



HEALTHGRADES[®]
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HealthGrades America's 50 Best Hospitals Report

February 2011

Co-authors: Kristin Reed, M.P.H., Rick May, M.D.

Major Contributors:

Harold Taylor, Ph.D. and Alex Brown, statistical analysis

Carol Nicholas, M.S.T.C, editing, publishing

Health Grades, Inc.
999 18th Street, Suite 600
Denver, Colorado 80202



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America's 50 Best Hospitals Report

February 2011

Executive Summary	1
Summary of Findings	2
Clinical Achievements.....	2
Characteristics of America's 50 Best Hospitals	2
Three-Step Methodology.....	2
Mortality and Complication Based Outcomes 2011 Methodology Brief (Step 1).....	3
Distinguished Hospital Award for Clinical Excellence™ 2011 Methodology (Step 2)	4
HealthGrades America's 50 Best Hospitals 2011 Methodology (Step 3).....	4
Results	5
Clinical Achievements of America's 50 Best Hospitals	5
America's 50 Best Hospitals have Better Clinical Outcomes	5
Characteristics of America's 50 Best Hospitals.....	6
Twenty-Eight Cities have One or More HealthGrades America's 50 Best Hospitals	6
America's 50 Best Hospitals are Not-For-Profit and Larger in Size	6
America's 50 Best Hospitals CEO Survey Results.....	7
Transparency.....	7
Positive Operating Margins.....	7
C-Level Tenure	7
Computerized Physician Order Entry.....	7
Investment in Physician Feedback and Leadership Development.....	7
Recognizing Consistent Quality Outcomes as an Important Benchmark	8
Acknowledgements	8
References.....	8
Appendix A. America's 50 Best Hospitals by Designated Market Area.....	9
Appendix B: Inhospital Mortality Performance: America's 50 Best Hospitals (A50B) Compared to All Other U.S. Hospitals.....	11
Appendix C: Inhospital Complications Performance: America's 50 Best Hospitals (A50B) Compared to All Other U.S. Hospitals.....	12
Appendix D: Survey Results	13



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Each year HealthGrades independently assesses the quality of care at the nation's 5,000 hospitals and publishes the results of its annual research on the Web to help consumers in choosing a hospital. In this study, HealthGrades objectively identified hospitals that demonstrated superior and sustained clinical quality year over year for up to nine consecutive analysis years. This report examines the differences between these top 50 hospitals as compared to the rest of nation's hospitals in terms of potential lives saved and in-hospital complications avoided. Lastly, HealthGrades also set out to learn more about what the top 50 facilities have in common. For a list of best-performing hospitals and for individual hospital quality results, see www.HealthGrades.com.

Executive Summary

For the fifth consecutive year, HealthGrades has identified 50 hospitals that have provided outstanding clinical quality year over year and recognized these hospitals as America's 50 Best Hospitals (A50B). HealthGrades has been rating hospitals based on quality outcomes (risk-adjusted in-hospital mortality and complication rates) for over a decade and displays every nonfederal hospital's performance for 26 diagnoses and procedures on www.HealthGrades.com. Annually, hospitals that rank among the top 5% in the nation as measured over a three-year period are identified as Distinguished Hospitals for Clinical Excellence. America's 50 Best hospitals are those facilities that have been Distinguished Hospitals for Clinical Excellence for the most consecutive analysis years. Of the America's 50 Best Hospitals recipients this year, 28 facilities have made the top rankings for nine consecutive analysis years, six for eight years, 15 for seven years, and one facility for six years.

This report examines the differences between these America's 50 Best Hospitals compared to the rest of nation's hospitals in terms of potential lives saved and in-hospital complications avoided. This year, HealthGrades also set out to learn more about what these 50 facilities have in common. HealthGrades sent a 10-question email survey to the Chief Executive Officers and Chief Medical Officers of these 50 hospitals. The goal was to learn if there are best practices employed by these facilities that drive their year-over-year clinical achievements. Eighteen percent of the facilities responded to our survey providing some insight into what makes an America's 50 Best Hospital.

If all hospitals performed at the level of America's 50 Best Hospitals across 17 procedures and conditions, 173,310 Medicare lives could potentially have been saved.

