

ST. LOUIS HEALTH CARE INDUSTRY OVERVIEW

2007

Financial and Quality Performance



St. Louis Area
**BUSINESS HEALTH
COALITION**

"Employer Partners in Healthcare"

25th Anniversary 1982-2007



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About the BHC

The St. Louis Area Business Health Coalition (BHC) represents leading St. Louis employers in their efforts to improve the health of their enrollees and enhance the overall value of their health benefit investments. BHC employers seek a transparent health care market where comparative information about quality, cost and outcomes is used to achieve high-quality and affordable care for all people in the region.

The BHC Foundation is a separate non-profit subsidiary organization to BHC. The BHC Foundation purpose is to provide pertinent health care information to the community.

About this Report

To reflect a more expansive view of the St. Louis health care market, this report is renamed the St. Louis Health Care Industry Overview. In addition to the print version, this report may be downloaded from the BHC website, at www.stlbhc.org. The report analyzes, summarizes, and presents information and trends on the St. Louis area health care industry for fiscal year 2005, with limited data for fiscal year 2006 and 2007. The report includes data from the following sources: Health Insights (QIO), Ingenix, Leapfrog, Centers for Medicare and Medicaid Services (CMS) Medicare Cost Reports and Hospital Compare, audited hospital financial statements, the American Hospital Association (AHA) and Missouri Hospital Association (MHA) annual licensing surveys and Community Benefit data, the Missouri Department of Health and Senior Services (DHSS), NCQA Physician Recognition Programs, and Primaris, as well as additional information voluntarily submitted by providers.

Data Limitation and Cautions

BHC has made every effort to provide accurate information. Each hospital was given the opportunity to verify its financial data. As with any analysis of health care industry data, a note of caution accompanies this report. BHC depends upon the accuracy of the individual sources of data and cannot guarantee the complete accuracy of all the data in this report, in part because Medicare Cost Reports contain a level of error. Data inaccuracies that may remain for individual hospitals would have minimal impact on weighted average values and virtually no impact on the overall conclusions regarding St. Louis' hospital performance.

Please read the appendices to become familiar with the technical discussion while reviewing or interpreting the data detailed in this report.

Acknowledgments

BHC would like to acknowledge the hospital representatives who voluntarily provided BHC with financial and utilization information. Hospital representatives and their staff worked extensively with BHC to verify the accuracy of the data. The additional time and effort they spent analyzing and verifying the data was invaluable to the success of this project.

BHC wishes to acknowledge the work of **Ingenix**, a leading provider of health data, information, and research, for their guidance and expert analysis of hospital data for the St. Louis region. The following organizations contributed to this report by providing certain data, analysis, recommendations or consultation: **Health Insights (QIO), the Leapfrog Group, DHSS, and the Missouri Department of Social Services. BHC would also like to recognize Novo Nordisk and sanofi-aventis for their financial support of the research and publication of this report.**

BHC especially thanks its members and other St. Louis organizations who provided additional funding to the BHC Foundation to make this publication possible. ■



Overall, the U.S. health care system underperforms compared to the rest of the world despite being the most expensive. Within the U.S., the Commonwealth Fund's State Scorecard **ranks Missouri's health system 37th, weighed down by higher rates of avoidable admissions and mediocre quality, contributing to shorter, less healthy lives.** Other national comparisons confirm Missouri's place at or just below average and provide ample motivation for community leaders to join together to make quality improvement a top priority.

Profits remained strong at St. Louis hospitals resulting from higher payments, not increased utilization or better cost management. Short term profits are likely to continue as more than a billion dollars of revenue-producing services and facilities come online. One of the few tools the public has to understand how well a hospital manages its operations, **average operating cost per discharge, rose steeply** from 2003 to 2005 with marked variation by hospital, even when adjusted for case mix (see page 7). On a positive note, **two organizations show signs of early success in cost management: BJC Health Care and St. Anthony's Medical Center.** BHC encourages their leadership to make this a sustainable trend that translates into more affordable care.

Access and cost of care are related issues. As costs rise, more Americans are unable to afford coverage even when their employer pays a sizeable portion of the premium. Despite record levels of uninsured, **charity care provided by the region's hospitals as a percent of operating revenue has again declined.** Given this, it is unclear why the level of charity care remains low or where those without insurance access care.

It is Time to Re-think the Cost Shift

CMS estimates hospital spending alone will double to more than \$1.3 trillion by 2017. In a competitive market, high cost producers must become more efficient or perish. Health care has been insulated from this market reality by a cost-plus payment system. Government's ability to fix its payments in the 1980s began the cost shift to the private sector (see page 6). **The practice by which employers and the public pick up the tab to cover "provider shortfalls" has fueled the affordability crisis.**

More money is not the answer; rather it has delayed needed improvements in cost efficiency. Several studies find that waste accounts for 30% to 50% of health care spending. Careful attention to processes and better use of information is essential to improving health and making health care affordable. Short of this, neither employers nor government will be able to sustain our current system. **These actions are made urgent by the looming financial insolvency of the Medicare system.**

Advances In Information Technology Arrive

Anecdotal information indicates that St. Louis hospitals are investing heavily in electronic medical records. Since much of the system's underperformance results from poor care coordination and lack of access to information, these are important investments. The degree of investment in information technology (IT) to improve patient safety across hospitals is less evident. Absent a common source of information, BHC queried hospitals on the presence of bar code medication administration systems and learned the good news! Eight hospitals now have operational

bar-code medication administration system-wide (see page 18).

Health care is one of the only industries where the customer pays for mistakes. BHC has requested St. Louis Hospitals to report adverse events when they occur, inform the patients and to reverse related charges for the full list of National Quality Forum (NQF) "never events." So far, only the St. Louis Tenet hospitals have publicly agreed not to bill for the **full** NQF list of "never events" as reported by Leapfrog (see page 18). It seems prudent for other St. Louis hospitals to adopt similar policies. Beginning October 2008, Medicare will stop paying for five NQF "never events" and some infections. **BHC commends Tenet and CMS for their leadership in advancing public safety.**

Missouri hospitals are in year two of reporting select infection rates. Central Line infection rates decreased for certain hospitals suggesting public reporting and improvement efforts have had a positive effect. Unfortunate for consumers, surgical site infection rates are reported using up to five different risk categories, obscuring the results. BHC calls for Missouri hospitals to rethink their methodology and simplify SSI reporting.

Physician Leaders Show the Way

While physicians are not solely responsible for health outcomes, they are central to improving health care quality and affordability. St. Louis is fortunate to have physicians paying attention to process and opening their practices to be measured against national quality standards. BHC asks the community to join them in commending these physicians for raising the bar and setting a standard of excellence (see page 15 for list of recognized physicians).

For more than a decade, hospitals have received a disproportionate share of payment increases. For much of this time, physician fee schedules have been flat, forcing physicians to develop new sources of revenue to sustain their practices.

This misallocation of resources must be corrected.

Employers Take Action

St. Louis employers work to improve system performance by investing in worksite programs to advance healthy lifestyles and health literacy. They are also creating a shared data asset to inform process improvements and decision making.

As BHC celebrates its 25th year, it is encouraging to note the positive signs of progress in the St. Louis area health care market. Yet, many St. Louis hospitals continue to struggle with higher operating costs and St. Louis' ranking in national studies on health care quality indicates the region is earning a "C" at best. As in other industries, necessity breeds innovation. It takes courage as a leader to invest in quality improvement and enhanced cost performance instead of the easier route of investing in new sources of revenue. Dr. Gary Kaplan, Chairman and CEO of Virginia Mason Medical Center in Seattle is one of those leaders. He had this to say, "We have more than enough resources in health care. We just need to stop waste and only do what's appropriate and value-added and we would save billions."

The strong financial position of many St. Louis hospitals positions them to support needed changes. It is time to dedicate our expert knowledge and financial resources toward perfecting processes. Together we can build a better health care future for our region. **Why not the best for Missouri? ■**



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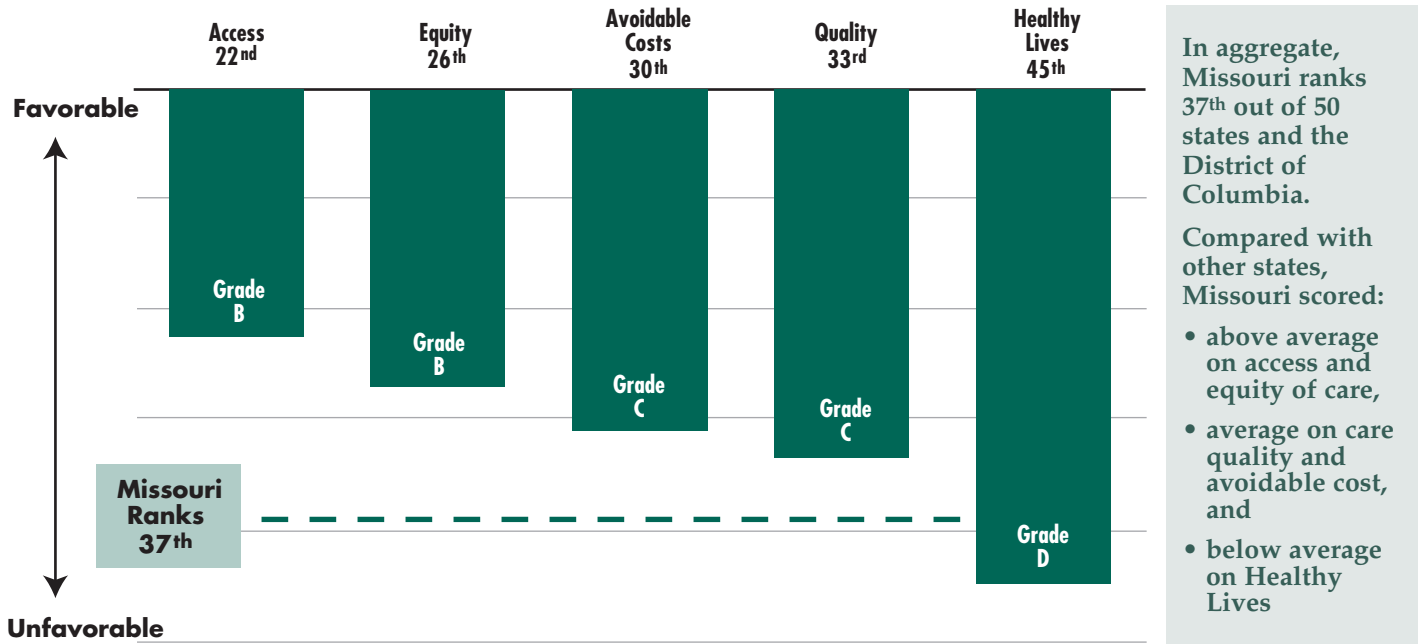
Missouri's health system ranks 37th in the nation



The Commonwealth Fund Commission on a High Performance Health System released the first *State Scorecard on Health System Performance* in June 2007. The *Scorecard's* 32 indicators of performance were evaluated and organized into five areas of care: **Access** (levels of insurance and access to providers),

Equity (care provided to people of different income levels, race, or ethnicity), **Avoidable Cost** (number of avoidable hospital readmissions), **Quality** (degree to which care provided complies with standards of care), and **Healthy Lives** (the number of deaths before age 75 and other health statistics).

Commonwealth Fund State Scorecard Missouri Rankings



Access to health care and the number of insured in the region is above average; however, health care quality is only average and is contributing to the below average health and shorter life span of Missouri citizens. This should provide ample motivation for community leaders to make quality improvement a top priority. As a result, not only will Missourians enjoy better health care, *Scorecard* findings also suggest that higher quality will result in lower costs leading to improved affordability, higher numbers of insured, and more lives saved.

Why Not the Best for Missouri?

The Commonwealth Fund recognizes that transformation of the U.S. health care delivery system is urgently needed to achieve optimal care for all Americans and improve value for society's investment in health care. BHC commends the Fund's leadership in creating the scorecard as a road map for regional efforts to ensure affordable access to high-quality, efficient, and equitable care. While it is difficult to calculate the specific "pay-off" of investments to improve health care system performance, the study used some of the key indicators to identify the returns that could be possible.

If Missouri performance improved to the level of the best performing state in each area:

- 194,105 more **insured adults** and 39,278 more **insured children**
- 198,267 adults would receive recommended **preventive care**
- 72,815 more adults with diabetes would receive three recommended **services to help delay or prevent complications**
- 23,642 **fewer Medicare hospitalizations with \$107,868,000 saved**
- 4,103 fewer Medicare readmissions would occur with **\$42,741,000 saved from the reduction in readmissions**
- 2,250 **fewer premature deaths** (before age 75) might occur from causes potentially treatable or preventable with timely and appropriate care.

