tertiary care hospitals providing service in the areas of ophthalmology, pediatrics, psychiatry, and rehabilitation. In short, the data to support our theoretical model does not exist: there is not a source of outcome data available, on a nationwide basis, for these four specialty groupings.

Thus, as shown in Appendix E, special-service hospitals are ranked only by the frequency of physician nominations received in the 1996 analysis.

**F. Calculation of the IHQs.** Thus, we have described the theoretical framework for our measure of quality of care and the universe that we attempt to measure. We felt strongly, however, that a single score summary of the three links in the quality chain would ease use of the measure. In addition, we felt that each of the three links should be weighed equally in determining "quality". Quality must be measured by each of the three avenues<sup>49</sup>: structural characteristics increase the probability of providing quality care, while properties of the process of care improve the probability of obtaining desirable changes in patients' health status (outcomes). Thus, the chain of quality is comprised of links forged of structure, process, and outcomes--one coupled to the next. But, the quality chain is only as strong as its weakest link. Therefore, a hospital must perform well in all three areas in order to provide good overall quality of care. All assessments of quality should be based on the interrelationship among structure, process, and outcome<sup>49</sup>.

Based on this literature and separate statistical analyses of the interrelationships among the three dimensions<sup>51</sup>, we are assured that each of the three components of the quality paradigm contribute equivalently to the overall concept of "quality." Therefore, in the final computation of IHQ scores for a particular specialty, mortality rates, nomination scores, and the set of objective indicators used to represent structure have been accorded arithmetically-equivalent importance.

The total formula, then, for calculation of the specialty-specific IHQs is as follows:

$$IHQ_i = (((S_1 * F_1) + (S_2 * F_2) + (\dots S_n * F_n)) + ((P_i * \Sigma F_{1-n}) + (M * \Sigma F_{1-n})))$$

$IHQ_i$  = Index for Hospital Quality for specialty  $i$

$S_{1-n}$  = Structural indicators (STRUCTURE)

$F$  = Factor loading

$P$  = Nomination score (PROCESS)

$M$  = Standardized mortality rate (OUTCOMES)

The general formula for IHQ scores for tertiary-level hospitals is the same as it began in 1993 (Hill and Rudolph 1993). Each of the three components--structure, process, and outcomes--is considered equally in the determination of the final, overall score. However, the relative "weights" (factor loadings) attached to the individual indicators that make up the structural portion of the index change from year to year, as the variable values change. The weights applied to the structure variable values are displayed in Appendix D.

Some care must be taken in interpreting the scores. Indeed, IHQ scores can be most valuable, perhaps, in delineating the hospitals that are at the very top of their craft. The IHQs are especially good at gross distinctions: essentially, the shape of the curve of raw IHQ scores (not shown) suggests that there are a few extremely good hospitals, many hospitals bunched together providing at least competent care, and a few hospitals at the bottom end of the curve which, perhaps, need to devote more attention and resources towards improving the quality of care. Skewness and kurtosis values for the individual indices suggest that the shape of the curves are slightly positively skewed (skewness values range from approximately 3-4) and relatively flat (high kurtosis values ranging from approximately 28-40). Furthermore, the number of hospitals with a specialty-specific IHQ score more than one standard deviation above the mean ("good" hospitals) is very small, although larger than the number of hospitals with an IHQ score at least one standard deviation below the mean (hospitals performing relatively poorly). In sum, these results indicate that the overwhelming majority of the hospitals analyzed are solidly in the middle of the range of IHQ scores.



### ***III. The 1996 Index of Hospital Quality***

We have strived to improve the IHQ in each iterations since 1993 while maintaining its solid theoretical basis. Our improvements have ranged from creating finer measures for each of our indicators to further honing the specialty specific elements of the IHQ. Our efforts are limited only by the quality and type of data publicly available for tertiary care hospitals. In 1996, we have encountered both loss of data elements and the introduction of finer measures; but in both instances, we have adhered to the theoretical background outlined previously. In the sections that follow, we detail each of the changes to the IHQ elements made in 1996.

**A. Universe of hospitals.** As with the 1995 IHQ analysis, we adopted a two stage approach to defining hospital eligibility. First, a hospital had to meet one of the following in order to be included in the analysis:

- ◆ COTH member
- ◆ Score of greater than 9 on our hospital-wide high-technology index
- ◆ Medical school affiliate

Using this set of criteria, a total of 1,961 hospitals were eligible for analysis in each of the twelve specialties. Then, twelve separate analysis files were created according to the criteria outlined in Table 2.

**Table 2. Eligibility criteria by specialty.**

<b>Specialty</b>	<b>Eligibility Criteria</b>	<b>N</b>
<b>AIDS</b>	<ul style="list-style-type: none"><li>● <i>Provide General Inpatient Care for AIDS/ARC and</i></li><li>● <i>Minimum of 2 discharges for relevant DRGs</i></li></ul>	<b>856</b>
<b>Cancer</b>	<ul style="list-style-type: none"><li>● <i>Minimum of 72 discharges for relevant DRGs</i></li></ul>	<b>1521</b>
<b>Cardiology</b>	<ul style="list-style-type: none"><li>● <i>Have a Cardiac catheterization lab, or</i></li><li>● <i>Offer Open Heart Surgery, or</i></li><li>● <i>Offer Angioplasty, or</i></li><li>● <i>and</i></li><li>● <i>Minimum of 794 discharges for relevant DRGs</i></li></ul>	<b>1171</b>
<b>Endocrinology</b>	<ul style="list-style-type: none"><li>● <i>Minimum of 81 discharges for relevant DRGs</i></li></ul>	<b>1512</b>
<b>Gastroenterology</b>	<ul style="list-style-type: none"><li>● <i>Minimum of 235 discharges for relevant DRGs</i></li></ul>	<b>1523</b>
<b>Neurology</b>	<ul style="list-style-type: none"><li>● <i>Minimum of 347 discharges for relevant DRGs</i></li></ul>	<b>1520</b>
<b>Gynecology</b>	<ul style="list-style-type: none"><li>● <i>Diagnostic mammography services and</i></li><li>● <i>Minimum of 27 discharges for relevant DRGs</i></li></ul>	<b>1374</b>
<b>Orthopedics</b>	<ul style="list-style-type: none"><li>● <i>Minimum of 129 discharges for relevant DRGs</i></li></ul>	<b>1571</b>
<b>Otolaryngology</b>	<ul style="list-style-type: none"><li>● <i>Minimum of 16 discharges for relevant DRGs</i></li></ul>	<b>1505</b>
<b>Rheumatology</b>	<ul style="list-style-type: none"><li>● <i>Minimum of 7 discharges for relevant DRGs</i></li></ul>	<b>1465</b>
<b>Urology</b>	<ul style="list-style-type: none"><li>● <i>Minimum of 129 discharges for relevant DRGs</i></li></ul>	<b>1517</b>
<b>Geriatrics</b>	<ul style="list-style-type: none"><li>● <i>Score of 1 or more on the geriatrics service index and</i></li><li>● <i>Minimum of 2491 discharges for relevant DRGs</i></li></ul>	<b>1334</b>

**B. Process Measure** We again relied on our annual survey of physicians to provide a proxy measure for process element of quality. Below we detail the protocol developed in the first years of the survey to which we continue to adhere.

1. **Survey sample.** The sample for the 1996 survey was comprised of 2,550 board-certified physicians selected from the American Medical Association's (AMA) Physician Masterfile, which contains names and associated data elements for over 560,000 physicians (both AMA members and non-members) in the United States and its possessions. The Physician Masterfile is widely acknowledged as the sample frame of choice for national surveys of physicians.

From within the Masterfile, NORC selected a target population of 162,681 board-certified physicians who met the eligibility requirements for inclusion (see below). Stratifying by region and by specialty within region, NORC selected a sample of 150 physicians from each of seventeen specialty areas for a total of 2,550 physicians. The final sample includes both non-federal and federal medical and osteopathic physicians residing in the fifty states and the District of Columbia.

2. **Eligibility requirements.** NORC defined a probability sample of physicians who could properly represent the seventeen specialty groupings delineated by *U.S. News*. NORC used two rules of eligibility: one related to a mapping between the seventeen specialties and the AMA's list of 85 self-designated specialties and the second related to a mapping between these 85 specialties and the 23 member boards of the American Boards of Medical Specialties (ABMS).

Under the first rule, NORC executed a linkage between each of the seventeen specialties and one or more relevant AMA specialties from the list of AMA self-designated practice specialty codes. These codes appear on the Physician's Professional Activities Questionnaire (PPA Census), completed by physicians in the United States for the AMA. The results of this AMA census inform the contents of the AMA's Masterfile. NORC first examined the physician's self-designated primary specialty from the AMA Masterfile; i.e., the specialty in which the physician spent most hours in a typical week. If it satisfied the initial mapping, he or she was preliminarily eligible for the survey.

Under the second rule, NORC proposed that the (above) physicians must also be certified by the corresponding member board of the ABMS. By requiring board-certification as a condition of eligibility, NORC sought to select only physicians with advanced training and expertise, i.e., those who were most knowledgeable in their chosen field.

Appendix B shows the correspondences which NORC used in drawing the physician sample for this survey. In many instances, NORC found a direct mapping between the specified *U.S. News & World Report* category (Column 1 on the table in Appendix B) and one particular AMA self-designated specialty (Column 2) and the corresponding member board (column 3); viz., psychiatry, neurology, and rheumatology. In other instances, more than one AMA self-designated specialty was needed to adequately represent the *U.S. News* category. In a few instances, most notably AIDS, where competing definitions presented themselves, NORC staff researched current medical sources and consulted medical experts before arriving at its final recommendation.

**3. Stratification.** For the 1996 survey of physicians, NORC selected a probability sample of seventeen equal-sized groups of 150 physicians each. To compensate for

the widely varying number of eligible physicians across the targeted specialties, NORC used different probabilities of selection for each grouping. NORC also drew a sample which was geographically representative of the population of eligible physicians. This was done by using proportionate stratification according to the four United States Census regions (West, Northeast, South, and North Central) within each of the seventeen strata.

4. **Data collection.** Sampled physicians were mailed a questionnaire, a cover letter, and a prepaid return envelope. Also included was a small incentive in the form of a two-dollar bill. Follow-up for selected non-responders was carried out using an express mailing. An example of the questionnaire used in 1996 is included in Appendix A.

5. **Response rate.** 1,275 of the 2,550 physicians returned a useable questionnaire, yielding a response rate of 50.0 percent. Response rates are calculated as the ratio of completed interviews to all sampled cases. Response rates by specialty are shown below in Table 3. (In previous years, using virtually the same format and survey design, response rates were 65 percent in 1991, 65 percent in 1992, 55 percent in 1993, 49 percent in 1994 and, 47.5 percent in 1995. Telephone follow-up was employed in 1991-2).

Table 3. Response rates (1996) by specialty.			
Specialty	Freq	Pct of	Resp
AIDS	73	5.7	48.7
CANCER	70	5.5	46.7
CARDIOLOGY	71	5.6	47.3
ENDOCRINOLOGY	72	5.6	48.0
GASTROENTEROLOGY	74	5.8	49.3
NEUROLOGY	76	5.6	48.0
GYNECOLOGY	78	6.0	50.7
OPHTHALMOLOGY	78	6.1	52.0
ORTHOPEDICS	81	6.1	52.0
OTOLARYNGOLOGY	72	6.3	53.3
PEDIATRICS	81	6.4	54.0
PSYCHIATRY	72	5.6	48.0
REHABILITATION	70	5.5	46.7
RHEUMATOLOGY	71	5.6	47.3
UROLOGY	83	6.5	55.3
GERIATRICS	82	6.4	54.7
PULMONARY	72	5.7	48.0
TOTAL	1275	100.0	50.0

**6. Weighting.** As in previous years, the data were weighted in two steps. First, weights were assigned to physicians that reflected the probabilities of selection within specialty groups and the overall rates of response within these groups. Second, the weights from the first step were post-stratified using selected marginals of the multi-dimensional contingency table of specialty (seventeen categories) by census region (West, North, South, and North Central) by age (25-39, 40-54, and 55 and over).

Thus, let:

$p_i$  = the estimated probability that a physician in specialty  $i$  is selected for the survey and responds to the survey ( $i = 1, 2, \dots, 16$ )

Given that the sample was disproportionately stratified by specialty,  $p_i$  equals the product of the sampling fraction for specialty  $i$  and the response rate for specialty  $i$ . Let:

$n_{ijk}$  = the sample count of physicians who responded to the survey in specialty  $i$ , region  $j$ , and age  $k$  ( $i = 1, 2, \dots, 16; j = 1, 2, 3, 4; k = 1, 2, 3$ ).

$N_{ijk}$  = the population count of physicians in specialty  $i$ , region  $j$ , and age  $k$  ( $i = 1, 2, \dots, 16; j = 1, 2, 3, 4; k = 1, 2, 3$ )

We did not use the complete three-dimensional array of  $N_{ijk}$ 's to post-stratify because of the problem of sampling/response zeros, *i.e.*,  $n_{ijk}$ 's equal to zero. Rather, we first "raked" (*i.e.*, applied iterative proportional fitting or the Deming-Stephan algorithm to) the three-way table of  $n_{ijk}$ 's using the specialty by region by age marginals from the table of  $N_{ijk}$ 's<sup>54,55</sup>. The result of the raking procedure is a three-dimensional table of estimated  $N_{ijk}$ 's [say,  $M_{ijk}$ ] that have the same interaction structure as the table of  $n_{ijk}$ 's. The first-and second-step weights are defined as follows:

$$W_{ijk1} = 1/p_i$$

$$W_{ijk2} = M_{ijk}/(n_{ijk} \times W_{ijk1})$$

The final weight for sample physicians in specialty  $i$ , region  $j$ , and age  $k$  ( $i = 1, 2, \dots, 16; j = 1, 2, 3, 4; k = 1, 2, 3$ ) equals the product of  $W_{ijk1}$  and  $W_{ijk2}$ :

$$W_{ijk} = W_{ijk1} \times W_{ijk2} = M_{ijk}/n_{ijk}$$

To check the weights, we confirmed that the sum across the sample of the weights in each cell of the (specialty x region) and (age) classifications equaled the population size of that cell. When applied to the responding population as a whole, the weights do not make for large differences in marginal distributions nor do the weights change any substantive conclusions that would be drawn from the unweighted data.

**C. Outcome Measure** All predicted mortality rates used in the calculation of the 1995 and 1996 IHQ score were provided by MEDSTAT, rather than by HCFA. This change - necessary due to the discontinuation of HCFA's calculation of mortality rates - did require the use of a different predictive model. MEDSTAT's prediction model employs a disease staging approach, details of which can be found in Appendix G. In addition, in 1995, we modified our specifications for the mortality data in three ways: two years' worth of data were pooled (rather than three, as in 1993, or four, as in 1994); observed deaths at discharge are counted, rather than deaths at 30 days; and, most importantly, the mortality ratios are specialty-specific. Each of these changes is discussed below.

**1. Two-year pooled data.** The mortality data used in the 1996 IHQ calculation reflects admissions and deaths for 1993 and 1994. Pooling multiple years of data smooths out short-term anomalies not necessarily related to the quality of care provided by a hospital. Data from 1993 and 1994 were pooled simply because these are the two most recent years with complete MEDPARS data.

**2. Deaths at discharge.** The numerator for the mortality rate is the number of observed deaths that occurred before or at discharge. In previous years, the numerator has been defined as deaths that occur within thirty days following discharge. This broader definition allows deaths that occur at home, but as a result of poor care in a hospital, to be included. Unfortunately, care-related deaths that occur in a second hospital would "count against" the post-operative hospital rather than the hospital that performed the procedure. Within the universe of



tertiary care hospitals, there are a number of hospitals that provide only surgery or more experimental treatments, but transfer patients to other hospitals for post-treatment care; as a result, some hospitals regularly register very low mortality rates using the thirty-day definition.

This year, we elected to use the more narrow death at discharge definition to resolve these inequities in the death counts. While care-related deaths following a transfer cannot be traced back to the original hospital, the death will not "count against" the hospital providing post-treatment care. Although not ideal, we believe that the death at discharge numerator provides a more level playing field than the death within thirty days count.

**3. Specialty-specific rates.** With the exception of five specialties, we have again employed a specialty-specific mortality rate in calculating IHQ scores. These rates are computed based on diagnosis-related group (DRG) classifications for medical and surgical procedures reimbursed by Medicare. (See Appendix F for DRG groupings for each specialty). However, for five of the specialties (AIDS, geriatrics, gynecology, otolaryngology, and rheumatology), the all-cases rate continues to serve as the outcome measure in the IHQ scoring. For these specialties, the all-cases rate was employed either because the number of hospitals with a sufficient amount of patients in the particular DRG-grouping was too low, or the DRG groupings proved to be less robust than necessary.

**C. Structure Measures** The most significant modification to this year's implementation of the IHQ model occurred in the element of the composite structural measures. A notable restructuring of the AHA's Annual Survey of Hospitals questionnaire, our primary source for structural data, allowed us to further refine our technology indices to note hospitals who may not provide a certain technology within the hospital but do allow access to the technology through a formal arrangement within the local community. Unfortunately, the restructuring of the AHA questionnaire also caused the loss or change in reporting of a number of structure elements traditionally seen in our IHQ analysis. For example, in the past, many of our structural measures have been expressed as a ratio of Statistical Beds, an average of the number of beds set-up and staffed in the hospital for the reporting period. However, the new questionnaire no longer collects the data necessary to calculate the average number of beds for

the fiscal year. We know use as the denominator in our ratios total beds, the total beds set up and staffed at the end of the reporting period. In seeking to replace the lost data, we evaluated potential replacements that most closely matched missing data in the question items that elicited the value. We then reviewed the correlation of each potential replacement variable with the measure used in previous years and with other data elements available in the 1994 AHA Annual Survey of Hospitals Data Base. We were unable to find adequate replacements for some measures - most notably - the Doctors to Beds ratio constructed in 1995. These variables were simply omitted from the 1996 IHQ analysis. In the sections that follow, we summarize the significant changes to the measures used in the 1996 IHQ scores.

1. **Beds Set-Up and Staffed.** The average number of beds set-up and staffed (statistical beds) had traditionally served as the denominator in many of the ratios in our composite structure measure. As noted above, the AHA calculated statistical beds was not available for this year's analysis. Instead we have used the total beds set up and staffed at the end of the reporting period. The new measure proved to be highly correlated with statistical beds from previous years. Thus, we are confident that the indicators that use this value (RN's to Beds, and Procedures to Beds) will be minimally impacted.

2. **COTH Membership.** This dichotomous variable indicating membership in the Council of Teaching Hospitals is unchanged in the 1996 Index.

3. **Interns and Residents to Beds** This measure seemingly reflects the same elements of structure as COTH membership but had been included in previous analysis because it is a continuous measure. For 1996, we omitted this structure component for each specialty with the exception of gynecology for which its factor loading is high. The calculation of the numerator of this variable was not modified from that of 1995 [interns + residents]. The denominator of the ratio - Beds Set-up and Staffed - was modified as noted above.

4. **Volume (inpatient operations) to beds ratio.** In years past, we have employed a gross, hospital-wide measure of volume: total inpatient operations divided by the average number of beds set up and staffed. In 1995 and again in 1996, we employed the number of Medicare cases in the appropriate DRG groupings provided by MEDSTAT as the numerator for this ratio for all specialty groupings.

**5. Technology Indices.** The technology indices remain specialty specific this year as they were in 1995. However, each of the specialty specific technology indices have changed in three ways in 1996 due to the restructuring of the AHA survey. First, a number of the traditional elements of the individual technology indices are no longer collected by the AHA and, thus, where possible we have introduced new elements. Second, the question from the AHA survey which collects the data used in the technology indices has changed so that previously individual elements have been collapsed. For example, the 1996 radiation therapy variable indicates the provision of megavoltage radiation therapy, radioactive implants, stereotactic radiosurgery, therapeutic radioisotope facility, or X-ray radiation therapy. Previously, each of the services were individual question items in the AHA survey. Finally, the restructuring of the AHA survey allowed us to further refine our technology indices to reflect the reality of the cost of these high technology services. While provision of a service within the hospital attended by the patient obviously benefits the patient; the cost of these services may not allow all hospitals to provide them. Many hospitals do allow access to the technology through the hospital's health system, local community network, or through a formal contractual arrangement or joint venture with another provider in my local community. Thus, as in past years, hospitals that provide the CAT scan technology within the hospital received a full point for that element; in addition, in 1996, hospitals that provide the same technology within its local community through some other formal arrangement now receive a half point for each element. Hospitals received no more than 1 point for each element on the index. Appendix C lists the elements used in each technology index this year.

**6. Discharge Planning.** The restructuring of the AHA survey allowed us to change the composition of this measure. Discharge planning now includes provision of a patient education service; case management services and patient representatives services. The half point scheme used for the technology indices was not employed for this or the other service indicators.

**7. Service Mix.** Service mix now has a range of 0 to 9. Elements included are HIV-AIDS services; Alcohol/Drug Abuse or dependency inpatient care; Hospice; Home

Health Services; Social Work Services; Reproductive Health Services; Psychiatric Education Services; Women's Health Center/Services; Psychiatric Consultation/Liaison Services.

8. **Geriatric Services.** The range on this indicator is 0 to 6 and now includes Adult Day Care Program; Patient Representative Services; Geriatric Services; Meals on Wheels; Assisted Living; and Transportation to Health Facilities.

#### *IV. Summary*

Again this year, we have constructed an Index of Hospital Quality for each of twelve different medical/surgical specialties. These IHQ scores represent a one-number summation of a hospital's performance as far as quality of care delivery. In order to make the IHQ scores more easily interpretable, the scores have been transformed to fit a 0-100 scale. The Index of Hospital Quality scores for each specialty have the ability to identify top-quality hospitals. Such information is extremely useful in educating consumers faced with a hard choice about where to receive medical care for serious medical problems (assuming, of course, they, in consultation with their doctors, have a choice). The top one hundred hospitals in each specialty, according to the 1996 IHQ scores, are presented in Appendix H.

Our goal with each of the annual iterations of the IHQ has been to further enhance its sensitivity at measuring the quality of care available in tertiary hospitals thereby augmenting its utility. We have concentrated our efforts to improve the IHQ in identifying finer indicators of quality - although we are constrained by the availability of data for the universe of hospitals. In addition, the dynamic nature of health care delivery -- the many changes in how hospitals are structured to remain competitive and to maintain the quality of care provided -- requires us to adjust our model each year to preserve its utility to providers of care, consumers of care and health care policy makers.

In future iterations of the IHQ, we will continue our commitment by seeking measures that improve the specialty specific nature of the IHQ, by incorporating additional indicators of quality, and by adjusting the indicators included in the IHQ analysis. As we do each year, we will again consider the feasibility of a primary data collection from care providers. Most importantly, we encourage readers of this methodology report to provide input to us regarding the utility of the IHQ and further enhancements to the measure.

These findings are of major importance for the health care reform effort. If it is true that there are a set of hospitals excelling in the provision of high-quality care, it is important to delineate what these hospitals are doing that others are not. What set of characteristics do these very top hospitals have in common? Any health reform effort should have as a cornerstone the provision of high quality care. The IHQ may constitute a method by which these elements are identified and measured. The IHQ scores and the patterns evinced by the array of hospitals across the scores suggest that certain combinations of structural characteristics, procedural choices, and outcomes directions work together to lay a solid foundation for the provision of high-quality care. It is these patterns and combinations of characteristics that are of interest to policymakers in the attempt to marry high-quality care with cost containment and equal access to care. The IHQ results show firmly that hospitals that invest in highly-trained nurses (RNs), the latest high-technology equipment, and a commitment to the teaching and research mission (as well as, for some specialties, patient-directed services, such as discharge planning) can parlay these structural elements into a large number of operations performed, thus gaining clinical expertise (and a favorable reputation in the medical community), leading ultimately to successful outcomes. Good "scores" on these indicators, then, form a solid footing for the provision of high-quality care.

In conclusion, we wish to express our gratitude to the many contributors to our efforts to measure hospital quality. Our client in the IHQ analysis - *U.S. News and World Report* has provided continuing support, encouragement and, much appreciated critical evaluation. The many providers of data used in the IHQ analysis - the American Hospital Association and its members, MEDSTAT, and the physicians who participate in our survey - have provided critical input and data. Finally, the many readers and users of the IHQ have contributed valuable insight to our efforts to enhance our measure.

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## **Appendix A**

### **Sample Physician questionnaire (1996)**









## **Appendix B**

### **Physician sample mapping**



SPECIALTY	AMA	AMA SELF-	AMERICAN
AIDS	27	Infectious diseases	Internal medicine
Cancer	22	Hematology	Internal medicine
	44	Medical oncology	Internal medicine
Cardiology	08	Cardiovascular diseases	Internal medicine
		Cardiovascular surgery	Surgery
Endocrinology	14	Endocrinology	Internal medicine
	12	Diabetes	Internal medicine
Gastroenterology	17	Gastroenterology	Internal medicine
Geriatrics	38	Geriatrics	Internal medicine
Gynecology	21	Gynecology	Obstetrics & gynecology
	42	Obstetrics & gynecology	Obstetrics & gynecology
Neurology	36	Neurology	Psychiatry & Neurology
Ophthalmology	46	Ophthalmology	Ophthalmology
Orthopedics	85	Orthopedic surgery	Orthopedic surgery
Otolaryngology	48	Otolaryngology	Otolaryngology
Pediatrics	55	Pediatrics	Pediatrics
	01	Adolescent medicine	Pediatrics
Psychiatry	63	Psychiatry	Psychiatry & Neurology
Rehabilitation	62	Physical medicine & rehabilitation	Physical medicine & rehabilitation
Rheumatology	74	Rheumatology	Internal medicine
Urology	91	Urological surgery	Urology

**Appendix C**  
**Technology indices by specialty**

<i>Index</i>	<i>Elements</i>
<i>All Hospital Index 18 Elements</i>	<i>Extracorporeal Shock Wave Lithotripter</i>
	<i>X-ray Radiation Therapy</i>
	<i>Magnetic Resonance Imaging</i>
	<i>Positron Emissions Tomography Scanner</i>
	<i>Single Photon Emissions Computed Tomography</i>
	<i>Cardiac Catheterization Lab</i>
	<i>Diagnostic Radioisotope Facility</i>
	<i>Ultrasound</i>
	<i>Computed Tomography Scanner</i>
	<i>Reproductive Health</i>
	<i>Cardiac Intensive Care Beds</i>
	<i>Neonatal Intensive Care Beds</i>
	<i>Pediatric Intensive Care Beds</i>
	<i>Diagnostic Mammography Services</i>
	<i>Medical/Surgical Intensive Care</i>
	<i>HIV-AIDS Services</i>
	<i>Open Heart Surgery</i>
	<i>Angioplasty</i>
<i>AIDS 9 Elements</i>	<i>X-ray Radiation Therapy</i>
	<i>Computed Tomography Scanner</i>
	<i>Magnetic Resonance Imaging</i>
	<i>Positron Emissions Tomography Scanner</i>
	<i>Single Photon Emissions Computed Tomography</i>
	<i>Ultrasound</i>
	<i>Pediatric Intensive Care</i>
	<i>Medical/Surgical Intensive Care</i>

<i>HIV-AIDS Services</i>	
<i>Cardiology</i> <i>9 Elements</i>	<i>Angioplasty</i>
	<i>Open Heart Surgery</i>
	<i>Cardiac Catheterization Lab</i>
	<i>Computed Tomography Scanner</i>
	<i>Magnetic Resonance Imaging</i>
	<i>Positron Emissions Tomography Scanner</i>
	<i>Single Photon Emissions Computed Tomography</i>
	<i>Ultrasound</i>
	<i>Cardiac Intensive Care</i>
<i>CANCER</i> <i>7 Elements</i>	<i>X-ray Radiation Therapy</i>
	<i>Computed Tomography Scanner</i>
	<i>Magnetic Resonance Imaging</i>
	<i>Positron Emissions Tomography Scanner</i>
	<i>Single Photon Emissions Computed Tomography</i>
	<i>Oncology Services</i>
	<i>Pediatric Intensive Care</i>
<i>Endocrinology</i> <i>7 Elements</i>	<i>X-ray Radiation Therapy</i>
	<i>Computed Tomography Scanner</i>
	<i>Magnetic Resonance Imaging</i>
	<i>Positron Emissions Tomography Scanner</i>
	<i>Single Photon Emissions Computed Tomography</i>
	<i>Diagnostic Radioisotope Facility</i>
	<i>Ultrasound</i>

<b>Gastroenterology</b> <b>8 Elements</b>	<i>Extracorporeal Shock Wave Lithotripter</i>
	<i>X-ray Radiation Therapy</i>
	<i>Computed Tomography Scanner</i>
	<i>Magnetic Resonance Imaging</i>
	<i>Positron Emissions Tomography Scanner</i>
	<i>Single Photon Emissions Computed Tomography</i>
	<i>Diagnostic Radioisotope Facility</i>
	<i>Ultrasound</i>
<b>Geriatrics</b> <b>8 Elements</b>	<i>Cardiac Catheterization Lab</i>
	<i>X-ray Radiation Therapy</i>
	<i>Computed Tomography Scanner</i>
	<i>Magnetic Resonance Imaging</i>
	<i>Positron Emissions Tomography Scanner</i>
	<i>Single Photon Emissions Computed Tomography</i>
	<i>Ultrasound</i>
	<i>Cardiac Intensive Care</i>
<b>Gynecology</b> <b>8 Elements</b>	<i>X-ray Radiation Therapy</i>
	<i>Diagnostic Mammography Services</i>
	<i>Computed Tomography Scanner</i>
	<i>Magnetic Resonance Imaging</i>
	<i>Positron Emissions Tomography Scanner</i>
	<i>Single Photon Emissions Computed Tomography</i>
	<i>Ultrasound</i>
	<i>Neonatal Intensive Care</i>