Summary of Findings

HealthGrades America's 50 Best Hospitals are those hospitals that have year over year ranked among the top 5% in the nation for clinical quality. These elite organizations represent the best of the top-performing hospitals and set the quality standard for American hospitals.

Clinical Achievements

During the period from 2007 through 2009, compared to all other hospitals, America's 50 Best Hospitals had:

Patients have, on average, a 28.59% lower chance of dying at America's 50 Best Hospitals compared to all other hospitals across 17 procedures and conditions.

- Overall **28.59% lower risk-adjusted inhospital mortality** across 17 procedures and diagnoses where inhospital mortality was the outcome studied.
- Overall **3.45% lower risk-adjusted inhospital complications** across nine procedures where the inhospital complication rate was the outcome studied.
- From 2007 through 2009, if all hospitals performed at the level of America's 50 Best Hospitals:
 - 173,310 Medicare deaths may have been prevented.
 - 6,867 Medicare inhospital complications may have been avoided.

Characteristics of America's 50 Best Hospitals

- America's 50 Best Hospitals are located in 28 cities in 19 states with overall populations ranging from 265,877 to 18.5 million people.
- Overall 86% of America's 50 Best Hospitals are Not-For-Profit or Government entities.
- Overall 82% of America's 50 Best Hospitals have 250 beds or more and 58% have more than 350 beds.
- As reported by the hospitals in the CEO/CMO survey, America's 50 Best Hospitals share the following operational practices:
 - Transparency of clinical quality outcomes
 - Positive operating margins
 - Above-average tenure of the Executive team
 - Computerized Physician Order Entry systems that support real-time clinical decision making
 - Investment in physician feedback and leadership development

Three-Step Methodology

In order to evaluate overall hospital performance and to identify the 50 best-performing hospitals in clinical excellence across the United States, HealthGrades uses a three-step methodology:

1. Mortality and Complication-based Outcomes Methodology
2. Distinguished Hospital Award for Clinical Excellence™ Methodology
3. HealthGrades America's 50 Best Hospitals Methodology

This year's *America's 50 Best Hospitals Report* concentrates on the 26 procedures and diagnoses for which HealthGrades has developed predictive logistic regression models. The 26 procedures and diagnoses, including 17 diagnoses and procedures that measure mortality and nine procedures that measure complications, are as follows.

Mortality-based Procedures and Diagnoses

- Bowel Obstruction
- Chronic Obstructive Pulmonary Disease
- Coronary Bypass Surgery
- Coronary Interventional Procedures (Angioplasty/Stent)
- Diabetic Acidosis and Coma
- Gastrointestinal Bleed
- Gastrointestinal Surgeries and Procedures
- Heart Attack (Acute Myocardial Infarction)
- Heart Failure
- Pancreatitis
- Pneumonia
- Pulmonary Embolism
- Resection/Replacement of Abdominal Aorta
- Respiratory Failure
- Sepsis
- Stroke
- Valve Replacement Surgery

Complication-based Procedures

- Back and Neck Surgery (Spinal Fusion)
- Back and Neck Surgery (except Spinal Fusion)
- Carotid Surgery
- Cholecystectomy
- Hip Fracture Repair
- Peripheral Vascular Bypass
- Prostatectomy
- Total Hip Replacement
- Total Knee Replacement



Mortality and Complication Based Outcomes 2011 Methodology Brief (Step 1)

To help consumers evaluate and compare hospital performance, HealthGrades analyzes patient outcomes data for virtually every hospital in the country. HealthGrades purchased the initial data from the Centers for Medicare and Medicaid Services (CMS). The Medicare data (MedPAR file) from CMS contain approximately 40 million inpatient records for Medicare hospitalizations from 2007 through 2009.

Using a logistic-regression based risk-adjustment model to compare performance among hospitals, each hospital is assigned one of three star ratings: 1-star (poor), 3-star (as expected), or 5-star (best) for each of the above patient groups. The purpose of risk adjustment is to obtain fair statistical comparisons among disparate populations or groups. Significant differences in demographic and clinical risk factors are found among patients treated in different hospitals; and therefore, risk adjustment of the data is needed to make accurate and valid comparisons of clinical outcomes at different hospitals. This is important because in health care patients differ from one another with respect to their health status, demographics, and type of procedure performed. Risk factors include gender, age, specific procedure performed, and current health conditions such as hypertension, diabetes, and congestive heart failure. The risk adjustment used by HealthGrades takes these factors into consideration to make fair and accurate comparisons of hospitals based upon the types of patients treated.