Study details and other information can be found at www.Commonwealthfund.org. ■

Aggregate Health System Performance

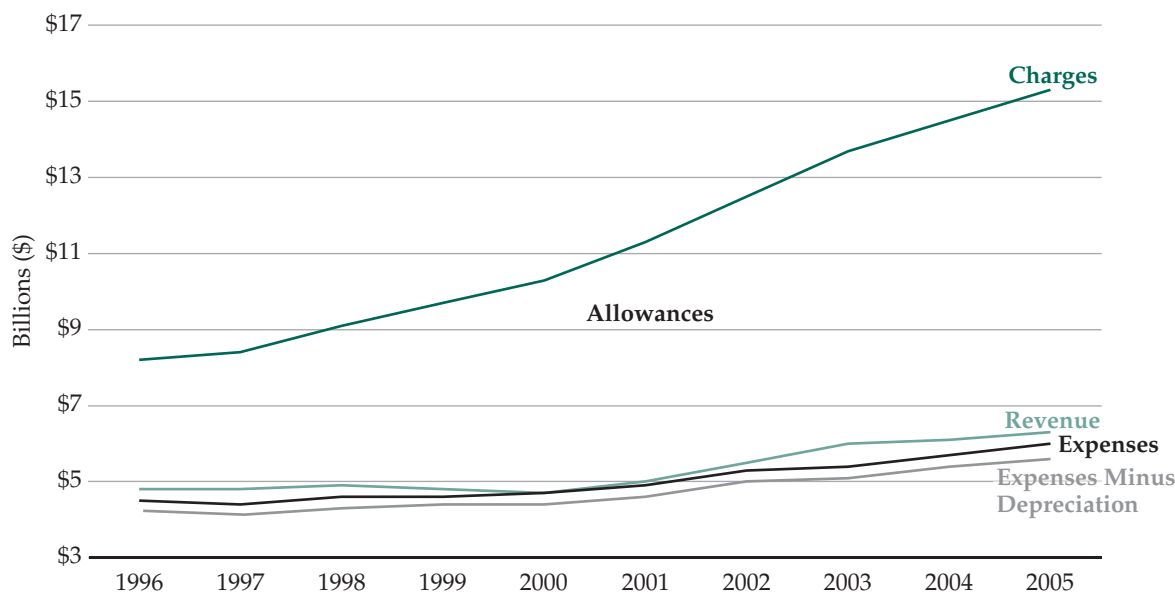
The health care affordability crisis continues with 17% of American families now spending more than 10% of their after-tax income on health care.¹ As costs rise, the numbers of uninsured climb and more Americans are unable to afford coverage even when their employer pays a sizable portion of the premium.

Business and the public are often called upon to pay more to solve the problem of the uninsured. **More money is not the solution.** Removing waste and improving quality are essential to improving health and making health care cost effective. Short of this, neither employers nor government will be able to make health care affordable for all.

Providers are not solely responsible for health outcomes. St. Louis employers work to improve system performance by investing in worksite programs to advance healthy lifestyles and health literacy. They are also working to make information available to identify improvement goals.

Many St. Louis area hospitals have enjoyed several years of solid financial performance; collectively they hold more than \$4.1 billion in reserve (see page 22). As a community, it is time to dedicate our expert knowledge and financial resources toward perfecting processes. Together we can build a better health care future.

Aggregate Charges, Revenues, and Expenses St. Louis Area Hospital Industry Shown in 2005 Dollars



Charges

increased 6% in 2005.

Revenues

increased 3.2% in 2005.

Expenses

increased 4.7% in 2005.

Source: Centers for Medicare and Medicaid Services Medicare Cost Reports and audited financial statements.

Inflation adjustments are based on the St. Louis area CPI (including medical component), provided by the U.S. Labor Department. Hospitals that are part of consolidated organizations may not report all of their non-operating revenue and expenses by individual hospital and their cumulative effect may not be reflected in these results.

Charge inflation increased a sizable 6% in 2005 causing billed charges for hospital services in the region to rise to over \$15.3 billion. Although most services are paid at a lower negotiated rate, charges influence future payments. In 2006, CMS made the decision to end its practice of using charges as a factor in future payment determinations and to base payment calculations on costs instead of charges. The primary impact of moving to this cost-based system will be to redistribute weights from overly profitable surgical DRGs to less profitable medical DRGs. Since CMS began the three-year phase-in of the cost-based method in October of 2007, any potential downward influence on relative charge inflation will not be evident until 2008.

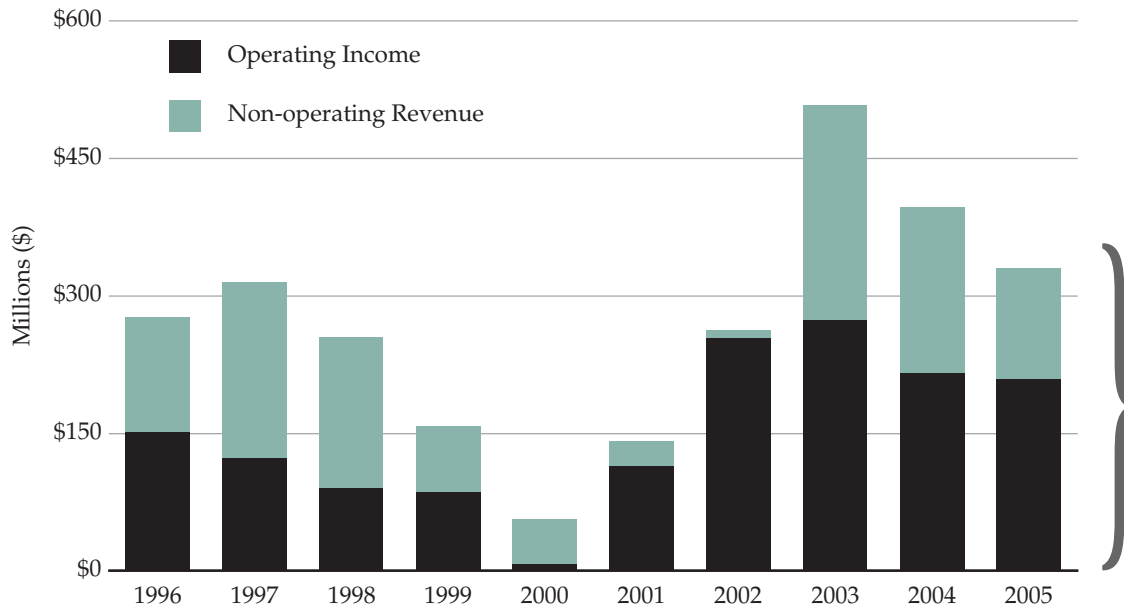
Revenue growth in 2005 was driven mainly by increased payments from government and private payers. With the exception of modest growth in Medicare services, inpatient service volume

was relatively unchanged from the prior year and contributed little to revenue growth. Overall market dynamics are expected to be favorable for hospitals in the near term; new revenues from ongoing capital expansion, favorable managed care negotiations, and enhanced reimbursement from CMS for new severity-adjusted DRGs (MS-DRGs) and outpatient procedures.

Expenses grew at an inflation-adjusted rate of 4.7% in the St. Louis region; substantially higher than in 2004. In 2005, inpatient utilization growth was flat and, based on the limited data available; there was no significant increase in outpatient activity suggesting the growth in expenses did not result from an increase in services. The high expense trend is more likely the result of waste from inefficient processes and costs associated with the building boom. ■



Aggregate Hospital Performance Total Profit Profile St. Louis Area Hospital Industry, 1996–2005



In 2005, St. Louis hospitals extended the run of solid financial performance started in 2003.

Source: Medicare Cost Reports, audited financial statements, and MHA/AHA Annual Licensing Surveys.

Current Position: After two record setting years, 2005 operating income and non-operating revenue remained strong. The average profit margin for the region was 5% with a range of profitability among hospital systems from -5% to nearly 10% (see page 8 for individual hospital profits). The national average was 5.3%, the highest in seven years. For those St. Louis hospitals for which financial information was available, 2006 was an even more profitable year. As illustrated in the previous page, profitability has been driven largely by hospitals' ability to maintain and grow revenue, not reductions in expenses.

Ten Year Trend: 2002 operating income fully recovered from significant losses incurred from 1997 to 2001 as a result of mergers and unsuccessful investments in physician practices. From 2002 to 2005, St. Louis area hospitals sustained operating income well above levels earned in the prior ten years despite rapid growth in expenses. **Unfortunately, this growth in expenses suggests there has been little gain in much needed cost efficiency.**

Since hospital mergers in the mid-1990s, hospitals have used their market power to extract a disproportionate share

of payment increases. As a result, physician fee schedules have been flat for much of this time, forcing physicians to develop new sources of revenue to sustain their practices. While this has benefited hospitals, it has not served physicians or the community well. **BHC calls for hospitals to hold payment increases flat to enable needed payment reforms.**

Future: Healthy profit levels are likely to continue in the near term as a result of increased revenues from new services added by the recent construction boom and improved reimbursement from Medicare and private payers. In recent years, reports have indicated that more than a billion dollars have been invested in revenue-producing construction and new medical technology. It is unclear to what degree the community benefits from additional facilities and medical equipment, however, it is clear that better quality of care improves health and saves lives. Capital investments must prioritize quality, information technology, and delivery system improvements over investments in duplicative equipment and facilities; otherwise Missouri's health system ranking relative to other states is not likely to improve. ■

The Cost Shift – A time for re-examination

Concern is increasing both locally and nationally over the degree to which hospitals overcharge commercial payers to make up for losses from Medicare, Medicaid, and uncompensated care, otherwise known as the “cost shift”. The amount that St. Louis patients, employers, and insurers are paying to cover these “shortfalls” is on average 27 cents more for every dollar they spend. Among the St. Louis area hospitals and hospital systems listed in the table below, the level of commercial cost shift was fairly consistent from 2004 to 2005.

Government and other industry leaders have called into question the common practice of adding Medicare losses to charity care as part of hospitals’ “community benefit”. In December 2007, the IRS mandated that Medicare losses and bad debt were not community benefit. **Since the intent of Medicare’s prospective payment system was to make facilities efficient, CMS and industry experts believe Medicare losses may be more of an indication of poor hospital cost management rather than underpayment.**² While controversial, the issue is worthy of further examination.

As noted elsewhere, **St. Louis average operating cost per adjusted discharge rose on average 10% annually since 2003 with significant variation in individual hospital cost performance (see page 7).** By focusing on processes and eliminating waste in health care delivery, health care providers have an opportunity to reduce or eliminate their “shortfalls” from public sector programs and reduce the need

to cost shift to commercial payers. Patient safety and quality improvements from investment in health care information technology, evidence-based care, preventive care, and the elimination of infections and never events are examples of ways to take out waste. According to a recent report, **waste accounts for 30% to 50% of health care spending.**³

CMS estimates **hospital spending will double to more than \$1.3 trillion by 2017, making up 30% of all health care spending.** In response, Congress is considering across-the-board cuts in payments to providers to stem the rising costs of Medicare. Employers have serious reasons to worry that the cost shift will become proportionately larger given cost escalations and financial shortfalls in public programs. In light of this, it must be asked: **is the practice by which employers and the public pick up the tab to cover “provider shortfalls from other payers” the source of the affordability problem;** does it obscure important market feedback to health care manufacturers and providers, and avert direct accountability for cost performance?