<b>Neurology</b> <b>7 Elements</b>	<i>X-ray Radiation Therapy</i>
	<i>Computed Tomography Scanner</i>
	<i>Magnetic Resonance Imaging</i>
	<i>Positron Emissions Tomography Scanner</i>
	<i>Single Photon Emissions Computed Tomography</i>
	<i>Ultrasound</i>
	<i>Diagnostic Radioisotope Facility</i>
<b>Orthopedics</b> <b>5 Elements</b>	<i>Computed Tomography Scanner</i>
	<i>Magnetic Resonance Imaging</i>
	<i>Positron Emissions Tomography Scanner</i>
	<i>Single Photon Emissions Computed Tomography</i>
	<i>Ultrasound</i>
<b>Rheumatology</b> <b>5 Elements</b>	<i>Computed Tomography Scanner</i>
	<i>Magnetic Resonance Imaging</i>
	<i>Positron Emissions Tomography Scanner</i>
	<i>Single Photon Emissions Computed Tomography</i>
	<i>Ultrasound</i>
<b>Otolaryngology</b> <b>5 Elements</b>	<i>X-ray Radiation Therapy</i>
	<i>Computed Tomography Scanner</i>
	<i>Magnetic Resonance Imaging</i>
	<i>Positron Emissions Tomography Scanner</i>
	<i>Single Photon Emissions Computed Tomography</i>

<b>Urology</b> <b>8 Elements</b>	<i>Extracorporeal Shock Wave Lithotripter</i>
	<i>X-ray Radiation Therapy</i>
	<i>Computed Tomography Scanner</i>
	<i>Magnetic Resonance Imaging</i>
	<i>Positron Emissions Tomography Scanner</i>
	<i>Single Photon Emissions Computed Tomography</i>
	<i>Ultrasound</i>
	<i>Diagnostic Radioisotope Facility</i>
<b>Rehabilitation</b> <b>7 Elements</b>	<i>Sports Medicine Clinic/Services</i>
	<i>Sub Acute Care Rehabilitation Beds</i>
	<i>Physical Rehabilitation Outpatient Services</i>
	<i>Rehabilitation Care Beds</i>
	<i>Computed Tomography Scanner</i>
	<i>Ultrasound</i>
	<i>Magnetic Resonance Imaging</i>
<i>Positron Emissions Tomography Scanner</i>	
<b>Psychiatry</b> <b>8 Element</b>	<i>Psychiatric Consultation - Liaison Services</i>
	<i>Psychiatric Child/Adolescent Services</i>
	<i>Psychiatric Education Services</i>
	<i>Psychiatric Emergency Services</i>
	<i>Psychiatric Geriatric Services</i>
	<i>Psychiatric Outpatient Services</i>
	<i>Psychiatric Partial Hospitalization Services</i>
	<i>Psychiatric Care Beds</i>

<b>Pulmonary</b> <b>4 elements</b>	<i>Computed Tomography Scanner</i>
	<i>Magnetic Resonance Imaging</i>
	<i>Radiation Therapy</i>
	<i>Ultrasound</i>
<b>Ophthalmology</b> <b>4 Elements</b>	<i>Computed Tomography Scanner</i>
	<i>Magnetic Resonance Imaging</i>
	<i>Ultrasound</i>
	<i>Radiation Therapy</i>
<b>Pediatrics</b> <b>5 Elements</b>	<i>Psychiatric Child/Adolescent Services</i>
	<i>Pediatric Intensive Care Beds</i>
	<i>Neonatal Intensive Care Beds</i>
	<i>Computed Tomography Scanner</i>
	<i>Obstetric Unit Service Level <math>\geq 2</math>, Provides Services for all uncomplicated and most complicated cases</i>



## **Appendix D**

### **Factor loadings by specialty**

Specialty	Interns to Beds	RNs/Beds	COth	DISPLN	Tech	Volume	Service Mix	Ger. Serv
AIDS	N/A	73	76	31	77	N/A	N/A	N/A
Cancer	N/A	76	69	N/A	58	42	N/A	N/A
Cardiology	N/A	74	76	N/A	71	3	N/A	N/A
Endocrinology	N/A	76	79	N/A	49	N/A	N/A	N/A
Gastroenterology	N/A	66	83	N/A	43	50	N/A	N/A
Geriatrics	N/A	51	71	34	64	N/A	64	42
Gynecology	80	79	N/A	N/A	63	10	N/A	N/A
Orthopedics	N/A	74	81	N/A	39	32	N/A	N/A
Otolaryngology	N/A	74	77	N/A	54	9	N/A	N/A
Rheumatology	N/A	55	64	59	69	N/A	N/A	N/A
Urology	N/A	75	80	N/A	50	8	N/A	N/A
Neurology	N/A	72	80	N/A	44	N/A	N/A	N/A

## **Appendix E**

### **Reputational rankings for special-service hospitals**

## OPHTHALMOLOGY RANKINGS

Rank	Hospital	Reputational score
1	Johns Hopkins Hospital (Wilmer Eye Institute), Baltimore	59.10%
2	University of Miami (Bascom Palmer Eye Institute)	56.89%
3	Wills Eye Hospital, Philadelphia	45.35%
4	Massachusetts Eye and Ear Infirmary, Boston	40.22%
5	UCLA Medical Ctr. (Jules Stein Eye Institute), Los Angeles	31.46%
6	University of Iowa Hospitals and Clinics, Iowa City	18.38%
7	University of California, San Francisco Medical Center	10.14%
8	Mayo Clinic, Rochester, Minn.	9.72%
9	Duke University Medical Center, Durham, N.C.	8.58%
10	Manhattan Eye, Ear, and Throat Hospital, New York	6.83%
11	Barnes Hospital, St Louis	6.83%
12	Baylor University Medical Center, Dallas	5.81%
13	Doheny Eye Institute, Los Angeles	5.53%
14	Emory University Hospital, Atlanta	4.57%
15	University of Michigan Medical Center, Ann Arbor	4.56%
16	New York Eye and Ear Infirmary	4.21%
17	University of Illinois Hospital and Clinics, Chicago	4.10%
18	Stanford University Hospital, Stanford, Calif.	3.10%
19	Cleveland Clinic	2.84%
20	New England Medical Center, Boston	2.80%
21	Columbia-Presbyterian Medical Center, New York	2.29%
22	Brigham and Women's Hospital, Boston	2.23%
23	Northwestern Memorial Hospital, Chicago	2.13%
24	University of Wisconsin Hospital and Clinic, Madison	1.89%
25	California Pacific Medical Center, San Francisco	1.85%
26	Los Angeles County-USC Medical Center	1.78%
27	John L. Doyne Hospital, Milwaukee	1.70%
28	New York Hospital-Cornell Medical Center	1.46%
29	University of Minnesota Hospital and Clinic, Minneapolis	1.24%
30	Ohio State University Medical Center, Columbus	1.18%
31	Indiana University Medical Center, Indianapolis	1.17%
32	Hospital of the University of Pennsylvania, Philadelphia	1.14%
33	Montefiore Medical Center, Bronx, N.Y.	1.05%
34	Texas Heart Institute-St. Luke's Episcopal, Houston	1.00%

## OPHTHALMOLOGY RANKINGS

Rank	Hospital	Reputational score
35	Yale-New Haven Hospital, New Haven, Conn.	0.98%
36	North Carolina Baptist Hospital, Winston-Salem	0.98%
37	University of Pittsburgh Medical Center	0.93%
38	Hospital for Joint Diseases-Orthopedic Institute, New York	0.91%
39	Beth Israel Hospital, Boston	0.90%
40	Cedars-Sinai Medical Center, Los Angeles	0.89%
41	University of Washington Medical Center, Seattle	0.80%
42	Hutzel Hospital, Detroit	0.79%
43	Medical Center of Louisiana at New Orleans	0.66%
44	Methodist Hospital of Indiana, Indianapolis	0.64%
45	Trumann Medical Center-West, Kansas City	0.64%
46	Vanderbilt University Hospital and Clinic, Nashville	0.64%
47	University of Utah Hospitals and Clinics, Salt Lake City	0.64%
48	Kings County Hospital Center, Brooklyn	0.57%
49	University Hospital, Denver	0.57%
50	Medical University of South Carolina	0.52%
51	Beth Israel Medical Center, New York	0.52%
52	Sinai Hospital of Baltimore, Baltimore	0.52%
53	Eye Foundation Hospital, Birmingham	0.52%
54	Long Island Jewish Medical Center, New York	0.50%
55	Nassau County Medical Center, East Meadow	0.50%
56	Hahnemann University Hospital, Philadelphia	0.50%
57	Thomas Jefferson University Hospital, Philadelphia	0.50%
58	George Washington University Hospital	0.50%
59	Albert Einstein Medical Center, Philadelphia	0.47%
60	Howard University Hospital	0.47%
61	UCSD Medical Center, San Diego	0.46%
62	Los Angeles County-Harbor-UCLA Medical Center	0.46%
63	Ochsner Foundation Hospital, New Orleans	0.45%
64	Orthopaedic Hospital, Los Angeles	0.44%
65	Beverly Hospital, Montebello	0.44%
66	Garfield Medical Center, Monterey Park	0.44%
67	University of California, Davis Medical Center	0.44%
68	Allegheny General Hospital, Pittsburgh	0.43%

## OPHTHALMOLOGY RANKINGS

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Rank	Hospital	Reputational score
69	Magee Rehabilitation Hospital, Philadelphia	0.41%
70	Henry Ford Hospital, Detroit	0.41%
71	Mount Sinai Medical Center, New York	0.41%
72	University of California, Irvine Medical Center	0.41%
73	Miami Children's Hospital	0.40%
74	St. Francis Hospital, Memphis	0.39%
75	University Hospitals, Oklahoma City	0.39%
76	Long Beach Memorial Medical Center, Long Beach	0.39%
77	Cook County Hospital, Chicago	0.39%
78	Rush-Presbyterian-St. Luke's Medical Center, Chicago	0.39%
79	Deaconess Medical Center, Spokane	0.39%
80	Sacred Heart Medical Center, Spokane	0.39%
81	University and Children's Hospital, Colombia	0.39%
82	Eye, Ear, Nose and Throat Hospital, New Orleans	0.39%
83	Tulane University Hospital and Clinics, New Orleans	0.39%
84	Phillips Eye Institute	0.39%

## PEDIATRICS RANKINGS

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Rank	Hospital	Reputational score
1	Children's Hospital, Boston	41.8%
2	Children's Hospital of Philadelphia	28.3%
3	Johns Hopkins Hospital, Baltimore	27.8%
4	Children's Hospital, Los Angeles	12.1%
5	Children's National Medical Center, Washington, D.C.	9.0%
6	Children's Memorial Hospital, Chicago	8.9%
7	Children's Hospital of Pittsburgh	8.8%
8	Children's Hospital, Denver	8.8%
9	Mayo Clinic, Rochester, Minn.	8.0%
10	Children's Hospital Medical Center, Cincinnati	7.9%
11	Columbia-Presbyterian Medical Center, New York	7.1%
12	Univ. Hosps. of Cleveland (Rainbow Babies & Children's Hosp.)	6.7%
13	UCLA Medical Center, Los Angeles	5.6%
14	St. Louis Children's Hospital	4.9%
15	Duke University Medical Center, Durham, N.C.	4.6%
16	Massachusetts General Hospital, Boston	4.6%
17	Texas Children's Hospital, Houston	4.3%
18	University of Washington Medical Center, Seattle	4.3%
19	Stanford University Hospital, Stanford, Calif.	4.1%
20	University of California, San Francisco Medical Center	3.8%
21	Children's and Medical Center, Seattle	3.5%
22	St. Jude Children's Research Hospital, Memphis	3.2%
23	University of Michigan Medical Center, Ann Arbor	3.1%
24	University of Miami, Jackson Memorial Hospital	3.0%
25	Children's Medical Center of Dallas	2.8%
26	New York Hospital-Cornell Medical Center	2.4%
27	St. Christopher's Hospital for Children, Philadelphia	2.4%
28	Cleveland Clinic	2.1%
29	Baylor University Medical Center, Dallas	1.8%
30	Child and Adolescent Services of the Menninger Clinic	1.8%
31	University of Minnesota Hospital and Clinic, Minneapolis	1.8%
32	Yale-New Haven Hospital, New Haven, Conn.	1.8%
33	Egleston Children's Hospital at Emory University, Atlanta	1.8%

## PEDIATRICS RANKINGS

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Rank	Hospital	Reputational score
34	Long Island Jewish Medical Center, New York	1.7%
35	Children's Hospital of Alabama, Birmingham	1.6%
36	Barnes Hospital, St Louis	1.6%
37	National Jewish Center, Denver	1.5%
38	Children's Hospital, St. Paul	1.4%
39	University of North Carolina, Chapel Hill	1.4%
40	Indiana University Medical Center, Indianapolis	1.4%
41	North Carolina Baptist Hospital, Winston-Salem	1.3%
42	Boston City Hospital	1.3%
43	Children's Hospital, Columbus	1.3%
44	Hospital of the University of Pennsylvania, Philadelphia	1.3%
45	Le Bonheur Children's Medical Center, Memphis	1.3%
46	University of Virginia Health Sciences Ctr., Charlottesville	1.2%
47	Cardinal Glennon Children's Hospital, St. Louis	1.2%
48	Children's Hospital of Michigan, Detroit	1.1%
49	University of Iowa Hospitals and Clinics, Iowa City	1.1%
50	University Hospitals, Oklahoma City	1.0%
51	Children's Hospital, Albany	1.0%
52	Lucile Salter Packard Children's Hosp. at Stanford, PaloAlto	1.0%
53	Children's Hospital, St. Paul	1.0%
54	University of Wisconsin Hospital and Clinic, Madison	1.0%
55	Loma Linda University Medical Center, Loma Linda, Calif.	0.9%
56	New York University Medical Center	0.9%
57	Children's Hospital Medical Center, Cincinnati	0.9%
58	Children's Hospital, Oakland	0.9%
59	New England Medical Center, Boston	0.9%
60	Methodist Hospital, Houston	0.8%
61	Horsham Clinic, Ambler	0.8%
62	Cook County Hospital, Chicago	0.8%
63	Medical College of Virginia Hospitals, Richmond	0.8%
64	Children's Mercy Hospital, Kansas City, Mo.	0.7%
65	University of Texas Medical Branch Hospitals, Galveston	0.6%
66	University of Pittsburgh Medical Center	0.6%



## PEDIATRICS RANKINGS

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Rank	Hospital	Reputational score
67	Parkland Memorial Hospital, Dallas	0.6%
68	Children's Hospital of Orange County, Orange	0.6%
69	St. Barnabas Hospital, Bronx	0.6%
70	Overlook Hospital, Summit	0.6%
71	Western Pennsylvania Hospital, Pittsburgh	0.6%
72	Rush-Presbyterian-St. Luke's Medical Center, Chicago	0.5%
73	Northwestern Memorial Hospital, Chicago	0.5%
74	San Bernardino County Medical Center, San Bernardino	0.5%
75	Children's Hospital and Health Center, San Diego	0.5%
76	Kapiolani Medical Center for Women and Children, Honolulu	0.5%
77	Montefiore Medical Center, Bronx, N.Y.	0.5%
78	Poudre Valley Hospital, Fort Collins	0.5%
79	Phoenix General Hospital and Medical Center	0.5%
80	University Medical Center, Tucson	0.5%
81	John Muir Medical Center, Walnut Creek	0.5%
82	Lehigh Valley Hospital, Allentown	0.5%
83	Emory University Hospital, Atlanta	0.5%
84	Tulane University Hospital and Clinics, New Orleans	0.5%
85	UCSD Medical Center, San Diego	0.4%
86	Akron General Medical Center, Akron	0.4%
87	Summa Health System, Akron	0.4%
88	McLaren Regional Medical Center, Flint	0.4%
89	Pine Rest Christian Hospital, Grand Rapids	0.4%
90	St. Lawrence Hospital and Healthcare Services, Lansing	0.4%
91	Sinai Samaritan Medical Center, Milwaukee	0.4%
92	Elmbrook Memorial Hospital, Brookfield	0.4%
93	Milwaukee Psychiatric Hospital, Milwaukee	0.4%
94	United Hospital Medical Center, Newark	0.4%
95	Carolinas Medical Center, Charlotte	0.4%
96	All Children's Hospital, St. Petersburg	0.4%
97	Los Angeles County-USC Medical Center	0.4%
98	Rhode Island Hospital, Providence	0.4%
99	University Hospital, Newark	0.4%

## PEDIATRICS RANKINGS

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Rank	Hospital	Reputational score
100	Arkansas Children's Hospital, Little Rock	0.4%

## PSYCHIATRY RANKINGS

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Rank	Hospital	Reputational score
1	Massachusetts General Hospital, Boston	19.9%
2	C. F. Menninger Memorial Hospital, Topeka, Kan.	15.0%
3	McLean Hospital, Belmont, Mass.	14.0%
4	Johns Hopkins Hospital, Baltimore	13.6%
5	Columbia-Presbyterian Medical Center, New York	10.6%
6	Mayo Clinic, Rochester, Minn.	10.4%
7	New York Hospital-Cornell Medical Center	10.3%
8	Sheppard and Enoch Pratt Hospital, Baltimore	8.5%
9	New York University Medical Center	7.8%
10	Yale-New Haven Hospital, New Haven, Conn.	7.7%
11	UCLA Neuropsychiatric Hospital, Los Angeles	6.4%
12	Duke University Medical Center, Durham, N.C.	5.5%
13	Hospital of the University of Pennsylvania, Philadelphia	5.2%
14	University of Pittsburgh Medical Center	5.1%
15	<u>Chestnut Lodge Hospital, Rockville, Md.</u>	<u>3.1%</u>
16	Rush-Presbyterian-St. Luke's Medical Center, Chicago	2.9%
17	Beth Israel Hospital, Boston	2.7%
18	University of Michigan Medical Center, Ann Arbor	2.7%
19	Cleveland Clinic	2.4%
20	Timberlawn Psychiatric Hospital, Dallas	2.3%
21	Mount Sinai Medical Center, New York	2.3%
22	University of Miami, Jackson Memorial Hospital	2.1%
23	Methodist Hospital, Houston	2.0%
24	Rehabilitation Institute of Chicago	2.0%
25	University of California, San Francisco Medical Center	1.9%
26	Los Angeles County-Harbor-UCLA Medical Center	1.8%
27	Georgetown University Hospital, Washington D.C.	1.7%
28	Lahey Clinic Hospital, Burlington	1.6%
29	University of Chicago Hospitals	1.6%
30	Baylor University Medical Center, Dallas	1.6%
31	Medical University of South Carolina, Charleston	1.4%
32	Austen Riggs Center, Stockbridge	1.3%
33	University of Iowa Hospitals and Clinics, Iowa City	1.3%

## PSYCHIATRY RANKINGS

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Rank	Hospital	Reputational score
34	Barnes Hospital, St. Louis	1.3%
35	Northwestern Memorial Hospital, Chicago	1.2%
36	Parkland Memorial Hospital, Dallas	1.2%
37	Montefiore Medical Center, Bronx, N.Y.	1.2%
38	Boston University Medical Center-University Hospital	1.1%
39	Stanford University Hospital, Stanford, Calif.	1.1%
40	Ohio State University Medical Center, Columbus	1.1%
41	Baystate Medical Center, Springfield	1.0%
42	San Francisco General Hospital Medical Center	1.0%
43	UCSD Medical Center, San Diego	1.0%
44	Tulane University Hospital and Clinics, New Orleans	1.0%
45	Brattleboro Retreat, Brattleboro	1.0%
46	Stoney Lodge Hospital, Ossining	1.0%
47	Harding Hospital, Worthington	1.0%
48	Thomas Jefferson University Hospital, Philadelphia	0.9%
49	University of Cincinnati Hospital	0.9%
50	Los Angeles County-USC Medical Center	0.9%
51	Long Island Jewish Medical Center, New York	0.9%
52	University of Wisconsin Hospital and Clinic, Madison	0.8%
53	Belmont Center for Comprehensive Treatment, Philadelphia	0.8%
54	Psychiatric Institute of Washington, Washington D.C.	0.8%
55	University of California, Irvine Medical Center, Orange	0.8%
56	Hospital for Special Surgery, New York	0.8%
57	L.A. County-Rancho Los Amigos Med. Ctr., Downey, Calif.	0.8%
58	Emory University Hospital, Atlanta	0.7%
59	Baptist Medical Center, Little Rock	0.7%
60	St. Joseph Hospital, Fort Worth	0.7%
61	Scott and White Memorial Hospital, Temple	0.7%
62	St. Luke's-Roosevelt Hospital Center, New York	0.7%
63	Cambridge Hospital, Cambridge	0.7%
64	Westwood Lodge Hospital, Westwood	0.7%
65	Beth Israel Medical Center, New York	0.7%
66	St. Vincent's Hospital and Medical Center, New York	0.7%

## PSYCHIATRY RANKINGS

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Rank	Hospital	Reputational score
67	Westchester County Medical Center, Valhalla	0.7%
68	White Plains Hospital Center, White Plains	0.7%
69	Sinai Hospital of Baltimore, Baltimore	0.7%
70	University Hospital, Augusta	0.7%
71	Bayfront Medical Center, St. Petersburg	0.7%
72	Cook County Hospital, Chicago	0.7%
73	St. Joseph's Hospital of Atlanta	0.7%
74	St. Joseph's Hospital, Tampa	0.7%
75	University of Illinois Hospital and Clinics, Chicago	0.6%
76	New England Medical Center, Boston	0.6%
77	Robert Wood Johnson University Hospital, New Brunswick	0.6%
78	North Carolina Baptist Hospital, Winston-Salem	0.6%
79	Ochsner Foundation Hospital, New Orleans	0.6%
80	Evanston Hospital, Evanston	0.6%
81	St. Louis University Hospital	0.6%
82	Yakima Valley Memorial Hospital, Yakima	0.6%
83	Johnson City Medical Center Hospital, Johnson City	0.5%
84	Jackson Brook Institute, South Portland	0.5%
85	New England Deaconess Hospital, Boston	0.5%
86	Butler Hospital, Providence	0.5%
87	Yale Psychiatric Institute, New Haven	0.5%
88	Fairview Riverside Medical Center, Minneapolis	0.5%
89	St. Paul-Ramsey Medical Center, St. Paul	0.5%
90	Indiana University Medical Center, Indianapolis	0.5%
91	St. Luke's Episcopal Hospital, Houston	0.5%
92	Vanderbilt University Hospital and Clinic, Nashville	0.5%
93	Western Pennsylvania Hospital, Pittsburgh	0.5%
94	Brigham and Women's Hospital, Boston	0.4%
95	Burke Rehabilitation Hospital, White Plains	0.4%
96	University Hospitals of Cleveland	0.4%
97	Detroit Riverview Hospital	0.4%
98	Hawthorn Center, Northville	0.4%
99	Pine Rest Christian Hospital, Grand Rapids	0.4%

## PSYCHIATRY RANKINGS

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Rank	Hospital	Reputational score
100	St. Mary's Hospital Medical Center, Madison	0.4%

## REHABILITATION RANKINGS

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Rank	Hospital	Reputational score
1	Rehabilitation Institute of Chicago	45.0%
2	Mayo Clinic, Rochester, Minn.	30.0%
3	University of Washington Medical Center, Seattle	28.7%
4	New York University Medical Center (Rusk Institute)	19.5%
5	Craig Hospital, Englewood, Colo.	15.4%
6	The Institute for Rehabilitation and Research, Houston	15.3%
7	Baylor University Medical Center, Dallas	13.2%
8	Kessler Institute For Rehabilitation, West Orange, N.J.	12.5%
9	Ohio State University Medical Center, Columbus	11.4%
10	Thomas Jefferson University Hospital, Philadelphia	10.7%
11	L.A. County-Rancho Los Amigos Med. Ctr., Downey, Calif.	8.9%
12	University of Michigan Medical Center, Ann Arbor	7.2%
13	Spaulding Rehabilitation Institute, Boston	7.1%
14	Johns Hopkins Hospital, Baltimore	5.5%
15	Mount Sinai Medical Center, New York	5.2%
16	Cleveland Clinic	5.2%
17	National Rehabilitation Hospital, Washington, D.C.	3.6%
18	University of Miami, Jackson Memorial Hospital	3.4%
19	Columbia-Presbyterian Medical Center, New York	3.4%
20	<del>Montefiore Medical Center, Bronx, N.Y.</del>	<del>3.0%</del>
21	Hospital of the University of Pennsylvania, Philadelphia	2.8%
22	Medical College of Virginia Hospitals, Richmond	2.6%
23	Methodist Hospital, Houston	2.6%
24	UCLA Medical Center, Los Angeles	2.5%
25	Rehabilitation Institute of Michigan, Detroit	2.4%
26	University of California, Davis Medical Center	2.4%
27	Santa Clara Valley Medical Center, San Jose	2.4%
28	University of Minnesota Hospital and Clinics	2.2%
29	Stanford University Hospital, Stanford, Calif.	2.2%
30	Temple University Hospital, Philadelphia	2.1%
31	Magee Rehabilitation Hospital, Philadelphia	2.0%
32	University Hospital, Denver	1.9%
33	Barnes Hospital, St. Louis	1.9%

## REHABILITATION RANKINGS

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Rank	Hospital	Reputational score
34	New York Hospital-Cornell Medical Center	1.8%
35	Marianjoy Rehabilitation Hospital and Clinics, Wheaton	1.7%
36	University of Pittsburgh Medical Center	1.6%
37	University of Alabama Hospital at Birmingham	1.5%
38	Brigham and Women's Hospital, Boston	1.5%
39	Abbot Northwestern Hospital, Minneapolis	1.5%
40	University of California, San Francisco Medical Center	1.4%
41	St. Luke's Episcopal Hospital, Houston	1.4%
42	Sheltering Arms Rehabilitation Hospital, Richmond	1.4%
43	New England Medical Center, Boston	1.2%
44	Memorial Sloan-Kettering Cancer Center, New York	1.2%
45	University of Texas M.D. Anderson Cancer Ctr., Houston	1.2%
46	Harborview Medical Center, Seattle	1.2%
47	Lutheran General Healthsystem, Parkridge	1.1%
48	Univ. of Virginia Health Sciences Ctr., Charlottesville	1.0%
49	University of Wisconsin Hospital and Clinic, Madison	1.0%
50	National Hospital for Orthopaedics	0.9%
51	Rush-Presbyterian-St. Luke's Medical Center, Chicago	0.9%
52	Baptist Rehabilitation Institute of Arkansas, Little Rock	0.8%
53	San Francisco General Hospital Medical Center	0.8%
54	University of California, Irvine Medical Center, Orange	0.7%
55	Albert Einstein Med. Ctr. (Moss Rehab. Ctr.), Philadelphia	0.7%
56	Good Samaritan Regional Medical Center, Phoenix	0.7%
57	Lahey Clinic Hospital, Burlington	0.7%
58	Maimonides Medical Center, Brooklyn	0.7%
59	Elmhurst Hospital Center, Elmhurst	0.7%
60	William Beaumont Hospital-Troy	0.7%
61	Cedars-Sinai Medical Center, Los Angeles	0.6%
62	Penn State's Milton S. Hershey Medical Ctr., Hershey	0.6%
63	St. Joseph Hospital and Trauma Center, Nashua	0.6%
64	Fairlawn Rehabilitation Hospital, Worcester	0.6%
65	Metropolitan Hospital Center, New York	0.6%
66	St. Vincent's Hospital and Medical Center, New York	0.6%



## REHABILITATION RANKINGS

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Rank	Hospital	Reputational score
67	JFK Medical Center, Edison	0.6%
68	Harmarville Rehabilitation Center, Pittsburgh	0.6%
69	Evanston Hospital, Evanston	0.5%
70	Alfred I. DuPont Institute, Wilmington	0.5%
71	Good Samaritan Hospital, Baltimore	0.5%
72	Arkansas Children's Hospital, Little Rock	0.5%
73	Sinai Hospital, Detroit	0.5%
74	F.G. McGaw Hospital at Loyola University, Maywood	0.5%
75	St. Joseph Hospital and Health Care Center, Chicago	0.5%
76	University of Chicago Hospitals	0.5%
77	San Antonio Regional Hospital	0.5%
78	Sinai Hospital of Baltimore, Baltimore	0.5%
79	Memorial Medical Center, Savannah	0.5%
80	Scott and White Memorial Hospital, Temple	0.5%
81	Riverside Methodist Hospitals, Columbus	0.5%
82	St. Joseph Medical Center, Fort Wayne	0.5%
83	Indiana University Medical Center, Indianapolis	0.5%
84	St. Louis University Hospital	0.5%
85	St. John's Mercy Medical Center, St. Louis	0.5%
86	Beth Israel Medical Center, New York	0.5%
87	Duke University Medical Center, Durham, N.C.	0.5%
88	Reading Hospital and Medical Center, Reading	0.4%
89	Moses H. Cone Memorial Hospital, Greensboro	0.4%
90	St. Mary's Medical Center, Long Beach	0.4%
91	Kentfield Rehabilitation Center, Kentfield	0.4%
92	Cardinal Hill Rehabilitation Hospital, Lexington	0.4%
93	St. David's Rehabilitation Center, Austin	0.4%
94	Warm Springs Rehabilitation Hospital, Gonzalez	0.4%
95	University and Children's Hospital, Colombia	0.4%
96	St. Luke's Midland Regional Medical Center, Aberdeen	0.4%
97	Boston University Medical Center-University Hospital	0.4%
98	Harper Hospital, Detroit	0.4%
99	Henry Ford Hospital, Detroit	0.4%

## REHABILITATION RANKINGS

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Rank	Hospital	Reputational score
100	Hutzel Hospital	0.4%

## **Appendix F**

### **Diagnosis-related group (DRG) groupings by specialty**

- Death at discharge used for all rates calculated.