Developing ratings involves two steps:

- First, the **predicted** value for a specific outcome is calculated.
- Second, the predicted outcome is compared to the **actual outcome**.

HealthGrades determines if the difference between the predicted outcome and the actual outcome was statistically significant.

The following rating system was applied to the data for all procedures and diagnoses:

- ★★★★★ Actual performance was better than predicted and the difference was statistically significant.
- ★★★ Actual performance was not statistically different from what was predicted.
- ★ Actual performance was worse than predicted and the difference was statistically significant.

In general, 70% to 80% of hospitals in each procedure/diagnosis are classified as three stars, with actual results statistically the same as predicted results. Approximately 10% to 15% are 1-star hospitals and 10% to 15% are 5-star hospitals.

Visit www.HealthGrades.com to view hospital ratings and to read the complete methodology *Hospital Report Cards™ Mortality and Complication-based Outcomes 2011 Methodology*.



Distinguished Hospital Award for Clinical Excellence™ 2011 Methodology (Step 2)

To be considered for a HealthGrades Distinguished Hospital Award for Clinical Excellence, a hospital must have star ratings in at least 19 of the 26 HealthGrades procedures and diagnoses ratings using MedPAR data.

After creating a list of hospitals that met the above criteria, HealthGrades took the following steps to determine the Distinguished Hospital Award for Clinical Excellence recipients:

1. Calculated the average star rating and average z-score for each hospital by averaging all of their MedPAR-based ratings and the corresponding z-scores.
2. Ranked hospitals in descending order by their average star rating, with ties broken by average z-score.
3. Selected the top 268 hospitals on the list (which represents the top 5% of all hospitals).
4. Designated these hospitals as Distinguished Hospital Award for Clinical Excellence recipients.



HealthGrades America's 50 Best Hospitals 2011 Methodology (Step 3)

HealthGrades America's 50 Best Hospitals Award recognizes hospitals for consistent excellence by identifying those hospitals that have received a HealthGrades Distinguished Hospital Award for Clinical Excellence for the most consecutive years of the nine years HealthGrades has designated this award. To identify America's 50 Best Hospitals, HealthGrades used a two-step process:

1. Hospitals that were Distinguished Hospital Award for Clinical Excellence recipients for all of the last seven, eight, and nine years were identified.
2. Hospitals that were Distinguished Hospital Award for Clinical Excellence recipients for all of the last six years were identified.
 - The six-year recipients were sorted by z-score, using the average z-score from the most recent Distinguished Hospital Award for Clinical Excellence analysis. The average z-score is a statistical measure of hospital quality outcomes.
 - The top hospitals from this list were then added to the list from step 1 to create a list of America's 50 Best Hospitals.

Results

Clinical Achievements of America's 50 Best Hospitals

The HealthGrades America's 50 Best Hospitals Award designation recognizes hospitals that demonstrated superior and sustained clinical quality over an eleven-year time period, based upon an analysis of more than 140 million Medicare patient records from 1999 through 2009 (the most recent year available).

HealthGrades America's 50 Best Hospitals were selected by identifying those hospitals that have received the HealthGrades Distinguished Hospital Award for Clinical Excellence for the most consecutive years. Hospitals that are recognized with a HealthGrades Distinguished Hospital Award for Clinical Excellence rank among the top 5% nationally for quality. America's 50 Best Hospitals consistently outperformed all other hospitals across all procedures and diagnoses studied.

America's 50 Best Hospitals have Better Clinical Outcomes

When compared to all other hospitals, America's 50 Best Hospitals had a **28.59% overall lower risk-adjusted in-hospital mortality** rate associated with the 17 procedures and diagnoses where mortality was studied as the outcome. America's 50 Best Hospitals had lower risk-adjusted mortality across each of the 17 diagnoses and procedures studied with differences between these top 50 hospitals and all others ranging from 15.47% to 43.82% (see *Appendix B*). The top four areas associated with the greatest relative reduction in risk-adjusted in-hospital mortality are noted in *Table 1*.