Another question must also be asked: **does the extra money paid by the commercial sector actually create broader access to services, especially preventive or routine care, for those without insurance?** Considering the findings on charity care in this report (see page 12) and others, it is not clear that this money is actually being used to provide access to care for the uninsured. ■

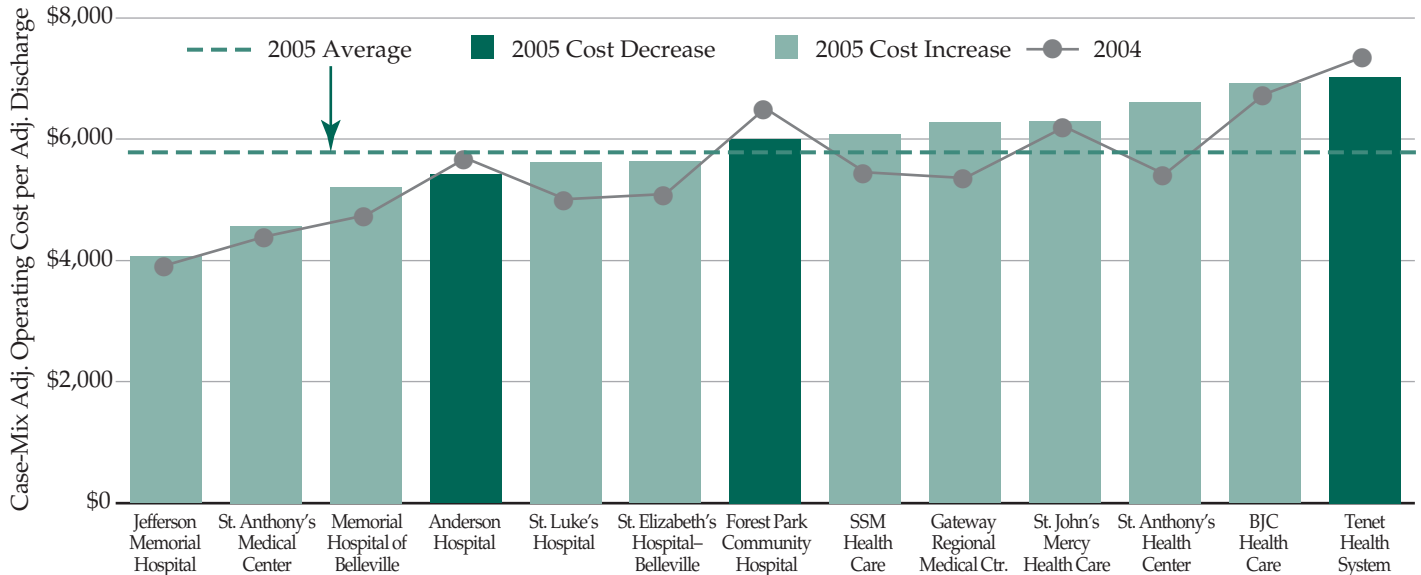
St. Louis Area Hospitals Payment to Cost Ratio by Payer Type, 2005

Hospitals and Hospital Systems	Medicare		Medicaid		Commercial	
	Ratio	% Rev.	Ratio	% Rev.	2004	2005
Tenet HealthSystem	\$0.96	48%	\$0.60	17%	\$1.29	\$1.31
SSM Health Care	0.97	44	0.93	16	1.21	1.21
BJC HealthCare	0.94	41	0.94	16	1.43	1.38
St. Anthony’s Health Center (Alton)	0.75	57	0.72	15	1.50	1.48
St. John’s Mercy Health Care	0.86	36	0.88	14	1.20	1.19
St. Anthony’s Medical Center	0.92	51	0.82	8	1.18	1.18
St. Luke’s Hospital	0.95	51	0.63	4	1.13	1.15
St. Louis Aggregate	\$0.94	43%	\$0.90	16%	\$1.28	\$1.27

Note: Ratio represents on average the amount of revenue collected for each dollar of expense by payer. Payments below \$1.00 indicate the hospital is paid less on average than its cost and those above \$1.00 are more than their cost. The percentage of revenues estimates the percent of total revenues at each hospital covered by the payer based on annual discharges. For example, using the information provided and subtracting from 100, one could determine that about 40% of SSM’s revenues come from commercial payers. Since Medicaid is generally the lowest payer, the table is sorted by the highest percentage of Medicaid business. Source: CMS Medicare Cost Reports, audited financial statements, and AHA/MHA Licensing Surveys. Certain hospitals for whom data were unavailable were excluded from the aggregate, including Forest Park, Kindred, St. Joseph Health Center Wentzville, St. Alexius, Gateway Regional Medical Center, Kenneth Hall Regional, St. Joseph – Breese, IL, and Touchette Regional.



Hospital Cost per Discharge, 2003 to 2005



Source: Ingenix ReimbursementAnalysis using publicly available data including CMS Medicare Cost Reports, audited financial statements, MHA/AHA Annual Licensing Surveys and Commercial insurance.

	JMH	SAMC	MHB	AH	SLH	SEHB	FPCH	SSM	GRMC	SJMHC	SAHC	BJC	THS
2004	-19.3%	1.5%	-9.5%	13.2%	1.7%	9.4%	29.0%	2.4%	0.3%	14.3%	15.4%	2.1%	8.5%
2005	3.6%	3.8%	9.9%	-4.6%	12.2%	10.7%	-7.7%	11.5%	17.1%	1.3%	22.1%	2.7%	-4.5%
2-Year Avg.	-8.2%	2.7%	-0.2%	4.0%	7.1%	10.6%	9.5%	7.1%	8.7%	7.9%	20.4%	2.4%	1.8%

Health benefits costs have grown 8 to 14 percent per year since 2000, far outstripping the rise in inflation and growth in workers earnings.⁴ Workers have grown weary of accepting their annual compensation increases in the form of health benefits, challenging their standard of living and ability to save for the future. **Information on a hospital's average cost per discharge is one of the few tools the public has to understand how well a hospital is doing in managing its internal operations and its stewardship of precious community assets.**

The affordability crisis in health care and the significant burden it places on our overall economic well-being as a nation, makes a hospital's ability to manage cost of paramount importance.

For these reasons, BHC added cost per adjusted discharge analysis to this report three years ago. The data above represents the first time the **change in a hospital's annual cost per discharge** has been reported for a two-year period. BHC looks forward to providing three year trends in its next report and tracking this important indicator over time.

As shown in the table above, hospital cost increases varied widely from year to year even after accounting for case-mix. Without data from a longer period of time, it is difficult to assess meaningful trends or to understand the cause of the dramatic one year swings in cost. Given this, a few observations still seem worth mentioning.

- In aggregate, on a pure cost basis, St. Louis hospitals' average cost per adjusted discharge increased 10 percent

annually from 2003 to 2005. Or put another way, almost four times the rate of inflation.

- **Congratulations to BJC and St. Anthony's Medical Centers for stable and successful cost management over the two-year period.** BHC hopes this represents a sustainable trend, that these institutions can provide leadership in this important area, and that these successes translate into more affordable health care for our community.

For a few hospitals nationally, such as Seattle's Virginia Mason Medical Center, process improvement discipline has led to dramatic reductions in waste with simultaneous improvements in quality and satisfaction among patients, providers, and staff.⁵ Perhaps these lessons can be replicated in St. Louis. **The region can no longer afford to absorb the cost of poor efficiency—whatever the reason. ■**

Methodology

Provided by ReimbursementAnalysis, a consulting solution from Ingenix, that analyzes profitability and reimbursement rates by payer group (i.e., Medicare, Commercial, etc.) and provides unit cost benchmarking. In this analysis, costs included in operating expenses unrelated to net patient revenues (i.e., cafeteria, parking lot, research, etc.) and those related to SNF and Home Health were removed from each hospital's operating expenses. The resulting expenses related to net patient revenues were divided by the adjusted patient discharges, excluding SNF and Home Health discharges, to calculate an average cost per adjusted patient discharge and then divided by the case-mix index. The case-mix index was estimated by weighting the Medicare and commercial case mix based on discharges. Lincoln County Memorial, Kenneth Hall Regional, Kindred, St. Alexius, St. Joseph—Breese, and Touchette Regional Hospitals cost data were excluded from this analysis.



2005 Individual hospital and system results

System Name (market share) ¹	Avail. beds	Patient days	Avail. occup. %	Avg. LOS	FTE per occup. bed	Net profit	Profit margin	Profit margin net of deprec.
BJC HealthCare (29.90%)								
Alton Memorial Hospital	128	24,881	53.26%	4.24	4.2	19,391,786	16.65%	21.63%
Barnes-Jewish Hospital	1,276	285,899	61.39	5.42	6.9	79,190,496	7.11	13.09
Barnes-Jewish Hospital—St. Peters	103	28,265	75.18	3.90	4.5	13,811,393	13.63	18.83
Barnes-Jewish Hospital—West County	72	12,791	48.67	3.79	4.4	11,865,921	15.42	21.36
Christian Hospitals NE/NW	439	93,468	58.33	5.82	4.5	5,581,341	2.23	7.76
Missouri Baptist Hospital—Sullivan	59	8,227	38.20	4.35	3.0	3,171,196	10.05	15.05
Missouri Baptist Medical Center	394	105,876	73.62	4.77	4.6	48,530,993	13.77	19.72
St. Louis Children's Hospital	234	67,495	79.02	6.49	7.8	44,803,550	14.24	20.85
Network Total	2,705	626,902	63.49%	5.23	5.9	\$226,346,676	9.60%	15.51%
SSM Health Care (19.38%)								
Cardinal Glennon Hospital	187	44,721	65.52%	7.84	6.3	25,615,871	12.68%	15.99%
DePaul Health Center	412	106,786	71.01	4.87	4.3	19,471,092	7.61	9.77
St. Joseph Health Center—St. Charles	246	65,411	72.85	4.62	4.3	2,039,365	1.28	4.80
St. Joseph Hospital—Kirkwood	273	33,120	33.24	3.73	4.9	-13,614,613	-13.24	-8.69
St. Joseph Health Center—Wentzville	86	9,071	28.90	4.20	4.4	-11,434,370	-47.21	-41.22
St. Joseph West—Lake St. Louis	125	19,383	42.48	3.17	4.7	4,120,090	5.62	8.88
St. Mary's Health Center	435	84,841	53.43	4.52	4.9	20,223,308	7.92	11.78
Network Total	1,764	363,333	56.43%	4.68	4.8	\$46,420,743	4.33%	7.70%
St. John's Mercy Health Care (11.26%)								
St. John's Mercy Hospital—Washington	179	21,426	32.79%	3.54	4.6	2,649,690	3.48%	10.34%
St. John's Mercy Medical Center	852	206,307	66.34	5.28	4.4	10,534,866	1.79	7.58
Network Total	1,031	227,733	60.52%	5.05	4.4	\$13,184,556	1.98%	7.89%
Tenet HealthSystem (5.85%)								
Des Peres Hospital	127	38,959	84.04%	4.47	3.6	3,486,386	3.29%	6.69%
St. Louis University Hospital ²	337	89,213	72.53	6.07	4.1	-24,259,854	-7.86	-3.45
Network Total	464	128,172	75.68%	5.47	4.0	(\$20,773,468)	-5.01%	-0.86%
Missouri Non-Merged, Non-Affiliated (19.67%)								
Forest Park Hospital ³	242	39,943	45.22%	4.27	7.7	-6,602,280	-6.03%	-4.12%
Jefferson Memorial Hospital	210	38,985	50.86	3.55	5.0	2,054,046	2.01	6.66
Kindred Hospital	94	15,699	45.76	31.27	3.8	1,976,555	7.66	17.94
Lincoln County Memorial Hospital	25	5,781	63.35	5.02	3.4	792,540	3.16	8.95
St. Alexius Hospital ^{3,4}	319	69,260	59.48	6.85	3.1	478,601	0.49	2.00
St. Anthony's Medical Center	554	137,836	68.16	4.85	4.4	22,594,000	6.40	12.24
St. Luke's Hospital	402	82,457	56.20	4.52	4.9	13,035,000	4.20	9.24
Total	1,846	389,961	57.88%	4.78⁶	4.6	\$34,328,462	3.35%	8.11%
Illinois Non-Merged, Non-Affiliated (13.94%)								
Anderson Hospital	135	28,745	58.34%	4.08	4.0	3,020,991	3.13%	7.33%
Gateway Regional Medical Center	226	56,654	68.68	6.51	2.9	20,186,988	18.71	21.10
Kenneth Hall Regional Hospital (East St. Louis, IL) ⁵	169	15,803	25.62	5.08	4.7	-4,738,431	-11.82	-8.62
Memorial Hospital of Belleville	313	63,371	55.47	4.45	5.3	-900,064	-0.51	4.86
St. Anthony's Health Center (Alton, IL)	111	23,488	57.97	4.60	5.3	-1,851,737	-2.05	1.33
St. Elizabeth's Hospital (Belleville)	264	64,967	67.42	5.00	4.5	-2,893,307	-1.84	3.79
St. Joseph Hospital (Breese, IL)	57	6,885	33.09	3.22	5.5	6,432,528	18.40	25.54
Touchette Regional Hospital	105	10,022	26.15	4.00	6.2	-170,298	-0.57	2.17
Total	1,380	269,935	53.59%	4.83	4.4	\$19,086,670	2.60%	7.05%
Aggregate for 34 St. Louis Hospitals	9,190	2,006,036	59.80%	4.97⁶	4.77	\$318,593,639	5.08%	10.08%

¹ Market share percentages listed by each network are based on total number of discharges for the hospitals in the network. Hospital network configurations are current as of 2007.

² St. Louis University Hospital recognized \$11,613,144 in non-operating expense corporate overhead allocation.

³ Forest Park Hospital, and St. Alexius Hospitals (formerly Alexian Brothers & SouthPoint Hospitals) were sold to Envision Hospital Corporation (formerly Doctors Community Healthcare Corporation) in November 2004 by Tenet Healthcare Corporation.

⁴ St. Alexius-Broadway and St. Alexius-Jefferson Campus reported on a combined basis under St. Alexius Hospital.

⁵ St. Mary's Hospital of East St. Louis was acquired by the Southern Illinois Healthcare Foundation February 1, 2004 and was renamed Kenneth Hall Regional Hospital.

⁶ Kindred Hospital is not included in the aggregate average LOS figure because Kindred is a long-term acute care hospital.

⁷ St. Louis Area average excludes Barnes-Jewish Hospital and St. Louis University Hospital because they are teaching hospitals with higher numbers of FTEs.