## Aids

All Cases

## Cancer

DRG # 010	Nervous System Neoplasms, with Complicating Conditions
DRG # 011	Nervous System Neoplasms, without Complicating Conditions
DRG # 064	Ear, Nose, Mouth and Throat malignancy
DRG # 082	Respiratory Neoplasms
DRG # 172	Digestive Malignancy, with Complicating Conditions
DRG # 173	Digestive Malignancy, without Complicating Conditions
DRG # 199	Hepatobiliary Diagnostic Procedure for Malignancy
DRG # 203	Malignancy of Hepatobiliary System or Pancreas
DRG # 239	Pathological Fractures and Musculoskeletal and Connective Tissue Malignancy
DRG # 257	Total Mastectomy for Malignancy, with Complicating Conditions
DRG # 258	Total Mastectomy for Malignancy, without Complicating Conditions
DRG # 259	Subtotal Mastectomy for Malignancy, with Complicating Conditions
DRG # 260	Subtotal Mastectomy for Malignancy, without Complicating Conditions
DRG # 274	Malignant Breast Disorders, with Complicating Conditions
DRG # 275	Malignant Breast Disorders, without Complicating Conditions
DRG # 303	Kidney, Ureter and Major Bladder Procedures for Neoplasms
DRG # 318	Kidney and Urinary Tract Neoplasms, with Complicating Conditions
DRG # 319	Kidney and Urinary Tract Neoplasms, without Complicating Conditions
DRG # 338	Testes Procedures for Malignancy

DRG # 344 Other Male Reproductive System Operating Room  
Procedures for Malignancy

DRG # 346 Malignancy of Male Reproductive System, with Complicating  
Conditions

DRG # 347 Malignancy of Male Reproductive System, without  
Complicating Conditions

DRG # 357 Uterine and Adnexa Procedures for Ovarian or Adnexal  
Malignancy

DRG # 363 D & C, Conization and Radioimplant for Malignancy

DRG # 366 Malignancy of Female Reproductive System, with  
Complicating Conditions

DRG # 367 Malignancy of Female Reproductive System, without  
Complicating Conditions

DRG # 400 Lymphoma and Leukemia, with Major Operating Room  
Procedures

DRG # 401 Lymphoma and Nonacute Leukemia, with Other Operating  
Room Procedures, with Complicating Conditions

DRG # 402 Lymphoma and Nonacute Leukemia, with Other Operating  
Room Procedures, without Complicating Conditions

DRG # 403 Lymphoma and Nonacute Leukemia, with Complicating  
Conditions

DRG # 404 Lymphoma and Nonacute Leukemia, without Complicating  
Conditions

DRG # 405 Acute Leukemia, without Major Operating Room Procedure,  
Age 0-17

DRG # 406 Myeloproliferative Disorders or Poorly Differentiated  
Neoplasms, with Major Operating Room Procedures, with  
Complicating Conditions

DRG # 407 Myeloproliferative Disorders or Poorly Differentiated  
Neoplasms, with Major Operating Room Procedures, without  
Complicating Conditions

DRG # 408 Myeloproliferative Disorders or Poorly Differentiated  
Neoplasms, with other Operating Room Procedures

DRG # 409 Radiotherapy

DRG # 410 Chemotherapy, without Leukemia as Secondary Diagnosis

DRG # 411 History of Malignancy, without Endoscopy

DRG # 412 History of Malignancy, with Endoscopy

- DRG # 413 Myeloproliferative Disorders or Poorly Differentiated Neoplasms, with Complicating Conditions
- DRG # 414 Myeloproliferative Disorders or Poorly Differentiated Neoplasms, without Complicating Conditions
- DRG # 473 Acute Leukemia, without Major Operating Room Procedure, Age greater than 17
- DRG # 492 Chemotherapy, with Leukemia as Secondary Diagnosis

**Cardiology**

- DRG # 103 Heart Transplant
- DRG # 104 Cardiac Valve Procedures with Cardiac Catheterization
- DRG # 105 Cardiac Valve Procedures without Cardiac Catheterization
- DRG # 106 Coronary Bypass with Cardiac Catheterization
- DRG # 107 Coronary Bypass without Cardiac Catheterization
- DRG # 108 Other Cardiothoracic Procedures
- DRG # 110 Major Cardiovascular Procedures, with Complicating Conditions
- DRG # 111 Major Cardiovascular Procedures, without Complicating Conditions
- DRG # 112 Percutaneous Cardiovascular Procedures
- DRG # 115 Permanent Cardiac Pacemaker Implant with Acute Myocardial Infarction, Heart Failure, or Shock
- DRG # 116 Other Permanent Cardiac Pacemaker Implant or A\CD Lead or Generator Procedure
- DRG # 117 Cardiac Pacemaker Revision Except Device Replacement
- DRG # 118 Cardiac Pacemaker Device Replacement
- DRG # 119 Vein Ligation and Stripping
- DRG # 120 Other Circulatory System Operating Room Procedures
- DRG # 121 Circulatory Disorders with Acute Myocardial Infarction and Cardiovascular Complication, Discharged Alive
  
- DRG # 122 Circulatory Disorders without Acute Myocardial Infarction and Cardiovascular Complication, Discharged Alive

DRG # 123	Circulatory Disorders with Acute Myocardial Infarction, Expired
DRG # 124	Circulatory Disorders except Acute Myocardial Infarction with Cardiac Catheterization and Complex Diagnosis
DRG # 125	Circulatory Disorders except Acute Myocardial Infarction with Cardiac Catheterization without Complex Diagnosis
DRG # 126	Acute and Subacute Endocarditis
DRG # 127	Heart Failure and Shock
DRG # 128	Deep Vein Thrombophlebitis
DRG # 129	Cardiac Arrest, Unexplained
DRG # 130	Peripheral Vascular Disorders, with Complicating Conditions
DRG # 131	Peripheral Vascular Disorders, without Complicating Conditions
DRG # 132	Atherosclerosis, with Complicating Conditions
DRG # 133	Atherosclerosis, with Complicating Conditions
DRG # 134	Hypertension
DRG # 135	Cardiac Congenital and Valvular Disorders, Age greater than 17, with Complicating Conditions
DRG # 136	Cardiac Congenital and Valvular Disorders, Age greater than 17, without Complicating Conditions
DRG # 137	Cardiac Congenital and Valvular Disorders, Age 0 - 17
DRG # 138	Cardiac Arrhythmia and Conduction Disorders, with Complicating Conditions
DRG # 139	Cardiac Arrhythmia and Conduction Disorders, without Complicating Conditions
DRG # 140	Angina Pectoris
DRG # 141	Syncope and Collapse, with Complicating Conditions
DRG # 142	Syncope and Collapse, without Complicating Conditions
DRG # 143	Chest Pain
DRG # 144	Other Circulatory System Diagnoses, with Complicating Conditions
DRG # 145	Other Circulatory System Diagnoses, without Complicating Conditions

## Endocrinology

DRG # 286	Adrenal and Pituitary Procedures
DRG # 287	Skin Grafts and Wound Debridement for Endocrine, Nutritional and Metabolic Disorders
DRG # 288	Operating Room Procedures for Obesity
DRG # 289	Parathyroid Procedures
DRG # 290	Thyroid Procedures
DRG # 291	Thyroglossal Procedures
DRG # 292	Other Endocrine, Nutritional and Metabolic Operating Room Procedure, with Complicating Conditions
DRG # 293	Other Endocrine, Nutritional and Metabolic Operating Room Procedure, without Complicating Conditions
DRG # 294	Diabetes, Age greater than 35
DRG # 295	Diabetes, Age 0-35
DRG # 296	Nutritional and Miscellaneous Metabolic Disorders, Age greater than 17, with Complicating Conditions
DRG # 297	Nutritional and Miscellaneous Metabolic Disorders, Age greater than 17, without Complicating Conditions
DRG # 298	Nutritional and Miscellaneous Metabolic Disorders, Age 0 - 17
DRG # 299	Inborn Errors of Metabolism
DRG # 300	Endocrine Disorders, with Complicating Conditions
DRG # 301	Endocrine Disorders, without Complicating Conditions

## Gastroenterology

DRG # 146	Rectal Resection, with Complicating Conditions
DRG # 147	Rectal Resection, without Complicating Conditions
DRG # 148	Major Small and Large Bowel Procedure, with Complicating Conditions
DRG # 149	Major Small and Large Bowel Procedure, without Complicating Conditions



DRG # 150	Peritoneal Adhesiolysis, with Complicating Conditions
DRG # 151	Peritoneal Adhesiolysis, without Complicating Conditions
DRG # 152	Minor Small and Large Bowel Procedure, with Complicating Conditions
DRG # 153	Minor Small and Large Bowel Procedure, without Complicating Conditions
DRG # 154	Stomach, Esophageal and Duodenal Procedures, Age greater than 17, with Complicating Conditions
DRG # 155	Stomach, Esophageal and Duodenal Procedures, Age greater than 17, without Complicating Conditions
DRG # 156	Stomach, Esophageal and Duodenal Procedures, Age 0-17
DRG # 157	Anal and stomal procedures, with Complicating Conditions
DRG # 158	Anal and stomal procedures, without Complicating Conditions
DRG # 159	Hernia Procedures except Inguinal and Femoral, Age grater than 17, with Complicating Conditions
DRG # 160	Hernia Procedures except Inguinal and Femoral, Age grater than 17, without Complicating Conditions
DRG # 161	Inguinal and Femoral Hernia Procedures, Age Greater than 17, with Complicating Conditions
DRG # 162	Inguinal and Femoral Hernia Procedures, Age Greater than 17, without Complicating Conditions
DRG # 163	Hernia Procedures, Age 0 - 17
DRG # 164	Appendectomy, with Complicated Principal Diagnosis, with Complicating Conditions
DRG # 165	Appendectomy with Complicated Principal Diagnosis, without Complicating Conditions
DRG # 166	Appendectomy without Complicated Principal Diagnosis, with Complicating Conditions
DRG # 167	Appendectomy without Complicated Principal Diagnosis, without Complicating Conditions
DRG # 168	Mouth Procedures, with Complicating Conditions
DRG # 169	Mouth Procedures, without Complicating Conditions
DRG # 170	Other Digestive System Operating Room Procedures, with Complicating Conditions
DRG # 171	Other Digestive System Operating Room Procedures, without Complicating Conditions

DRG # 172	Digestive Malignancy, with Complicating Conditions
DRG # 173	Digestive Malignancy, without Complicating Conditions
DRG # 174	GI Hemorrhage, with Complicating Conditions
DRG # 175	GI Hemorrhage, without Complicating Conditions
DRG # 176	Complicated Peptic Ulcer
DRG # 177	Uncomplicated Peptic Ulcer, with Complicating Conditions
DRG # 178	Uncomplicated Peptic Ulcer, without Complicating Conditions
DRG # 179	Inflammatory Bowel Disease
DRG # 180	GI Obstruction, with Complicating Conditions
DRG # 181	GI Obstruction, without Complicating Conditions
DRG # 182	Esophagitis, Gastroenteritis, and Miscellaneous Digestive Disorders, Age greater than 17, with Complicating Conditions
DRG # 183	Esophagitis, Gastroenteritis, and Miscellaneous Digestive Disorders, Age greater than 17, without Complicating Conditions
DRG # 184	Esophagitis, Gastroenteritis, and Miscellaneous Digestive Disorders, Age 0-17
DRG # 185	Dental and Oral Diseases except extractions and restorations, Age greater than 17
DRG # 188	Other Digestive System Diagnoses, Age Greater than 17, with Complicating Conditions
DRG # 189	Other Digestive System Diagnoses, Age Greater than 17, without Complicating Conditions
DRG # 190	Other Digestive System Diagnoses, Age 0 - 17
DRG # 195	Cholecystectomy with Common Duct Exploration, with Complicating Conditions
DRG # 196	Cholecystectomy with Common Duct Exploration, without Complicating Conditions
DRG # 197	Cholecystectomy except by Laparoscopy, without Common Duct Exploration, with Complicating Conditions
DRG # 198	Cholecystectomy except by Laparoscopy, without Common Duct Exploration, without Complicating Conditions
DRG # 493	Laparoscopic Cholecystectomy without Common Duct Exploration, with Complicating Conditions
DRG # 494	Laparoscopic Cholecystectomy without Common Duct Exploration, without Complicating Conditions

## Geriatrics

All Cases

## Gynecology

All Cases

## Neurology

DRG # 001	Craniotomy, Age greater than 17, except for Trauma
DRG # 002	Craniotomy, Age greater than 17
DRG # 003	Craniotomy, Age 0 - 17
DRG # 004	Spinal Procedures
DRG # 005	Extracranial Vascular Procedures
DRG # 006	Carpal Tunnel Release
DRG # 007	Peripheral and Cranial Nerve and other Nervous System procedures, with Complicating Conditions
DRG # 008	Peripheral and Cranial Nerve and other Nervous System procedures, without Complicating Conditions
DRG # 009	Spinal Disorders and Injuries
DRG # 010	Nervous System Neoplasms, with Complicating Conditions
DRG # 011	Nervous System Neoplasms, without Complicating Conditions
DRG # 012	Degenerative Nervous System Disorders
DRG # 013	Multiple Sclerosis and Cerebellar Ataxia
DRG # 014	Specific Cerebrovascular Disorders except Transient Ischemic Attack
DRG # 015	Transient Ischemic Attack and Precerebral Occlusions
DRG # 016	Nonspecific Cerebrovascular Disorders, with Complicating Conditions
DRG # 017	Nonspecific Cerebrovascular Disorders, without Complicating Conditions
DRG # 018	Cranial and Peripheral Nerve Disorders, with Complicating Conditions
DRG # 019	Cranial and Peripheral Nerve Disorders, without Complicating Conditions

DRG # 020	Nervous System Infection Except Viral Meningitis
DRG # 021	Viral Meningitis
DRG # 022	Hypertensive Encephalopathy
DRG # 023	Nontraumatic Stupor and Coma
DRG # 024	Seizure and Headache, age greater than 17, with Complicating Conditions
DRG # 025	Seizure and Headache, age greater than 17, without Complicating Conditions
DRG # 026	Seizure and Headache, age 0 - 17
DRG # 027	Traumatic Stupor and Coma, Coma greater than one hour
DRG # 028	Traumatic Stupor and Coma, Coma less than one hour, Age greater than 17, with Complicating Conditions
DRG # 029	Traumatic Stupor and Coma, Coma less than one hour, Age greater than 17, without Complicating Conditions
DRG # 030	Traumatic Stupor and Coma, Coma less than one hour, Age 0 - 17
DRG # 031	Concussion, Age greater than 17, with Complicating Conditions
DRG # 032	Concussion, Age greater than 17, without Complicating Conditions
DRG # 033	Concussion, Age 0 - 17
DRG # 034	Other Disorders of Nervous System with Complicating Conditions
DRG # 035	Other Disorders of Nervous System, without Complicating Conditions

### Orthopedics

DRG # 209	Major Joint and Limb Reattachment Procedures of Lower Extremities
DRG # 210	Hip and Femur Procedures except Major Joint Procedures, Age greater than 17, with Complicating Conditions
DRG # 211	Hip and Femur Procedures except Major Joint Procedures, Age greater than 17, without Complicating Conditions
DRG # 212	Hip and Femur Procedures except Major Joint Procedures, Age 0 - 17

DRG # 213	Amputation for Musculoskeletal System and Connective Tissue Disorders
DRG # 214	Back and Neck Procedures, with Complicating Conditions
DRG # 215	Back and Neck Procedures, without Complicating Conditions
DRG # 216	Biopsies of Musculoskeletal System and Connective Tissue
DRG # 217	Wound Debridement and Skin Graft Except Hand for Musculoskeletal and Connective Tissue Disorders
DRG # 218	Lower Extremity and Humerus Procedures Except Hip, Foot and Femur, Age greater than 17, with Complicating Conditions
DRG # 219	Lower Extremity and Humerus Procedures Except Hip, Foot and Femur, Age greater than 17, without Complicating Conditions
DRG # 220	Lower Extremity and Humerus Procedures Except Hip, Foot and Femur, Age 0 - 17
DRG # 221	Knee Procedures, with Complicating Conditions
DRG # 222	Knee Procedures, without Complicating Conditions
DRG # 223	Major Shoulder/Elbow Procedures or Other Upper Extremity Procedures, with Complicating Conditions
DRG # 224	Shoulder, Elbow or Forearm Procedures except Major Joint Procedures, with Complicating Conditions
DRG # 225	Foot Procedures
DRG # 226	Soft Tissue Procedures, with Complicating Conditions
DRG # 227	Soft Tissue Procedures, without Complicating Conditions
DRG # 228	Major Thumb or Joint Procedures or Other Hand or Wrist Procedures, with Complicating Conditions
DRG # 229	Major Thumb or Joint Procedures or Other Hand or Wrist Procedures, without Complicating Conditions
DRG # 230	Local Excision and Removal of Internal Fixation Devices of Hip and Femur
DRG # 231	Local Excision and Removal of Internal Fixation Devices, except Hip and Femur
DRG # 232	Arthroscopy
DRG # 233	Other Musculoskeletal System and Connective Tissue Operating Room Procedures, with Complicating Conditions

- DRG # 234 Other Musculoskeletal System and Connective Tissue  
Operating Room Procedures, without Complicating  
Conditions
- DRG # 471 Bilateral or Multiple Major Joint Procedures of Lower  
Extremity
- DRG # 485 Limb Reattachment, Hip and Femur Procedures for Multiple  
Significant Trauma
- DRG # 491 Major Joint and Limb Reattachment Procedures of Upper  
Extremity

**Otolaryngology**

All Cases

**Pulmonology**

- DRG # 075 Major Chest Procedure
- DRG # 076 Other Respiratory System Operating Room Procedures, with  
Complicating Conditions
- DRG # 077 Other Respiratory System Operating Room Procedures,  
without Complicating Conditions
- DRG # 078 Pulmonary Embolism
- DRG # 079 Respiratory Infections and Inflammations, Age Greater Than  
17, with Complicating Conditions
- DRG # 080 Respiratory Infections and Inflammations, Age Greater Than  
17, without Complicating Conditions
- DRG # 081 Respiratory Infections and Inflammations, Age 0 - 17
- DRG # 083 Major Chest Trauma, with Complicating Conditions
- DRG # 084 Major Chest Trauma, without Complicating Conditions
- DRG # 085 Pleural Effusion, with Complicating Conditions
- DRG # 086 Pleural Effusion, without Complicating Conditions
- DRG # 087 Pulmonary Edema and Respiratory Failure
- DRG # 088 Chronic Obstructive Pulmonary Disease
- DRG # 089 Simple Pneumonia and Pleurisy, Age Greater Than 17, with  
Complicating Conditions
- DRG # 090 Simple Pneumonia and Pleurisy, Age Greater Than 17,  
without Complicating Conditions

DRG # 091	Simple Pneumonia and Pleurisy, Age 0 - 17
DRG # 092	Interstitial Lung Disease with Complicating Conditions
DRG # 093	Interstitial Lung Disease, without Complicating Conditions
DRG # 094	Pneumothorax, with Complicating Conditions
DRG # 095	Pneumothorax, without Complicating Conditions
DRG # 096	Bronchitis and Asthma, Age Greater than 17, with Complicating Conditions
DRG # 097	Bronchitis and Asthma, Age Greater than 17, without Complicating Conditions
DRG # 098	Bronchitis and Asthma, Age 0 - 17
DRG # 099	Respiratory Signs and Symptoms, with Complicating Conditions
DRG # 100	Respiratory Signs and Symptoms, without Complicating Conditions
DRG # 101	Other Respiratory System Diagnoses, with Complicating Conditions
DRG # 102	Other Respiratory System Diagnoses, without Complicating Conditions
DRG # 475	Respiratory System Diagnoses with Ventilator Support

## Rheumatology

All Cases

## Urology

DRG # 302	Kidney Transplant
DRG # 303	Kidney, Ureter and Major Bladder Procedures for Neoplasms
DRG # 304	Kidney, Ureter and Major Bladder Procedures for Neoplasms, with Complicating Conditions
DRG # 305	Kidney, Ureter and Major Bladder Procedures for Neoplasms, without Complicating Conditions
DRG # 306	Prostatectomy, with Complicating Conditions
DRG # 307	Prostatectomy, without Complicating Conditions
DRG # 308	Minor Bladder Procedures, with Complicating Conditions
DRG # 309	Minor Bladder Procedures, without Complicating Conditions
DRG # 310	Transurethral Procedures, with Complicating Conditions
DRG # 311	Transurethral Procedures, without Complicating Conditions

DRG # 312 Urethral Procedures, Age Greater Than 17, with Complicating Conditions  
 DRG # 313 Urethral Procedures, Age Greater Than 17, without Complicating Conditions  
 DRG # 314 Urethral Procedures, Age 0 -17  
 DRG # 315 Other Kidney and Urinary Tract Operating Room Procedures  
 DRG # 316 Renal Failure  
 DRG # 317 Admission for Renal Dialysis  
 DRG # 318 Kidney and Urinary Tract Neoplasms, with Complicating Conditions  
 DRG # 319 Kidney and Urinary Tract Neoplasms, without Complicating Conditions  
 DRG # 320 Kidney and Urinary Tract Infections, Age Greater than 17, with Complicating Conditions  
 DRG # 321 Kidney and Urinary Tract Infections, Age Greater than 17, without Complicating Conditions  
 DRG # 322 Kidney and Urinary Tract Infections, Age 0 - 17  
 DRG # 323 Urinary Stones, with Complicating Conditions and/or ESW Lithotripsy  
 DRG # 324 Urinary Stones, without Complicating Conditions  
 DRG # 325 Kidney and Urinary Tract Signs and Symptoms, Age Greater than 17, with Complicating Conditions  
 DRG # 326 Kidney and Urinary Tract Signs and Symptoms, Age Greater than 17, without Complicating Conditions  
 DRG # 327 Kidney and Urinary Tract Signs and Symptoms, Age 0 - 17  
 DRG # 328 Urethral Stricture, Age Greater than 17, with Complicating Conditions  
 DRG # 329 Urethral Stricture, Age Greater than 17, without Complicating Conditions  
 DRG # 330 Urethral Stricture, Age 0 - 17  
 DRG # 331 Other Kidney and Urinary Tract Diagnoses, Age Greater than 17, with Complicating Conditions  
 DRG # 332 Other Kidney and Urinary Tract Diagnoses, Age Greater than 17, without Complicating Conditions  
 DRG # 333 Other Kidney and Urinary Tract Diagnoses, Age 0 - 17  
 DRG # 334 Major Male Pelvic Procedures, with Complicating Conditions



DRG # 335	Major Male Pelvic Procedures, without Complicating Conditions
DRG # 336	Transurethral Prostatectomy, with Complicating Conditions
DRG # 337	Transurethral Prostatectomy, without Complicating Conditions
DRG # 338	Testes Procedures for Malignancy
DRG # 339	Testes Procedures for Non-malignancy, Age Greater than 17
DRG # 340	Testes Procedures for Non-malignancy, Age 0 - 17
DRG # 341	Penis Procedures
DRG # 342	Circumcision, Age Greater Than 17
DRG # 343	Circumcision, Age 0 - 17
DRG # 344	Other Male Reproductive System Operating Room Procedures for Malignancy
DRG # 345	Other Male Reproductive System Operating Room Procedures Except for Malignancy
DRG # 346	Malignancy of Male Reproductive System, with Complicating Conditions
DRG # 347	Malignancy of Male Reproductive System, without Complicating Conditions
DRG # 348	Benign Prostatic Hypertrophy, with Complicating Conditions
DRG # 349	Benign Prostatic Hypertrophy, without Complicating Conditions
DRG # 350	Inflammation of the Male Reproductive System
DRG # 351	Male Sterilization
DRG # 352	Other Male Reproductive System Diagnoses

## **Appendix G**

### **Predicted Mortality: Disease Staging Approach**

## Rationale and Methods of Disease Staging

MEDSTAT's Disease Staging is a clinically based measure of disease severity that has been widely used in hospital management, quality assurance, and reimbursement applications. Over the past decade, hospitals, insurers, researchers, and state and federal governments have used the Disease Staging methodology to analyze tens of millions of hospital discharges.

Disease Staging uses objective medical criteria to assess the cause and stage of disease progression. Staging defines discrete points in the course of individual diseases that are clinically detectable, reflect severity in terms of risk of death or lasting disability or disease (morbidity), and possess clinical significance for prognosis and choice of therapeutic methods. Medical staging criteria have been developed for approximately 600 diseases and translated into recognized international disease classification rubrics. Disease Staging criteria have been developed for manual applications to medical records and for automated applications to computerized hospital discharge abstract data.

### Development

Since its initial development, Disease Staging has undergone extensive testing and refinement to ensure its clinical precision. The inclusion of criteria for new diseases and periodic adjustments of diagnostic code assignments have guaranteed the timeliness, accuracy and clinical relevance of the Disease Staging system. Severity criteria now exist for all diseases typically seen in

hospital admissions, as well as in ambulatory care. Therefore, Disease Staging is a comprehensive disease classification system.

Much of the early development of Disease Staging was sponsored by the office of Planning Evaluation, and Legislation--the evaluation component of the Health Services Administration within the (former) Department of Health, Education, and Welfare. The "staging" concept was used to produce medically meaningful (homogeneous) cluster of patients in terms of Disease Stage.

Much of the later development of Disease Staging was sponsored by the National Center for Health Services Research (NCHSR), a branch of the Public Health Service. Under contract to NCHSR, MEDSTAT assembled a panel of physician consultant to develop staging criteria for over 400 high-incidence diseases. Computer software was developed to apply Disease Staging criteria to automated hospital discharge abstract data. This software was validated in reabstracting studies that compared manual and computer staging on a large sample of records. Results showed a high level of agreement between stages assigned manually using the full medical record and stages assigned to the computer software operating on automated discharge abstract data. Each mode of implementation is clinically valid and statistically reliable; each is also characterized by unique strengths for application in different settings.

Since the completion of the NCHSR work in 1983, Dr. Joseph S. Gonnella (Dean of Jefferson Medical College) and MEDSTAT, Inc., have conducted research to further improve Disease Staging. Recent improvements include the simplification of numerous disease categories, the clinical

modification of staging criteria to reflect current clinical practice and the updating of coded staging criteria to reflect current coding conventions. The result is a more complete and precise system for defining disease severity, which permits classifications at multiple time points. The Disease Staging definition therefore reflect the severity of a disease at any given time, and have significance in terms of prognosis and choice of therapy in treating a particular patient.

Consistent with its initial design, Disease Staging objectively defines severity based only on the clinical attributes of a patient's illness, without regard for treatment decisions, intensity of care, or resource utilization. However, a by-product of the effort to produce clinically pure groups was the categorization of patients into groups that required common treatment protocols, had similar expected outcomes, and consumed comparable resources. Thus, by virtue of its clinical foundations, the Disease Staging methodology is readily applicable to quality improvement, case management, and utilization management.

### Disease Severity

Disease Severity is the likelihood of death or lasting disability or illness as a result of disease, without consideration of treatment. Disease Severity is a clinical characteristic of the patient and can be through of as an input to the treatment process.

As a disease advances, it naturally progresses through three general stages of increasing complexity and system involvement:

- State 1      Conditions with no complications or problem of minimal severity.
  
- Stage 2      Problem limited to an organ or system; significantly increased risk of complications.
  
- Stage 3      Multiple site involvement; generalized systemic involvement; poor prognosis.

In Disease Staging, clinical criteria have been determined for each disease to define progressive stages modeled on the above framework. Substages have been defined within each stage to further specify levels of disease progression. Each stage and substage is defined on the basis of objective clinical findings and standard diagnostic terminology or naming conventions. For example, the Appendicitis Disease category is defined as the following:

<u>Stage</u>	<u>Description</u>
1.0	Appendicitis
2.1	Appendicitis with Perforation Causing: <ul style="list-style-type: none"><li>• Localized Peritonitis</li><li>• Peritoneal Abscess</li></ul>
2.2	Appendicitis and Intestinal Obstruction
2.3	Appendicitis with Perforation Causing: <ul style="list-style-type: none"><li>• General Peritonitis</li></ul>

- 2.4 Pylephlebitis with or without Liver Abscess
- 3.1 Septicemia
- 3.2 Shock

In terms of its natural progression, appendicitis begins without complications. If it is not treated in time, it can perforate and cause localized peritonitis or peritoneal abscess and, later, generalized peritonitis. Without effective treatment, this condition can eventually lead to septicemia. Ultimately, the patient may go into shock.