Table 1. Relative Reduction in Risk-Adjusted In-hospital Mortality Associated with America's 50 Best Hospitals Compared to All Other Hospitals

Procedure / Diagnosis	Relative Reduction in Risk-Adjusted In-hospital Mortality Associated with America's 50 Best Hospitals Compared to All Other Hospitals*
Pneumonia	43.82% lower risk-adjusted mortality
Chronic Obstructive Pulmonary Disease	42.81% lower risk-adjusted mortality
Bowel Obstruction	37.64% lower risk-adjusted mortality
Pulmonary Embolism	34.90 % lower risk-adjusted mortality

* Relative Risk Reduction is the difference in observed to expected performance between America's 50 Best Hospitals and all other hospitals. For complete results and methodology, see *Appendix B*.

When compared to all other hospitals, America's 50 Best Hospitals had a **3.45% overall lower in-hospital risk-adjusted complication** rate associated with the nine procedures studied where major in-hospital complications were the outcome studied. Risk-adjusted in-hospital complications were lower at America's 50 Best Hospitals for eight of the nine complication-based procedures studied with differences ranging from under 1% to 10.95% (see *Appendix C*).

The top three areas associated with the greatest relative reduction in risk-adjusted in-hospital complications associated with America's 50 Best Hospitals, as compared to all other hospitals, are noted in *Table 2*.

America's 50 Best Hospitals had 28.59% lower risk-adjusted in-hospital mortality and 3.45% lower risk-adjusted in-hospital complications compared to all other hospitals.

Table 2. Relative Reduction in Risk-Adjusted Complications Associated with America's 50 Best Hospitals Compared to All Other Hospitals

Procedure / Diagnosis	Relative Reduction in Risk-Adjusted Complications Associated with America's 50 Best Hospitals Compared to All Other Hospitals*
Prostatectomy	10.95% fewer risk-adjusted in-hospital major complications
Peripheral Vascular Bypass	8.91% fewer risk-adjusted in-hospital major complications
Total Hip Replacement	6.34% fewer risk-adjusted in-hospital major complications

* Relative Risk Reduction is the difference in observed to expected performance between A50B hospitals and all other hospitals. For complete results and methodology, see *Appendix C*.

Characteristics of America's 50 Best Hospitals

Twenty-Eight Cities have One or More HealthGrades America's 50 Best Hospitals

Twenty eight cities, as defined by The Nielsen Company Designated Market Areas, in 19 states have at least one hospital recognized as a HealthGrades America's 50 Best Hospital as listed in *Appendix A*.

- West Palm Beach Florida leads the nation with six America's 50 Best Hospitals.
- Chicago and Cleveland come in next with four America's 50 Best Hospitals each.

America's 50 Best Hospitals are in communities of all size from Panama City, Florida with a population of 265,877, to Los Angeles, California with a population of over 14 million and New York with a population of 18.5 million.

America's 50 Best Hospitals are Not-For-Profit and Larger in Size

In looking at the ownership status and size of America's 50 Best Hospitals, 43 (86%) of America's 50 Best Hospitals are not-for-profit or local government entities. This is consistent with the overall distribution of the hospitals considered eligible for the award (hospitals with 30 or more cases in at least 19 of the 26 cohorts studied) where 86% were not-for-profit or government entities. However, in terms of bed size, 82% of America's 50 Best Hospitals have 250 beds or more compared to 54.8% of the eligible hospitals. Over half of America's 50 Best Hospitals (58%) have 350 beds or more compared to 31.4% of the eligible hospitals.

Table 3. Ownership Status of America's 50 Best Hospitals

Status	A50B Hospitals		Eligible Hospitals	
	Frequency	Percent	Frequency	Percent
For Profit	7	14.0	207	14.3
Government	4	8.0	177	12.2
Not-for-profit	39	78.0	1,068	73.6
Total	50	100	1,452	100

Table 4. Bed Size of America's 50 Best Hospitals

Bed Size	A50B Hospitals		Eligible Hospitals	
	Frequency	Percent	Frequency	Percent
0-99	0	0	17	1.17
100-249	9	18.0	638	43.9
250-349	12	24.0	340	23.4
350-499	20	40.0	262	18.0
500+	9	18.0	195	13.4

America's 50 Best Hospitals CEO Survey Results

Nine hospitals responded to the CEO survey, out of the 50 hospitals that were surveyed, resulting in an 18% response rate. While the numbers are small, there are some interesting findings that highlight several of the practices these top hospitals have executed across their organizations (see *Appendix D* for survey results).