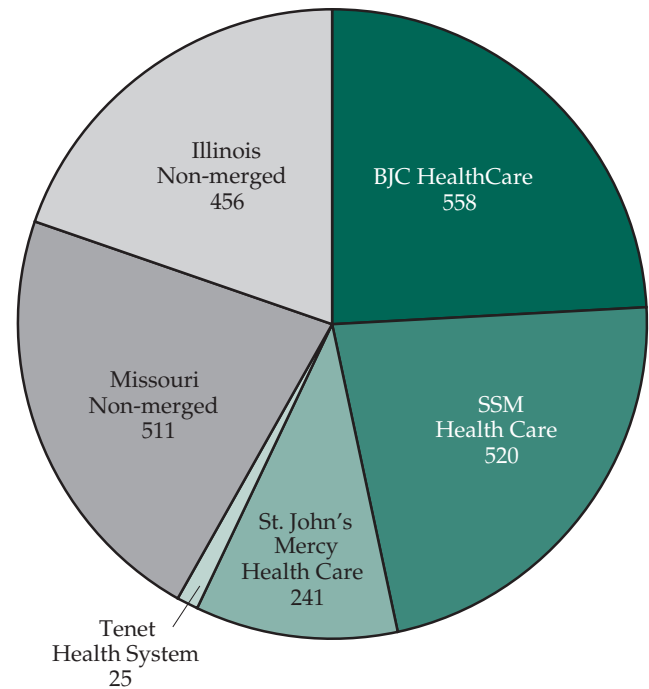
BJC, St. John's, and SSM, the three largest hospital systems, increased their numbers of available beds in 2005 as they expanded capacity. Beds declined for the second year at most of the independent hospitals.

During the period, patient days and discharges increased 0% to 1% as a result of modest Medicare growth. As hospital beds grew and utilization eased, aggregate St. Louis hospital occupancy fell to 59.80%, down from 61.08% in 2004. Although more illness as a result of the flu was reported in the St. Louis region for part of the year, annual aggregate inpatient utilization was flat. In fact, modest reductions were observed in Medicaid utilization that may have been in part a result of cuts to the Missouri Medicaid program effective in September 2005.

- In 2005, excess beds grew 9% over 2004.* 2,311 excess available acute care beds were reported. This is equivalent to approximately five empty community hospitals. ■

* 2004 excess beds were revised and increased from 1,996 to 2,121 based on the most current information

Excess Available Beds in 2005 per Network (assuming 80% occupancy is the equivalent of "full")



Sources: Centers for Medicare and Medicaid Services Medicare Cost Reports and internal utilization statements. Hospital network configurations are current as of 2007.

	1996 ¹	1997 ¹	1998 ¹	1999	2000 ¹	2001	2002	2003	2004	2005
Discharges²										
Medicare	138,186	134,941	132,780	133,623	144,245	156,330	162,700	161,665	167,385	174,018
Medicaid	51,212	47,656	44,890	46,960	53,770	56,924	59,781	64,016	65,926	65,023
Other	154,715	166,455	172,025	167,027	148,374	158,128	160,464	163,122	162,236	161,640
Total	344,113	349,052	349,696	347,610	346,389	371,382	382,945	388,803	395,547	400,681
Inpatient Days²										
Medicare	927,986	884,557	833,923	841,192	886,167	904,159	952,302	958,425	984,159	999,340
Medicaid	253,741	228,163	233,863	252,272	276,843	281,161	308,338	327,463	337,555	323,544
Other	623,289	635,816	670,939	703,165	649,387	656,763	650,086	678,304	677,869	683,152
Total	1,805,016	1,765,393	1,738,726	1,796,629	1,812,397	1,842,083	1,910,726	1,964,192	1,999,583	2,006,036
Avg. Length of Stay³										
Medicare	6.7	6.5	6.2	6.2	6.1	5.7	5.8	5.9	5.9	5.7
Medicaid	4.9	4.8	5.2	5.4	5.1	4.9	5.1	5.1	5.1	5.0
Other	4.0	3.9	3.9	4.2	4.4	4.1	4.0	4.2	4.2	4.2
Total	5.2	5.0	4.9	5.1	5.2	4.9	5.0	5.1	5.1	5.0
# of Hospitals	39	39	39	39	38	35	35	35	34	34

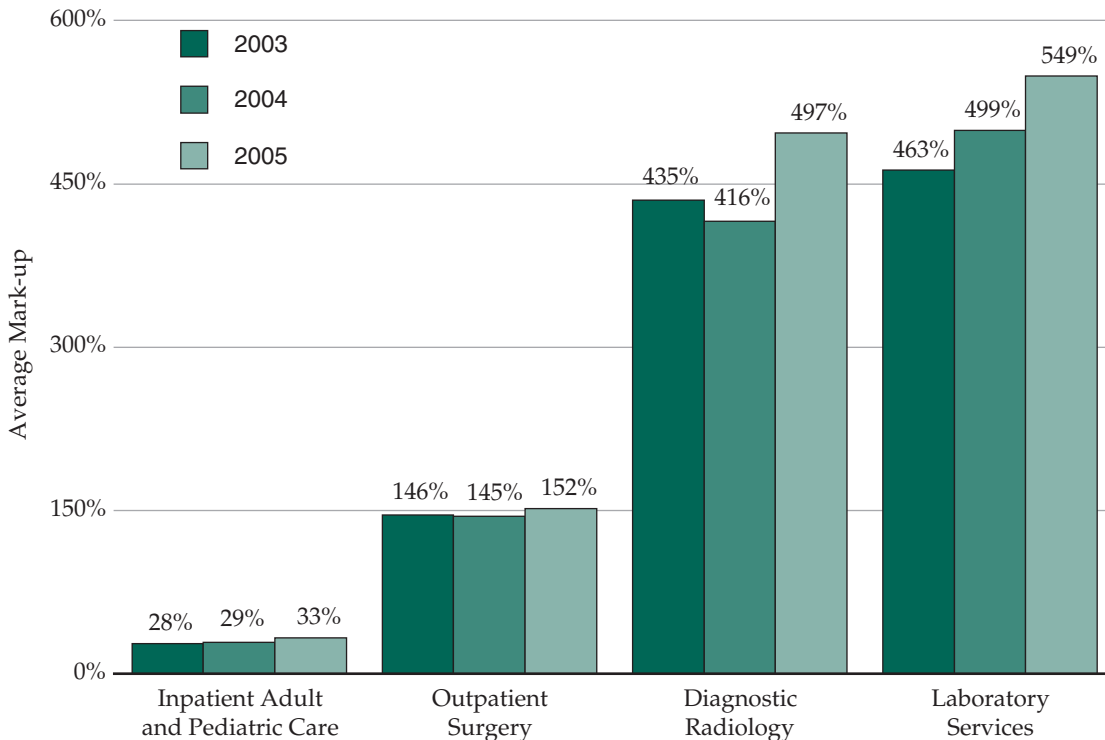
¹ As a result of hospital mergers in fiscal years 1996, 1997, 1998, and 2000, incomplete utilization data for those years was estimated to reflect 12 months. Utilization trends in 1999 and 2000 were affected by the closure of four hospitals.¹⁹

² Utilization categories are defined as 1) Medicare managed care (starting in 1997) and fee for service (indemnity) programs, 2) Medicaid managed care and traditional programs, and 3) Other, including commercially insured, and the uninsured. Changes to previously reported data are based on the most current information.

³ Kindred Hospital is excluded from average length of stay because it is a long-term acute care hospital.



Average Mark-up by Hospital Service St. Louis Area Hospital Industry, 2003 to 2005



Average mark-up approximates the relationship between the charge and the cost of providing services.

A mark-up of 0% indicates the charge equals the cost of providing the service.

A mark-up of 100% indicates charges double the cost of providing the service.

Sources: Centers for Medicare and Medicaid Services Medicare Cost Reports.

Sharp increases in average mark-ups in 2005 worsened the inflationary trend for radiology and lab services. For decades, inpatient service mark-ups have been set at a level that did not cover costs, and higher mark-ups on outpatient services were used to subsidize it. **This cross-subsidization has been a poor long-term strategy for hospitals and their communities**, as high profits attract the addition of new facilities. In health care, both utilization and price rise as capacity increases, unlike other markets in which new entrants drive down price. Research has found that the higher utilization occurs in “supply sensitive services.” These are services whose utilization grows in relation to the medical supply in the community rather than medical need.^{6,7} Additionally, new studies have also demonstrated that oversupply of facilities has a negative impact on technical quality as well.^{8,9}

Nationally, outpatient services grew rapidly in volume and intensity in 2005 and still more in 2006—regardless of their quality or impact on health. Most of this growth can be attributed to outpatient surgery, implantable devices, and complex imaging services, suggesting that their greater profitability is driving higher utilization.¹⁰ ■

	Low Mark-up	High Mark-up
Inpatient Care	-67%	278%
Outpatient Surgery	12%	689%
Diagnostic Radiology	97%	1,091%
Laboratory Services	241%	1,017%

Space did not allow mark-up by service type for individual hospitals to be included in this report. This information may be obtained from the BHC.

What CMS did...

In line with the Four Cornerstones for Improving Health Care Value, CMS will require hospitals to submit outpatient quality indicators in 2008. They believe that public reporting of comparative information is a strong incentive for quality improvement, encouraging the most efficient and effective care.

In 2008, hospitals will be required to report on 10 outpatient quality measures. CMS will provide an incentive payment for hospitals that report on the 10 quality measures, and reduce payments to hospitals that did not report during 2009.

What CMS did not do...

Unfortunate for consumers, CMS did not require ambulatory surgery centers (ASC) to report on quality measures for incentive payments in 2008. Compensation rates for ASCs were reduced to 65% of the hospital rate and the effect varied by specialty. For example, payments improved for orthopedic services, and fell for gastroenterology services.

Average mark-up percentage by network 1996–2005



System Name	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
BJC HealthCare										
Alton Memorial Hospital	112.5%	111.7%	103.0%	125.1%	142.3%	178.2%	190.7%	194.8%	203.5%	205.3%
Barnes-Jewish Hospital ¹	84.8	89.8	91.1	104.8	121.7	124.8	114.6	121.6	129.7	125.7
Barnes-Jewish Hospital—St. Peters	100.0	114.0	118.9	131.5	147.0	157.5	171.6	169.1	162.5	167.6
Barnes-Jewish Hospital—West County	87.3	85.5	97.4	104.9	124.4	153.1	162.3	171.0	172.2	161.5
Christian Hospitals	128.7	126.6	119.2	127.2	136.2	144.7	181.7	179.4	182.2	168.9
Missouri Baptist Hospital—Sullivan	70.3	61.8	79.7	66.7	92.8	107.3	123.3	126.3	145.4	135.3
Missouri Baptist Medical Center	120.1	120.5	126.0	130.8	136.5	153.8	168.1	167.6	168.2	160.9
St. Louis Children's Hospital	35.0	37.8	43.6	51.5	50.4	51.3	52.4	52.1	56.2	64.0
Network Total	91.1%	94.1%	95.5%	106.0%	118.2%	125.8%	128.5%	132.1%	137.7%	134.3%
SSM Health Care										
Cardinal Glennon Hospital	58.3%	62.1%	64.4%	86.8%	98.2%	92.7%	103.9%	122.4%	121.2%	115.0%
DePaul Health Center	101.5	102.0	118.9	131.4	143.8	148.6	180.4	199.0	200.6	198.7
St. Joseph Health Center—St. Charles	101.2	109.4	116.5	140.9	154.9	171.3	193.6	228.4	209.7	224.1
St. Joseph Hospital—Kirkwood	97.8	114.7	138.6	151.1	152.7	170.4	198.4	214.3	202.5	189.1
St. Joseph Health Center—Wentzville ²	52.4	80.3	N/A	73.9	41.5	77.1	93.9	120.9	109.7	69.1
St. Joseph Hospital West—Lake St. Louis	99.3	107.7	131.5	159.2	161.6	187.5	202.7	237.6	221.6	248.8
St. Mary's Health Center	99.6	117.8	127.4	144.8	164.2	171.5	188.9	208.0	206.5	201.9
Network Total	91.5%	101.0%	113.5%	129.5%	142.2%	151.0%	172.6%	195.4%	188.2%	186.7%
St. John's Mercy Health Care										
St. John's Mercy Hospital—Washington	104.1%	90.9%	125.3%	111.5%	113.0%	130.4%	133.6%	132.6%	153.0%	189.6%
St. John's Mercy Medical Center	81.5	108.3	107.9	105.5	109.1	116.6	116.9	125.5	142.6	158.2
Network Total	84.5%	93.2%	110.2%	106.3%	109.6%	118.5%	119.2%	126.4%	143.9%	161.8%
Tenet HealthSystem										
Des Peres Hospital ³	85.0%	107.1%	115.4%	178.8%	231.7%	250.0%	279.8%	359.6%	345.1%	343.7%
St. Louis University Hospital ³	41.7	65.1	41.4	98.0	109.1	182.9	170.8	216.9	225.9	223.0
Network Total	48.9%	68.1%	51.8%	111.8%	130.7%	197.6%	194.9%	248.7%	251.9%	250.5%
Missouri Non-Merged, Non-Affiliated										
Forest Park Hospital ⁴	82.4%	80.4%	108.3%	135.6%	151.2%	221.8%	238.6%	277.8%	210.9%	192.8%
Jefferson Memorial Hospital	90.3	93.3	98.0	101.2	101.5	100.4	98.2	95.6	112.8	115.5
Kindred Hospital	195.3	177.1	176.6	201.4	183.0	160.0	165.3	183.1	193.0	173.0
Lincoln County Memorial Hospital	76.9	69.5	63.6	74.7	68.6	74.2	83.3	72.0	83.8	87.3
St. Alexius Hospital ⁵	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	229.8	174.5
St. Alexius Hospital—Broadway Campus ⁴	63.1	77.4	68.7	63.8	51.9	68.8	115.9	297.1	N/A	N/A
St. Alexius Hospital—Jefferson Campus ⁴	84.4	99.2	112.5	161.2	206.8	243.2	273.3	226.8	N/A	N/A
St. Anthony's Medical Center ⁶	100.9	97.9	108.3	104.3	113.9	109.8	93.7	107.5	119.7	135.1
St. Luke's Hospital	87.9	90.0	109.4	108.1	112.7	118.4	117.9	116.6	125.8	114.7
Total	90.7%	94.1%	106.6%	113.0%	121.8%	136.2%	135.5%	143.3%	145.0%	137.3%
Illinois Non-Merged, Non-Affiliated										
Anderson Hospital	81.3%	94.0%	100.2%	98.4%	106.1%	109.7%	104.3%	115.1%	126.2%	149.0%
Gateway Regional Medical Center ⁷	110.5	113.7	129.6	128.5	115.3	96.7	153.1	189.3	245.4	329.3
Kenneth Hall Regional Hospital (East St. Louis) ⁸	35.7	33.8	14.6	17.0	9.3	21.3	18.9	21.2	30.7	29.4
Memorial Hospital of Belleville	91.2	98.9	93.4	96.5	97.9	97.2	106.7	108.4	109.3	116.4
St. Anthony's Health Center (Alton) ⁹	130.4	150.3	188.8	176.5	194.8	208.4	213.4	215.7	223.0	251.0
St. Elizabeth's Hospital (Belleville)	90.9	103.4	106.0	110.8	113.6	112.2	122.3	128.9	114.8	131.4
St. Joseph Hospital (Breese, IL)	48.2	63.2	64.5	68.7	70.7	71.2	80.1	88.1	91.7	89.4
Touchette Regional Hospital	46.0	61.8	43.4	42.3	36.7	41.0	59.0	49.8	55.6	50.2
Total	90.7%	101.1%	105.0%	104.6%	106.7%	107.1%	120.3%	128.6%	136.3%	158.1%
Aggregate for 34 St. Louis Hospitals	84.5%	92.2%	97.9%	107.0%	120.9%	133.2%	139.3%	152.6%	156.4%	158.2%