In summary, the stages and Substages defined by the clinical criteria for each disease denote levels of natural disease progression that typically occur unless effective treatment halts the advancement of the disease.

#### Disease Staging IV

The fourth edition to Disease Staging is a complete redesign of the system from clinical criteria to the predictive scales. The panel of physicians, led by Dr. Gonnella, has completely updated the clinical criteria. Many disease categories, such as IDs and neonatal conditions, have been added and some have been collapsed into a single category.

The coded criteria, which allow the staging of computerized secondary data, have also been updated. Even though the third edition has been updated with ICD9 CM codes, the fourth edition coded criteria rules have been revised

to take advantage of the greater specificity of the Disease Staging clinical criteria.

Greater specificity in classifying diseases has resulted in nearly 600 disease categories--up from nearly 400. Other changes are the grouping of diseases into 23 body-system categories. The body-system codes have also changed, rendering the system more intuitive. This also more clearly differentiates between third and fourth edition output. For example, instead of using 05 for respiratory system diseases, the new coding system uses the mnemonic RS. As a result, the bacterial pneumonia disease category number is now RS30.

Many of the improvements to the Disease Staging system were to the predictive scales. The development database consisted of over 10 million discharges (7 million for the test data set, 3 million for the validation data set). The records were a combination of 1991 and 1992 data from Arizona, California, Florida, Illinois, Maryland, Massachusetts, Washington, and Wisconsin. The greater number of discharges meant less combining of classifications as a result of insufficient sampling, thereby producing greater specificity for the disease models.

Hospitals' total charges were standardized for the Resource Demand Scale. This took into account MSA wage rates, teaching status, and disproportionate share which leveled much of the charge variation between hospitals and states.



Using the patient classification system within the Disease Staging methodology and the development database, severity scale and probability values were developed using multiple regression analysis to predict charges, costs, length of stay, mortality, complications of care, and readmission. These regression analyses are done for each severity adjustment indicator outputted within Disease Staging IV.

Therefore, each patient received a length of stay severity scale number, resource demand severity scale number, mortality probability, and complications of care probability for 95 individual complications of care.

The handling of unrelated secondary diseases or complications was also enhanced. In the fourth edition, the lasting impact of the secondary disease on the outcome being modeled was measured. The decreasing impact that secondary diseases have as the number of secondary diseases increase was then modeled. The mortality model had another significant enhancement. High risk diseases were modeled with logistic regression--which used an equation that takes into account the diagnosis, as well as such variables as disease stage, secondary diseases, admit source (e.g., emergency room), and the age and sex of the patient, in predicting mortality rates, length of stay, and charges.

## **Appendix H**

### **Index of Hospital Quality (IHQ) scores by specialty**

## 1996 Aids Ranking

Rank	Hospital	Sihq	Percent	Rate	COTH	Tech	Displan	Nurses
1	San Francisco General Hospital Medical Center	100.0	59.3%	0.94	No	7.5	2	2.21
2	Johns Hopkins Hospital, Baltimore	71.8	35.3%	0.91	Yes	9.0	3	1.36
3	Massachusetts General Hospital, Boston	59.4	24.4%	0.76	Yes	9.0	1	1.40
4	University of California--San Francisco Medical Center	53.6	19.0%	0.70	Yes	9.0	3	1.41
5	UCLA Medical Center, Los Angeles	51.0	18.8%	0.68	Yes	9.0	1	1.03
6	University of Miami, Jackson Memorial Hospital	43.5	15.8%	0.95	Yes	6.5	3	1.49
7	Memorial Sloan-Kettering Cancer Center, New York	42.1	11.7%	0.80	Yes	8.0	2	1.56
8	New York University Medical Center	38.6	10.9%	0.88	Yes	8.5	3	0.91
9	Northwestern Memorial Hospital, Chicago	37.6	8.9%	0.59	Yes	7.5	3	0.99
10	New York Hospital--Cornell Medical Center	36.9	11.7%	0.99	Yes	8.0	2	0.93
11	Montefiore Medical Center, Bronx, N.Y.	36.0	9.1%	0.98	Yes	8.0	3	1.52
12	Duke University Medical Center, Durham, N.C.	35.0	4.4%	0.78	Yes	9.0	3	1.73
13	Rush--Presbyterian--St. Luke's Medical Center, Chicago	33.7	5.4%	0.65	Yes	9.0	1	1.07
14	UCSD Medical Center, San Diego	33.5	3.7%	0.67	Yes	8.0	3	1.73
15	University of Washington Medical Center, Seattle	33.5	3.8%	0.68	Yes	8.0	2	1.88
16	New England Deaconess Hospital, Boston	32.9	6.7%	0.80	Yes	7.0	2	1.00
17	Beth Israel Hospital, Boston	32.7	4.7%	0.72	Yes	7.0	2	1.53
18	Stanford University Hospital, Stanford, Calif.	32.3	4.8%	0.78	Yes	7.5	3	1.18
19	Mount Sinai Medical Center, New York	31.2	5.3%	0.97	Yes	8.5	3	1.39
20	Hospital of the University of Pennsylvania, Philadelphia	30.5	3.5%	0.81	Yes	7.0	3	1.52
21	Columbia Presbyterian Medical Center, New York	30.1	6.7%	1.16	Yes	9.0	2	1.17
22	New England Medical Center, Boston	29.7	0.9%	0.81	Yes	8.0	3	2.16
23	Mayo Clinic, Rochester	29.4	4.9%	0.67	No	7.5	3	0.83
24	Brigham and Women's Hospital, Boston	28.6	3.6%	0.78	Yes	6.5	3	0.76
25	Cook County Hospital, Chicago	28.5	1.2%	0.55	Yes	7.0	3	1.49
26	Barnes Hospital, St. Louis	28.5	3.1%	0.86	Yes	8.5	2	1.00
27	Harborview Medical Center, Seattle	28.4	3.5%	0.99	Yes	6.5	3	2.25
28	University of Iowa Hospitals and Clinics, Iowa City	28.4	1.3%	0.85	Yes	9.0	3	1.31
29	University of Chicago Hospitals, Chicago	28.4	0.0%	0.64	Yes	8.0	3	1.63
30	Cleveland Clinic, Cleveland	28.3	0.8%	0.68	Yes	8.5	3	1.10
31	Thomas Jefferson University Hospital, Philadelphia	28.2	0.5%	0.74	Yes	8.0	3	1.38
32	University of Maryland Medical System, Baltimore	28.1	1.1%	0.85	Yes	7.0	3	2.37
33	University Hospital, Denver	28.1	0.8%	0.77	Yes	7.0	3	1.62
34	University of Texas, M. D. Anderson Center, Houston	28.1	0.9%	0.19	Yes	7.5	2	1.49
35	Georgetown University Hospital, Washington, D.C.	28.0	1.5%	0.77	Yes	7.0	1	1.63
36	University of Illinois Hospital and Clinics, Chicago	27.9	0.0%	0.68	Yes	7.0	3	1.81
37	University of Michigan Medical Center, Ann Arbor	27.7	1.2%	0.90	Yes	9.0	3	1.45
38	Mary Hitchcock Memorial Hospital, Lebanon, N.H.	27.7	0.0%	0.82	Yes	9.0	3	1.49
39	Univ. of Virginia Health Sciences Center, Charlottesville	27.7	1.6%	1.00	Yes	9.0	3	1.77
40	University Hospitals of Cleveland	27.6	0.4%	0.88	Yes	9.0	2	1.84
41	Beth Israel Medical Center, New York	27.6	2.7%	0.93	Yes	8.0	3	1.20
42	University Hospital, Portland, Ore.	27.5	0.0%	0.72	Yes	7.0	2	1.88
43	Los Angeles County--USC Medical Center	27.5	1.5%	0.67	Yes	6.5	3	1.19
44	North Carolina Baptist Hospital, Winston-Salem	27.5	1.0%	0.89	Yes	9.0	3	1.40

45	Yale--New Haven Hospital, New Haven, Conn.	27.4	2.9%	0.90	Yes	8.5	2	0.95
46	Boston City Hospital	27.3	1.5%	0.72	No	7.5	3	1.62
47	Ochsner Foundation Hospital, New Orleans	27.2	0.6%	0.67	Yes	8.0	2	1.17
48	William Beaumont Hospital, Royal Oak, Mich.	26.9	0.0%	0.87	Yes	9.0	3	1.51
49	University of California--Davis Medical Center	26.9	0.0%	0.81	Yes	7.0	2	2.22
50	California Pacific Medical Center, San Francisco	26.8	0.4%	0.81	Yes	8.0	2	1.41
51	Medical University of South Carolina, Charleston	26.8	0.0%	0.85	Yes	8.5	2	1.76
52	University of Louisville Hospital	26.7	0.5%	0.79	Yes	7.0	3	1.39
53	Fairfax Hospital, Falls Church, Va.	26.7	0.8%	0.82	Yes	8.0	2	1.33
54	University of Kentucky Hospital, Lexington	26.5	0.0%	0.85	Yes	7.0	3	1.96
55	Vanderbilt University Hospital and Clinic, Nashville, Tenn.	26.5	1.1%	0.95	Yes	9.0	3	1.34
56	Baylor University Medical Center, Dallas	26.4	0.3%	0.75	Yes	8.0	1	1.19
57	Methodist Hospital, Brooklyn, N.Y.	26.4	0.0%	0.48	Yes	8.5	3	0.77
58	Medical Center of Delaware, Wilmington	26.3	0.0%	0.86	Yes	8.0	2	1.82
59	Parkland Memorial Hospital, Dallas	26.3	2.3%	1.07	Yes	8.0	3	1.61
60	St. John's Mercy Medical Center, St. Louis, Mo.	26.3	0.0%	0.74	Yes	8.0	3	0.91
61	Scott and White Memorial Hospital, Temple, Tx.	26.1	0.0%	0.81	Yes	7.0	3	1.57
62	Hospital of St. Raphael, New Haven, Conn.	26.1	0.0%	0.75	Yes	7.0	3	1.21
63	Medical Center of Louisiana at New Orleans	26.1	0.6%	0.96	Yes	8.0	2	2.80
64	Sinai Samaritan Medical Center, Milwaukee, Wisc.	26.0	0.0%	0.86	Yes	8.5	3	1.33
65	Albany Medical Center Hospital, Albany, N.Y.	25.8	0.4%	0.92	Yes	8.0	3	1.63
66	St. Joseph's Hospital and Medical Center, Phoenix	25.8	0.0%	0.86	Yes	8.0	3	1.41
67	Western Pennsylvania Hospital, Pittsburgh	25.7	0.0%	0.79	Yes	8.0	3	0.94
68	Evanston Hospital, Evanston	25.6	0.0%	0.69	Yes	7.0	3	1.03
69	Los Angeles County-- Harbor--UCLA Medical Center	25.5	1.5%	0.75	No	7.5	1	1.38
70	Maricopa Medical Center, Phoenix	25.5	0.0%	0.98	Yes	8.0	3	2.00
71	Baptist Hospital of Miami, Miami	25.5	0.0%	0.71	No	9.0	3	1.14
72	William N. Wishard Memorial Hospital, Indianapolis	25.4	0.0%	0.80	Yes	7.0	1	1.59
73	University of Wisconsin Hospital and Clinics, Madison	25.4	0.4%	0.91	Yes	9.0	3	1.08
74	St. Luke's Medical Center, Milwaukee	25.3	0.0%	0.92	Yes	8.5	3	1.45
75	F.G. McGaw Hospital at Loyola University, Maywood, Ill.	25.2	0.0%	0.92	Yes	8.0	3	1.60
76	Boston University Medical Center--University Hospital, Boston	25.2	0.5%	0.71	Yes	7.0	3	0.69
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77	Hennepin County Medical Center, Minneapolis	25.1	0.0%	0.63	Yes	7.0	3	0.86
78	University Hospitals, Oklahoma City	25.0	0.0%	0.99	Yes	8.0	3	1.90
79	Cedars-Sinai Medical Center, Los Angeles	25.0	1.8%	0.98	Yes	8.0	3	1.04
80	Mary Imogene Bassett Hospital, Cooperstown, N.Y.	25.0	0.5%	0.81	Yes	7.0	3	0.95
81	Temple University Hospital, Philadelphia	25.0	0.5%	0.90	Yes	7.0	3	1.54
82	University of Cincinnati Hospital	25.0	0.8%	0.88	Yes	7.5	2	1.28
83	Harper Hospital, Detroit	25.0	0.0%	0.81	Yes	8.0	2	1.03
84	Tulane University Hospital and Clinics, New Orleans	24.9	0.0%	0.77	Yes	7.0	1	1.21
85	Mercy Hospital of Pittsburgh, Pittsburgh	24.9	0.0%	0.86	Yes	8.0	3	1.13
86	Orlando Regional Medical Center, Orlando	24.8	0.0%	0.93	Yes	8.0	3	1.52
87	Lehigh Valley Hospital, Allentown, Penn.	24.8	0.4%	0.90	Yes	7.5	3	1.33
88	University of Minnesota Hospital and Clinic, Minneapolis	24.8	0.9%	0.77	Yes	7.0	2	0.59
89	Henry Ford Hospital, Detroit	24.8	1.4%	0.94	Yes	8.0	3	0.93
90	University of North Carolina Hospitals, Chapel Hill	24.6	1.4%	1.11	Yes	8.5	3	1.43
91	Florida Hospital Medical Center, Orlando	24.6	0.0%	0.82	No	9.0	3	1.23
92	Olive View Medical Center, Sylmar, Calif.	24.5	0.0%	0.82	No	7.5	2	1.97
93	Sinai Hospital of Baltimore, Baltimore	24.5	0.0%	0.95	Yes	8.0	2	1.71
94	Pennsylvania Hospital, Philadelphia	24.5	0.0%	0.38	Yes	6.0	3	1.00

95	Indiana University Medical Center, Indianapolis	24.5	0.0%	1.04	Yes	9.0	2	1.76
96	University of Utah Hospital and Clinics, Salt Lake City	24.2	0.0%	0.84	Yes	6.0	2	1.63
97	University of Massachusetts Medical Center, Worcester	24.2	0.0%	0.84	Yes	6.5	2	1.45
98	Emory University Hospital, Atlanta	24.1	0.9%	0.90	Yes	7.5	3	0.87
99	Cape Cod Hospital, Hyannis, Mass.	24.0	0.0%	0.70	No	7.0	3	1.36
100	Provident Hospital of Cook County, Chicago	24.0	0.0%	0.77	No	6.0	2	1.96

## 1996 Cancer Rankings

Rank	Hospital	Sihq	Percent	Rate	Coth	Tech	Nurses	Volume
1	Memorial Sloan-Kettering Cancer Center, New York	100.0	72.4%	0.89	Yes	6.0	1.56	8.74
2	University of Texas, M. D. Anderson Center, Houston	99.7	68.8%	0.18	Yes	6.5	1.49	8.51
3	Dana-Farber Cancer Institute, Boston	68.8	47.1%	0.06	No	3.0	6.16	11.33
4	Johns Hopkins Hospital, Baltimore	55.7	32.6%	0.44	Yes	7.0	1.36	1.62
5	Mayo Clinic, Rochester, Minn.	46.5	28.9%	0.47	No	5.5	0.83	3.55
6	Stanford University Hospital, Stanford, Calif.	35.2	17.2%	0.64	Yes	5.5	1.18	2.17
7	University of Washington Medical Center, Seattle	30.7	11.6%	0.56	Yes	6.0	1.88	1.81
8	Duke University Medical Center, Durham, N.C.	30.2	10.9%	0.63	Yes	7.0	1.73	3.14
9	University of Chicago Hospitals	28.2	8.4%	0.44	Yes	7.0	1.63	2.71
10	University of California--San Francisco Medical Center	25.6	7.7%	0.47	Yes	7.0	1.41	0.96
11	Massachusetts General Hospital, Boston	25.3	8.0%	0.70	Yes	7.0	1.40	2.79
12	Roswell Park Cancer Institute, Buffalo, N.Y.	23.4	7.5%	0.49	No	5.5	2.92	14.56
13	Indiana University Medical Center, Indianapolis	22.2	4.1%	0.57	Yes	7.0	1.76	1.59
14	Fox Chase Cancer Center, Philadelphia	20.7	6.1%	0.21	No	4.0	1.90	9.68
15	University of Michigan Medical Center, Ann Arbor	19.8	2.1%	0.45	Yes	7.0	1.45	1.64
16	UCLA Medical Center, Los Angeles	19.7	3.0%	0.47	Yes	7.0	1.03	1.89
17	Barnes Hospital, St. Louis	18.9	3.3%	0.58	Yes	6.5	1.00	1.69
18	Hospital of the University of Pennsylvania, Philadelphia	18.4	2.5%	0.71	Yes	6.0	1.52	2.33
19	Mary Hitchcock Memorial Hospital, Lebanon, N.H.	18.4	0.5%	0.50	Yes	7.0	1.49	1.92
20	University of Iowa Hospitals and Clinics, Iowa City	18.3	1.4%	0.57	Yes	7.0	1.31	1.62
21	Rush--Presbyterian--St. Luke's Medical Center, Chicago	18.2	1.9%	0.48	Yes	7.0	1.07	1.65
22	Georgetown University Hospital, Washington, D.C.	18.1	1.2%	0.49	Yes	5.0	1.63	2.11
23	University of Virginia Health Sciences Center, Charlottesville	17.9	0.0%	0.54	Yes	7.0	1.77	1.94
24	Mount Sinai Medical Center, New York	17.9	4.2%	1.03	Yes	6.5	1.39	2.38
25	Vanderbilt University Hospital and Clinic, Nashville, Tenn.	17.7	1.4%	0.64	Yes	7.0	1.34	1.94
26	University Hospital, Denver	17.5	1.8%	0.46	Yes	5.0	1.62	0.99
27	UCSD Medical Center, San Diego	17.4	0.4%	0.45	Yes	6.0	1.73	1.63
28	North Carolina Baptist Hospital, Winston-Salem	17.2	0.6%	0.65	Yes	7.0	1.40	2.53
29	University of California--Davis Medical Center	17.1	1.1%	0.56	Yes	5.0	2.22	1.29
30	Cleveland Clinic	17.0	1.0%	0.52	Yes	6.5	1.10	1.74
31	University Medical Center, Tucson, Ariz.	16.7	2.1%	0.49	Yes	5.0	1.03	1.44
32	University Hospital of Arkansas, Little Rock	16.4	0.0%	0.57	Yes	4.5	1.81	2.47
33	Yale--New Haven Hospital, New Haven, Conn.	16.3	0.5%	0.50	Yes	6.5	0.95	2.09
34	University Hospitals, Oklahoma City	16.1	0.0%	0.56	Yes	6.0	1.90	1.04
35	Scott and White Memorial Hospital, Temple, Tx.	16.1	0.0%	0.43	Yes	5.0	1.57	1.56
36	Shands Hospital, Gainesville, Fla.	16.1	0.6%	0.53	Yes	7.0	1.09	1.10
37	University Hospitals of Cleveland	16.0	0.5%	0.71	Yes	7.0	1.84	1.70
38	University of Cincinnati Hospital	16.0	0.5%	0.50	Yes	5.5	1.28	1.35
39	University Hospital, Portland, Ore.	15.9	0.0%	0.54	Yes	5.0	1.88	1.38
40	Roger Williams Medical Center, Providence, R.I.	15.8	0.0%	0.41	Yes	5.0	1.21	3.84
41	University of North Carolina Hospitals, Chapel Hill	15.7	0.6%	0.65	Yes	6.5	1.43	1.24
42	Fairfax Hospital, Falls Church, Va.	15.7	0.0%	0.56	Yes	6.0	1.33	1.26
43	Brigham and Women's Hospital, Boston	15.6	2.3%	0.55	Yes	4.5	0.76	1.46
44	Ochsner Foundation Hospital, New Orleans	15.6	0.0%	0.41	Yes	6.0	1.17	1.59
45	University of Kentucky Hospital, Lexington	15.5	0.6%	0.64	Yes	5.0	1.96	1.52

46	New England Medical Center, Boston	15.4	1.2%	0.77	Yes	6.0	2.16	1.51
47	University Hospital, Stony Brook, N.Y.	15.3	0.0%	0.66	Yes	6.0	1.48	1.78
48	California Pacific Medical Center, San Francisco	15.3	0.0%	0.51	Yes	6.0	1.41	0.57
49	Baylor University Medical Center, Dallas	15.3	0.6%	0.64	Yes	6.0	1.19	1.75
50	Maricopa Medical Center, Phoenix	15.2	0.0%	0.30	Yes	6.0	2.00	0.21
51	Northwestern Memorial Hospital, Chicago	15.2	1.1%	0.59	Yes	5.5	0.99	1.59
52	University of Illinois Hospital and Clinics, Chicago	15.2	0.0%	0.53	Yes	5.0	1.81	0.79
53	Methodist Hospital, Brooklyn, N.Y.	15.2	0.0%	0.21	Yes	6.5	0.77	2.26
54	Riverside Methodist Hospitals, Columbus, Ohio	15.2	0.0%	0.70	Yes	6.0	1.45	2.08
55	University of Massachusetts Medical Center, Worcester	15.1	0.0%	0.62	Yes	4.5	1.45	2.13
56	Hospital of St. Raphael, New Haven, Conn.	15.1	0.0%	0.54	Yes	5.0	1.21	1.67
57	Harper Hospital, Detroit	15.0	0.5%	0.65	Yes	6.0	1.03	3.30
58	F.G. McGaw Hospital at Loyola University, Maywood, Ill.	14.9	0.0%	0.68	Yes	6.0	1.60	1.50
59	North Shore University Hospital, Manhasset, N.Y.	14.9	1.4%	0.84	Yes	7.0	1.06	2.29
60	Penn State's Milton S. Hershey Medical Center, Hershey	14.9	0.0%	0.68	Yes	6.0	1.25	2.31
61	Cook County Hospital, Chicago	14.9	0.0%	0.42	Yes	5.0	1.49	0.57
62	University of Nebraska Medical Center, Omaha	14.7	3.2%	0.77	Yes	6.0	0.82	1.04
63	University of Wisconsin Hospital and Clinics, Madison	14.6	0.9%	0.77	Yes	7.0	1.08	1.97
64	Emory University Hospital, Atlanta	14.5	2.2%	0.80	Yes	5.5	0.87	2.36
65	Montefiore Medical Center, Bronx, N.Y.	14.5	0.0%	0.80	Yes	6.0	1.52	2.41
66	Medical Center of Delaware, Wilmington	14.3	0.0%	0.83	Yes	6.0	1.82	2.83
67	Beth Israel Hospital, Boston	14.2	0.4%	0.76	Yes	5.0	1.53	1.84
68	University of Utah Hospital and Clinics, Salt Lake City	14.2	0.0%	0.54	Yes	4.0	1.63	0.51
69	William Beaumont Hospital, Royal Oak, Mich.	14.2	0.0%	0.88	Yes	7.0	1.51	1.93
70	William Beaumont Hospital-Troy, Mich.	14.2	0.0%	0.51	No	5.0	1.81	2.59
71	Allegheny General Hospital, Pittsburgh	14.2	0.0%	0.60	Yes	5.0	1.17	1.59
72	Thomas Jefferson University Hospital, Philadelphia	14.1	0.4%	0.75	Yes	6.0	1.38	1.48
73	Mary Imogene Bassett Hospital, Cooperstown, N.Y.	14.1	0.0%	0.51	Yes	5.0	0.95	1.64
74	St. Luke's Hospital, Jacksonville, Fla.	14.1	0.0%	0.55	Yes	4.5	0.95	1.90
75	University of Alabama Hospital at Birmingham	14.1	0.5%	0.63	Yes	4.0	1.42	1.25
76	City of Hope National Medical Center, Duarte, Calif.	13.9	4.4%	0.80	No	4.0	1.03	4.61
77	Medical University of South Carolina, Charleston	13.9	0.0%	0.74	Yes	6.5	1.76	0.91
78	Sinai Hospital of Baltimore, Baltimore	13.9	0.0%	0.79	Yes	6.0	1.71	1.58
79	St. Luke's Medical Center, Milwaukee	13.7	0.0%	0.92	Yes	6.5	1.45	3.81
80	Butterworth Hospital, Grand Rapids	13.7	0.0%	0.65	Yes	5.0	1.03	2.25
81	University Hospitals and Clinics, Columbia, Mo.	13.7	0.0%	0.63	Yes	6.0	1.22	0.75
82	Medical College of Ohio Hospital, Toledo	13.7	0.5%	0.70	Yes	6.0	1.19	1.16
83	University of Maryland Medical System, Baltimore	13.6	0.0%	0.70	Yes	5.0	2.37	1.12
84	Rhode Island Hospital, Providence	13.5	0.0%	0.67	Yes	6.0	0.95	2.03
85	St. Peter's Community Hospital, Helena, Mont.	13.5	0.0%	0.55	No	5.5	1.30	2.09
86	Evanston Hospital, Evanston, Ill.	13.4	0.0%	0.68	Yes	5.0	1.03	2.58
87	Winthrop-University Hospital, Mineola, N.Y.	13.4	0.0%	0.79	Yes	5.0	1.36	2.26
88	Boston University Medical Center-University Hospital, Boston	13.4	0.0%	0.58	Yes	5.0	0.69	2.14
89	Green Hospital of Scripps Clinic, La Jolla, Calif.	13.4	0.0%	0.85	Yes	5.0	1.48	2.66
90	Memorial Hospital, Colorado Springs	13.4	0.0%	0.53	No	6.0	1.71	0.99
91	Froedtert Memorial Lutheran Hospital, Milwaukee	13.3	0.0%	0.44	Yes	3.0	1.30	1.02
92	Cooper Hospital--University Medical Center, Camden, N.J.	13.3	0.0%	0.95	Yes	6.0	1.48	2.39
93	Mercy Medical Center, Baltimore	13.3	0.0%	0.44	No	4.0	1.47	3.03
94	University of Minnesota Hospital and Clinic, Minneapolis	13.3	0.0%	0.38	Yes	5.0	0.59	2.06
95	The Toledo Hospital, Toledo	13.2	0.0%	0.79	Yes	7.0	1.23	1.33
96	Tulane University Hospital and Clinics, New Orleans	13.1	0.0%	0.67	Yes	5.0	1.21	1.39

97	University of Texas Medical Branch Hospitals, Galveston	13.1	0.0%	0.67	Yes	6.0	1.28	0.57
98	Sinai Samaritan Medical Center, Milwaukee	13.1	0.0%	0.82	Yes	6.5	1.33	1.51
99	Albany Medical Center Hospital, Albany, N.Y.	13.1	0.0%	0.81	Yes	6.0	1.63	1.08
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100	Hoag Memorial Hospital Presbyterian, Newport Beach, Calif.	13.0	0.5%	0.65	No	5.0	1.42	2.59