Transparency

All respondents indicated that their Board of Directors and their hospital Managers receive regular quality outcomes communication; 77.8% indicated that physicians and the entire staff receive this information; and 55.6% told us that they provide quality information to the public via their website or through other communications. Over half (55.6%) involve community members in their quality and patient experience improvement efforts through board seats (20.0%) or through having community members sit on major policy quality committees (80.0%).

Positive Operating Margins

Only one of nine hospitals responding reported an operating margin less than 2%. The remaining eight were split with half reporting a 2 to 4% operating margin and half reporting greater than a 4% margin.

C-Level Tenure

A CEO survey conducted in 2005 by the American College of Healthcare Executives found that the average tenure for hospital CEOs was 5.6 years with a median of 3.6 years.¹ The hospitals that we surveyed reported no less than a three to five year tenure of the executive team with over half (55.6%) reporting the average tenure as being greater than 10 years.

Computerized Physician Order Entry

America's 50 Best hospitals appear to be adopting technology at a faster rate than their counterparts. Of the seven hospitals that answered a question concerning computerized physician order entry (CPOE), the majority (85.7%) reported having electronic physician ordering capabilities and availability of order sets and bundles (71.4%); 57.1% of respondents reported having clinical decision support in their CPOE systems. HIMSS Analytics as of third quarter 2010 reported only 10.3% of hospitals had implemented clinical decision support as part of the CPOE.²

Investment in Physician Feedback and Leadership Development

Our America's 50 Best responders all reported (with the exception of one hospital) that they provided physician reporting. Two-thirds (66.7%) reported that physicians receive performance feedback through one-on-one meetings with the CMO or the Department Chair. Just over half (55.6%) said that they provide physician feedback in written quality reports. For quality reporting purposes, 88.9% indicated they use both internal and external benchmarks to gauge their performance.

As to the content of the quality reports:

- 100% of hospitals reported providing physicians with adjusted mortality and length of stay information
- 88.9% provide adjusted complication rates and compliance with core measures
- 44% of the hospital respondents report information regarding the appropriateness of interventions/clinical indications for procedures

The America's 50 Best hospitals reported engaging physicians in quality initiatives. All but one facility reported having physicians outside the CMO or Department Chairs leading quality initiatives. Half (50%) of the hospitals with physicians chairing quality improvement initiatives pay those physicians a stipend for their time and participation.

In addition to engaging physicians in quality, all but one of our America's 50 Best Hospital respondents answered affirmatively that they have physician leadership development programs in place.

Recognizing Consistent Quality Outcomes as an Important Benchmark

For years HealthGrades has studied the impact of clinical quality variation on potentially preventable in-hospital mortality and complications. Consistently we have found that variation in care quality costs lives and contributes to avoidable morbidity. The variation is so significant that in looking at just three years of the most recent data, **173,310 lives could potentially have been saved** and **6,867 in-hospital major complications could potentially have been avoided** in U.S. hospitals if all hospitals performed at the same level as America's 50 Best Hospitals.

Clearly this performance is not due to chance. Based on a sample of these facilities, this success is due to an investment in quality and benchmarking, an executive team committed for the long term, and engagement of both physicians and the community to make lasting improvements. America's 50 Best Hospitals: range in size from 100 beds to over 500 beds; are of every ownership status; and are in communities ranging from a few hundred thousand to 18.5 million. Therefore, this level of achievement is attainable for all full service hospitals regardless of hospital characteristics. All hospitals and communities should look to these elite hospitals as a performance benchmark. In fact, if all hospitals performed at the level of America's 50 Best Hospitals, over half a million deaths could have been avoided over the last decade.

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Acknowledgements

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Health Grades Inc. is the leading independent health care ratings organization, providing quality ratings, profiles and cost information on the nation's hospitals, physicians and nursing homes.

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2. HIMSS Analytics. U.S. EMR Adoption Model, Q3 2010. Available at <http://himssanalytics.org/>. Accessed January 14, 2011.

