



## **New CareChex Study Assesses Quality of University Hospital Care in the U.S.**

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**With notable exception of cancer care, university hospitals no more likely to provide best quality of care than non-university medical centers**

CareChex, a division of The Delta Group specializing in rating the quality of hospital and physician care, today released a new study, *An Assessment of the Quality of University Hospital Care in the U.S.*, that investigates whether or not university hospitals outperform other hospitals on objective measures of quality. Importantly, to accurately assess the relative quality of care provided by university hospitals, the study removed unusually difficult cases (i.e., outliers) and adjusted for differences in patient risk factors (i.e., clinical and demographic characteristics).

Study results were surprising: While university hospitals do very well as a group in cancer care and in overall medical care, in many clinical categories they either performed the same as non-university hospitals or sometimes far worse. For example, 89% of university hospitals fall below the national average in orthopedic care, and 85% fall below the national average for general surgery.

CareChex looked across all key components of quality available for comparison – process, outcomes, and patient satisfaction – to form a single composite percentile score and attendant quality ranking. A total of 118 university hospitals were evaluated using The Delta Group’s National Quality Rating Database (NQRD), which includes virtually all general, acute, non-federal U.S. hospitals.

"Most people assume that a university hospital will provide better quality care because these institutions typically conduct cutting-edge academic research, have lofty reputations and adopt the latest treatment protocols and technologies," says Dr. Thane Forthman, Managing Principal of The Delta Group. "We were especially surprised to see the study reveal that some of the nation’s best-known university hospitals scored in the bottom quartile of all hospitals nationally for overall quality of hospital care."

“Certainly more research is needed, but at university hospitals you have a large population of interns and residents who are still being trained. While under the supervision of an attending physician, they have the autonomy to make rounds, order lab tests and make clinical decisions, even though they lack time-tested, hands-on experience,” says Forthman.

“More importantly, interns and residents often work extended shifts of up to 80 hours per week, which empirical research has shown dramatically increases fatigue-related medical and diagnostic errors, medication errors and other adverse events.”

“Regardless of the potential factors contributing to the issue, patients should consider the quality of care provided by all hospitals in their market before making the assumption that a university hospital will provide superior care.”

Among the key CareChex study findings:

- University hospitals appeared **more frequently** in the top 10% of all hospitals nationally in cancer care and overall medical care: 43% of university hospitals studied performed in the top 10% nationally for cancer care, while 17% performed in the top 10% for overall medical care.
- Surprisingly, many highly-regarded university hospitals performed in the **bottom 25%** of all hospitals nationally for overall quality of hospital care, including: Emory University Hospital, Dartmouth-Hitchcock Memorial Hospital, George Washington University Hospital, Georgetown University Hospital, Hospital of University of Pennsylvania, Stanford Hospital, Shands Hospital at the University of Florida, The Johns Hopkins Hospital, The University of Chicago Medical Center and University of North Carolina Hospital (Chapel Hill).
- Of the 118 university hospitals evaluated, 17 were in the top 10% of all hospitals nationally for overall quality of care in three or more clinical categories:

- Nine Clinical Categories: Ball Memorial Hospital (Indiana University); Gunderson Lutheran Medical Center (University of Wisconsin)

- Six Clinical Categories: Massachusetts General Hospital (Harvard Medical School)

- Five Clinical Categories: Hackensack University Medical Center

- Four Clinical Categories: Baylor University Medical Center; Cedars-Sinai Medical Center (UCLA & USC); Memorial Health University Medical Center (Mercer University); Ohio State University (OSU) Hospitals; Rush University Medical Center; Medical University of South Carolina (MUSC); University of Massachusetts Medical Center

- Three Clinical Categories: Abbott Northwestern (University of Minnesota); Harper University Hospital; Thomas Jefferson University Hospital; Yale-New Haven Hospital; University Medical Center (University of Arizona); University of Wisconsin Hospitals

- Of the 118 university hospitals, the following ranked #1 in more than one clinical category:

- Gunderson Lutheran Medical Center (University of Wisconsin) ranked #1 in three clinical categories (overall hospital care, overall surgical care, and major cardiac surgery)

- Massachusetts General Hospital (Harvard Medical School) ranked #1 in two clinical categories (cancer care and general surgery)