1996 Cardiology Rankings

Rank	Hospital	Sihq	Percent	Rate	Coth	Tech	Nurses	Volume
1	Cleveland Clinic	100.0	54.6%	0.65	Yes	8.5	1.10	9.10
2	Mayo Clinic, Rochester	92.3	52.9%	0.75	No	8.0	0.83	10.43
3	Massachusetts General Hospital, Boston	67.6	30.6%	0.64	Yes	9.0	1.40	8.68
4	Duke University Medical Center, Durham, N.C.	58.2	23.7%	0.74	Yes	9.0	1.73	7.09
5	Texas Heart Institute--St. Luke's Episcopal, Houston	53.6	28.0%	1.22	Yes	8.0	1.31	11.20
6	Emory University Hospital, Atlanta	49.3	21.7%	0.88	Yes	9.0	0.87	9.39
7	Brigham and Women's Hospital, Boston	48.3	23.7%	0.94	Yes	7.0	0.76	5.92
8	Stanford University Hospital, Stanford, Calif.	44.9	18.3%	0.87	Yes	8.0	1.18	7.20
9	Johns Hopkins Hospital, Baltimore	35.2	13.8%	1.16	Yes	9.0	1.36	5.01
10	University of California--San Francisco Medical	33.2	6.5%	0.76	Yes	9.0	1.41	2.77
11	Barnes Hospital, St. Louis	30.0	8.4%	0.92	Yes	9.0	1.00	5.35
12	Cedars-Sinai Medical Center, Los Angeles	29.6	7.9%	0.87	Yes	8.0	1.04	7.90
13	Columbia Presbyterian Medical Center, New York	29.1	9.7%	1.12	Yes	9.0	1.17	4.72
14	Methodist Hospital, Houston	28.9	10.9%	1.13	Yes	8.0	1.03	7.15
15	Beth Israel Hospital, Boston	28.9	4.0%	0.77	Yes	8.0	1.53	11.60
16	Mount Sinai Medical Center, New York	27.5	3.3%	0.78	Yes	8.5	1.39	3.74
17	UCLA Medical Center, Los Angeles	26.8	3.2%	0.68	Yes	9.0	1.03	4.55
18	University of Alabama Hospital at Birmingham	26.7	9.4%	1.19	Yes	7.0	1.42	7.76
19	Hospital of the University of Pennsylvania, Philadelphia	26.6	1.7%	0.76	Yes	9.0	1.52	4.95
20	University of Chicago Hospitals	26.3	1.6%	0.77	Yes	9.0	1.63	4.46
21	William Beaumont Hospital, Royal Oak, Mich.	25.6	2.5%	0.85	Yes	9.0	1.51	10.65
22	New York Hospital--Cornell Medical Center	25.2	4.6%	0.88	Yes	9.0	0.93	3.85
23	University of Washington Medical Center, Seattle	25.0	0.4%	0.70	Yes	9.0	1.88	4.29
24	University Hospitals of Cleveland	24.3	0.5%	0.79	Yes	9.0	1.84	4.99
25	Baylor University Medical Center, Dallas	23.9	4.2%	0.91	Yes	8.0	1.19	6.89
26	Fairfax Hospital, Falls Church, Va.	23.9	0.9%	0.75	Yes	8.0	1.33	8.48
27	Ochsner Foundation Hospital, New Orleans	23.9	1.4%	0.75	Yes	8.0	1.17	11.12
28	Rush--Presbyterian--St. Luke's Medical Center, Chicago	23.8	1.0%	0.74	Yes	9.0	1.07	4.55
29	New England Medical Center, Boston	23.4	0.0%	0.66	Yes	8.0	2.16	6.72
30	California Pacific Medical Center, San Francisco	23.4	0.4%	0.75	Yes	8.0	1.41	3.55
31	UCSD Medical Center, San Diego	23.3	0.0%	0.72	Yes	8.0	1.73	3.30
32	Maimonides Medical Center, Brooklyn	23.0	0.7%	0.74	Yes	8.0	1.22	4.04
33	Sinai Samaritan Medical Center, Milwaukee	23.0	0.0%	0.76	Yes	8.5	1.33	12.60
34	New York University Medical Center	22.8	2.3%	0.81	Yes	8.5	0.91	4.14
35	Washington Hospital Center, Washington, D.C.	22.8	7.7%	0.98	Yes	8.0	0.12	9.52
36	University of Louisville Hospital, Kentucky	22.8	0.0%	0.70	Yes	8.0	1.39	3.00
37	Thomas Jefferson University Hospital, Philadelphia	22.7	0.0%	0.75	Yes	8.0	1.38	3.03
38	University of Miami, Jackson Memorial Hospital	22.4	1.0%	0.78	Yes	6.5	1.49	1.06
39	Albany Medical Center Hospital, New York	22.4	0.0%	0.79	Yes	8.0	1.63	7.23
40	Georgetown University Hospital, Washington, D.C.	22.3	0.0%	0.68	Yes	7.0	1.63	5.34
41	University Hospital, Portland, Ore.	22.3	0.0%	0.68	Yes	7.0	1.88	3.02
42	Cook County Hospital, Chicago	22.1	0.0%	0.63	Yes	7.0	1.49	2.84
43	North Carolina Baptist Hospital, Winston-Salem	22.1	1.1%	0.89	Yes	9.0	1.40	7.21
44	Green Hospital of Scripps Clinic, La Jolla, Calif.	21.9	0.0%	0.77	Yes	7.0	1.48	10.04

45	Temple University Hospital, Philadelphia	21.9	0.6%	0.84	Yes	8.0	1.54	5.72
46	William N. Wishard Memorial Hospital, Indianapolis	21.7	0.0%	0.60	Yes	6.5	1.59	3.38
47	St. Luke's Medical Center, Milwaukee	21.7	0.0%	0.84	Yes	8.5	1.45	28.00
48	Winthrop-University Hospital, Mineola, New York	21.6	0.4%	0.78	Yes	7.0	1.36	10.54
49	University of California--Davis Medical Center	21.5	0.3%	0.80	Yes	7.0	2.22	3.41
50	Beth Israel Medical Center, New York	21.5	0.0%	0.81	Yes	9.0	1.20	3.64
51	University of Michigan Medical Center, Ann Arbor	21.5	2.9%	1.06	Yes	9.0	1.45	4.58
52	Graduate Hospital, Philadelphia	21.4	0.0%	0.74	Yes	8.0	1.08	4.08
53	Evanston Hospital, Illinois	21.3	0.0%	0.60	Yes	8.0	1.03	9.14
54	F.G. McGaw Hospital at Loyola University, Maywood, Ill.	21.3	1.6%	0.94	Yes	8.0	1.60	8.78
55	Medical University of South Carolina, Charleston	21.0	0.0%	0.86	Yes	8.5	1.76	4.65
56	Medical Center of Delaware, Wilmington	21.0	0.0%	0.85	Yes	8.0	1.82	11.87
57	Mercy Hospital of Pittsburgh	20.9	0.0%	0.79	Yes	8.0	1.13	13.25
58	St. Luke's Hospital, Jacksonville, Fla.	20.9	0.0%	0.76	Yes	8.0	0.95	10.42
59	Shands Hospital, Gainesville	20.8	1.4%	0.90	Yes	9.0	1.09	2.76
60	Orlando Regional Medical Center	20.8	0.0%	0.85	Yes	8.0	1.52	6.64
61	University Hospital, Denver	20.6	0.8%	0.86	Yes	7.0	1.62	4.50
62	LDS Hospital, Salt Lake City	20.4	1.6%	0.74	No	8.0	1.16	3.65
63	Sinai Hospital of Baltimore	20.4	0.0%	0.87	Yes	8.0	1.71	10.26
64	Univ. of Virginia Health Sci. Center, Charlottesville	20.4	2.1%	1.08	Yes	9.0	1.77	6.56
65	Indiana University Medical Center, Indianapolis	20.3	2.7%	1.14	Yes	9.0	1.76	2.66
66	Howard University Hospital, Washington, D.C.	20.3	0.6%	0.91	Yes	9.0	1.29	3.77
67	St. John's Mercy Medical Center, St. Louis	20.2	0.0%	0.78	Yes	8.0	0.91	4.64
68	Northwestern Memorial Hospital, Chicago	20.0	0.0%	0.54	Yes	7.0	0.99	4.61
69	Sutter Memorial Hospital, Sacramento	19.9	0.0%	0.68	No	8.0	1.80	10.87
70	Western Pennsylvania Hospital, Pittsburgh	19.9	0.0%	0.83	Yes	9.0	0.94	12.00
71	Tulane University Hospital and Clinics, New Orleans	19.8	0.0%	0.84	Yes	8.0	1.21	4.20
72	Yale--New Haven Hospital	19.8	2.3%	0.96	Yes	8.5	0.95	8.18
73	Mary Hitchcock Memorial Hospital, Lebanon, N.H.	19.8	0.0%	0.94	Yes	9.0	1.49	7.29
74	Hospital of St. Raphael, New Haven	19.8	0.0%	0.84	Yes	8.0	1.21	13.43
75	Delray Community Hospital, Delray Beach	19.7	0.0%	0.64	No	9.0	1.16	26.35
76	Parkland Memorial Hospital, Dallas	19.6	0.8%	0.95	Yes	8.0	1.61	1.38
77	Holy Cross Hospital, Silver Spring	19.6	0.0%	0.76	Yes	7.0	0.94	7.37
78	Methodist Hospital, Brooklyn	19.6	0.0%	0.54	Yes	7.5	0.77	5.94
79	University Hospitals, Oklahoma City	19.5	0.4%	0.93	Yes	8.0	1.90	2.67
80	Mount Sinai Medical Center, Cleveland	19.5	0.0%	0.69	Yes	7.0	0.86	8.69
81	Hennepin County Medical Center, Minneapolis	19.4	0.0%	0.75	Yes	7.0	0.86	4.36
82	Harper Hospital, Detroit	19.4	0.6%	0.88	Yes	8.5	1.03	7.14
83	St. Joseph's Hospital and Medical Center, Phoenix	19.3	1.2%	0.98	Yes	8.0	1.41	3.71
84	Sequoia Hospital District, Redwood City, Calif.	19.1	3.0%	0.71	No	7.0	0.59	12.63
85	Deborah Heart and Lung Center, Browns Mills, N.J.	19.1	0.0%	0.47	No	7.0	2.04	25.75
86	Vanderbilt University Hospital and Clinic, Nashville	19.1	0.3%	0.96	Yes	9.0	1.34	3.95
87	Allegheny General Hospital, Pittsburgh	19.0	0.5%	0.90	Yes	8.0	1.17	9.94
88	Roger Williams Medical Center, Providence	19.0	0.0%	0.66	Yes	5.0	1.21	11.42
89	St. Luke's Hospital, Kansas City	18.9	0.0%	0.80	Yes	8.0	0.77	10.62
90	Overlook Hospital, Summit, N.J.	18.9	0.0%	0.79	Yes	7.0	0.94	7.80
91	Baptist Hospital of Miami	18.8	0.5%	0.73	No	8.0	1.14	6.30
92	Memorial Hospital of Rhode Island, Pawtucket	18.8	0.0%	0.80	Yes	6.5	1.06	11.09
93	Montefiore Medical Center, Bronx	18.8	0.5%	0.98	Yes	8.0	1.52	6.77
94	Moore Regional Hospital, Pinehurst, N.C.	18.8	0.0%	0.79	No	8.0	1.56	8.33
95	University Hospital of Arkansas, Little Rock	18.8	0.0%	0.89	Yes	7.0	1.81	2.69

96	St. Joseph Hospital, Denver	18.8	0.0%	0.26	No	8.0	1.27	8.86
97	Rhode Island Hospital, Providence	18.7	0.0%	0.84	Yes	8.0	0.95	8.69
98	Washington Adventist Hospital, Takoma Park	18.7	0.4%	0.73	No	6.5	1.45	13.78
99	University of Illinois Hospital and Clinics, Chicago	18.7	0.0%	0.89	Yes	7.0	1.81	2.75
100	Sentara-Norfolk General Hospital, Va.	18.6	0.0%	0.90	Yes	8.0	1.28	8.89

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## 1996 Endocrinology Rankings

Rank	Hospname	Sihq	Percent	Rate	Coth	Tech	Nurses
1	Massachusetts General Hospital, Boston	100.0	63.8%	0.59	Yes	7.0	1.40
2	Mayo Clinic, Rochester, Minn.	91.5	63.4%	0.68	No	5.5	0.83
3	University of California--San Francisco Medical Center	48.3	23.6%	0.45	Yes	7.0	1.41
4	Johns Hopkins Hospital, Baltimore	42.8	22.3%	0.88	Yes	7.0	1.36
5	Barnes Hospital, St. Louis	37.9	20.4%	0.93	Yes	6.0	1.00
6	New England Deaconess Hospital, Boston	32.6	14.0%	0.57	Yes	6.0	1.00
7	Brigham and Women's Hospital, Boston	29.7	12.9%	0.55	Yes	5.0	0.76
8	UCLA Medical Center, Los Angeles	29.1	12.1%	0.66	Yes	6.0	1.03
9	Parkland Memorial Hospital, Dallas	28.9	11.4%	0.81	Yes	6.0	1.61
10	University of Chicago Hospitals	28.9	9.7%	0.62	Yes	7.0	1.63
11	University of Michigan Medical Center, Ann Arbor	27.5	9.4%	0.71	Yes	7.0	1.45
12	University of Washington Medical Center, Seattle	26.0	8.6%	0.79	Yes	7.0	1.88
13	Vanderbilt University Hospital and Clinic, Nashville	25.8	6.8%	0.43	Yes	7.0	1.34
14	Duke University Medical Center, Durham, N.C.	24.7	7.6%	0.78	Yes	7.0	1.73
15	Univ. of Virginia Health Sci. Center, Charlottesville	23.7	6.6%	0.75	Yes	7.0	1.77
16	Stanford University Hospital, Calif.	23.2	5.8%	0.09	Yes	6.0	1.18
17	Columbia Presbyterian Medical Center, New York	20.5	6.8%	1.14	Yes	7.0	1.17
18	Hospital of the Univ. of Pennsylvania, Philadelphia	20.5	2.5%	0.55	Yes	7.0	1.52
19	University Hospital, Denver, Colo.	20.3	2.6%	0.35	Yes	6.0	1.62
20	Beth Israel Hospital, Boston	19.7	4.2%	0.78	Yes	6.0	1.53
21	University of Texas, M. D. Anderson Center, Houston	18.9	1.0%	0.23	Yes	7.0	1.49
22	University of Iowa Hospitals and Clinics, Iowa City	18.8	3.8%	0.82	Yes	7.0	1.31
23	Cleveland Clinic, Ohio	18.7	4.2%	0.73	Yes	6.5	1.10
24	Mount Sinai Medical Center, New York	18.1	4.6%	1.18	Yes	6.5	1.39
25	Medical University of South Carolina, Charleston	18.0	0.6%	0.32	Yes	6.5	1.76
26	UCSD Medical Center, San Diego	18.0	1.1%	0.55	Yes	6.0	1.73
27	Cook County Hospital, Chicago	17.4	0.9%	0.45	Yes	5.0	1.49
28	Shands Hospital, Gainesville, Fla.	17.1	1.0%	0.49	Yes	7.0	1.09
29	Rush--Presbyterian--St. Luke's Medical Center, Chicago	17.1	1.0%	0.51	Yes	7.0	1.07
30	Thomas Jefferson University Hospital, Philadelphia	17.0	0.5%	0.53	Yes	6.0	1.38
31	F.G. McGaw Hospital at Loyola University, Maywood, Ill.	16.9	0.0%	0.36	Yes	6.0	1.60
32	University Hospitals, Oklahoma City	16.9	0.0%	0.49	Yes	6.0	1.90
33	Green Hospital of Scripps Clinic, La Jolla, Calif.	16.9	0.0%	0.21	Yes	6.0	1.48
34	Baylor University Medical Center, Dallas	16.8	1.4%	0.56	Yes	6.0	1.19
35	Ohio State University Medical Center, Columbus	16.8	2.8%	0.55	Yes	5.5	0.75
36	University Hospital, Portland, Ore.	16.6	2.3%	0.76	Yes	5.0	1.88
37	California Pacific Medical Center, San Francisco	16.6	0.0%	0.23	Yes	6.0	1.41
38	University of Louisville Hospital, Kentucky	16.5	0.0%	0.42	Yes	6.0	1.39
39	Los Angeles County--USC Medical Center	16.5	1.4%	0.38	Yes	4.5	1.19
40	Hermann Hospital, Houston	16.4	0.6%	0.57	Yes	6.0	1.37
41	Ochsner Foundation Hospital, New Orleans	16.4	0.8%	0.54	Yes	6.0	1.17
42	Yale--New Haven Hospital, New Haven, Conn.	16.3	4.1%	1.01	Yes	6.5	0.95
43	Maricopa Medical Center, Phoenix	16.1	0.0%	0.58	Yes	6.0	2.00
44	Temple University Hospital, Philadelphia	16.1	0.0%	0.58	Yes	6.0	1.54
45	University of Texas Medical Branch Hospitals, Galveston	16.0	0.0%	0.41	Yes	6.0	1.28

46	Scott and White Memorial Hospital, Temple, Tx.	16.0	0.0%	0.54	Yes	5.0	1.57
47	University of Wisconsin Hospital and Clinics, Madison	15.8	0.0%	0.42	Yes	7.0	1.08
48	Northwestern Memorial Hospital, Chicago	15.8	0.8%	0.53	Yes	6.0	0.99
49	Medical College of Ohio Hospital, Toledo	15.6	0.0%	0.49	Yes	6.0	1.19
50	University of Cincinnati Hospital	15.6	0.0%	0.57	Yes	6.5	1.28
51	Sinai Samaritan Medical Center, Milwaukee	15.6	0.0%	0.58	Yes	6.5	1.33
52	University of North Carolina Hospitals, Chapel Hill	15.6	1.1%	0.78	Yes	6.5	1.43
53	University of Illinois Hospital and Clinics, Chicago	15.1	0.0%	0.61	Yes	5.0	1.81
54	Roger Williams Medical Center, Providence, R.I.	15.1	0.0%	0.57	Yes	6.0	1.21
55	University Medical Center, Tucson, Ariz.	15.0	0.0%	0.47	Yes	6.0	1.03
56	Jewish Hospital of St. Louis	15.0	0.0%	0.52	Yes	4.5	1.26
57	St. Joseph's Hospital and Medical Center, Phoenix	14.8	0.0%	0.66	Yes	6.0	1.41
58	Harborview Medical Center, Seattle	14.7	0.0%	0.62	Yes	4.5	2.25
59	New York University Medical Center	14.6	1.9%	0.77	Yes	6.5	0.91
60	Sinai Hospital of Baltimore	14.6	0.0%	0.72	Yes	6.0	1.71
61	Mary Hitchcock Memorial Hospital, Lebanon, N.H.	14.6	0.0%	0.80	Yes	7.0	1.49
62	University Hospitals of Cleveland	14.6	0.0%	0.81	Yes	7.0	1.84
63	New England Medical Center, Boston	14.5	0.5%	0.82	Yes	6.0	2.16
64	St. John's Mercy Medical Center, St. Louis	14.5	0.0%	0.41	Yes	6.0	0.91
65	Good Samaritan Regional Medical Center, Phoenix	14.4	0.0%	0.73	Yes	7.0	1.30
66	University of Massachusetts Medical Center, Worcester	14.3	0.0%	0.63	Yes	4.5	1.45
67	Holy Cross Hospital, Silver Spring, Md.	14.3	0.0%	0.49	Yes	5.5	0.94
68	University of California, Irvine Medical Center, Orange	14.3	0.3%	0.45	Yes	4.5	0.98
69	Methodist Hospital, Brooklyn	14.2	0.0%	0.45	Yes	6.5	0.77
70	North Carolina Baptist Hospital, Winston-Salem	14.2	0.0%	0.80	Yes	7.0	1.40
71	Medical College of Georgia Hospital and Clinic, Augusta	14.2	0.0%	0.13	Yes	6.0	0.84
72	Montefiore Medical Center, Bronx, N.Y.	14.2	1.0%	1.00	Yes	6.0	1.52
73	University of Nebraska Medical Center, Omaha	14.1	0.0%	0.44	Yes	6.0	0.82
74	New York Hospital--Cornell Medical Center	14.0	1.5%	0.82	Yes	7.0	0.93
75	University of Miami, Jackson Memorial Hospital	14.0	1.4%	1.09	Yes	4.5	1.49
76	University of Utah Hospital and Clinics, Salt Lake City	13.9	0.4%	0.80	Yes	5.0	1.63
77	Indiana University Medical Center, Indianapolis	13.8	1.0%	1.33	Yes	7.0	1.76
78	Western Pennsylvania Hospital, Pittsburgh	13.7	0.0%	0.64	Yes	7.0	0.94
79	University of Pittsburgh Medical Center	13.7	4.2%	1.15	No	6.0	1.37
80	Lenox Hill Hospital, New York	13.7	0.0%	0.71	Yes	6.0	1.28
81	Crawford Long Hospital at Emory University, Atlanta	13.7	0.0%	0.75	Yes	6.5	1.26
82	Hennepin County Medical Center, Minneapolis	13.6	0.0%	0.23	Yes	5.0	0.86
83	Emory University Hospital, Atlanta	13.5	1.7%	0.85	Yes	6.5	0.87
84	University of California--Davis Medical Center	13.5	0.0%	0.78	Yes	5.0	2.22
85	Illinois Masonic Medical Center, Chicago	13.5	0.0%	0.59	Yes	6.0	0.91
86	William Beaumont Hospital, Royal Oak, Mich.	13.5	0.0%	1.01	Yes	7.0	1.51
87	William N. Wishard Memorial Hospital, Indianapolis	13.4	0.0%	0.89	Yes	6.0	1.59
88	Orlando Regional Medical Center, Florida	13.3	0.0%	0.91	Yes	6.0	1.52
89	Fairfax Hospital, Falls Church, Va.	13.3	0.0%	0.80	Yes	6.0	1.33
90	Cedars-Sinai Medical Center, Los Angeles	13.2	1.9%	1.05	Yes	6.0	1.04
91	Riverside Methodist Hospitals, Columbus, Ohio	13.2	0.0%	1.03	Yes	7.0	1.45
92	University of Maryland Medical System, Baltimore	13.2	0.0%	0.82	Yes	5.0	2.37
93	University of Kentucky Hospital, Lexington	13.2	0.0%	0.83	Yes	5.0	1.96
94	Medical Center of Delaware, Wilmington	13.2	0.0%	0.94	Yes	6.0	1.82
95	Cooper Hospital--Univ. Medical Center, Camden, N.J.	13.2	0.0%	0.93	Yes	6.0	1.48
96	Lehigh Valley Hospital, Allentown, Penn.	13.1	0.0%	0.88	Yes	6.5	1.33

97	Allegheny General Hospital, Pittsburgh	13.1	0.0%	0.74	Yes	6.0	1.17
98	Blodgett Memorial Medical Center, Grand Rapids	13.1	0.0%	0.61	Yes	5.0	1.01
99	Sutter Memorial Hospital, Sacramento	13.1	0.0%	0.52	No	5.5	1.80
100	Medical Center of Louisiana at New Orleans	13.0	0.0%	0.98	Yes	6.0	2.80

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## 1996 Gastroenterology Rankings

Rank	Hospname	Sihq	Percent	Rate	Coth	Tech	Nurses	Volume
1	Mayo Clinic, Rochester, Minn.	100.0	59.7%	0.48	No	6.5	0.83	5.02
2	Johns Hopkins Hospital, Baltimore	61.0	30.3%	0.61	Yes	7.5	1.36	1.49
3	Massachusetts General Hospital, Boston	59.7	28.5%	0.57	Yes	8.0	1.40	3.19
4	Mount Sinai Medical Center, New York	52.6	25.9%	0.84	Yes	7.5	1.39	2.15
5	Cleveland Clinic	52.4	24.6%	0.55	Yes	7.0	1.10	2.48
6	Duke University Medical Center, Durham, N.C.	50.6	23.4%	0.74	Yes	8.0	1.73	1.71
7	University of California--San Francisco Medical Center	48.6	21.5%	0.49	Yes	8.0	1.41	1.25
8	UCLA Medical Center, Los Angeles	45.8	20.3%	0.64	Yes	7.0	1.03	1.97
9	University of Chicago Hospitals	41.7	16.1%	0.55	Yes	8.0	1.63	2.02
10	Brigham and Women's Hospital, Boston	31.2	11.7%	0.72	Yes	6.0	0.76	1.96
11	University of Michigan Medical Center, Ann Arbor	30.2	8.4%	0.67	Yes	8.0	1.45	1.66
12	Baylor University Medical Center, Dallas	30.0	8.5%	0.62	Yes	7.0	1.19	2.79
13	Beth Israel Hospital, Boston	29.4	7.0%	0.64	Yes	7.0	1.53	3.81
14	Hospital of the University of Pennsylvania, Philadelphia	27.2	6.9%	0.73	Yes	8.0	1.52	1.95
15	Cedars-Sinai Medical Center, Los Angeles	22.4	4.2%	0.75	Yes	7.0	1.04	3.56
16	University of Washington Medical Center, Seattle	22.3	2.9%	0.55	Yes	8.0	1.88	1.26
17	Georgetown University Hospital, Washington, D.C.	22.1	3.1%	0.64	Yes	6.0	1.63	1.84
18	Parkland Memorial Hospital, Dallas	22.0	6.3%	1.00	Yes	7.0	1.61	0.51
19	Memorial Sloan-Kettering Cancer Center, New York	21.7	2.2%	0.69	Yes	7.0	1.56	3.16
20	Indiana University Medical Center, Indianapolis	21.6	6.1%	1.14	Yes	8.0	1.76	1.29
21	Yale--New Haven Hospital, New Haven, Conn.	21.0	3.7%	0.73	Yes	7.5	0.95	2.20
22	University of Pittsburgh Medical Center	20.8	6.8%	0.87	No	7.0	1.37	0.90
23	Barnes Hospital, St. Louis	20.7	5.3%	0.91	Yes	7.0	1.00	1.73
24	Rush--Presbyterian--St. Luke's Medical Center, Chicago	20.6	2.3%	0.53	Yes	8.0	1.07	2.00
25	Stanford University Hospital, Stanford, Calif.	19.8	2.1%	0.69	Yes	6.0	1.18	2.80
26	William Beaumont Hospital, Royal Oak, Mich.	19.8	0.6%	0.69	Yes	8.0	1.51	3.24
27	University of Texas, M. D. Anderson Center, Houston	19.7	1.1%	0.12	Yes	7.0	1.49	1.73
28	Shands Hospital, Gainesville, Fla.	19.3	1.7%	0.52	Yes	8.0	1.09	1.26
29	Thomas Jefferson University Hospital, Philadelphia	19.1	1.2%	0.60	Yes	7.0	1.38	1.20
30	Green Hospital of Scripps Clinic, La Jolla, Calif.	18.9	0.0%	0.52	Yes	6.5	1.48	3.58
31	University of Alabama Hospital at Birmingham	18.8	3.3%	0.89	Yes	6.0	1.42	1.68
32	St. Luke's Medical Center, Milwaukee	18.5	0.9%	0.86	Yes	7.5	1.45	5.64
33	University of Iowa Hospitals and Clinics, Iowa City	18.4	1.6%	0.76	Yes	8.0	1.31	1.23
34	Ochsner Foundation Hospital, New Orleans	18.4	1.4%	0.77	Yes	7.0	1.17	3.44
35	University of Wisconsin Hospital and Clinics, Madison	18.4	1.9%	0.78	Yes	8.0	1.08	2.17
36	Los Angeles County--USC Medical Center	18.3	2.1%	0.59	Yes	5.0	1.19	0.19
37	University of Maryland Medical System, Baltimore	18.2	1.0%	0.68	Yes	5.5	2.37	1.15
38	University Hospital, Portland, Ore.	18.0	0.8%	0.52	Yes	5.0	1.88	1.16
39	University of Illinois Hospital and Clinics, Chicago	18.0	0.5%	0.35	Yes	6.0	1.81	1.11
40	New York University Medical Center	17.9	1.4%	0.69	Yes	7.0	0.91	1.71
41	Northwestern Memorial Hospital Chicago	17.9	0.9%	0.54	Yes	7.0	0.99	1.96
42	University Hospital, Denver	17.8	0.9%	0.73	Yes	6.0	1.62	1.74
43	Crawford Long Hospital at Emory University, Atlanta	17.7	0.0%	0.74	Yes	7.5	1.26	4.08
44	Hospital of St. Raphael, New Haven, Conn.	17.7	0.0%	0.71	Yes	6.0	1.21	4.52