Appendix A. America's 50 Best Hospitals by Designated Market Area

America's 50 Best Hospitals 2011			
Designated Market Area	Population	City	State
Baltimore, MD	2,528,945		
Franklin Square Hospital Center		Baltimore	MD
Greater Baltimore Medical Center		Baltimore	MD
Good Samaritan Hospital		Baltimore	MD
Cedar Rapids, IA	775,972		
Saint Luke's Hospital		Cedar Rapids	IA
Chattanooga, TN	737,091		
Memorial Healthcare System		Chattanooga	TN
Chicago, IL	8,364,125		
Evanston Hospital		Evanston	IL
<i>including:</i> Highland Park Hospital		Highland Park	IL
Glenbrook Hospital		Glenview	IL
Skokie Hospital		Skokie	IL
Alexian Brothers Medical Center		Elk Grove Village	IL
Community Hospital		Munster	IN
Cincinnati, OH	2,008,586		
St. Elizabeth Edgewood		Edgewood	KY
Christ Hospital		Cincinnati	OH
Cleveland, OH	3,778,784		
Summa Akron City and St. Thomas Hospitals		Akron	OH
Akron General Medical Center		Akron	OH
Marymount Hospital		Garfield Heights	OH
Hillcrest Hospital		Mayfield Heights	OH
Colorado Springs, CO	621,929		
Centura Health - Penrose St. Francis Health Services		Colorado Springs	CO
Dayton, OH	1,207,681		
Grandview Medical Center		Dayton	OH
Detroit, MI	4,705,164		
Saint Mary Mercy Hospital		Livonia	MI
Beaumont Hospital - Royal Oak		Royal Oak	MI
Beaumont Hospital - Troy		Troy	MI
Erie, PA	406,841		
Hamot Medical Center		Erie	PA
Eugene, OR	508,645		
Mercy Medical Center		Roseburg	OR
Flint-Saginaw, MI	1,169,321		
Genesys Regional Medical Center		Grand Blanc	MI
Harrisburg, PA	1,616,559		
Lancaster General Hospital		Lancaster	PA

HealthGrades America's 50 Best Hospitals Report 2011 - 10
Appendix A: America's 50 Best Hospitals by Designated Market Area

Houston, TX	4,013,896		
Memorial Hermann Healthcare System – Southwest <i>including:</i> Memorial Hermann Northwest Hospital Memorial Hermann Southeast Hospital Memorial Hermann the Woodlands Hospital		Houston Houston Houston Houston	TX TX TX TX
Jacksonville, FL	1,226,698		
Flagler Hospital		Saint Augustine	FL
Los Angeles, CA	14,391,003		
Glendale Memorial Hospital and Health Center		Glendale	CA
Saint John's Health Center		Santa Monica	CA
New York, NY	18,567,049		
Hackensack University Medical Center		Hackensack	NJ
Community Medical Center		Toms River	NJ
Orlando, FL	2,249,653		
Munroe Regional Medical Center		Ocala	FL
Central Florida Regional Hospital		Sanford	FL
Ocala Regional Medical Center/West Marion Hospital		Ocala	FL
Panama City, FL	265,877		
Bay Medical Center		Panama City	FL
Philadelphia, PA	7,133,153		
St. Luke's Hospital - Bethlehem Campus <i>including:</i> St. Luke's Hospital - Allentown Campus		Bethlehem Allentown	PA PA
Lehigh Valley Hospital		Allentown	PA
Phoenix, AZ	2,714,182		
Banner Del E. Webb Medical Center		Sun City West	AZ
Mayo Clinic Hospital		Phoenix	AZ
Raleigh, NC	1,902,798		
Rex Hospital		Raleigh	NC
Richmond-Petersburg, VA	1,103,458		
Henrico Doctors' Hospital <i>including:</i> Parham Doctors' Hospital Retreat Doctors' Hospital		Richmond Richmond Richmond	VA VA VA
St. Louis, MO	2,920,128		
St. Luke's Hospital		Chesterfield	MO
Tampa, FL	3,144,270		
Sarasota Memorial Hospital		Sarasota	FL
Traverse City, MI	500,441		
Munson Medical Center		Traverse City	MI
W. Palm Beach, FL	1,234,398		
Martin Memorial Medical Center		Stuart	FL
Boca Raton Regional Hospital		Boca Raton	FL
Palm Beach Gardens Medical Center		Palm Beach Gardens	FL
Lawnwood Regional Medical Center and Heart Institute		Fort Pierce	FL
Jupiter Medical Center		Jupiter	FL
Delray Medical Center		Delray Beach	FL
Wilkes Barre, PA	1,434,206		
Mercy Hospital Scranton		Scranton	PA