¹ Barnes Hospital and The Jewish Hospital of St. Louis merged to become Barnes-Jewish Hospital in fiscal year 1996. Their combined 1996 Medicare Cost Report (MCR) included 11 months of Barnes Hospital data and 12 months of Jewish Hospital data.

² St. Joseph Health Center—Wentzville (as the former Doctors Hospital—Wentzville) filed a 7 month Medicare Cost Report for 1996 and fiscal year 1998 information was unavailable. They filed an 8.5 month MCR for fiscal year 2000 just prior to acquisition by Essent Healthcare of Missouri June 28, 2000 and were renamed Crossroads Regional Hospital. They were acquired by SSM Health Care in November 2005 and are currently shown as part of SSM Health Care.

³ Des Peres and St. Louis University Hospitals reported 11 months of data in 1998.

⁴ Southpointe Hospital was renamed St. Alexius Hospital—Jefferson Campus in 2003. Forest Park Hosp., St. Alexius Hosp.—Broadway Campus (formerly Alexian Bros. Hosp.), and St. Alexius Hosp.—Jefferson Campus were sold to Doctors Community Healthcare Corp. in November 2004 by Tenet Healthcare Corp. Due to this transfer in ownership, 2002, 2003 & 2004 data could not be verified.

⁵ Beginning in 2004, St. Alexius-Broadway Campus and St. Alexius-Jefferson Campus reported on a combined basis under St. Alexius Hospital.

⁶ From 1997 to 1999, statistics for St. Anthony's Medical Center and St. Clement's Hospital are combined under St. Anthony's Medical Center.

⁷ Gateway Regional Medical Center (formerly St. Elizabeth's Medical Center of Granite City) was acquired by Community Health Systems on January 1, 2002.

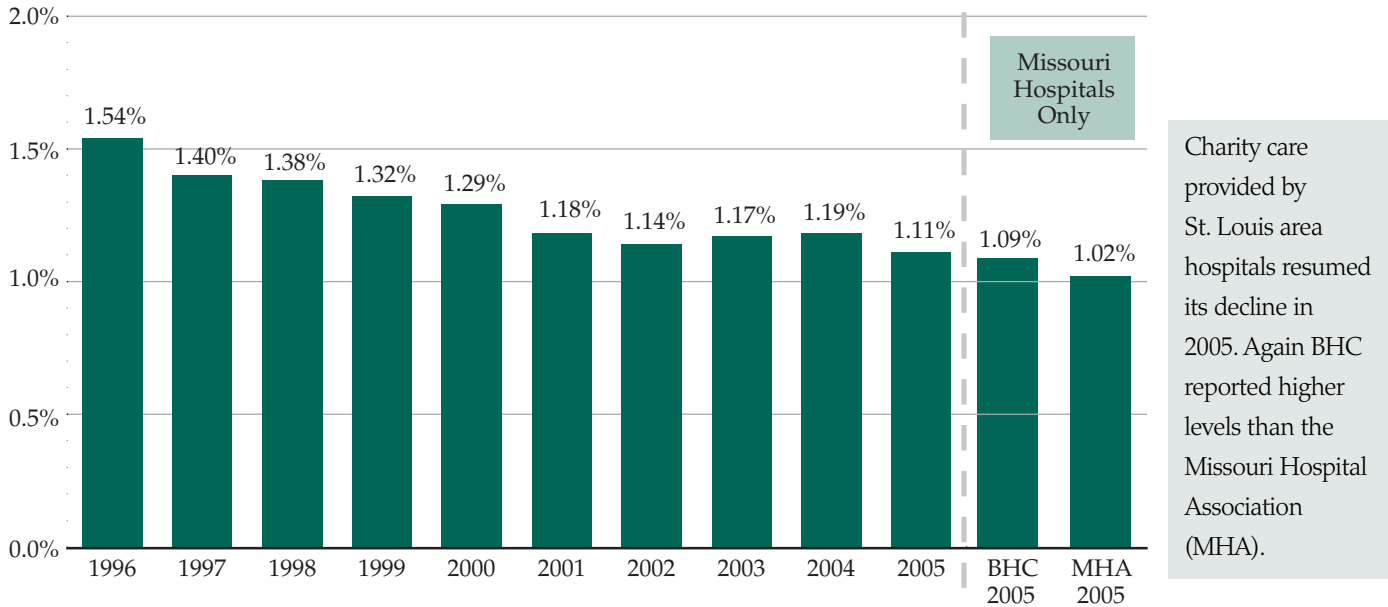
⁸ St. Mary's Hospital of East St. Louis was acquired by the Southern Regional Healthcare Foundation February 1, 2004 and was renamed Kenneth Hall Regional Hospital.

⁹ Statistics for St. Anthony's Hospital and St. Clare's Hospital are combined under St. Anthony's Health Center.

Sources: Centers for Medicare and Medicaid Services Medicare Cost Reports and audited hospital financial statements. Data in this table not adjusted for inflation.

Note: Changes in previously reported data are based on most current information. Hospital network and affiliate configurations shown on this page are current as of 2007.

Despite growing uninsured, hospitals provide less charity care Charity Care as a Percentage of Operating Revenue 1996–2005



Sources: Centers for Medicare and Medicaid Services Medicare Cost Reports, audited financial statements, internal financial statements, the Missouri Hospital Association (MHA) website focusonhospitals.com, and MHA/AHA Annual Licensing Surveys.

Lower MHA charity care cost continues

The number of uninsured in Missouri jumped to an estimated 11% to 12.6% in 2005 according to the research of Timothy McBride, PhD of St. Louis University.¹¹ Yet, charity care provided by the region's hospitals as a percent of operating revenue declined. It is unclear why the level of charity care remains low despite the rise in uninsured or where these individuals are accessing health care.

BHC calls for non-profit hospitals to provide a minimum of charity care at 3% of operating revenue.

Individually and collectively, St. Louis hospitals provide charity care at levels well below this standard (see page 13 for individual hospital levels). The American Hospital Association (AHA) considers charity care and bad debt expense together as total uncompensated care and expresses it as a percentage of total expense. Even using the AHA measure, St. Louis hospitals' uncompensated care (3.2%) trailed the uncompensated care levels provided by hospitals (5.6%) nationally.¹² The BHC measure does not include bad debt, a position in line with a growing consensus that includes some hospital associations, consumer advocacy groups, and government.

High costs of health care contribute to the rise in uninsured. Recent proposals in California, Pennsylvania, and other states to **expand coverage to the uninsured** have emphasized the **critical need for improvements in affordability**

and quality of care. Operating cost per adjusted discharge at St. Louis hospitals has grown at an average rate of 10% per year since 2003 (see page 7 for individual hospital performance). Hospitals in some other communities have demonstrated the ability to achieve dramatic cost reductions by reducing waste while improving health care quality. Similar success must be replicated in all health care delivery sites to ensure cost-effective care. **Improving health care affordability is a moral imperative, and perhaps, the greatest challenge facing physicians and hospital leaders during the coming decade.** Without dramatic improvements in the cost effectiveness of health care, neither business nor government will be able to expand coverage to the uninsured.

Concern over community benefit provided by non-profit hospitals remains on the national agenda and has prompted the Internal Revenue Service (IRS) to redesign the tax form 990 filed by non-profit institutions. In October 2007, the Senate Finance Committee facilitated a roundtable discussion to determine whether the revised form alone was enough or if legislation was needed to ensure non-profit hospitals provided adequate levels of community benefit to offset the generous tax breaks they receive. Though specific legislation on reforms has not yet resulted, it remains a possibility, particularly as charity care levels remain low while hospital reserves grow. St. Louis area hospital reserves grew to \$4.1 billion in 2005 (see page 22). ■