- University hospitals appeared **less frequently** in the top 10% of all hospitals nationally in six clinical categories: Orthopedic Care (2% in the nation's top 10%); Neurological Care (2% in the top 10%); General Surgery (3% in the top 10%); Cardiac Care (6% in the top 10%); Major Orthopedic Care (6% in the top 10%), and Overall Hospital Care (7% in the top 10%).
- University hospitals appeared with essentially the **same frequency** in the top 10% of all hospitals nationally in the following categories: Overall Surgical Care (10% in the nation's top 10%); Pulmonary Care (11% in the top 10%); Major Cardiac Surgery (11% in the top 10%); Major Neuro-Surgery (11% in the top 10%)
- University hospital quality scores fall disproportionately **below** the national average for the majority of clinical categories: Orthopedic Care (89% fall below the national average); General Surgery (85% fall below); Major Orthopedic Surgery and Neurological Care (78% fall below, respectively); Overall Hospital Care (74% fall below); Overall Surgical Care (73% fall below); Major Neuro-Surgery (67% fall below); Cardiac Care (63% fall below); Major Cardiac Surgery (62% fall below).

A full narrative of the 2010 CareChex study, *An Assessment of the Quality of University Hospital Care in the U.S.*, is available at: <http://www.carechex.com/media/univhospstudy.aspx>

Also available are graphs of the percent of university hospitals in the nation's top 10% by clinical category: <http://www.carechex.com/media/univ10.aspx> and of the university hospitals that fall below the national average by clinical category: <http://www.carechex.com/media/univ50.aspx>

### **About The Delta Group and CareChex**

As the nation's largest privately-held healthcare information services company, The Delta Group provides an extensive array of products and services designed to measure, manage, and monitor the clinical, financial, and market performance of healthcare organizations.

CareChex, a division of The Delta Group, specializes in rating and ranking the quality of hospital and physician care using both public and proprietary measures of performance including process of care, outcomes of care, and patient satisfaction. Learn more at [www.carechex.com](http://www.carechex.com)

### **More on Study Design, Data Sources and Methods**

In November 2010, CareChex released a significant research study relating to the quality of care provided by U.S. university hospitals.

The research project conducted by CareChex was designed as a longitudinal study spanning the most recent three (3) years of federal fiscal year data using all Medicare inpatient discharges from the Center for Medicare and Medicaid Studies (CMS) Medicare Provider Assessment and Review (MedPAR) file as well as the Department of Health and Human Services (DHHS) Hospital Compare database. All CareChex studies utilized both public and proprietary methods validated by third-party organizations for evaluating hospital quality performance. These methods include process of care measures developed by The Joint Commission (TJC) for national accreditation of healthcare organizations, inpatient quality and patient safety measures developed by Stanford University under sub-contract with the federal government's Agency for Health Research and Quality (AHRQ), patient satisfaction measures developed by CMS using a standardized national hospital survey, and proprietary outcome measures developed by The Delta Group for evaluating rates of hospital inpatient mortality, post-surgical complications, and global patient safety events. For more information regarding the construction and validation of the aforementioned methods, please access the following web links:

- Process of Care Measures:

<http://www.jointcommission.org/PerformanceMeasurement/PerformanceMeasurement/default.htm>

- Inpatient Quality Measures:

[http://www.qualityindicators.ahrq.gov/downloads/iqi/iqi\\_guide\\_v31.pdf](http://www.qualityindicators.ahrq.gov/downloads/iqi/iqi_guide_v31.pdf)

- Patient Safety Measures:

[http://www.qualityindicators.ahrq.gov/downloads/psi/psi\\_guide\\_v31.pdf](http://www.qualityindicators.ahrq.gov/downloads/psi/psi_guide_v31.pdf)

- Patient Satisfaction Measures:

[http://www.cms.gov/HospitalQualityInits/30\\_HospitalHCAHPS.asp](http://www.cms.gov/HospitalQualityInits/30_HospitalHCAHPS.asp)

- Proprietary Outcome Measures:

<http://www.thedeltagroup.com/assets/PDF/Publications/Risk-Models.pdf>

Additionally, specific statistical methods used in the study are provided under separate cover along with the resultant study findings. These methods include statistical significance testing and distribution standardization.