45	New England Medical Center, Boston	17.6	1.6%	0.81	Yes	6.0	2.16	1.63
46	New England Deaconess Hospital, Boston	17.6	0.5%	0.53	Yes	6.0	1.00	2.95
47	Evanston Hospital, Evanston, Ill.	17.6	0.0%	0.71	Yes	6.5	1.03	4.77
48	Winthrop--University Hospital, Mineola, N.Y.	17.5	0.0%	0.73	Yes	6.0	1.36	4.10
49	Western Pennsylvania Hospital, Pittsburgh	17.5	0.0%	0.65	Yes	7.0	0.94	3.51
50	Cook County Hospital, Chicago	17.5	0.5%	0.56	Yes	5.5	1.49	0.62
51	Medical Center of Delaware, Wilmington	17.4	0.0%	0.79	Yes	6.5	1.82	4.30
52	Sinai Hospital of Baltimore	17.4	0.0%	0.77	Yes	7.0	1.71	3.44
53	Lehigh Valley Hospital, Allentown, Penn.	17.2	0.0%	0.77	Yes	7.0	1.33	4.03
54	University of Nebraska Medical Center, Omaha	17.2	2.4%	0.77	Yes	6.5	0.82	1.24
55	Medical University of South Carolina, Charleston	17.2	2.1%	0.92	Yes	7.0	1.76	1.26
56	Allegheny General Hospital, Pittsburgh	17.1	0.0%	0.67	Yes	7.0	1.17	2.12
57	UCSD Medical Center, San Diego	17.1	0.4%	0.72	Yes	6.5	1.73	1.14
58	University of Louisville Hospital	16.9	0.0%	0.60	Yes	6.0	1.39	1.16
59	Methodist Hospital, Brooklyn, N.Y.	16.8	0.0%	0.45	Yes	7.0	0.77	3.30
60	Medical Center of Central Massachusetts, Worcester	16.8	0.0%	0.75	Yes	6.5	0.97	5.52
61	Scott and White Memorial Hospital, Temple, Tx.	16.8	0.0%	0.77	Yes	6.0	1.57	3.19
62	Tulane University Hospital and Clinics, New Orleans	16.8	0.0%	0.48	Yes	6.0	1.21	1.76
63	Mary Hitchcock Memorial Hospital, Lebanon, N.H.	16.8	0.0%	0.79	Yes	8.0	1.49	2.17
64	Danbury Hospital, Danbury, Conn.	16.7	0.0%	0.74	Yes	6.0	0.99	5.14
65	Harper Hospital, Detroit	16.7	0.0%	0.70	Yes	7.5	1.03	2.39
66	Boston University Medical Center-University Hospital	16.7	1.2%	0.75	Yes	7.0	0.69	2.93
67	William Beaumont Hospital-Troy, Mich.	16.7	0.0%	0.59	No	6.5	1.81	6.57
68	Montefiore Medical Center, Bronx, N.Y.	16.7	0.9%	0.88	Yes	7.0	1.52	2.54
69	Medical Center of Louisiana at New Orleans	16.6	0.0%	0.69	Yes	6.5	2.80	0.45
70	St. John's Mercy Medical Center, St. Louis	16.6	0.0%	0.61	Yes	7.0	0.91	2.19
71	University of Virginia Health Sciences Center, Charlottesville	16.5	0.4%	0.84	Yes	8.0	1.77	1.98
72	Sinai Samaritan Medical Center, Milwaukee	16.5	0.0%	0.80	Yes	7.0	1.33	3.49
73	University of Massachusetts Medical Center, Worcester	16.5	0.0%	0.69	Yes	4.5	1.45	1.97
74	North Carolina Baptist Hospital, Winston-Salem	16.5	0.0%	0.77	Yes	8.0	1.40	1.85
75	Vanderbilt University Hospital and Clinic, Nashville, Tenn.	16.4	0.4%	0.79	Yes	7.5	1.34	1.63
76	Roswell Park Cancer Institute, Buffalo	16.3	0.0%	0.25	No	6.5	2.92	4.39
77	University Medical Center, Tucson	16.3	0.0%	0.70	Yes	7.0	1.03	2.11
78	Scottsdale Memorial Hospital--North Scottsdale	16.3	0.0%	0.51	No	6.0	1.43	5.94
79	Cape Cod Hospital, Hyannis, Mass.	16.3	0.0%	0.67	No	6.5	1.36	7.92
80	New York Hospital--Cornell Medical Center	16.3	1.4%	0.81	Yes	8.0	0.93	1.33
81	Michael Reese Hospital and Medical Center, Chicago	16.2	0.5%	0.58	Yes	7.0	0.75	1.22
82	Penn State's Milton S. Hershey Medical Center, Hershey	16.2	0.0%	0.73	Yes	7.0	1.25	1.73
83	F.G. McGaw Hospital at Loyola University, Maywood, Ill.	16.2	0.0%	0.80	Yes	7.0	1.60	2.24
84	Lenox Hill Hospital, New York	16.1	2.5%	1.08	Yes	6.0	1.28	2.38
85	St. Peter's Community Hospital, Helena, Mont.	16.1	0.0%	0.41	No	6.5	1.30	7.13
86	California Pacific Medical Center, San Francisco	16.1	0.0%	0.74	Yes	6.5	1.41	1.33
87	Jewish Hospital of St. Louis	16.0	0.0%	0.82	Yes	5.0	1.26	4.89
88	Overlook Hospital, Summit	15.9	0.0%	0.78	Yes	6.5	0.94	4.27
89	University Hospitals of Cleveland	15.8	0.0%	0.88	Yes	8.0	1.84	2.43
90	Memorial Hospital of Rhode Island, Pawtucket	15.8	0.0%	0.80	Yes	5.0	1.06	5.06
91	Martha Jefferson Hospital, Charlottesville	15.7	0.0%	0.58	No	7.0	1.11	7.57
92	St. Joseph Hospital, Denver	15.7	0.0%	0.38	No	7.0	1.27	4.08
93	Boca Raton Community Hospital	15.6	0.0%	0.56	No	6.5	1.15	6.58
94	Mercy Hospital of Pittsburgh	15.6	0.0%	0.82	Yes	7.0	1.13	3.54
95	Mercy Hospital and Medical Center, Chicago	15.6	0.0%	0.67	Yes	5.0	0.91	2.25



96	Mount Auburn Hospital, Cambridge	15.6	0.0%	0.57	Yes	4.5	0.58	3.89
97	Greater Baltimore Medical Center	15.6	0.0%	0.76	Yes	5.5	0.97	3.96
98	York Hospital, York, Penn.	15.5	0.0%	0.93	Yes	6.0	1.34	5.32
99	Mary Imogene Bassett Hospital, Cooperstown, N.Y.	15.5	0.0%	0.80	Yes	6.0	0.95	4.50
100	Beth Israel Medical Center, New York	15.5	0.8%	0.88	Yes	7.5	1.20	1.94

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## 1996 Geriatric Ranking

Rank	Hospital	IHQ	Percent	Rate	Coth	Serv	Tech	Nurses	Disch	Gerserv
1	UCLA Medical Center, Los Angeles	100.0	30.5%	0.68	Yes	5	8.0	1.03	1	2
2	Mount Sinai Medical Center, New York	88.4	26.5%	0.97	Yes	7	7.5	1.39	3	2
3	Massachusetts General Hospital, Boston	84.1	24.0%	0.76	Yes	6	8.0	1.40	1	3
4	Duke University Medical Center, Durham, NC	74.0	20.0%	0.78	Yes	5	8.0	1.73	3	3
5	Beth Israel Hospital, Boston	63.2	16.3%	0.72	Yes	7	7.0	1.53	2	2
6	Johns Hopkins Hospital, Baltimore	61.2	16.5%	0.91	Yes	6	8.0	1.36	3	1
7	Mayo Clinic, Rochester, Minn.	57.5	16.2%	0.67	No	4	6.5	0.83	3	2
8	University of Michigan Medical Center, Ann Arbor	44.1	9.5%	0.90	Yes	8	8.0	1.45	3	2
9	University of Washington Medical Center, Seattle	39.2	7.6%	0.68	Yes	6	8.0	1.88	2	1
10	Brigham and Women's Hospital, Boston	37.4	7.9%	0.78	Yes	6	6.0	0.76	3	2
11	Cleveland Clinic	34.5	5.1%	0.68	Yes	9	7.5	1.10	3	3
12	Stanford University Hospital, Stanford, Calif.	34.3	5.9%	0.78	Yes	6	7.0	1.18	3	3
13	University of Chicago Hospitals	32.4	4.5%	0.64	Yes	6	8.0	1.63	3	3
14	University of California--San Francisco Medical Center	31.0	3.6%	0.70	Yes	7	8.0	1.41	3	4
15	New York University Medical Center	30.4	5.4%	0.88	Yes	6	7.5	0.91	3	2
16	Yale--New Haven Hospital, New Haven, Conn.	28.8	5.0%	0.90	Yes	5	7.5	0.95	2	3
17	Columbia Presbyterian Medical Center, New York	27.8	5.6%	1.16	Yes	4	8.0	1.17	2	3
18	UCSD Medical Center, San Diego	27.6	3.4%	0.67	Yes	5	7.0	1.73	3	2
19	Barnes Hospital, St. Louis	27.4	3.3%	0.86	Yes	9	8.0	1.00	2	3
20	Montefiore Medical Center, Bronx, NY	27.3	4.4%	0.98	Yes	6	7.0	1.52	3	2
21	University of Wisconsin Hospital and Clinics, Madison	27.1	3.8%	0.91	Yes	7	8.0	1.08	3	2
22	North Carolina Baptist Hospital, Winston-Salem	23.6	2.4%	0.89	Yes	6	8.0	1.40	3	2
23	Rush--Presbyterian--St. Luke's Medical Center, Chicago	23.6	1.4%	0.65	Yes	8	8.0	1.07	1	4
24	University Hospital, Portland, Ore.	23.2	1.6%	0.72	Yes	8	6.0	1.88	2	3
25	Northwestern Memorial Hospital, Chicago	23.0	1.7%	0.59	Yes	8	6.0	0.99	3	3
26	University of Alabama Hospital at Birmingham	22.6	2.7%	1.10	Yes	9	6.0	1.42	3	3
27	University Hospitals of Cleveland	21.8	1.4%	0.88	Yes	7	8.0	1.84	2	3
28	University Hospital, Denver	21.7	1.5%	0.77	Yes	6	6.0	1.62	3	2
29	New York Hospital--Cornell Medical Center	21.7	2.3%	0.99	Yes	6	8.0	0.93	2	4
30	Baylor University Medical Center, Dallas	21.6	1.0%	0.75	Yes	9	7.0	1.19	1	3
31	University of North Carolina Hospitals, Chapel Hill	21.6	2.7%	1.11	Yes	6	7.5	1.43	3	2
32	New England Deaconess Hospital, Boston	21.4	1.6%	0.80	Yes	6	7.0	1.00	2	3
33	Hospital of the University of Pennsylvania, Philadelphia	21.3	0.9%	0.81	Yes	6	8.0	1.52	3	2
34	Thomas Jefferson University Hospital, Philadelphia	21.1	0.9%	0.74	Yes	6	7.0	1.38	3	2
35	University of Minnesota Hospital and Clinic, Minneapolis	21.0	2.2%	0.77	Yes	7	6.0	0.59	2	1
36	University of Iowa Hospitals and Clinics, Iowa City	20.9	0.8%	0.85	Yes	7	8.0	1.31	3	3
37	William Beaumont Hospital, Royal Oak, Mich.	20.7	1.2%	0.87	Yes	5	8.0	1.51	3	2
38	Evanston Hospital, Evanston, Ill.	20.5	0.4%	0.69	Yes	8	7.0	1.03	3	3
39	Lehigh Valley Hospital, Allentown, Penn.	20.4	0.6%	0.90	Yes	8	7.5	1.33	3	4
40	St. John's Mercy Medical Center, St. Louis	20.2	0.0%	0.74	Yes	9	7.0	0.91	3	4
41	F.G. McGaw Hospital at Loyola University, Maywood, Ill.	20.1	1.1%	0.92	Yes	8	7.0	1.60	3	2
42	New England Medical Center, Boston	20.1	0.3%	0.81	Yes	6	7.0	2.16	3	4
43	St. Louis University Hospital	20.0	3.1%	1.19	Yes	5	8.0	1.17	1	2
44	Boston University Medical Center-University Hospital	19.7	1.2%	0.71	Yes	5	7.0	0.69	3	2
45	University of Miami, Jackson Memorial Hospital	19.6	1.2%	0.95	Yes	7	5.5	1.49	3	4
46	St. Joseph's Hospital and Medical Center, Phoenix	19.5	0.6%	0.86	Yes	7	7.0	1.41	3	3

47	Cedars-Sinai Medical Center, Los Angeles	19.4	0.8%	0.98	Yes	9	7.0	1.04	3	4
48	Hospital of St. Raphael, New Haven, Conn.	19.3	0.0%	0.75	Yes	6	7.0	1.21	3	4
49	Temple University Hospital, Philadelphia	19.2	1.0%	0.90	Yes	6	7.0	1.54	3	2
50	Sinai Samaritan Medical Center, Milwaukee	19.0	0.3%	0.86	Yes	7	7.5	1.33	3	3
51	Western Pennsylvania Hospital, Pittsburgh	18.9	0.0%	0.79	Yes	7	8.0	0.94	3	3
52	California Pacific Medical Center, San Francisco	18.9	0.0%	0.81	Yes	7	7.0	1.41	2	4
53	Scott and White Memorial Hospital, Temple, Tx.	18.7	0.0%	0.81	Yes	7	6.0	1.57	3	4
54	Strong Memorial Hospital--Rochester University, Rochester, NY	18.7	1.8%	1.12	Yes	7	7.0	1.69	2	2
55	University of Illinois Hospital and Clinics, Chicago	18.6	0.0%	0.68	Yes	6	6.0	1.81	3	3
56	Cook County Hospital, Chicago	18.4	0.0%	0.55	Yes	7	6.0	1.49	3	2
57	Beth Israel Medical Center, New York	18.2	0.3%	0.93	Yes	8	8.0	1.20	3	2
58	Sinai Hospital of Baltimore	18.0	0.0%	0.95	Yes	8	7.0	1.71	2	5
59	Mary Hitchcock Memorial Hospital, Lebanon, NH	18.0	0.0%	0.82	Yes	5	8.0	1.49	3	2
60	Hennepin County Medical Center, Minneapolis	18.0	0.3%	0.63	Yes	6	6.0	0.86	3	3
61	Shands Hospital, Gainesville, Fl.	17.9	0.6%	0.75	Yes	5	8.0	1.09	1	1
62	Emory University Hospital, Atlanta	17.8	1.3%	0.90	Yes	5	7.5	0.87	3	1
63	Orlando Regional Medical Center	17.7	0.0%	0.93	Yes	8	7.0	1.52	3	3
64	Vanderbilt University Hospital and Clinic, Nashville, Tenn.	17.7	0.3%	0.95	Yes	7	8.0	1.34	3	2
65	Jewish Hospital of Cincinnati	17.6	0.0%	0.69	No	9	7.0	0.39	3	6
66	University of Utah Hospital and Clinics, Salt Lake City	17.5	0.5%	0.84	Yes	7	5.0	1.63	2	3
67	Holy Cross Hospital, Silver Spring, MD	17.5	0.0%	0.84	Yes	6	6.5	0.94	3	5
68	Mount Sinai Medical Center, Cleveland	17.5	0.0%	0.76	Yes	8	6.0	0.86	3	2
69	Francis Scott Key Medical Center, Baltimore	17.5	1.6%	1.21	Yes	8	7.0	0.50	3	4
70	University of Texas Medical Branch Hospitals, Galveston	17.5	0.3%	0.97	Yes	8	7.0	1.28	2	4
71	Overlook Hospital, Summit, NJ	17.5	0.0%	0.90	Yes	8	7.0	0.94	3	4
72	Mount Sinai Hospital Medical Center, Chicago	17.4	1.5%	1.09	Yes	8	6.0	1.01	2	3
73	Mercy Hospital of Pittsburgh	17.3	0.0%	0.86	Yes	7	7.0	1.13	3	3
74	Riverside Methodist Hospitals, Columbus, Ohio	17.3	0.0%	1.02	Yes	8	8.0	1.45	2	4
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75	University of Virginia Health Sciences Center, Charlottesville	17.2	0.0%	1.00	Yes	7	8.0	1.77	3	3
76	Methodist Hospital of Indiana, Indianapolis	17.1	0.0%	1.01	Yes	9	7.0	1.17	3	4
77	Allegheny General Hospital, Pittsburgh	17.1	0.0%	0.84	Yes	7	7.0	1.17	3	2
78	University of Maryland Medical System, Baltimore	17.0	0.0%	0.85	Yes	6	6.0	2.37	3	3
79	University of California--Davis Medical Center	17.0	0.0%	0.81	Yes	7	6.0	2.22	2	2
80	Methodist Hospital, Houston	17.0	1.2%	1.23	Yes	8	7.0	1.03	3	3
81	University of Kentucky Hospital, Lexington	17.0	0.0%	0.85	Yes	7	6.0	1.96	3	2
82	Long Island Jewish Medical Center, New York	16.9	0.9%	1.21	Yes	7	7.0	1.07	3	5
83	Mercy Hospital, Miami	16.9	0.6%	0.80	No	7	7.5	0.95	2	3
84	Jewish Hospital of St. Louis	16.9	0.7%	0.88	Yes	5	6.0	1.26	3	2
85	Mount Sinai Medical Center, Miami Beach	16.8	0.0%	0.91	Yes	9	7.0	0.80	3	3
86	Winthrop--University Hospital, Mineola, NY	16.7	0.6%	0.87	Yes	6	6.0	1.36	2	2
87	Los Angeles County--USC Medical Center	16.7	0.0%	0.67	Yes	7	5.5	1.19	3	1
88	Harper Hospital, Detroit	16.7	0.0%	0.81	Yes	4	7.5	1.03	2	4
89	University of Cincinnati Hospital	16.7	0.0%	0.88	Yes	6	7.5	1.28	2	3
90	University of Texas, M. D. Anderson Center, Houston	16.7	0.5%	0.19	Yes	3	6.0	1.49	2	1
91	Roger Williams Medical Center, Providence, RI	16.7	0.5%	0.76	Yes	3	6.0	1.21	2	2
92	Illinois Masonic Medical Center, Chicago	16.6	0.0%	0.91	Yes	8	7.0	0.91	3	3
93	Montclair Baptist Medical Center, Birmingham, Ala.	16.6	0.0%	0.82	Yes	9	7.0	0.33	3	2
94	Methodist Hospital, Brooklyn, NY	16.5	0.0%	0.48	Yes	4	7.5	0.77	3	2
95	St. Luke's Medical Center, Milwaukee	16.5	0.0%	0.92	Yes	6	7.5	1.45	3	2
96	University of Nebraska Medical Center, Omaha	16.5	0.7%	0.87	Yes	5	6.0	0.82	3	3
97	Boston City Hospital	16.5	0.3%	0.72	No	6	5.5	1.62	3	3

98	Medical University of South Carolina, Charleston	16.4	0.0%	0.85	Yes	6	7.5	1.76	2	1
99	Mount Auburn Hospital, Cambridge, Mass.	16.4	0.3%	0.76	Yes	6	5.5	0.58	3	2
100	Ochsner Foundation Hospital, New Orleans	16.3	0.0%	0.67	Yes	5	7.0	1.17	2	1

1996 Gynecology Rankings

Rank	Hospital	Sihq	Percent	Rate	Resint	Tech	Nurses	Volume
1	Johns Hopkins Hospital, Baltimore	100.0	30.8%	0.91	0.68	8.0	1.36	0.43
2	Mayo Clinic, Rochester, Minn.	93.9	29.6%	0.67	0.61	6.0	0.83	1.12
3	University of Texas, M. D. Anderson Center, Houston	70.5	19.3%	0.19	0.77	7.0	1.49	0.82
4	Brigham and Women*s Hospital, Boston	69.2	18.9%	0.78	1.80	6.0	0.76	0.65
5	Massachusetts General Hospital, Boston	63.9	15.9%	0.76	1.20	8.0	1.40	0.67
6	Duke University Medical Center, Durham, N.C.	44.5	9.2%	0.78	0.94	8.0	1.73	0.55
7	Los Angeles County--USC Medical Center	44.2	10.0%	0.67	1.40	5.5	1.19	0.04
8	Parkland Memorial Hospital, Dallas	42.7	9.9%	1.07	1.07	7.0	1.61	0.12
9	Memorial Sloan-Kettering Cancer Center, New York	41.6	8.7%	0.80	0.90	7.0	1.56	0.52
10	Cleveland Clinic	40.7	8.7%	0.68	0.89	7.5	1.10	0.55
11	UCLA Medical Center, Los Angeles	38.6	6.8%	0.68	1.55	8.0	1.03	0.50
12	University of Chicago Hospitals	37.2	5.0%	0.64	1.80	8.0	1.63	0.36
13	University of California, San Francisco Medical Center	36.3	6.2%	0.70	1.04	8.0	1.41	0.25
14	Hospital of the University of Pennsylvania, Philadelphia	35.4	4.3%	0.81	1.94	8.0	1.52	0.37
15	Stanford University Hospital, Stanford, Calif.	33.0	6.7%	0.78	0.69	6.5	1.18	0.55
16	Columbia Presbyterian Medical Center, New York	32.5	6.5%	1.16	1.10	8.0	1.17	0.27
17	Northwestern Memorial Hospital, Chicago	31.8	6.7%	0.59	0.45	7.0	0.99	0.43
18	Yale--New Haven Hospital, New Haven, Conn.	29.8	5.1%	0.90	1.19	7.5	0.95	0.60
19	Vanderbilt University Hospital and Clinic, Nashville, Tenn.	28.5	3.5%	0.95	1.47	8.0	1.34	0.39
20	New York Hospital--Cornell Medical Center	27.4	5.1%	0.99	0.80	8.0	0.93	0.24
21	University of Washington Medical Center, Seattle	27.4	2.6%	0.68	1.05	8.0	1.88	0.60
22	University of Michigan Medical Center, Ann Arbor	27.1	2.3%	0.90	1.67	8.0	1.45	0.42
23	Cedars-Sinai Medical Center, Los Angeles	26.9	5.3%	0.98	0.65	7.0	1.04	0.54
24	University of North Carolina Hospitals, Chapel Hill	26.6	3.4%	1.11	1.42	7.5	1.43	0.45
25	New York University Medical Center	26.4	3.8%	0.88	1.30	7.5	0.91	0.29
26	Barnes Hospital, St. Louis	25.6	3.8%	0.86	0.91	7.5	1.00	0.54
27	Rush--Presbyterian--St. Luke's Medical Center, Chicago	25.4	2.4%	0.65	1.28	8.0	1.07	0.34
28	University of Virginia Health Sciences Center, Charlottesville	25.0	2.1%	1.00	1.45	8.0	1.77	0.47
29	Thomas Jefferson University Hospital, Philadelphia	24.4	2.4%	0.74	1.00	7.0	1.38	0.21
30	Beth Israel Hospital, Boston	24.2	1.7%	0.72	1.18	7.0	1.53	0.60
31	North Carolina Baptist Hospital, Winston-Salem	24.1	2.1%	0.89	1.13	8.0	1.40	0.44
32	Mount Sinai Medical Center, New York	23.8	2.7%	0.97	1.04	7.5	1.39	0.27
33	University Hospital, Portland, Ore.	22.7	0.9%	0.72	1.60	6.0	1.88	0.39
34	Roswell Park Cancer Institute, Buffalo	22.6	2.0%	0.50	0.71	6.5	2.92	1.13
35	Georgetown University Hospital, Washington, D.C.	22.6	1.6%	0.77	1.20	6.0	1.63	0.52
36	Los Angeles County-- Harbor--UCLA Medical Center	22.2	0.7%	0.75	1.70	6.5	1.38	0.08
37	Ohio State University Medical Center, Columbus	22.2	3.8%	0.92	0.91	6.5	0.75	0.16
38	University of Iowa Hospitals and Clinics, Iowa City	22.1	1.7%	0.85	0.97	8.0	1.31	0.30
39	University of Miami, Jackson Memorial Hospital	22.1	2.2%	0.95	1.01	5.5	1.49	0.18
40	New England Medical Center, Boston	22.0	0.3%	0.81	1.62	7.0	2.16	0.55
41	San Francisco General Hospital Medical Center	21.9	1.7%	0.94	1.34	6.5	2.21	0.11
42	University of California--Davis Medical Center	21.9	0.5%	0.81	1.82	6.0	2.22	0.36
43	Indiana University Medical Center, Indianapolis	21.9	1.8%	1.04	1.01	8.0	1.76	0.57
44	Medical College of Virginia Hospitals, Richmond	21.4	2.9%	1.19	1.03	6.0	1.56	0.31
45	University of Illinois Hospital and Clinics, Chicago	21.1	0.5%	0.68	1.54	6.0	1.81	0.22

46	University Hospitals of Cleveland	20.7	0.0%	0.88	1.50	8.0	1.84	0.48
47	Boston City Hospital	20.7	0.0%	0.72	1.61	6.5	1.62	0.17
48	Ochsner Foundation Hospital, New Orleans	20.3	0.9%	0.67	1.15	7.0	1.17	0.55
49	Temple University Hospital, Philadelphia	20.2	0.6%	0.90	1.39	7.0	1.54	0.28
50	F.G. McGaw Hospital at Loyola University, Maywood, Ill.	20.0	0.5%	0.92	1.40	7.0	1.60	0.43
51	Medical University of South Carolina, Charleston	19.9	0.0%	0.85	1.42	7.5	1.76	0.35
52	Cook County Hospital, Chicago	19.9	0.5%	0.55	1.30	6.0	1.49	0.11
53	University of California, Irvine Medical Center, Orange, Calif.	19.7	4.0%	1.14	0.64	5.5	0.98	0.29
54	UCSD Medical Center, San Diego	19.5	0.0%	0.67	1.21	7.0	1.73	0.28
55	University Hospital, Denver	19.2	1.0%	0.77	0.61	7.0	1.62	0.29
56	University of Cincinnati Hospital	19.2	0.0%	0.88	1.57	7.5	1.28	0.28
57	Mary Hitchcock Memorial Hospital, Lebanon, N.H.	19.0	0.0%	0.82	1.03	8.0	1.49	0.38
58	Scott and White Memorial Hospital, Temple, Tx.	18.9	0.8%	0.81	0.93	6.0	1.57	0.62
59	University of Utah Hospital and Clinics, Salt Lake City	18.7	1.1%	0.84	0.85	6.0	1.63	0.18
60	Penn State's Milton S. Hershey Medical Center, Hershey	18.7	0.4%	0.92	1.42	7.0	1.25	0.56
61	University of Maryland Medical System, Baltimore	18.4	0.0%	0.85	1.48	6.0	2.37	0.14
62	University of Wisconsin Hospital and Clinics, Madison	18.3	0.9%	0.91	1.26	7.0	1.08	0.28
63	Shands Hospital, Gainesville, Fla.	18.3	0.4%	0.75	0.87	8.0	1.09	0.49
64	University of Alabama Hospital at Birmingham	18.2	1.7%	1.10	0.99	6.0	1.42	0.56
65	William Beaumont Hospital, Royal Oak, Mich.	18.2	0.5%	0.87	0.63	8.0	1.51	0.54
66	Albany Medical Center Hospital	17.7	0.0%	0.92	1.18	7.0	1.63	0.57
67	Montefiore Medical Center, Bronx, N.Y.	17.6	0.0%	0.98	1.34	7.0	1.52	0.27
68	University of Tennessee Memorial Hospital, Knoxville	17.3	1.4%	1.22	0.54	8.0	1.52	0.53
69	LSU Medical Center--University Hospital, Shreveport	17.2	0.9%	1.23	1.17	8.0	1.19	0.20
70	Bexar County Hospital District, San Antonio	16.8	0.0%	1.05	1.66	7.5	1.07	0.11
71	Howard University Hospital, Washington, D.C.	16.8	0.0%	1.05	1.29	8.0	1.29	0.13
72	University of Massachusetts Medical Center, Worcester	16.6	0.0%	0.84	1.45	4.5	1.45	0.65
73	Sinai Samaritan Medical Center, Milwaukee	16.6	0.0%	0.86	0.86	7.5	1.33	0.62
74	St. Barnabas Medical Center, Livingston, N.J.	16.5	2.2%	1.01	0.38	8.0	0.72	0.64
75	University Hospital, Stony Brook, N.Y.	16.4	0.0%	1.11	1.30	7.0	1.48	0.56
76	University of Louisville Hospital, Louisville	16.4	0.0%	0.79	0.75	7.0	1.39	0.29
77	University Hospitals, Oklahoma City	16.1	0.0%	0.99	1.04	7.0	1.90	0.28
78	Medical College of Ohio Hospital, Toledo	16.0	0.0%	1.00	1.65	6.0	1.19	0.16
79	Lenox Hill Hospital, New York	16.0	1.6%	1.17	0.58	7.0	1.28	0.26
80	Tulane University Hospital and Clinics, New Orleans	15.9	0.9%	0.77	0.47	6.0	1.21	0.36
81	University Medical Center, Tucson, Ariz.	15.8	0.4%	0.83	0.82	7.0	1.03	0.65
82	Dana-Farber Cancer Institute, Boston	15.8	0.0%	0.05	1.12	4.0	6.16	0.58
83	Medical Center of Louisiana at New Orleans	15.7	0.0%	0.96	0.91	7.0	2.80	0.16
84	Greater Baltimore Medical Center	15.7	1.4%	0.77	0.28	6.0	0.97	1.03
85	Highland General Hospital, Oakland, Calif.	15.7	0.0%	0.68	1.06	6.5	1.02	0.11
86	Roger Williams Medical Center, Providence	15.6	0.0%	0.76	0.96	6.0	1.21	0.22
87	William N. Wishard Memorial Hospital, Indianapolis	15.6	0.0%	0.80	0.47	7.0	1.59	0.30
88	Medical Center of Delaware, Wilmington	15.6	0.0%	0.86	0.57	7.0	1.82	0.67
89	New England Deaconess Hospital, Boston	15.4	0.0%	0.80	1.25	6.0	1.00	0.17
90	Maricopa Medical Center, Phoenix	15.4	0.0%	0.98	0.89	7.0	2.00	0.10
91	University of Kansas Hospital, Kansas City	15.3	0.5%	1.04	0.98	7.0	1.18	0.38
92	Allegheny General Hospital, Pittsburgh	15.3	0.6%	0.84	0.58	7.0	1.17	0.22
93	University Hospitals and Clinics, Columbia	15.3	0.0%	1.09	1.32	7.0	1.22	0.26
94	Strong Memorial Hospital--Rochester University	15.3	0.0%	1.12	1.03	7.0	1.69	0.48
95	St. Joseph Hospital, Denver	15.2	0.0%	0.32	0.48	7.0	1.27	0.74
96	University of Texas Medical Branch Hospitals, Galveston	15.2	0.0%	0.97	1.05	7.0	1.28	0.17

97	Winthrop-University Hospital, Mineola, N.Y.	15.1	0.0%	0.87	0.70	7.0	1.36	0.36
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98	Medical College of Georgia Hospital and Clinic, Augusta	15.0	0.0%	0.97	1.43	7.0	0.84	0.45
99	St. Joseph's Hospital and Medical Center, Phoenix	14.9	0.0%	0.86	0.55	7.0	1.41	0.56
100	University of Kentucky Hospital, Lexington	14.8	0.0%	0.85	0.61	6.0	1.96	0.76