Charity care profile by network 2003–2005



System Name	2003 Operating Revenue	2004 Operating Revenue	2005 Operating Revenue	2003 BHC Charity cost as % of op. rev. ¹	2004 BHC Charity cost as % of op. rev. ¹	2005 BHC Charity cost as % of op. rev. ¹	2004 MHA Charity cost as % of op. rev. ¹	2005 MHA Charity cost as % of op. rev. ¹
BJC HealthCare								
Alton Memorial Hospital	\$ 86,039,047	\$ 96,278,828	\$ 110,126,789	1.00%	1.29%	1.09%	N/A	N/A
Barnes-Jewish Hospital	944,042,713	996,684,525	1,075,362,035	2.06	2.15	1.42	0.88%	1.42%
Barnes-Jewish Hospital—St. Peters	81,564,303	86,349,397	99,063,776	0.33	0.40	0.60	0.34	0.58
Barnes-Jewish Hospital—West County	76,849,551	78,024,315	76,926,555	0.22	0.25	0.37	0.24	0.38
Christian Hospitals	247,495,936	248,509,158	244,192,451	1.12	1.79	1.98	1.48	1.88
Missouri Baptist Hospital—Sullivan	30,282,396	31,292,194	31,564,770	1.16	0.55	1.93	0.52	1.87
Missouri Baptist Medical Center	309,049,060	333,256,106	345,962,582	0.28	0.29	0.49	0.26	0.50
St. Louis Children's Hospital	257,116,000	278,842,298	300,123,547	1.07	0.50	0.70	1.14	0.67
Network Total	\$2,032,439,006	\$2,149,236,821	\$2,283,322,505	1.35%	1.40%	1.16%	0.84%	1.15%
SSM Health Care								
Cardinal Glennon Hospital	\$ 145,917,301	\$ 184,597,702	\$ 197,048,078	0.17%	0.33%	0.10%	0.24%	0.10%
DePaul Health Center	199,046,000	224,876,899	255,139,474	1.12	1.69	1.56	1.46	1.42
St. Joseph Health Center—St. Charles	141,972,807	142,922,207	159,075,934	0.75	1.42	1.29	1.26	1.21
St. Joseph Health Center—Wentzville ²	23,239,110	22,956,438	24,218,902	0.66	1.04	N/A	N/A	N/A
St. Joseph Hospital—Kirkwood	82,755,347	92,836,791	102,714,920	0.43	0.52	0.93	0.46	0.86
St. Joseph Hospital West—Lake St. Louis	59,601,304	62,463,822	73,399,939	0.62	1.16	1.14	0.97	1.05
St. Mary's Health Center	204,643,986	220,994,637	252,121,833	0.60	1.78	1.15	1.78	1.10
Network Total	\$ 857,175,855	\$ 951,648,496	\$1,063,719,080	0.66%	1.24%	1.05%²	1.13%²	0.98%²
St. John's Mercy Health Care								
St. John's Mercy Hospital—Washington	\$ 69,802,186	\$ 72,706,996	\$ 75,910,181	0.80%	0.71%	1.00%	0.65%	0.91%
St. John's Mercy Medical Center	454,537,124	534,089,839	590,246,406	1.07	0.94	0.97	1.08	0.92
Network Total	\$ 524,339,310	\$ 606,796,835	\$ 666,156,587	1.03%	0.92%	0.98%	1.03%	0.92%
Tenet HealthSystem								
Des Peres Hospital	\$ 93,500,203	\$ 98,414,763	\$ 106,091,411	0.27%	0.17%	0.11%	0.19%	0.11%
St. Louis University Hospital	312,102,000	305,981,000	308,619,020	2.77	1.96	2.30	1.51	2.13
Network Total	\$ 405,602,203	\$ 404,395,763	\$ 414,710,431	2.20%	1.52%	1.74%	1.19%	1.62%
Missouri Non-Merged, Non-Affiliated								
Forest Park Hospital ³	\$ 111,888,437	\$ 104,361,647	\$ 109,477,656	1.02%	0.63%	1.31%	0.86%	1.13%
Jefferson Memorial Hospital	81,991,369	91,395,954	101,001,564	0.47	0.45	0.35	1.01	0.30
Kindred Hospital ⁴	17,687,807	18,189,883	25,801,060	0.87	N/A	N/A	0.00	N/A
Lincoln County Memorial Hospital	19,690,767	22,517,906	24,899,929	0.20	0.21	0.47	0.22	0.45
St. Alexius Hospital ^{3,5}	N/A	86,794,253	96,874,984	N/A	1.26	0.48	2.25	0.45
St. Alexius Hospital—Broadway Campus ⁵	48,109,385	N/A	N/A	1.85	N/A	N/A	N/A	N/A
St. Alexius Hospital—Jefferson Campus ⁵	39,398,123	N/A	N/A	0.97	N/A	N/A	N/A	N/A
St. Anthony's Medical Center	290,918,000	314,980,000	335,731,000	0.87	0.86	0.86	0.77	0.82
St. Luke's Hospital	263,468,000	274,105,000	307,192,000	0.34	0.32	0.32	0.30	0.29
Total	\$ 873,151,888	\$ 912,344,643	\$1,000,978,193	0.74%	0.65%⁴	0.64%⁴	0.78%	0.59%⁴
Illinois Non-Merged, Non-Affiliated								
Anderson Hospital	\$ 71,311,797	\$ 79,526,939	\$ 95,473,428	0.30	0.57%	0.72%	N/A	N/A
Gateway Regional Medical Center ⁶	74,031,032	87,764,269	107,866,488	N/A	0.38	0.94	N/A	N/A
Kenneth Hall Regional Hospital (E. St. Louis)	36,313,909	43,190,945	40,022,154	6.02	1.91	2.68	N/A	N/A
Memorial Hospital of Belleville	156,851,476	159,978,114	171,442,373	0.71	0.99	1.14	N/A	N/A
St. Anthony's Health Center (Alton) ⁷	88,473,759	88,296,847	89,254,893	3.39	3.30	2.29	N/A	N/A
St. Elizabeth's Hospital (Belleville)	142,587,729	141,569,466	153,765,842	0.76	0.82	1.28	N/A	N/A
St. Joseph Hospital (Breese, IL)	26,515,322	29,238,411	32,322,361	0.05	0.13	0.28	N/A	N/A
Touchette Regional Hospital	28,121,952	30,879,868	29,806,449	0.02	2.64	3.93	N/A	N/A
Total	\$ 624,206,976	\$ 660,444,859	\$ 719,953,988	1.38%⁶	1.23%	1.39%	N/A	N/A
Aggregate for 34 St. Louis Hospitals	\$5,316,915,238	\$5,684,867,417	\$6,148,840,784	1.17%⁶	1.19%⁴	1.11%^{2,4}	0.93%²	1.02%^{2,4}

¹ BHC Charity care cost is the product of charity care gross charges times the cost-to-charge ratio. Missouri Hosp. Assoc. (MHA) Charity care cost is found on the www.focusonhospitals.com website.
² Operating revenue for Crossroads Reg. Hosp. (now St. Joseph—Wentzville) was excluded from these figures since the hospital did not report charity care to MHA in 2004 or to MHA and BHC in 2005.
³ St. Alexius and Forest Park hospitals were sold to Doctors Community Healthcare Corporation in 2004, and due to the transfer in ownership, 2003 and 2004 data could not be verified.
⁴ Operating revenue for Kindred Hospital was excluded from these figures since the hospital did not report charity care to BHC in 2004 and 2005 or to MHA in 2005.
⁵ Beginning in 2004, St. Alexius—Broadway Campus and St. Alexius—Jefferson Campus reported on combined basis under St. Alexius Hospital.
⁶ Operating Revenues for Gateway Regional Medical Center have been excluded from these figures, because charity care information was unavailable for 2003.
⁷ Statistics for St. Anthony's Hospital and St. Clare's Hospital are combined under St. Anthony's Health Center.
Sources: Centers for Medicare and Medicaid Services Medicare Cost Reports, audited financial statements, and AHA/MHA Licensing Surveys. Note: In order to assess a hospital's charitable commitment, it is necessary to evaluate the following: 1) Charity care performance, 2) Bad debt expense, 3) Case-mix (especially as it relates to the Medicaid population), and 4) Other charitable programs in which significant allowances and discounts are provided. All figures are not adjusted for inflation. Hospital network and affiliate configurations shown on this page are current as of 2007.

Physician Recognition Programs

Achieving clinical excellence takes more than simply understanding the science, particularly when caring for patients with a chronic illness. It takes a care setting that is accessible to patients; avails time for listening and teaching; engages patients in decision-making; and systematically manages data, such as laboratory results. As a result, care is better coordinated, fewer errors are likely, and patients achieve better self management skills.

The St. Louis region is fortunate to have more than 120 physicians, many primary care physicians, taking action through the programs noted below to ensure high-quality care and fully address patients' medical needs. If you are looking for a new experience in patient care, more information on these programs and a list of participating physicians can be found at NCQA.org or IMPMO.org and also on the following page. **BHC commends the physician leaders, noted on the next page, who have voluntarily stepped forward to make the care they deliver more collaborative and patient-centered (IMP) and to have their performance measured against national quality standards (NCQA).**

The National Committee for Quality Assurance (NCQA), a respected 501c3 organization, has been dedicated to improving health care quality since its founding in 1990. NCQA's Physician Recognition programs identify clinicians via medical record review, who consistently deliver high-quality care for key conditions. The criteria are established through an open process with input from many partners, including the American Diabetes Association and the American Heart /Stroke Associations and the best evidence available. The American Board of Family Medicine (ABFM) recognizes NCQA recognition in its board designations. **NCQA's physician recognition programs are the only national source of publicly available information about physician services that look at the results of actual care.**

Diabetes Physician Recognition Program (DPRP)

Measurements include HbA1c control, blood pressure control, cholesterol control, eye exam, foot exam, and advice or treatment for nephropathy and smoking cessation.

Approximately 50,000 people with Type II diabetes are living in the St. Louis region with about one-third of them unaware of their condition according to the St. Louis Diabetes Coalition (SLDC).¹³

Heart/Stroke Recognition Program (HSRP)

Measurements include complete lipid profile, blood pressure and cholesterol control, use of aspirin or another antithrombotic and smoking cessation advice or treatment.

According to a recent report, Missouri has the fifth highest death rate from coronary heart disease in the United States.¹⁴ Missouri's high overall mortality from heart disease underscores the critical importance of this program for its citizens.

The Ideal Missouri Practice (IMP) With support from the Commonwealth Fund, Dartmouth Medical School, Primaris (Missouri's Medicare Quality Improvement Organization)

and BHC worked together to bring Missouri primary care physicians patient-centered, collaborative care information and tools. Led by experienced faculty, physicians are guided through sequenced innovative steps, designed to introduce small and subtle changes to their patient encounters.

After getting a feel for a patients' readiness, physicians introduce *How's Your Health*, a survey that quickly enables the physician to tap into relevant and current information about **what matters most** to the patient. Individually, the results improve communications between the physician and patient. In aggregate, IMP physicians use the data to better understand and improve their practice. By observing overall trends and common patient responses, physicians are *scored* in real-time by their patients.

Collaborative care refers to a partnership between a health care professional and patient, through which patients gain confidence in managing their health condition. This practice style strives for excellence in five areas of care: continuity, access, efficiency, communication, and confidence. When a practice scores high in these five areas, it can be expected that patients will agree, that they receive the care they want and need when they want and need it. **Many see this model of collaborative care as key to improving health care value and the foundation of successful health care reform.** Hence, the consensus is growing that everyone should have a personalized partnership with a primary care physician, often referred to as a **"medical home"**.

BHC recognizes the central role of physicians in improving health care and believes the medical home concept holds promise. Yet, a severe shortage of primary care providers may limit its potential. Since 1995, the number of physicians entering primary care residency programs has declined steadily. **Community-wide effort to better understand and support primary care physicians is needed.** ■

"There is so much to accomplish in the typical office visit. Sometimes in trying to manage a patient's diabetes, high blood pressure, medications, preventive needs, etc. we may fail to respond to what is bothering the patient most. The Ideal Missouri Practice How's Your Health tool works. I found myself completely changing course during an office visit recently after reviewing a patient's pre-visit How's Your Health survey."

—John Zalewski, M.D., Internist, St. John's Mercy Medical Group



Missouri Physicians recognized by the National Committee for Quality Assurance's Heart/Stroke (HSRP) and Diabetes (DPRP) Physician Recognition Programs

Physician Name	HSRP	DPRP
Christopher Abercrombie		●
Helene Aisenstat		●
Robert Aisenstat		●
Juan Alvarez	♥	
Phillip Apprill	♥	
Elizabeth Ballard		●
Chelmer Barrow	♥	●
William Beaman	♥	●
Christopher Bowe*		●
David Brown	♥	●
Kathleen Brunts		●
Richard Burns	♥	●
Charles Carey	♥	
Jennifer Carpenter		●
Siroth Charnond		●
Duck Sung Chun	♥	
Philip Conway	♥	
James Corder		●
David Cravens	♥	
Robert Curtin		●
Peter Danis, III	♥	●
Dennis Disch	♥	
David Dobmeyer	♥	
Stanley Dorst	♥	
Ralph Duda, Jr.		●
Manoj Eapen	♥	
Leonard Fagan	♥	
Jeffrey Faron	♥	●
Mark Faron	♥	●
Anne Fitzsimmons	♥	
William Fritz	♥	●
Michael Fuller		●
Mary Gamache	♥	
Francisco Garriga	♥	
Christine Gentry	♥	
Michael Goldmeier	♥	
Andrew Grabowski*		●
Gary Gray	♥	●

Physician Name	HSRP	DPRP
Brian Grus		●
Betsy Grybinas		●
Thomas Gutmann		●
Kristen Hahn-Cover	♥	●
Thomas Hale	♥	●
Gavin Helton	♥	●
Joseph Hilgeman	♥	●
Grant Hoekzema		●
Mark Houston	♥	●
Heather Jordan		●
M. Kancherla	♥	
Andrew Kazdan	♥	●
L. Kennington		●
James Ketchum	♥	●
John Kilgore	♥	
James Koller		●
Robert Kunkel		●
Edward Kunst	♥	●
Laura Lasack*		●
Michael Lefevre	♥	
Joseph LeMaster	♥	
Rebecca Llorens	♥	●
James Lord		●
Catherine Lowder		●
Mel Lucas	♥	●
Edward Lynch	♥	●
Kirsten Maakestad	♥	
Daniel Maestas	♥	
Stanley Mathew		●
Bernard McGuire	♥	●
Zinnat Meghjee		●
David Mehr	♥	
Marc Merbaum		●
Marsha Mertens		●
Shamita Misra	♥	
David Morton	♥	
Terrell Mulford	♥	
Timothy Murphy		●