Appendix B: Inhospital Mortality Performance: America's 50 Best Hospitals (A50B) Compared to All Other U.S. Hospitals

(3-Year Aggregate Relative Risk-Adjusted Inhospital Mortality Performance: 2007-2009)

Procedure or Diagnosis	Total Number of U.S. Medicare Hospitalizations	A50B Hospitals Average Observed-to-Expected Inhospital Mortality Ratio	All Other U.S. Hospitals Average Observed-to-Expected Inhospital Mortality Ratio	Relative Risk Reduction Associated with A50B Hospitals Compared to All Other U.S. Hospitals ¹	Number of Lives That Could Have Been Saved If All Patients were Treated at A50B Hospitals (2007-2009) ²	P-Value (DH-CE Hospital Mortality Compared to National Mortality Average)
Bowel Obstruction	490,501	.63	1.02	37.64%	5,377	<.001
Chronic Obstructive Pulmonary Disease	1,142,512	.58	1.02	42.81%	8,285	<.001
Coronary Bypass Surgery	255,122	.76	1.01	24.89%	1,500	<.001
Coronary Interventional Procedures (Angioplasty/Stent)	855,493	.77	1.01	24.18%	3,388	<.001
Diabetic Acidosis and Coma	177,190	.68	1.01	32.88%	830	<.001
Gastrointestinal Bleed	797,996	.68	1.02	33.23%	4,897	<.001
Gastrointestinal Surgeries and Procedures	246,085	.75	1.01	25.53%	6,196	<.001
Heart Attack (Acute Myocardial Infarction)	753,010	.83	1.01	17.86%	11,834	<.001
Heart Failure	1,762,797	.68	1.02	33.35%	20,487	<.001
Pancreatitis	152,337	.78	1.01	22.32%	828	.003
Pneumonia	1,437,001	.57	1.02	43.82%	29,716	<.001
Pulmonary Embolism	166,852	.66	1.02	34.90%	2,441	<.001
Resection/Replacement of Abdominal Aorta	70,409	.85	1.01	15.47%	441	.040
Respiratory Failure	451,162	.79	1.01	21.93%	18,812	<.001
Sepsis	961,838	.79	1.01	22.21%	42,363	<.001
Stroke	675,151	.68	1.01	32.68%	14,352	<.001
Valve Replacement Surgery	128,377	.80	1.01	20.42%	1,563	<.001
3-Year Performance Average		0.72	1.01	28.59%		
Totals	10,523,833				173,310	

¹ Relative Risk Reduction determines the difference in performance between A50B and All Other hospitals. Calculated as follows: (Non-A50B O/E – A50B O/E) / Non-A50B O/E.

² Lives saved were calculated: All Other hospitals' 3-year actual number of mortalities – (All Other hospitals' 3-year expected number of mortalities x A50B O/E ratio).

Appendix C: Inhospital Complications Performance: America's 50 Best Hospitals (A50B) Compared to All Other U.S. Hospitals

(3-Year Aggregate Relative Risk-Adjusted Inhospital Complications Performance: 2007-2009)

Procedure or Diagnosis	Total Number of U.S. Medicare Hospitalizations	A50B Hospitals Average Observed-to-Expected Inhospital Complications Ratio	All Other U.S. Hospitals Average Observed-to-Expected Inhospital Complications Ratio	Relative Risk Reduction Associated with A50B Hospitals Compared to All Other U.S. Hospitals ¹	Number of Patients That Could Have Avoided Developing One or More Post-Op Complications If All Patients were Treated at A50B Hospitals (2007-2009) ²	P-Value (DH-CE Hospital Complications Compared to National Complication Average)
Back and Neck Surgery (except Spinal Fusion)	198,149	.99	1.00	.56%	126	.426
Back and Neck Surgery (Spinal Fusion)	215,906	.96	1.00	3.96%	1,399	.053
Carotid Surgery	238,724	1.02	1.00	-2.26%	-437	.754
Cholecystectomy	289,076	1.00	1.00	.39%	190	.431
Hip Fracture Repair	560,110	.99	1.00	1.31%	1,126	.223
Peripheral Vascular Bypass	64,297	.91	1.00	8.91%	638	.053
Prostatectomy	215,275	.90	1.01	10.95%	1,483	.003
Total Hip Replacement	325,560	.94	1.00	6.34%	1,765	.009
Total Knee Replacement	818,593	.99	1.00	.92%	577	.313
3-Year Performance Average		.97	1.00	3.45%		
Total	2,925,690				6,867	

¹ Relative Risk Reduction determines the difference in performance between A50B and All Other hospitals. Calculated as follows: (Non- A50B O/E – A50B O/E) / Non- A50B O/E.