## 1996 Neurology Rankings

Rank	Hospital	Sihq	Percent	Rate	Coth	Tech	Nurses
1	Mayo Clinic, Rochester	100.0	56.9%	0.78	No	5.5	0.83
2	Massachusetts General Hospital, Boston	90.5	46.0%	0.79	Yes	7.0	1.40
3	Johns Hopkins Hospital, Baltimore	82.3	41.7%	0.88	Yes	7.0	1.36
4	Columbia Presbyterian Medical Center, New York	58.6	28.1%	1.02	Yes	7.0	1.17
5	University of California--San Francisco Medical Center	53.7	22.3%	0.79	Yes	7.0	1.41
6	Cleveland Clinic	40.5	13.5%	0.59	Yes	6.5	1.10
7	UCLA Medical Center, Los Angeles	37.1	11.8%	0.68	Yes	6.0	1.03
8	Duke University Medical Center, Durham	35.5	10.1%	0.77	Yes	7.0	1.73
9	Hospital of the University of Pennsylvania, Philadelphia	33.4	8.6%	0.76	Yes	7.0	1.52
10	Barnes Hospital, St. Louis	33.0	10.3%	0.76	Yes	6.0	1.00
11	New York Hospital--Cornell Medical Center	29.9	9.3%	0.89	Yes	7.0	0.93
12	University of Miami, Jackson Memorial Hospital	29.2	8.6%	0.91	Yes	4.5	1.49
13	University of Iowa Hospitals and Clinics, Iowa City	25.7	3.8%	0.72	Yes	7.0	1.31
14	University of Washington Medical Center, Seattle	25.0	2.1%	0.61	Yes	7.0	1.88
15	Shands Hospital, Gainesville, Fla.	24.7	3.1%	0.38	Yes	7.0	1.09
16	University of Michigan Medical Center, Ann Arbor	24.3	6.0%	1.15	Yes	7.0	1.45
17	University of Illinois Hospital and Clinics, Chicago	24.2	2.5%	0.34	Yes	5.0	1.81
18	University of Chicago Hospitals, Chicago	24.1	1.5%	0.57	Yes	7.0	1.63
19	University of Texas, M. D. Anderson Center, Houston	24.1	1.5%	0.15	Yes	7.0	1.49
20	New York University Medical Center	23.4	3.1%	0.66	Yes	6.5	0.91
21	Rush--Presbyterian--St. Luke's Medical Center, Chicago	23.2	2.2%	0.44	Yes	7.0	1.07
22	Stanford University Hospital, Stanford, Calif.	22.7	3.1%	0.75	Yes	6.0	1.18
23	Beth Israel Hospital, Boston	22.5	1.0%	0.64	Yes	6.0	1.53
24	Mount Sinai Medical Center, New York	22.4	3.0%	0.84	Yes	6.5	1.39
25	Georgetown University Hospital, Washington, D.C.	22.0	1.4%	0.70	Yes	5.0	1.63
26	Montefiore Medical Center, Bronx, N.Y.	22.0	1.5%	0.74	Yes	6.0	1.52
27	Memorial Sloan-Kettering Cancer Center, New York	22.0	0.4%	0.69	Yes	7.0	1.56
28	Brigham and Women's Hospital, Boston	21.6	4.2%	0.76	Yes	5.0	0.76
29	Baylor University Medical Center, Dallas	21.4	3.0%	0.82	Yes	6.0	1.19
30	University Hospital, Denver	21.4	0.9%	0.72	Yes	6.0	1.62
31	Thomas Jefferson University Hospital, Philadelphia	21.3	0.5%	0.51	Yes	6.0	1.38
32	Northwestern Memorial Hospital, Chicago	21.1	1.6%	0.54	Yes	6.0	0.99
33	Cook County Hospital, Chicago	21.0	0.5%	0.41	Yes	5.0	1.49
34	Temple University Hospital, Philadelphia	21.0	0.0%	0.60	Yes	6.0	1.54
35	Green Hospital of Scripps Clinic, La Jolla, Calif.	20.9	0.0%	0.52	Yes	6.0	1.48
36	Mary Hitchcock Memorial Hospital, Lebanon	20.7	0.0%	0.72	Yes	7.0	1.49
37	Harper Hospital, Detroit	20.5	0.9%	0.57	Yes	6.5	1.03
38	North Carolina Baptist Hospital, Winston-Salem	20.5	1.5%	0.84	Yes	7.0	1.40
39	William Beaumont Hospital, Royal Oak, Mich.	20.3	0.0%	0.74	Yes	7.0	1.51
40	Ochsner Foundation Hospital, New Orleans	20.0	0.3%	0.62	Yes	6.0	1.17
41	University of Maryland Medical System, Baltimore	20.0	1.9%	0.86	Yes	5.0	2.37
42	University of Virginia Health Sciences Center, Charlottesville	20.0	1.0%	0.85	Yes	7.0	1.77
43	Los Angeles County--USC Medical Center	19.9	1.7%	0.73	Yes	4.5	1.19
44	Roger Williams Medical Center, Providence	19.7	0.0%	0.62	Yes	6.0	1.21
45	Howard University Hospital, Washington, D.C.	19.7	0.0%	0.72	Yes	7.0	1.29



46	Summa Health System, Akron, Ohio	19.6	0.0%	0.71	Yes	5.0	1.50
47	University of Minnesota Hospital and Clinic, Minneapolis	19.5	2.1%	0.56	Yes	5.0	0.59
48	Scott and White Memorial Hospital, Temple	19.3	0.6%	0.77	Yes	5.0	1.57
49	University Hospitals of Cleveland	19.3	0.3%	0.83	Yes	7.0	1.84
50	Western Pennsylvania Hospital, Pittsburgh	19.2	0.0%	0.54	Yes	7.0	0.94
51	Tulane University Hospital and Clinics, New Orleans	19.0	0.0%	0.61	Yes	5.0	1.21
52	St. John's Mercy Medical Center, St. Louis	18.9	0.4%	0.66	Yes	6.0	0.91
53	New England Medical Center, Boston	18.9	1.4%	0.93	Yes	6.0	2.16
54	Methodist Hospital, Houston	18.7	3.7%	1.09	Yes	6.0	1.03
55	Greater Baltimore Medical Center	18.5	0.4%	0.64	Yes	5.0	0.97
56	William N. Wishard Memorial Hospital, Indianapolis	18.5	0.0%	0.80	Yes	6.0	1.59
57	Winthrop-University Hospital, Mineola, N.Y.	18.5	0.0%	0.76	Yes	6.0	1.36
58	Allegheny General Hospital, Pittsburgh	18.3	1.8%	0.91	Yes	6.0	1.17
59	University Hospitals, Oklahoma City	18.2	0.0%	0.82	Yes	6.0	1.90
60	University of California--Davis Medical Center	18.1	0.0%	0.78	Yes	5.0	2.22
61	Indiana University Medical Center, Indianapolis	18.0	0.9%	1.00	Yes	7.0	1.76
62	Methodist Hospital, Brooklyn	18.0	0.0%	0.38	Yes	6.5	0.77
63	Hospital of St. Raphael, New Haven	18.0	0.0%	0.75	Yes	6.0	1.21
64	Crawford Long Hospital at Emory University, Atlanta	18.0	0.0%	0.79	Yes	6.5	1.26
65	Yale--New Haven Hospital, New Haven, Conn.	17.8	1.2%	0.82	Yes	6.5	0.95
66	UCSD Medical Center, San Diego	17.8	0.0%	0.85	Yes	6.0	1.73
67	F.G. McGaw Hospital at Loyola University, Maywood, Ill.	17.8	0.0%	0.85	Yes	6.0	1.60
68	Riverside Methodist Hospitals, Columbus	17.8	0.0%	0.88	Yes	7.0	1.45
69	Fairfax Hospital, Falls Church, Va.	17.6	0.0%	0.81	Yes	6.0	1.33
70	Mercy Hospital and Medical Center, Chicago	17.6	0.0%	0.65	Yes	5.0	0.91
71	St. Joseph's Hospital and Medical Center, Phoenix	17.6	0.9%	0.94	Yes	6.0	1.41
72	University of Pittsburgh Medical Center	17.5	3.5%	0.94	No	6.0	1.37
73	Butterworth Hospital, Grand Rapids, Mich.	17.5	0.0%	0.70	Yes	5.0	1.03
74	University of Cincinnati Hospital	17.4	0.0%	0.83	Yes	6.5	1.28
75	Beth Israel Medical Center, New York	17.4	0.0%	0.83	Yes	7.0	1.20
76	University Hospitals and Clinics, Columbia	17.4	0.0%	0.75	Yes	5.0	1.22
77	Mount Sinai Medical Center, Cleveland	17.4	0.0%	0.59	Yes	5.0	0.86
78	Strong Memorial Hospital--Rochester University	17.4	0.0%	0.88	Yes	6.0	1.69
79	Boston University Medical Center-University Hospital	17.3	0.0%	0.62	Yes	6.0	0.69
80	New England Deaconess Hospital, Boston	17.2	0.0%	0.75	Yes	6.0	1.00
81	Medical Center of Delaware, Wilmington	17.1	0.0%	0.90	Yes	6.0	1.82
82	University of Massachusetts Medical Center, Worcester	17.1	0.0%	0.81	Yes	4.5	1.45
83	St. Luke's Hospital, Kansas City	17.0	0.0%	0.65	Yes	5.0	0.77
84	Albert Einstein Medical Center, Philadelphia	16.9	0.0%	0.77	Yes	6.0	1.04
85	Methodist Hospital of Indiana, Indianapolis	16.9	0.0%	0.81	Yes	6.0	1.17
86	Mount Sinai Medical Center, Miami Beach	16.9	0.0%	0.72	Yes	6.0	0.80
87	University of Kentucky Hospital, Lexington	16.8	0.0%	0.87	Yes	5.0	1.96
88	Albany Medical Center Hospital	16.8	0.0%	0.92	Yes	6.0	1.63
89	Sinai Hospital of Baltimore	16.6	0.0%	0.93	Yes	6.0	1.71
90	Good Samaritan Regional Medical Center, Phoenix	16.6	0.0%	0.92	Yes	7.0	1.30
91	Medical University of South Carolina, Charleston	16.6	0.0%	0.97	Yes	6.5	1.76
92	Maricopa Medical Center, Phoenix	16.5	0.0%	0.95	Yes	6.0	2.00
93	Grace Hospital, Detroit	16.5	0.0%	0.87	Yes	6.5	1.22
94	Lehigh Valley Hospital, Allentown, Penn.	16.4	0.0%	0.92	Yes	6.5	1.33
95	California Pacific Medical Center, San Francisco	16.4	0.0%	0.92	Yes	6.0	1.41
96	Evanston Hospital, Evanston, Ill.	16.4	0.4%	0.84	Yes	6.0	1.03

97	Hamot Medical Center, Erie	16.4	0.0%	0.76	Yes	7.0	0.71
98	St. Vincent Medical Center, Toledo	16.4	0.0%	0.70	No	6.0	1.50
99	Graduate Hospital, Philadelphia	16.4	0.0%	0.82	Yes	6.0	1.08
100	Bishop Clarkson Memorial Hospital, Omaha	16.2	0.0%	0.71	No	6.0	1.50

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1996 Orthopedics Rankings

Rank	Hospname	Sihq	Percent	Rate	Coth	Tech	Nurses	Volume
1	Mayo Clinic, Rochester, Minn.	100.0	48.5%	0.50	No	4.0	0.83	6.08
2	Massachusetts General Hospital, Boston	90.0	40.2%	0.57	Yes	5.0	1.40	2.81
3	Hospital for Special Surgery, New York	89.0	39.7%	0.04	Yes	4.5	1.12	21.28
4	Johns Hopkins Hospital, Baltimore	49.1	18.9%	0.65	Yes	5.0	1.36	1.23
5	Duke University Medical Center, Durham, N.C.	39.8	13.0%	0.58	Yes	5.0	1.73	1.78
6	Cleveland Clinic	34.1	10.4%	0.48	Yes	4.5	1.10	2.39
7	UCLA Medical Center, Los Angeles	33.1	10.9%	0.70	Yes	5.0	1.03	1.88
8	University of Iowa Hospitals and Clinics, Iowa City	28.9	8.2%	0.69	Yes	5.0	1.31	1.25
9	University of Washington Medical Center, Seattle	27.7	6.0%	0.50	Yes	5.0	1.88	1.76
10	Hospital for Joint Diseases--Orthopedic Institute, New York	27.4	6.4%	0.06	Yes	4.0	1.10	9.06
11	University of Michigan Medical Center, Ann Arbor	23.1	5.2%	0.85	Yes	5.0	1.45	1.25
12	Stanford University Hospital, Stanford, Calif.	22.5	4.1%	0.54	Yes	4.0	1.18	3.04
13	Hospital of the University of Pennsylvania, Philadelphia	22.2	4.3%	0.80	Yes	5.0	1.52	1.80
14	Harborview Medical Center, Seattle	21.4	5.3%	1.15	Yes	3.5	2.25	1.25
15	Los Angeles County--USC Medical Center	20.6	3.8%	0.40	Yes	3.5	1.19	0.21
16	Thomas Jefferson University Hospital, Philadelphia	20.1	2.7%	0.41	Yes	4.0	1.38	0.99
17	University of Texas, M. D. Anderson Center, Houston	20.1	2.2%	0.08	Yes	5.0	1.49	0.74
18	University of Chicago Hospitals	19.3	1.5%	0.27	Yes	5.0	1.63	1.56
19	Vanderbilt University Hospital and Clinic, Nashville	19.2	2.3%	0.60	Yes	5.0	1.34	1.79
20	Rush--Presbyterian--St. Luke's Medical Center, Chicago	18.8	2.2%	0.54	Yes	5.0	1.07	1.98
21	Beth Israel Hospital, Boston	18.1	0.8%	0.48	Yes	4.0	1.53	2.99
22	Columbia Presbyterian Medical Center, New York	17.7	3.6%	1.37	Yes	5.0	1.17	1.58
23	UCSD Medical Center, San Diego	17.6	1.1%	0.30	Yes	4.0	1.73	1.18
24	Green Hospital of Scripps Clinic, La Jolla, Calif.	17.2	0.0%	0.25	Yes	4.0	1.48	6.18
25	Northwestern Memorial Hospital, Chicago	17.2	2.0%	0.55	Yes	4.0	0.99	2.06
26	University of California--San Francisco Medical Center	17.1	2.3%	0.94	Yes	5.0	1.41	1.25
27	Shands Hospital, Gainesville, Fla.	17.1	2.5%	0.80	Yes	5.0	1.09	1.60
28	Georgetown University Hospital, Washington, D.C.	16.9	1.8%	0.67	Yes	3.0	1.63	1.62
29	University of Maryland Medical System, Baltimore	16.6	2.7%	0.95	Yes	3.0	2.37	0.91
30	Parkland Memorial Hospital, Dallas	16.4	2.2%	0.91	Yes	4.0	1.61	0.44
31	Methodist Hospital, Houston	16.2	2.4%	1.04	Yes	4.0	1.03	3.71
32	Memorial Sloan-Kettering Cancer Center, New York	16.1	1.2%	0.80	Yes	5.0	1.56	1.20
33	North Carolina Baptist Hospital, Winston-Salem	16.0	0.9%	0.72	Yes	5.0	1.40	1.85
34	University of Virginia Health Sciences Center, Charlottesville	16.0	0.8%	0.74	Yes	5.0	1.77	1.74
35	Roger Williams Medical Center, Providence	16.0	0.0%	0.47	Yes	4.0	1.21	3.85
36	University Hospitals and Clinics, Columbia	15.9	0.8%	0.17	Yes	4.0	1.22	1.07
37	Scott and White Memorial Hospital, Temple, Tx.	15.9	0.0%	0.52	Yes	3.0	1.57	3.18
38	Ochsner Foundation Hospital, New Orleans	15.9	0.5%	0.26	Yes	4.0	1.17	2.20
39	Brigham and Women's Hospital, Boston	15.8	3.1%	0.83	Yes	3.0	0.76	2.26
40	University of Illinois Hospital and Clinics, Chicago	15.6	0.5%	0.28	Yes	3.0	1.81	0.65
41	William N. Wishard Memorial Hospital, Indianapolis	15.4	0.0%	0.55	Yes	4.5	1.59	0.96
42	California Pacific Medical Center, San Francisco	15.4	0.0%	0.53	Yes	4.0	1.41	1.66
43	Mary Hitchcock Memorial Hospital, Lebanon	15.4	0.0%	0.70	Yes	5.0	1.49	2.89
44	Barnes Hospital, St. Louis	15.4	1.8%	0.81	Yes	5.0	1.00	1.40

45	University of California--Davis Medical Center	15.3	1.2%	0.72	Yes	3.0	2.22	1.48
46	University of Miami, Jackson Memorial Hospital	15.3	2.8%	1.26	Yes	2.5	1.49	0.35
47	Baylor University Medical Center, Dallas	15.2	1.0%	0.69	Yes	4.0	1.19	2.63
48	Medical Center of Delaware, Wilmington	15.2	0.0%	0.65	Yes	4.0	1.82	2.96
49	Allegheny General Hospital, Pittsburgh	15.1	1.0%	0.68	Yes	4.0	1.17	2.40
50	William Beaumont Hospital, Royal Oak, Mich.	15.1	0.5%	1.02	Yes	5.0	1.51	3.37
51	St. Joseph's Hospital and Medical Center, Phoenix	14.9	0.0%	0.63	Yes	4.0	1.41	2.82
52	St. Luke's Medical Center, Milwaukee	14.9	0.0%	0.81	Yes	4.5	1.45	4.62
53	Sinai Samaritan Medical Center, Milwaukee	14.8	0.0%	0.60	Yes	4.5	1.33	2.12
54	Riverside Methodist Hospitals, Columbus	14.7	0.5%	1.07	Yes	5.0	1.45	3.18
55	New York University Medical Center, New York	14.5	2.1%	0.93	Yes	4.5	0.91	1.18
56	Hennepin County Medical Center, Minneapolis	14.5	0.9%	0.50	Yes	3.0	0.86	1.99
57	St. Louis University Hospital, St. Louis	14.5	0.5%	0.79	Yes	5.0	1.17	2.82
58	Evanston Hospital, Evanston, Ill.	14.5	0.0%	0.57	Yes	4.0	1.03	3.71
59	New England Medical Center, Boston	14.5	0.4%	0.72	Yes	4.0	2.16	1.25
60	Temple University Hospital, Philadelphia	14.3	0.4%	0.72	Yes	4.0	1.54	0.93
61	Medical University of South Carolina, Charleston	14.3	0.4%	0.80	Yes	4.5	1.76	0.91
62	University of Kentucky Hospital, Lexington	14.3	0.0%	0.59	Yes	3.0	1.96	1.56
63	University of Massachusetts Medical Center, Worcester	14.2	0.0%	0.55	Yes	2.5	1.45	1.73
64	Loma Linda University Medical Center, Loma Linda, Calif.	14.1	0.0%	0.57	Yes	3.5	1.86	0.18
65	University Hospitals of Cleveland	14.1	0.0%	0.91	Yes	5.0	1.84	2.48
66	University of North Carolina Hospitals, Chapel Hill	14.1	0.6%	0.89	Yes	4.5	1.43	1.29
67	Fairfax Hospital, Falls Church, Va.	14.1	0.0%	0.63	Yes	4.0	1.33	1.82
68	Tulane University Hospital and Clinics, New Orleans	14.0	0.0%	0.62	Yes	4.0	1.21	2.46
69	Hospital of St. Raphael, New Haven, Conn.	14.0	0.0%	0.66	Yes	4.0	1.21	3.06
70	F.G. McGaw Hospital at Loyola University, Maywood, Ill.	14.0	0.5%	0.92	Yes	4.0	1.60	1.76
71	Carolinas Medical Center, Charlotte, N.C.	13.9	0.5%	1.20	Yes	5.0	1.69	2.09
72	Memorial Medical Center, Savannah, Ga.	13.9	0.0%	0.43	Yes	4.0	0.93	2.08
73	Emory University Hospital, Atlanta	13.9	1.6%	1.06	Yes	5.0	0.87	2.35
74	Howard University Hospital, Washington, D.C.	13.8	0.0%	0.64	Yes	5.0	1.29	0.45
75	Maricopa Medical Center, Phoenix	13.8	0.0%	0.72	Yes	4.0	2.00	1.28
76	Western Pennsylvania Hospital, Pittsburgh	13.7	0.7%	0.75	Yes	5.0	0.94	1.77
77	Lehigh Valley Hospital, Allentown, Penn.	13.7	0.0%	0.90	Yes	4.5	1.33	3.51
78	Moore Regional Hospital, Pinehurst, N.C.	13.7	0.0%	0.46	No	4.0	1.56	4.99
79	University Hospital of Arkansas, Little Rock	13.6	0.4%	0.98	Yes	4.0	1.81	1.89
80	Orlando Regional Medical Center, Orlando	13.6	0.0%	0.79	Yes	4.0	1.52	1.83
81	University of Minnesota Hospital and Clinic, Minneapolis	13.6	1.1%	0.35	Yes	3.0	0.59	1.68
82	University of Connecticut Health Center, Farmington	13.6	0.0%	0.68	Yes	3.0	1.51	1.75
83	William Beaumont Hospital-Troy, Mich.	13.6	0.0%	0.48	No	4.0	1.81	4.02
84	St. Peter's Community Hospital, Helena	13.6	0.0%	0.46	No	5.0	1.30	5.25
85	Sinai Hospital of Baltimore, Baltimore	13.5	0.0%	0.82	Yes	4.0	1.71	1.98
86	University Hospital--SUNY Health Science Center, Syracuse	13.5	0.0%	0.73	Yes	3.0	1.57	2.27
87	Cook County Hospital, Chicago	13.5	0.6%	0.73	Yes	3.0	1.49	0.21
88	University of Wisconsin Hospital and Clinics, Madison	13.5	0.6%	0.82	Yes	5.0	1.08	1.74
89	St. Joseph Hospital, Denver	13.5	0.5%	0.28	No	4.0	1.27	3.71
90	University Hospitals and Clinics, University Center, Jackson, Miss.	13.4	0.6%	0.65	Yes	3.0	1.19	1.24
91	Medical Center Hospital of Vermont, Burlington	13.4	0.0%	0.54	Yes	4.0	1.04	1.02
92	Mount Sinai Medical Center, New York	13.4	0.3%	0.87	Yes	4.5	1.39	1.17
93	Yale--New Haven Hospital, New Haven, Conn.	13.4	1.6%	1.04	Yes	4.5	0.95	1.45
94	St. John's Mercy Medical Center, St. Louis	13.4	0.0%	0.62	Yes	5.0	0.91	2.16
95	Methodist Hospital, Brooklyn	13.3	0.0%	0.40	Yes	4.5	0.77	1.50

96	Harper Hospital, Detroit	13.3	0.0%	0.56	Yes	4.5	1.03	0.68
97	St. Luke's Hospital, Jacksonville, Fla.	13.3	0.0%	0.69	Yes	4.0	0.95	6.30
98	Texas Heart Institute--St. Luke's Episcopal, Houston	13.2	0.4%	0.90	Yes	4.0	1.31	1.87
99	York Hospital, York, Penn.	13.2	0.0%	0.90	Yes	3.5	1.34	3.84
100	Medical Center of Central Massachusetts, Worcester	13.2	0.0%	0.67	Yes	3.5	0.97	4.30

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## 1996 Otolaryngology Rankings

Rank	Hospname	Sihq	Percent	Rate	Coth	Tech	Nurses	Volume
1	Massachusetts Eye and Ear Infirmary, Boston	100.0	36.1%	0.76	No	2.0	1.20	1.40
2	Johns Hopkins Hospital, Baltimore	82.2	26.9%	0.91	Yes	5.0	1.36	0.32
3	University of Iowa Hospitals and Clinics, Iowa City	70.6	22.1%	0.85	Yes	5.0	1.31	0.29
4	University of Michigan Medical Center, Ann Arbor	56.3	16.3%	0.90	Yes	5.0	1.45	0.36
5	Barnes Hospital, St. Louis	46.7	13.1%	0.86	Yes	5.0	1.00	0.23
6	UCLA Medical Center, Los Angeles	45.2	12.0%	0.68	Yes	5.0	1.03	0.40
7	Mayo Clinic, Rochester, Minn.	39.2	11.8%	0.67	No	4.0	0.83	0.65
8	University of Pittsburgh Medical Center	36.1	10.6%	1.05	No	4.0	1.37	0.25
9	University of Texas, M. D. Anderson Center, Houston	35.6	7.3%	0.19	Yes	5.0	1.49	0.49
10	Stanford University Hospital, Calif.	35.3	8.3%	0.78	Yes	4.0	1.18	0.36
11	Cleveland Clinic, Ohio	34.7	8.0%	0.68	Yes	4.5	1.10	0.22
12	Mount Sinai Medical Center, New York	34.1	7.9%	0.97	Yes	4.5	1.39	0.18
13	University of California--San Francisco Medical Center	32.4	6.3%	0.70	Yes	5.0	1.41	0.20
14	University of Washington Medical Center, Seattle	31.1	5.6%	0.68	Yes	5.0	1.88	0.30
15	Vanderbilt University Hospital and Clinic, Nashville	30.6	6.2%	0.95	Yes	5.0	1.34	0.47
16	Duke University Medical Center, Durham, N.C.	30.0	5.3%	0.78	Yes	5.0	1.73	0.12
17	Univ. of Virginia Health Sci. Center, Charlottesville	29.2	5.5%	1.00	Yes	5.0	1.77	0.32
18	University of Chicago Hospitals	27.2	4.0%	0.64	Yes	5.0	1.63	0.22
19	University of Cincinnati Hospital	25.8	4.4%	0.88	Yes	4.5	1.28	0.35
20	Hospital of the Univ. of Pennsylvania, Philadelphia	23.8	2.8%	0.81	Yes	5.0	1.52	0.38
21	Manhattan Eye, Ear and Throat Hospital	22.9	4.2%	0.05	No	0.0	2.17	3.90
22	University of Illinois Hospital and Clinics, Chicago	21.9	2.7%	0.68	Yes	3.0	1.81	0.22
23	Los Angeles County--USC Medical Center	21.8	3.5%	0.67	Yes	2.5	1.19	0.04
24	Indiana University Medical Center, Indianapolis	20.9	2.4%	1.04	Yes	5.0	1.76	0.14
25	New York University Medical Center	20.8	3.1%	0.88	Yes	4.5	0.91	0.22
26	University of Miami, Jackson Memorial Hospital	20.7	3.1%	0.95	Yes	2.5	1.49	0.09
27	Montefiore Medical Center, Bronx	20.1	2.2%	0.98	Yes	4.0	1.52	0.22
28	F.G. McGaw Hospital at Loyola University, Maywood, Ill.	20.1	2.1%	0.92	Yes	4.0	1.60	0.30
29	Univ. of Minnesota Hospital and Clinic, Minneapolis	19.7	3.3%	0.77	Yes	3.0	0.59	0.32
30	University Hospital of Arkansas, Little Rock	19.5	2.0%	0.93	Yes	3.5	1.81	0.36
31	Parkland Memorial Hospital, Dallas	19.3	2.2%	1.07	Yes	4.0	1.61	0.04
32	Western Pennsylvania Hospital, Pittsburgh	19.3	1.9%	0.79	Yes	5.0	0.94	0.26
33	University of North Carolina Hospitals, Chapel Hill	19.2	2.1%	1.11	Yes	4.5	1.43	0.24
34	University Hospital, Portland, Oregon	19.1	1.5%	0.72	Yes	3.0	1.88	0.43
35	Northwestern Memorial Hospital, Chicago	18.8	1.9%	0.59	Yes	4.0	0.99	0.20
36	Memorial Sloan-Kettering Cancer Center, New York	18.7	0.5%	0.80	Yes	5.0	1.56	0.70
37	Yale--New Haven Hospital	18.7	2.2%	0.90	Yes	4.5	0.95	0.32
38	New England Medical Center, Boston	18.5	1.1%	0.81	Yes	4.0	2.16	0.23
39	UCSD Medical Center, San Diego	18.5	0.9%	0.67	Yes	4.0	1.73	0.17
40	Temple University Hospital, Philadelphia	18.4	1.3%	0.90	Yes	4.0	1.54	0.17
41	University of Texas Medical Branch Hospitals, Galveston	18.3	2.0%	0.97	Yes	4.0	1.28	0.07
42	University Hospitals of Cleveland	18.2	0.8%	0.88	Yes	5.0	1.84	0.27
43	North Carolina Baptist Hospital, Winston-Salem	18.1	1.0%	0.89	Yes	5.0	1.40	0.19