Physician Name	HSRP	DPRP
Tajaswini Nayak		●
David Pernikoff		●
Robert Poetz		●
Bharathi Raju		●
Alan Rauba		●
Naveed Razzaque		●
Sheryl Ream		●
Erika Ringdahl	♥	
Tracy Riordan		●
David Rosenberg	♥	
Kelly Rourke		●
Jacqueline Ruplinger	♥	
Stephen Sanders	♥	●
Jennifer Scheer	♥	●
David Schoenwalder	♥	●
Kristen Scullin		●
Laurie Senol		●
David Sewall	♥	
Christine Sigman		●
Kevin Smith		●
Donald Snodgrass		●
Thomas Sommers		●
George Stachecki		●
Keith Starke	♥	●
Charles Tadros	♥	●
Martha Terry	♥	
George Thampy		●
Michael Treisman	♥	●
Paul Vatterott		●
Gary Vickers	♥	●
Daniel Vinson	♥	
Cami Watkins	♥	
Dennis Wen	♥	
Catherine Wilke		●
Harold Williamson	♥	
John Zalewski*	♥	●
Beth Zimmer		●
Steven Zweig	♥	

Ideal Missouri Practice (IMP) Physicians

Michael J. Adams, M.D., St. Peters
 Thomas Alderson, M.D., St. Joseph
 Peggy Barjenbruch, M.D., Mexico
 Michael Barron, M.D., Belleville, IL
 Aaron Bjorn, D.O., St. Louis
 Christopher Bowe, M.D., St. Louis*
 Stephen Christiansen, M.D., Springfield
 Todd Craig, M.D., Washington
 Bridget Early, M.D., Ashland
 Michael Fedak, M.D., St. Louis
 Andrew Grabowski, D.O., St. Louis*

Patrick B. Harr, M.D., Maryville
 Thomas F. Hastings, M.D., Chesterfield
 Felix Herrera, M.D., St. Louis
 Denise Hooks-Anderson, M.D., St. Louis
 Aubra Houchin, D.O., St. Peters
 Gordon Jones, M.D., Sikeston
 Mahrukh Khan, M.D., St. Louis
 Laura E. Lasack, M.D., Union*
 Kevin Martin, D.O., St. Peters
 Timothy McCann, M.D., St. Louis
 Christopher Normile, M.D., St. Charles

Ken Phillips, M.D., Cape Girardeau
 Randall Qualls, D.O., Lebanon
 Caroline Rudnick, M.D., St. Louis
 Christine Salter, M.D., St. Louis
 Stephen Staten, M.D., St. Louis
 Tania L. Schmid, M.D., Chesterfield
 Shari Thompson, M.D., Marshall
 Kirby Turner, M.D., Poplar Bluff
 R. Jerome Williams, Jr., M.D., St. Louis
 John Zalewski, M.D., St. Louis*

* Recognized by NCQA and IMP

Hospital Compare, a Centers for Medicare and Medicaid Services (CMS) program provides national reporting on how often hospitals provide care consistent with consensus-based recommendations. For the past two years, this report has provided St. Louis hospitals' performance on CMS's 10 Measure Starter Set compared to hospitals nationally as ranked by HealthInsight, a CMS certified quality improvement organization. New to this report, results reflect the addition of the latest 10 clinical measures. The table below shows St. Louis hospitals' performance on the full 20 measures currently available (see box below right). The methodology is the same as past years except all hospitals were included in the rankings regardless of the number of cases reported. CMS again requires hospitals to report using the 10 Starter Measures in order to receive incentive payments, or risk receiving reduced payments if they do not.

Inclusion of the new 10 additional measures produced a higher ranking for St. Louis hospitals for both years; however, overall quality performance remained mediocre. It should also be noted that CMS audits the 10 starter measures but not the additional 10 measures.

Hospital Compare performance has profound implications for the community as recent research shows that **performance at or above the 75th percentile results in fewer deaths as compared to lower percentile performance.**¹⁵ Eight hospitals improved performance in 2006, some significantly, causing the aggregate rank to edge two points higher driven largely by better heart failure care. **St. Johns, Washington, MO and Alton Memorial are commended for their continuing high performance. Barnes Jewish Hospital is recognized for having the largest improvement in their ranking (34 points).** ■

Frequency (%) that St. Louis Hospitals Provide Recommended Care and National Performance Rankings: Jan.-Dec. 2006

Hospital	Frequency of Recommended Care (Goal = 100%)				National Performance Ranking	
	Heart Attack	Heart Failure	Pneumonia	Surgical Infection	2006 Nat'l Rank	2005 Nat'l Rank
Alton Memorial Hospital	97%	96%	94%	85%	90th	91st
Anderson Hospital	96	93	89	90	77th	83rd
Barnes Jewish Hospital	97	92	80	90	80th	46th
Barnes Jewish Hospital, St. Peters	93	76	91	92	79th	81st
Christian Hospitals	94	83	88	89	68th	67th
DePaul Health Center	94	86	90	95	87th	72nd
Des Peres Hospital	98	92	92	71	71st	60th
Gateway Regional Medical Center	91	73	84	54	18th	37th
Jefferson Memorial Hospital	90	81	69	83	29th	11th
Memorial Hospital of Belleville	93	92	81	75	56th	55th
Missouri Baptist Medical Center	97	84	86	92	74th	55th
St. Anthony's Medical Center	93	79	90	82	57th	74th
St. Elizabeth's Hospital, Belleville	93	78	78	79	33rd	40th
St. John's Mercy Hospital, Washington	94	96	93	95	95th	95th
St. John's Mercy Medical Center	96	90	90	90	86th	86th
St. Joseph Health Center	98	82	88	92	83rd	88th
St. Joseph Hospital, Kirkwood	97	91	89	90	80th	76th
St. Joseph Hospital, West	94	78	88	90	66th	79th
St. Louis University Hospital	96	93	88	69	69th	76th
St. Luke's Hospital	93	97	93	73	81st	95th
St. Mary's Health Center	96	89	87	93	82nd	68th
St. Louis Hospital Average	95%	87%	87%	84%	70th	68th

Hospital Compare Measures

Heart Attack (Acute Myocardial Infarction or AMI)

- Aspirin at arrival
- Aspirin at discharge
- ACE Inhibitor for Left Ventricular Systolic Dysfunction (LVSD)
- Beta Blocker at arrival
- Beta Blocker at discharge
- Thrombolytic agent within 30 min. of arrival
- PCI within 120 minutes of arrival
- Smoking cessation advice

Heart Failure

- Assessment of Left Ventricular Function (LVF)
- ACE Inhibitors for LVSD
- Discharge instructions
- Smoking cessation advice

Pneumonia

- Oxygenation Assessment
- Initial Antibiotic Timing
- Pneumococcal Vaccination
- Blood culture prior to first antibiotic rec'd
- Smoking cessation advice
- Appropriate antibiotic

Surgical Infection Prevention

- Antibiotic 1 hour prior to surgical incision
- Antibiotics stopped within 24 hours after end of surgery

Analysis Methodology

The score for each clinical area (frequency of recommended care) represents the hospital's combined performance for all measures.

To compute national rankings, each hospital's performance on each measure was ranked on a 0-1 scale (similar to grading each measure on a curve). An average rank was computed across all 20 measures for each hospital in contrast to the national comparison group. It is expressed as a percentile among all hospitals in the national sample. The combined St. Louis hospital rank at the 70th percentile identifies an important opportunity for improvement. ■



Hospitals across the nation are making major investments in **information technology (IT)** to improve the quality, efficiency, and safety of the care they provide. Recognizing and comparing IT investments has been challenging in the St. Louis region due to a lack of standardized reporting by hospitals. It does appear that St. Louis hospitals are investing heavily in electronic medical records to link their affiliated physicians via a common medical record. **It is not clear to what degree hospitals are also investing in IT systems that improve the safety of care of patients while hospitalized.** During 2007, BHC attempted to understand these investments through the American Hospital Association (AHA) IT survey.

The Most Wired Survey

For the past nine years, the AHA, through a partnership with the Health Forum, has conducted a standardized survey of the nation's hospitals on their use of IT to accomplish key strategic and operational goals. Each year the top 100 scoring hospitals are selected and recognized in AHA's publication *Hospitals & Health Networks (H&HN)*. *H&HN's* analysis shows an association between IT adoption and key quality measures. **Not surprisingly, the 100 Most Wired Hospitals have been found to have better outcomes in four key measures:**

- Lower mortality rates,
- Agency for Healthcare Research and Quality's (AHRQ) patient safety measures,
- Hospital Compare's Core Measures, and
- Average length of stay.

Alone, health care IT does not achieve better quality, it does however, clearly enable and accelerate process improvements. Behind every great success story of achieving new levels of safe, high quality, affordable care—one will likely find an early adopter of health IT.

Congratulations!

St. John's Mercy Medical Center
St. John's Mercy Washington
Members of
Sisters of Mercy Health System

designated

2007 Top 100 Most Wired

Sisters of Mercy Health System (SMHS), St. Louis, achieved designation as one of the Top 100 Most Wired Hospitals. SMHS operates hospitals in a seven state area including Missouri. According to SMHS, IT implementation is a work in progress. Bar-coded medication administration, an important safety feature, is in use at 10 of their largest hospitals including both St. John's facilities in the St. Louis

area. Installation of electronic medical records (EMR) in physician offices is scheduled to begin in 2008. Hospital implementation of EMRs will begin in 2008 as well.

Characteristics of the Most Wired Hospitals?

Improve Patient Flow

Electronic bed boards and other technologies improve efficiency and reduce capacity constraints

Improve Workflow

Eliminating waste and improving care is the goal for workflow redesign—IT is the facilitator

A Discipline of Process Improvement

Improve results through programs such as Six Sigma, Lean Management, CQI and others.

Measurement of Results

Key measures are tracked and analyzed to improve or manage processes

Medication Management at the Bedside

Electronic ordering and bedside medication matching reduce potential errors

Smart Alerts to Improve Care

Electronic surveillance systems tied to alerts reduce mortality in the ICU

Ubiquitous Access to Digital Images

Digital images are provided to an expanding number of clinical service areas and patient settings

A Wired Operating Room

Automation and process redesign assisted by IT improves safety, quality, and efficiency in the OR

A Plan for the Worst

Plans are in place to restore clinical systems after unplanned downtime

A Strong Infrastructure

Balance between investing capital that improves infrastructure vs. deploying new functionality

Sources: Solovy A, Hoppszallern S, Brown SB, "Ten Lessons from the Top 100, 2007 Most Wired," *Hospitals & Health Networks*, July 2007.

IT is an important solution to improving health care value and should be a major consideration when selecting a health care provider. Unfortunately, BJC, SSM, and St. Luke's, do not provide information on their IT investments to either of the two major IT surveys: AHA or The Leapfrog Group. BHC has asked local hospitals to report on their progress in IT adoption in a common format for the benefit of the public. A standardized source of information on hospitals' IT investment is needed so that the public can fairly compare hospitals on the presence of IT systems most likely to produce a safe, high quality, and coordinated patient care experience. ■



In its landmark report, *To Err is Human*, the Institute of Medicine (IOM) identified medical error as a leading cause of death in the United States; **responsible for more deaths each year than car accidents, breast cancer, and AIDs**. As the IOM points out, health care is a high-hazard industry and medical mistakes and preventable deaths remain a serious problem. Consumers have a right to expect safe, effective treatment when receiving care. They also have a critical role to play in preventing mistakes and encouraging faster adoption of safe practices and systems.

Developing a culture of safety must be a top priority for all.

- Patients can help themselves and the community by checking out local hospitals' quality and safety records, **before they need hospitalization**. While this isn't always easy to do, it is important. Comparative information of actual performance is gradually being made public. Reputation alone may not reflect current performance and results may vary by type of medical condition or procedure.
- **Ask ahead of time and choose a hospital that uses a bar coding system for administering medications.** Bar coding

is not just for retailers, it offers significant protection from medication errors, the most common medical mistake. Since February 2005, the FDA has required most medications to have a bar code. A bar code is able to identify and match important drug and patient information at the time of drug administration, **protecting both the patient and nurse**. Among other errors, these systems would prevent the recent highly publicized errors related to children receiving adult-dose medications and the administration of incompatible blood products. **BHC commends Missouri hospitals St. John's Mercy of Creve Coeur and Washington, BJC's Missouri Baptist, Progress West, Barnes-Jewish St. Peters and West County hospitals, St. Luke's Hospital, and Tenet's Des Peres Hospital for making this important safety investment for their patients and nurses.** BHC encourages all hospitals to follow suit. Why should St. Louis' patients accept this unnecessary risk, particularly when paying top dollar for their care?

BHC commends the five St. Louis area hospitals listed below for their commitment to patient safety and public accountability, as demonstrated by their voluntary reporting to Leapfrog.

The Leapfrog Group, with initial funding from the Business Roundtable, was developed to encourage breakthrough improvements in health care safety for all Americans. It encourages public reporting of hospital quality and safety practices through a voluntary survey that differentiates safe practices that have been shown to reduce errors (see table below).