² Complications avoided were calculated: All Other hospitals' 3-year actual number of complications – (All Other hospitals' 3-year expected number of complications x A50B O/E ratio).

Appendix D: Survey Results

This year, HealthGrades also set out to learn more about what America's 50 Best Hospitals have in common. HealthGrades sent a 10-question email survey to the Chief Executive Officers and Chief Medical Officers of these 50 hospitals. The goal was to learn if there are best practices employed by these facilities that drive their year-over-year clinical achievements. Eighteen percent of the facilities responded to our survey providing some insight into what makes an America's 50 Best Hospital.

1. Describe the levels of regular quality outcomes communication in your organization. Regular is defined as regular intervals such as monthly or quarterly. Check all that apply.		
	Response Percent	Response Count
Executive Team regularly receives dashboards	88.9%	8
Board of Directors regularly receives quality dashboards	100.0%	9
All Managers regularly receive quality dashboards	100.0%	9
All physicians regularly receive hospital level/departmental-level quality dashboards	77.8%	7
All staff regularly receive hospital-level quality dashboard	77.8%	7
The public regularly receives hospital-level quality information via the website/other communications	55.6%	5
2. How would you classify your operating margin generally over the last 3 years?		
	Response Percent	Response Count
<2% Operating Margin	11.1%	1
2 – 4% Operating Margin	44.4%	4
>4% Operating Margin	44.4%	4
3. In years, what is the average length of tenure for your C-level staff?		
	Response Percent	Response Count
< 1 year	0.0%	0
1 – 3 years	0.0%	0
3 – 5 years	22.2%	2
5 – 7 years	11.1%	1
7 – 10 years	11.1%	1
>10 years	55.6%	5
4. Do you have a physician leadership development program?		
	Response Percent	Response Count
Yes	88.9%	8
No	11.1%	1
Planning for one	0.0%	0
5. How would you describe your Computerized Physician Order Entry Efforts? Check all that apply.		
	Response Percent	Response Count
Ordering capabilities (lab, radiology, pharmacy)	85.7%	6
Available evidence-based order sets or bundles	71.4%	5
Hard stops driving the use of evidence-based order sets or bundles	42.9%	3
Provides clinical decision support at the time of care (i.e. mandatory test for high-priority condition, preventive care)	57.1%	4

6. What types of feedback do your physicians receive regarding their individual performance? Check all that apply.	Response Percent	Response Count
No individual reporting	11.1%	1
One on one with CMO/Department Chair	66.7%	6
Written quality reports	55.6%	5
7. Classify the types of feedback physicians receive in your organization. Check all that apply	Response Percent	Response Count
Adjusted mortality rates	100.0%	9
Adjusted length of stay	100.0%	9
Adjusted complication rates	88.9%	8
Compliance with core measures	88.9%	8
Adjusted cost of care information	44.4%	4
Information regarding appropriateness of interventions/clinical indications	44.4%	4
8. Do you have physicians leading quality initiatives/implementing change outside the CMO/Department Chairs?	Response Percent	Response Count
Yes	88.9%	8
No	11.1%	1
8a. If you answered Yes to question #8. Are they paid stipends to participate?	Response Percent	Response Count
Yes	50.0%	4
No	50.0%	4
9. What types of quality benchmarking do you use?	Response Percent	Response Count
Internal	22.2%	2
External	22.2%	2
Both	88.9%	8
10. Do you involve community members in your quality or patient experience performance measurement and improvement?	Response Percent	Response Count
Yes	55.6%	5
No	44.4%	4
10a. If you answered Yes to question #10. How are they involved?	Response Percent	Response Count
Board Seat	20.0%	1
Community members sit on major policy quality	80.0%	4
Ad hoc	0.0%	0