44	Beth Israel Hospital, Boston	18.0	0.7%	0.72	Yes	4.0	1.53	0.30
45	Thomas Jefferson University Hospital, Philadelphia	17.8	0.8%	0.74	Yes	4.0	1.38	0.23
46	Shands Hospital, Gainesville, Fla.	17.6	0.9%	0.75	Yes	5.0	1.09	0.22
47	Mary Hitchcock Memorial Hospital, Lebanon, N.H.	17.4	0.4%	0.82	Yes	5.0	1.49	0.21
48	Ochsner Foundation Hospital, New Orleans	17.4	1.0%	0.67	Yes	4.0	1.17	0.32
49	University Hospital, Denver, Colo.	17.3	0.5%	0.77	Yes	4.0	1.62	0.20
50	Baylor University Medical Center, Dallas	17.2	1.0%	0.75	Yes	4.0	1.19	0.16
51	Columbia Presbyterian Medical Center, New York	17.1	1.6%	1.16	Yes	5.0	1.17	0.17
52	University of Maryland Medical System, Baltimore	16.9	1.0%	0.85	Yes	3.0	2.37	0.27
53	Massachusetts General Hospital, Boston	16.8	0.0%	0.76	Yes	5.0	1.40	0.26
54	St. Louis University Hospital	16.7	1.5%	1.19	Yes	5.0	1.17	0.33
55	Rush--Presbyterian--St. Luke's Medical Center, Chicago	16.6	0.5%	0.65	Yes	5.0	1.07	0.20
56	University of Wisconsin Hospital and Clinics, Madison	16.4	0.9%	0.91	Yes	5.0	1.08	0.33
57	Ohio State University Medical Center, Columbus	16.3	2.1%	0.92	Yes	3.5	0.75	0.25
58	William Beaumont Hospital, Royal Oak, Mich.	16.3	0.0%	0.87	Yes	5.0	1.51	0.18
59	Methodist Hospital, Houston	16.3	2.0%	1.23	Yes	4.0	1.03	0.21
60	Green Hospital of Scripps Clinic, La Jolla, Calif.	16.1	0.0%	0.69	Yes	4.0	1.48	0.23
61	Albany Medical Center Hospital, New York	16.0	0.4%	0.92	Yes	4.0	1.63	0.22
62	Penn State's Milton S. Hershey Medical Center, Hershey	15.9	0.9%	0.92	Yes	4.0	1.25	0.24
63	Medical University of South Carolina, Charleston	15.9	0.0%	0.85	Yes	4.5	1.76	0.18
64	William N. Wishard Memorial Hospital, Indianapolis	15.9	0.0%	0.80	Yes	4.0	1.59	0.16
65	Good Samaritan Regional Medical Center, Phoenix	15.8	0.5%	1.00	Yes	5.0	1.30	0.19
66	Univ. Hospital--SUNY Health Science Center, Syracuse	15.7	0.9%	1.05	Yes	3.0	1.57	0.55
67	St. Luke's Medical Center, Milwaukee	15.5	0.0%	0.92	Yes	4.5	1.45	0.56
68	Medical Center of Delaware, Wilmington	15.5	0.0%	0.86	Yes	4.0	1.82	0.32
69	University of Louisville Hospital, Kentucky	15.3	0.0%	0.79	Yes	4.0	1.39	0.09
70	California Pacific Medical Center, San Francisco	15.3	0.0%	0.81	Yes	4.0	1.41	0.09
71	Georgetown University Hospital	15.3	0.0%	0.77	Yes	3.0	1.63	0.27
72	Roger Williams Medical Center, Providence, R.I.	15.2	0.0%	0.76	Yes	4.0	1.21	0.40
73	Hospital of St. Raphael, New Haven, Conn.	15.1	0.0%	0.75	Yes	4.0	1.21	0.38
74	Sinai Samaritan Medical Center, Milwaukee	15.1	0.0%	0.86	Yes	4.5	1.33	0.24
75	Cook County Hospital, Chicago	15.0	0.0%	0.55	Yes	3.0	1.49	0.10
76	Riverside Methodist Hospitals, Columbus, Ohio	15.0	0.0%	1.02	Yes	5.0	1.45	0.21
77	University of California--Davis Medical Center	14.9	0.0%	0.81	Yes	3.0	2.22	0.30
78	Fairfax Hospital, Falls Church, Va.	14.9	0.0%	0.82	Yes	4.0	1.33	0.26
79	St. Joseph's Hospital and Medical Center, Phoenix	14.9	0.0%	0.86	Yes	4.0	1.41	0.18
80	Lehigh Valley Hospital, Allentown, Penn.	14.9	0.0%	0.90	Yes	4.5	1.33	0.31
81	Allegheny General Hospital, Pittsburgh	14.9	0.4%	0.84	Yes	4.0	1.17	0.19
82	Crawford Long Hospital at Emory University, Atlanta	14.8	0.0%	0.86	Yes	4.5	1.26	0.27
83	Orlando Regional Medical Center, Florida	14.8	0.0%	0.93	Yes	4.0	1.52	0.14
84	New York Hospital--Cornell Medical Center	14.8	0.8%	0.99	Yes	5.0	0.93	0.08
85	Scott and White Memorial Hospital, Temple	14.8	0.0%	0.81	Yes	3.0	1.57	0.16
86	Sinai Hospital of Baltimore	14.7	0.0%	0.95	Yes	4.0	1.71	0.24
87	Winthrop--University Hospital, Mineola, N.Y.	14.6	0.0%	0.87	Yes	4.0	1.36	0.18
88	Medical Center of Louisiana at New Orleans	14.5	0.0%	0.96	Yes	4.0	2.80	0.09
89	University of Kentucky Hospital, Lexington	14.5	0.0%	0.85	Yes	3.0	1.96	0.23
90	Beth Israel Medical Center, New York	14.5	0.0%	0.93	Yes	5.0	1.20	0.22
91	University of Nebraska Medical Center, Omaha	14.5	0.9%	0.87	Yes	4.0	0.82	0.19
92	University Hospitals, Oklahoma City	14.5	0.0%	0.99	Yes	4.0	1.90	0.26
93	University of Utah Hospital and Clinics, Salt Lake City	14.5	0.0%	0.84	Yes	3.0	1.63	0.14
94	Evanston Hospital, Illinois	14.5	0.0%	0.69	Yes	4.0	1.03	0.54

95	Henry Ford Hospital, Detroit	14.4	0.9%	0.94	Yes	4.0	0.93	0.23
96	Maricopa Medical Center, Phoenix	14.4	0.0%	0.98	Yes	4.0	2.00	0.05
97	Emory University Hospital, Atlanta	14.2	0.5%	0.90	Yes	4.5	0.87	0.32
98	Brigham and Women's Hospital, Boston	14.2	1.0%	0.78	Yes	3.0	0.76	0.19
99	Harper Hospital, Detroit	14.2	0.0%	0.81	Yes	4.5	1.03	0.23
100	LSU Medical Center--Univ. Hospital, Shreveport, La.	14.1	0.5%	1.23	Yes	5.0	1.19	0.12

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1996 Rheumatology Rankings

Rank	Hospname	Sihq	Percent	Rate	Coth	Tech	Nurses
1	Mayo Clinic, Rochester, Minn.	100.0	37.2%	0.67	No	4.0	0.83
2	Johns Hopkins Hospital, Baltimore	91.5	31.9%	0.91	Yes	5.0	1.36
3	Brigham and Women's Hospital, Boston	68.2	22.9%	0.78	Yes	3.0	0.76
4	Massachusetts General Hospital, Boston	65.7	20.8%	0.76	Yes	5.0	1.40
5	Hospital for Special Surgery, New York	64.1	19.7%	0.12	Yes	4.5	1.12
6	Duke University Medical Center, Durham, N.C.	54.0	14.7%	0.78	Yes	5.0	1.73
7	UCLA Medical Center, Los Angeles	51.2	15.0%	0.68	Yes	5.0	1.03
8	University of Alabama Hospital at Birmingham	47.6	14.7%	1.10	Yes	3.0	1.42
9	Cleveland Clinic	47.4	12.5%	0.68	Yes	4.5	1.10
10	University of Michigan Medical Center, Ann Arbor	45.1	11.7%	0.90	Yes	5.0	1.45
11	Stanford University Hospital, Stanford	35.8	7.8%	0.78	Yes	4.0	1.18
12	University of California--San Francisco Medical Center	31.8	5.1%	0.70	Yes	5.0	1.41
13	New York University Medical Center	31.6	6.7%	0.88	Yes	4.5	0.91
14	University of Pittsburgh Medical Center	31.5	8.3%	1.05	No	4.0	1.37
15	University of Washington Medical Center, Seattle	27.5	3.6%	0.68	Yes	5.0	1.88
16	Hospital of the University of Pennsylvania, Philadelphia	27.1	3.3%	0.81	Yes	5.0	1.52
17	Barnes Hospital, St. Louis	26.2	4.3%	0.86	Yes	5.0	1.00
18	Hospital for Joint Diseases--Orthopedic Institute, New York	26.1	3.6%	0.08	Yes	4.0	1.10
19	University of Chicago Hospitals	25.6	2.3%	0.64	Yes	5.0	1.63
20	Montefiore Medical Center, Bronx, N.Y.	24.6	3.7%	0.98	Yes	4.0	1.52
21	Parkland Memorial Hospital, Dallas	24.1	3.7%	1.07	Yes	4.0	1.61
22	Beth Israel Hospital, Boston	23.5	2.4%	0.72	Yes	4.0	1.53
23	Mount Sinai Medical Center, New York	23.3	2.9%	0.97	Yes	4.5	1.39
24	Medical University of South Carolina, Charleston	22.7	2.4%	0.85	Yes	4.5	1.76
25	University Hospitals of Cleveland	22.1	2.0%	0.88	Yes	5.0	1.84
26	Yale--New Haven Hospital, New Haven, Conn.	21.7	2.9%	0.90	Yes	4.5	0.95
27	Ochsner Foundation Hospital, New Orleans	21.4	1.9%	0.67	Yes	4.0	1.17
28	University Hospital, Denver	21.3	1.1%	0.77	Yes	4.0	1.62
29	UCSD Medical Center, San Diego	21.1	0.9%	0.67	Yes	4.0	1.73
30	Thomas Jefferson University Hospital, Philadelphia	20.9	1.0%	0.74	Yes	4.0	1.38
31	Mary Hitchcock Memorial Hospital, Lebanon, N.H.	20.4	0.5%	0.82	Yes	5.0	1.49
32	New England Medical Center, Boston	20.4	0.9%	0.81	Yes	4.0	2.16
33	University of Iowa Hospitals and Clinics, Iowa City	20.3	0.8%	0.85	Yes	5.0	1.31
34	Western Pennsylvania Hospital, Pittsburgh	20.3	0.9%	0.79	Yes	5.0	0.94
35	University of Texas, M. D. Anderson Center, Houston	20.2	0.4%	0.19	Yes	5.0	1.49
36	North Carolina Baptist Hospital, Winston-Salem	20.0	0.8%	0.89	Yes	5.0	1.40
37	Los Angeles County--USC Medical Center, Los Angeles	19.9	1.1%	0.67	Yes	3.5	1.19
38	Indiana University Medical Center, Indianapolis	19.8	1.7%	1.04	Yes	5.0	1.76
39	William Beaumont Hospital, Royal Oak, Mich.	19.8	0.5%	0.87	Yes	5.0	1.51
40	Memorial Sloan-Kettering Cancer Center, New York	19.6	0.4%	0.80	Yes	5.0	1.56
41	Vanderbilt University Hospital and Clinic, Nashville	19.4	0.9%	0.95	Yes	5.0	1.34
42	University of Virginia Health Sciences Center, Charlottesville	19.3	0.9%	1.00	Yes	5.0	1.77
43	Temple University Hospital, Philadelphia	19.1	0.9%	0.90	Yes	4.0	1.54
44	University of Illinois Hospital and Clinics, Chicago	18.8	0.5%	0.68	Yes	3.0	1.81

45	Rush--Presbyterian--St. Luke's Medical Center, Chicago	18.8	0.9%	0.65	Yes	5.0	1.07
46	St. Luke's Medical Center, Milwaukee	18.7	0.6%	0.92	Yes	4.5	1.45
47	Emory University Hospital, Atlanta	18.6	0.9%	0.90	Yes	5.0	0.87
48	Georgetown University Hospital, Washington, D.C.	18.5	1.4%	0.77	Yes	3.0	1.63
49	St. John's Mercy Medical Center, St. Louis	18.5	0.0%	0.74	Yes	5.0	0.91
50	University of North Carolina Hospitals, Chapel Hill	18.3	1.2%	1.11	Yes	4.5	1.43
51	University of Louisville Hospital, Louisville	18.3	0.0%	0.79	Yes	4.0	1.39
52	Hospital of St. Raphael, New Haven	18.1	0.0%	0.75	Yes	4.0	1.21
53	Beth Israel Medical Center, New York	18.1	0.4%	0.93	Yes	5.0	1.20
54	University of Minnesota Hospital and Clinic, Minneapolis	18.1	1.8%	0.77	Yes	3.0	0.59
55	University Medical Center, Tucson, Ariz.	18.0	1.5%	0.83	Yes	4.0	1.03
56	Allegheny General Hospital, Pittsburgh	17.8	0.4%	0.84	Yes	4.0	1.17
57	Boston University Medical Center-University Hospital, Boston	17.8	0.5%	0.71	Yes	4.0	0.69
58	Florida Hospital Medical Center, Orlando	17.8	0.9%	0.82	No	5.0	1.23
59	Albany Medical Center Hospital, Albany, N.Y.	17.8	0.4%	0.92	Yes	4.0	1.63
60	Sinai Samaritan Medical Center, Milwaukee	17.7	0.0%	0.86	Yes	4.5	1.33
61	Cook County Hospital, Chicago	17.7	0.0%	0.55	Yes	3.0	1.49
62	University of Utah Hospital and Clinics, Salt Lake City	17.7	0.9%	0.84	Yes	3.0	1.63
63	Shands Hospital, Gainesville, Fla.	17.7	0.4%	0.75	Yes	5.0	1.09
64	Evanston Hospital, Evanston, Ill.	17.6	0.0%	0.69	Yes	4.0	1.03
65	New York Hospital--Cornell Medical Center	17.6	1.3%	0.99	Yes	5.0	0.93
66	Northwestern Memorial Hospital, Chicago	17.5	0.0%	0.59	Yes	4.0	0.99
67	Methodist Hospital, Brooklyn, N.Y.	17.4	0.0%	0.48	Yes	4.5	0.77
68	Henry Ford Hospital, Detroit	17.4	1.1%	0.94	Yes	4.0	0.93
69	St. Joseph's Hospital and Medical Center, Phoenix	17.3	0.0%	0.86	Yes	4.0	1.41
70	Lehigh Valley Hospital, Allentown, Penn.	17.2	0.0%	0.90	Yes	4.5	1.33
71	Cedars-Sinai Medical Center, Los Angeles	17.2	1.0%	0.98	Yes	4.0	1.04
72	Baylor University Medical Center, Dallas	17.1	0.5%	0.75	Yes	4.0	1.19
73	Roger Williams Medical Center, Providence, R.I.	17.0	0.0%	0.76	Yes	4.0	1.21
74	Scott and White Memorial Hospital, Temple, Tx.	17.0	0.0%	0.81	Yes	3.0	1.57
75	California Pacific Medical Center, San Francisco	17.0	0.0%	0.81	Yes	4.0	1.41
76	William N. Wishard Memorial Hospital, Indianapolis	16.9	0.0%	0.80	Yes	4.5	1.59
77	University of Wisconsin Hospital and Clinics, Madison	16.9	0.0%	0.91	Yes	5.0	1.08
78	University of Massachusetts Medical Center, Worcester	16.9	0.9%	0.84	Yes	2.5	1.45
79	Long Island Jewish Medical Center, New York	16.8	1.6%	1.21	Yes	4.0	1.07
80	F.G. McGaw Hospital at Loyola University, Maywood, Ill.	16.8	0.0%	0.92	Yes	4.0	1.60
81	Green Hospital of Scripps Clinic, La Jolla, Calif.	16.8	0.0%	0.69	Yes	4.0	1.48
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82	Orlando Regional Medical Center, Orlando	16.7	0.0%	0.93	Yes	4.0	1.52
83	Mary Imogene Bassett Hospital, Cooperstown, N.Y.	16.7	0.0%	0.81	Yes	4.0	0.95
84	University Hospital, Portland, Ore.	16.7	0.0%	0.72	Yes	3.0	1.88
85	University of Kentucky Hospital, Lexington	16.5	0.0%	0.85	Yes	3.0	1.96
86	University of Maryland Medical System, Baltimore	16.5	0.0%	0.85	Yes	3.0	2.37
87	Fairfax Hospital, Falls Church, Va.	16.5	0.0%	0.82	Yes	4.0	1.33
88	Medical Center of Delaware, Wilmington	16.5	0.0%	0.86	Yes	4.0	1.82
89	Sauk Prairie Memorial Hospital, Prairie du Sac, Wisc.	16.4	0.0%	0.71	No	4.5	1.39
90	Mercy Hospital of Pittsburgh, Pittsburgh	16.4	0.0%	0.86	Yes	4.0	1.13
91	Delray Community Hospital, Delray Beach, Fla.	16.4	0.0%	0.70	No	5.0	1.16
92	Harper Hospital, Detroit	16.3	0.0%	0.81	Yes	4.5	1.03
93	Baptist Hospital of Miami	16.3	0.0%	0.71	No	5.0	1.14
94	Columbia Presbyterian Medical Center, New York	16.3	1.1%	1.16	Yes	5.0	1.17

95	University of Cincinnati Hospital	16.2	0.0%	0.88	Yes	4.5	1.28
96	Holy Cross Hospital, Silver Spring, Md.	16.2	0.0%	0.84	Yes	4.0	0.94
97	Maricopa Medical Center, Phoenix	16.2	0.0%	0.98	Yes	4.0	2.00
98	William Beaumont Hospital-Troy, Mich.	16.2	0.0%	0.75	No	4.0	1.81
99	Strong Memorial Hospital--Rochester University	16.2	1.0%	1.12	Yes	4.0	1.69
100	Medical College of Ohio Hospital, Toledo	16.1	0.5%	1.00	Yes	4.0	1.19

1996 Urology Rankings

Rank	Hospital	Sihq	Percent	Rate	Coth	Tech	Nurses	Volume
1	Johns Hopkins Hospital, Baltimore	100.0	55.3%	0.89	Yes	7.5	1.36	1.32
2	Mayo Clinic, Rochester, Minn.	80.3	44.3%	0.57	No	6.5	0.83	3.76
3	Cleveland Clinic	54.7	25.1%	0.60	Yes	7.0	1.10	1.60
4	UCLA Medical Center, Los Angeles	52.3	23.4%	0.57	Yes	7.0	1.03	2.29
5	Massachusetts General Hospital, Boston	50.1	22.3%	0.81	Yes	8.0	1.40	2.21
6	Barnes Hospital, St. Louis	40.5	17.3%	0.77	Yes	7.0	1.00	1.52
7	Duke University Medical Center, Durham	38.8	14.0%	0.67	Yes	8.0	1.73	1.86
8	University of Texas, M. D. Anderson Center, Houston	33.9	10.4%	0.27	Yes	7.0	1.49	1.93
9	Memorial Sloan-Kettering Cancer Center, New York	32.7	10.3%	0.68	Yes	7.0	1.56	2.82
10	Stanford University Hospital, Stanford, Calif.	31.0	11.2%	0.79	Yes	6.0	1.18	2.15
11	Baylor University Medical Center, Dallas	30.5	9.4%	0.62	Yes	7.0	1.19	1.57
12	New York Hospital--Cornell Medical Center	30.1	10.5%	0.76	Yes	8.0	0.93	1.43
13	University of California--San Francisco Medical Center	28.3	6.7%	0.50	Yes	8.0	1.41	1.70
14	University of Michigan Medical Center, Ann Arbor	23.0	3.8%	0.66	Yes	8.0	1.45	1.40
15	University of Washington Medical Center, Seattle	22.5	2.7%	0.54	Yes	8.0	1.88	1.58
16	Brigham and Women's Hospital, Boston	21.8	5.6%	0.66	Yes	6.0	0.76	1.19
17	Hospital of the University of Pennsylvania, Philadelphia	21.7	2.8%	0.66	Yes	8.0	1.52	2.76
18	Indiana University Medical Center, Indianapolis	21.5	4.8%	1.13	Yes	8.0	1.76	1.40
19	Columbia Presbyterian Medical Center, New York	21.1	5.1%	0.93	Yes	7.0	1.17	1.67
20	Northwestern Memorial Hospital, Chicago	20.8	4.3%	0.71	Yes	7.0	0.99	1.54
21	University of Iowa Hospitals and Clinics, Iowa City	20.4	2.8%	0.69	Yes	8.0	1.31	1.28
22	Emory University Hospital, Atlanta	20.2	4.6%	0.79	Yes	7.0	0.87	2.47
23	Thomas Jefferson University Hospital, Philadelphia	20.0	2.0%	0.60	Yes	7.0	1.38	1.01
24	Los Angeles County--USC Medical Center	18.6	2.7%	0.63	Yes	5.0	1.19	0.18
25	UCSD Medical Center, San Diego	18.6	0.7%	0.34	Yes	6.5	1.73	1.67
26	University of Virginia Health Sciences Center, Charlottesville	18.4	3.3%	1.39	Yes	8.0	1.77	1.88
27	Parkland Memorial Hospital, Dallas	18.3	2.2%	0.84	Yes	7.0	1.61	0.67
28	Scott and White Memorial Hospital, Temple	18.0	0.6%	0.60	Yes	6.0	1.57	2.28
29	University of Chicago Hospitals	17.9	0.8%	0.72	Yes	8.0	1.63	1.68
30	Cook County Hospital, Chicago	17.9	0.8%	0.46	Yes	5.5	1.49	0.59
31	University Hospital, Portland	17.8	0.8%	0.37	Yes	5.0	1.88	1.85
32	Maricopa Medical Center, Phoenix	17.6	0.0%	0.54	Yes	7.0	2.00	0.96
33	University of California--Davis Medical Center	17.6	0.3%	0.27	Yes	6.0	2.22	1.35
34	Beth Israel Hospital, Boston	17.6	0.0%	0.60	Yes	7.0	1.53	2.52
35	Harper Hospital, Detroit	17.5	0.8%	0.58	Yes	7.5	1.03	2.72
36	University Hospital, Denver	17.5	2.4%	0.93	Yes	6.0	1.62	1.63
37	Mary Hitchcock Memorial Hospital, Lebanon	17.5	0.0%	0.63	Yes	8.0	1.49	1.36
38	St. Luke's Medical Center, Milwaukee	17.2	0.0%	0.64	Yes	7.5	1.45	2.84
39	Albany Medical Center Hospital	17.1	0.5%	0.67	Yes	6.5	1.63	1.49
40	University of Utah Hospital and Clinics, Salt Lake City	17.1	0.4%	0.61	Yes	6.0	1.63	0.57
41	Medical University of South Carolina, Charleston	17.1	0.6%	0.70	Yes	7.0	1.76	1.63
42	University of Maryland Medical System, Baltimore	17.1	1.5%	0.76	Yes	5.5	2.37	1.83
43	University of Illinois Hospital and Clinics, Chicago	17.1	0.0%	0.55	Yes	6.0	1.81	1.07
44	F.G. McGaw Hospital at Loyola University, Maywood	16.9	0.4%	0.70	Yes	7.0	1.60	1.73
45	William Beaumont Hospital, Royal Oak	16.7	0.8%	0.87	Yes	8.0	1.51	2.27

46	Green Hospital of Scripps Clinic, La Jolla	16.7	0.0%	0.64	Yes	6.5	1.48	2.05
47	Georgetown University Hospital, Washington, D.C.	16.6	1.8%	0.95	Yes	6.0	1.63	1.80
48	University of Cincinnati Hospital	16.6	0.0%	0.53	Yes	6.5	1.28	1.73
49	University of Louisville Hospital	16.6	0.0%	0.33	Yes	6.0	1.39	0.77
50	University of Connecticut Health Center, Farmington	16.5	0.0%	0.45	Yes	5.0	1.51	0.88
51	Rush--Presbyterian--St. Luke's Medical Center, Chicago	16.3	0.0%	0.61	Yes	8.0	1.07	1.94
52	Roger Williams Medical Center, Providence	16.2	0.0%	0.40	Yes	6.0	1.21	2.90
53	Methodist Hospital, Houston	16.2	3.1%	1.22	Yes	7.0	1.03	1.60
54	Good Samaritan Regional Medical Center, Phoenix	16.2	0.0%	0.66	Yes	7.5	1.30	1.64
55	Orlando Regional Medical Center	16.1	0.0%	0.70	Yes	7.0	1.52	1.28
56	Mount Sinai Medical Center, New York	16.1	1.6%	1.05	Yes	7.5	1.39	1.21
57	University of Miami, Jackson Memorial Hospital	16.0	1.2%	0.80	Yes	5.5	1.49	0.59
58	New England Deaconess Hospital, Boston	16.0	0.5%	0.54	Yes	6.0	1.00	2.06
59	USC-Kenneth Norris Cancer Hospital, Los Angeles	15.9	1.2%	0.59	No	6.0	1.37	8.13
60	North Carolina Baptist Hospital, Winston-Salem	15.9	1.2%	1.01	Yes	8.0	1.40	1.24
61	University of Wisconsin Hospital and Clinics, Madison	15.9	0.4%	0.71	Yes	8.0	1.08	2.84
62	Shands Hospital, Gainesville, Fla.	15.8	0.5%	0.71	Yes	8.0	1.09	1.40
63	Jewish Hospital of St. Louis	15.8	0.0%	0.47	Yes	5.0	1.26	2.48
64	William N. Wishard Memorial Hospital, Indianapolis	15.7	0.0%	0.72	Yes	6.5	1.59	1.18
65	New York University Medical Center	15.7	2.8%	1.07	Yes	7.0	0.91	1.43
66	Howard University Hospital, Washington, D.C.	15.6	0.0%	0.68	Yes	7.0	1.29	1.08
67	University of Massachusetts Medical Center, Worcester	15.5	0.0%	0.62	Yes	4.5	1.45	1.26
68	Penn State's Milton S. Hershey Medical Center	15.5	1.7%	1.08	Yes	7.0	1.25	1.85
69	Lahey Clinic Hospital, Burlington	15.4	4.9%	0.99	No	7.0	0.71	3.71
70	University Hospitals, Oklahoma City	15.4	0.0%	0.75	Yes	6.5	1.90	1.23
71	New England Medical Center, Boston	15.4	0.0%	0.72	Yes	6.0	2.16	1.14
72	Vanderbilt University Hospital and Clinic, Nashville	15.4	1.0%	0.98	Yes	7.5	1.34	1.72
73	Medical Center Hospital of Vermont, Burlington	15.3	0.0%	0.61	Yes	7.0	1.04	0.56
74	Hospital of St. Raphael, New Haven	15.2	0.0%	0.65	Yes	6.0	1.21	2.23
75	Temple University Hospital, Philadelphia	15.2	0.7%	0.94	Yes	6.5	1.54	1.18
76	Roswell Park Cancer Institute, Buffalo	15.1	0.7%	0.08	No	6.5	2.92	2.40
77	Boston University Medical Center-University Hospital	15.1	1.7%	0.77	Yes	7.0	0.69	2.19
78	University Medical Center, Tucson	15.1	0.5%	0.71	Yes	7.0	1.03	1.88
79	Crawford Long Hospital at Emory University, Atlanta	15.1	0.0%	0.78	Yes	7.5	1.26	2.99
80	Montefiore Medical Center, Bronx	15.1	0.7%	1.04	Yes	7.0	1.52	2.30
81	University Hospital of Arkansas, Little Rock	15.0	0.0%	0.75	Yes	5.5	1.81	1.94
82	Tulane University Hospital and Clinics, New Orleans	15.0	0.5%	0.74	Yes	6.0	1.21	2.09
83	Los Angeles County-- Harbor--UCLA Medical Center	14.9	1.2%	0.45	No	6.0	1.38	0.39
84	Methodist Hospital, Brooklyn	14.9	0.0%	0.46	Yes	7.0	0.77	1.78
85	Yale--New Haven Hospital	14.9	1.0%	0.82	Yes	7.5	0.95	1.69
86	University of Kansas Hospital, Kansas City	14.8	0.4%	0.80	Yes	7.0	1.18	1.87
87	Grant Medical Center, Columbus	14.8	0.0%	0.52	Yes	6.0	0.93	0.90
88	University Hospitals of Cleveland	14.7	0.0%	0.99	Yes	8.0	1.84	1.64
89	California Pacific Medical Center, San Francisco	14.7	0.4%	0.88	Yes	6.5	1.41	1.42
90	Hurley Medical Center, Flint	14.7	0.0%	0.60	Yes	5.5	1.06	0.90
91	Lehigh Valley Hospital, Allentown	14.6	0.0%	0.82	Yes	7.0	1.33	2.48
92	Ochsner Foundation Hospital, New Orleans	14.6	0.6%	0.88	Yes	7.0	1.17	2.89
93	University Hospital, Albuquerque	14.6	0.0%	0.69	Yes	6.0	1.20	1.49
94	University of Nebraska Medical Center, Omaha	14.6	0.0%	0.36	Yes	6.5	0.82	0.58
95	Mary Imogene Bassett Hospital, Cooperstown	14.5	0.0%	0.62	Yes	6.0	0.95	0.41
96	St. Joseph's Hospital and Medical Center, Phoenix	14.4	0.0%	0.88	Yes	7.0	1.41	1.28

97	Medical Center of Louisiana at New Orleans	14.3	0.0%	0.87	Yes	6.5	2.80	0.32
98	Mount Sinai Medical Center, Miami Beach	14.3	0.0%	0.62	Yes	7.0	0.80	0.96
99	Mercy Hospital and Medical Center, Chicago	14.2	0.0%	0.55	Yes	5.0	0.91	1.46
100	Fairfax Hospital, Falls Church	14.2	0.6%	0.91	Yes	6.0	1.33	1.28

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