More than 2,400 hospitals or 56% of all U.S. hospital beds were targeted in the Leapfrog Survey. Of the targeted hospitals, 45% publicly reported to the Leapfrog Survey. In the St. Louis region, only 12% of hospitals publicly reported to the Leapfrog Survey. **The St. Louis region continues its distinction as having the lowest hospital reporting of Leapfrog's 32 regions.** ■

Hospital Name	CPOE	ICU	Quality Index	Never Events
Anderson Hospital				
Des Peres Hospital				
Lincoln County Medical Center				
Saint Louis University Hospital				
St. Elizabeth Hospital				

- Fully implemented Leapfrog's quality and safety leap
- Good progress
- Good early-stage effort
- Willing to report publicly, did not make good early-stage effort



Selected Leapfrog Leaps

- Computer physician order entry (CPOE)**—integrates orders with other patient information and checks for potential errors.
- Intensivists (ICU)**—requires hospitals to have a critical care-trained physician onsite at least eight hours per day, and telephonic availability off-hours.
- Safe Practices Score**—tracks 27 other safe practices endorsed by the National Quality Forum because together they create a culture of safety.
- Never Events**—requires adherence to defined practices related to the National Quality Forum (NQF) Serious Reportable Events.
- High Risk Treatments**—Evidence-based Hospital Referral (EHR) standards on high-risk treatments.

How did the St. Louis area reporting hospitals do?

- Nationally, 11% of hospitals that reported to Leapfrog fully met this leap. All of the hospitals that reported to Leapfrog are willing to report publicly on CPOE, but have not yet achieved the good early-stage effort recognition.
- Nationally, 29% of hospitals that reported to Leapfrog fully met this leap. In a departure from last year, Anderson Hospital no longer fully meets Leapfrog's ICU Physician staffing leap and Des Peres is no longer making a good early-stage effort. All of the hospitals are willing to report this information publicly but have not achieved the good early-stage effort recognition.
- Nationally, 25% of hospitals that reported to Leapfrog fully met this leap. While four out of the five hospitals that reported to Leapfrog fully met NQF's Safe Practices in 2006, no reporting St. Louis hospital fully met the safe practice leap in 2007.
- Nationally, 53% of hospitals reporting to Leapfrog fully met this leap. Des Peres and St. Louis University hospitals fully meet Leapfrog's Never Events policy leap (see Adverse Events, page 19). All other hospitals are willing to report publicly on adherence to Never Events policies, but did not make the good early-stage effort recognition.
- Standards include surgical volume and adherence to clinical practices known to improve surgical outcomes. Survey results were too numerous to list here on St. Louis hospitals. For the complete list of results, go to www.leapfroggroup.org.



Health care is one of the only industries where the customer pays for mistakes; the impact of this practice on poor quality should not be underestimated. The good news is that this practice is about to end.

Again leading the way, Minnesota hospitals were the first to collectively pledge to waive charges for the Full List of National Quality Forum (NQF) "never events". These hospitals were also early Leapfrog reporters and Minnesota was the first state to publicly report NQF's never events by hospital in 2004. The public reporting has been acknowledged by hospitals as contributing to their 2007 twenty percent drop in errors.¹⁶ Hospitals in Maine, Washington, California, and Oregon have also agreed not to bill for the full list of NQF never events. BHC has requested similar action from Missouri hospitals and is awaiting a response.

In the absence of state policies, more than half of the 1,300 hospitals that participate in the Leapfrog Group Quality and Safety Survey agreed not to bill for never events. BHC commends all of these hospitals and especially both St. Louis Tenet hospitals for adopting Leapfrog's best practice for never events below:

1. Apologize to the patient/family;
2. Report occurrence to an external reporting program;
3. Perform a root cause analysis; and
4. Waive billing for all services related to the never event.

In October 2008, Medicare will stop paying for eight "preventable" adverse events. Five of these events are considered never events, and are part of the NQF standardized list of adverse events that never should happen. The list of the events for which hospitals will not receive additional payments from Medicare if they occur during an admission are identified in the adjacent table. BHC commends CMS for taking this important step to advance public safety and for its inclusion of three infections. Health care-acquired infections create a large financial burden and significant human suffering. Many hospitals are finding that with attention to details, they can come very close to eliminating infections.

Hospital Boards Become More Liable for Poor Quality Results

"With the U.S. Department of Justice taking a closer look at quality fraud in hospitals, the governance shift has legal implications, as well. If a hospital and its board are aware of potential quality problems, haven't taken steps to correct them, and continue to bill patients based on high-quality service, that is considered fraud."¹⁷

James L. Reinertsen, MD, a well-respected physician leader and former CEO of Beth Israel Deaconess Medical Center, Boston, MA.

NQF's Reportable Adverse Health Care Events aka "Never Events"

- Surgery performed on the wrong body part or wrong patient
- Wrong surgical procedure performed on the patient
- Retention of foreign object after surgery or other procedure
- Stage 3 or 4 ulcers (bedsores) acquired after admission to the facility (not necessarily resulting in death)
- Artificial insemination with the wrong donor sperm or egg
- Any incident in which a line designated for oxygen or other gas contains the wrong gas or toxic substance
- Infant discharged to the wrong person
- Care provided by a person impersonating physician, nurse, etc.
- Abduction of a patient
- Sexual assault of a patient

Death and disability associated with...

- Medication error
- Incompatible blood/blood products administration
- Labor or delivery of low-risk pregnancy
- Hypoglycemia
- Hyperbilirubinemia in neonates in the first 28 days of life
- Spinal manipulative therapy
- Use of restraints or bedrails
- Electric shock or elective cardioversion
- A Fall or burn
- Death due to unusual causes following surgery
- Contaminated drugs or devices
- Device malfunction
- Intravascular air embolism
- Patient disappearance, suicide or attempted suicide
- Patient or staff due to physical assault

Note: Medicare's list of adverse events is shown in green type and also includes:

- Catheter-associated urinary tract infections;
- Vascular catheter-associated infections; and
- Mediastinitis after coronary artery bypass surgery.

More than 25 states require reporting of adverse events, yet, **state mandated reporting of adverse events is still not required in Missouri, even to the Department of Health.** Voluntary reporting to the JCAHO sentinel events and root cause analysis system remains available. The number of events reported in Missouri was again notably low, with wrong site surgery being the most frequently reported event.

To reduce medical errors and improve patient safety, **The Missouri Center for Patient Safety** was established in 2005. Special initiatives include **Banding Together for Patient Safety**, a project that standardizes the colors for hospital wristbands to identify important information about patients (e.g. allergies and fall risks) and the **Missouri Just Culture Collaborative** that establishes a process to identify system issues that lead to errors.

If hospitals get engaged, the Missouri Center for Patient Safety holds great promise. These initiatives offer health care providers the opportunity to work together, track errors and near misses, learn from one another, and create an error free culture. We look forward to the Center's future successes. ■



Missouri Infection Rates...better late than never?

BHC is pleased to include Central Line infection information reported below for the second year published on the DHSS web-site in November 2007. Originally due during the first half of 2007, Surgical Site infection rates are included for the first time on the next page. Consumers can use these data to inform their decisions when choosing a health care facility.

Central Line-Associated Bloodstream Infection (CLAB) by Hospital Compared with State and National Rates By Intensive Care Unit (ICU) Type, Rates per 1,000 Central Line-Days

Hospitals and Hospital Systems	Coronary		Medical		Surgical		Neonatal		Pediatric	
	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006
Barnes-Jewish Hospital	4.5	4.5	3.1	3.4	4.5	2.8	*	*	*	*
Missouri Baptist Medical Center	*	*	*	*	*	*	0.0	0.0	*	*
St. Anthony's Medical Center	1.0	3.0	*	*	4.3	2.8	*	*	*	*
St. John's Mercy Medical Center	0.9	0.8	*	*	*	*	1.3	1.2	2.3	0.0
St. Louis University Hospital	2.7	*	3.0	3.4	*	*	*	*	*	*
St. Mary's Health Center	*	*	5.9	4.6	1.8	5.1	0.0	0.8	*	*
Cardinal Glennon Hospital	*	*	*	*	*	*	1.2	1.4	3.6	6.7
St. Louis Children's Hospital	*	*	*	*	*	*	5.7	6.0	6.0	5.2
Missouri Rate	1.8	2.0	2.5	2.4	2.7	2.1	2.9	3.0	5.7	5.2
National Rate	3.5	3.5	5.0	5.0	4.6	4.6	6.4	6.4	6.6	6.6

Note: Hospitals in bold indicate infection rate was higher as compared with all Missouri hospitals based on significance tests.
* Indicate a facility was not required to report during the period, did not provide the service, or had an insufficient sample size of data.

- Use caution when making decisions on data from one point in time.
- Variation may result from better infection tracking and reporting.
- Such differences are expected to be minimized over time.
- These caveats aside, standard measures and public reporting will translate to significant reductions in the number of preventable infections...a huge step forward in public safety.



Dr. Richard Shannon, chairman of the Department of Medicine at the University of Pennsylvania Health System and one of the outstanding speakers at BHC's 25th Anniversary celebration, has been a champion in eliminating hospital-acquired infections (watch a video of his presentation at stlbhc.org). Inspired several years ago by former CEO of Alcoa, Paul O'Neill to make Pittsburgh home to the safest health care in the nation, Dr. Shannon set a goal to reduce CLAB infections to zero in the coronary and medical intensive care units

when he was chairman of Allegheny General Hospital. He learned from O'Neill at Alcoa and also from Toyota how to make workplaces safe and remove waste and defects from processes. Using these approaches in the ICU, Dr. Shannon standardized procedures and investigated every infection in 24 hours. Both units achieved a near zero CLAB infection rate in 90 days that has been sustained for four years.¹⁸ BHC congratulates Dr. Shannon on his success and commends his leadership.

St. Louis area CLAB infection rates decreased for certain hospitals in 2006 notably in the Medical Surgical ICU suggesting public reporting is having a positive effect. However, the need for improvement remains across all hospitals. Fortunately, the pressure to reduce CLAB infection rates has intensified further by Medicare's decision to halt payments for vascular catheter-associated infections, along with seven other preventable hospital-acquired conditions, later this year.

Surgical site infections (SSI), on page 21, are reported based on Risk Groups (see definitions, page 28). Similar to reporting for CLAB infections, SSI rates in bold are higher as compared to other Missouri hospitals. While informative, second year rates will be important to determine where persistent problems exist. As shown by Dr. Shannon, health care-associated infections (HAI) are preventable by applying principles from industries with reliable, defect-free processes. Eliminating unsafe conditions such as HAI significantly reduces costs and human suffering. ■

Central Line-Associated Bloodstream Infection (CLAB) by Hospital Compared with State and National Rates Rates per 1,000 Central Line-Days

Hospitals and Hospital Systems	Medical Surgical ICU	
	2005	2006
Barnes-Jewish St. Peters	1.3	1.7
Barnes-Jewish West County	0.0	0.0
Christian Hospitals	4.5	4.7
DePaul Health Center	2.8	1.7
Des Peres Hospital	8.5	4.3
Forest Park Hospital	7.0	4.0
Jefferson Memorial Hospital	8.1	1.9
Lincoln County Medical Center	0.0	*
Missouri Baptist Hospital, Sullivan	0.0	0.0
Missouri Baptist Medical Center	2.1	2.3
St. Alexius Hospital	5.0	4.4
St. John's Mercy Hospital, Washington	0.0	0.0
St. John's Mercy Medical Center	3.0	2.9
St. Joseph Health Center	2.6	1.6
St. Joseph Hospital Kirkwood	0.0	0.0
St. Joseph Hospital West	13.0	2.7
St. Luke's Hospital	1.9	2.7
Missouri Rate	2.7	2.4
National Rate	3.6	3.6

Note: Bold type indicates infection rate was higher as compared with all Missouri hospitals based on significance tests.
* Indicates a facility was not required to report, did not provide the service, or data sample size was too small.



Surgical Site Infection Rates by Hospital, Rates per 100 Procedures

Hospital	Risk Group	Abdominal Hysterectomy	MO Rate	Nat'l Rate	Coronary Artery Bypass Graft**	MO Rate	Nat'l Rate	Hip Repair	MO Rate	Nat'l Rate
Barnes-Jewish Hospital	0	1.9	0.9	1.4	*	0.0	1.3	0.5	0.6	0.9
	1	1.8	2.3	2.3	6.5	3.1	3.4	0.8	1.5	1.7
	2	—	—	—	3.8	3.6	5.4	—	—	—
	2,3	1.6	2.3	5.2	—	—	—	3.2	2.2	2.5
Barnes-Jewish Hospital—St. Peters	0	0.0	0.9	1.4	*	—	—	2.5	0.6	0.9
	1	0.0	2.3	2.3	*	—	—	3.1	1.5	1.7
	2,3	20.0	2.3	5.2	—	—	—	25.0	2.2	2.5
Barnes-Jewish Hospital—West County	0	*	—	—	*	—	—	0.7	0.6	0.9
	1	*	—	—	*	—	—	0.0	1.5	1.7
	2,3	*	—	—	—	—	—	0.0	2.2	2.5
Christian Hospitals	0	0.0	0.9	1.4	*	0.0	1.3	0.0	0.6	0.9
	1	2.3	2.3	2.3	3.8	3.1	3.4	1.9	1.5	1.7
	2	—	—	—	2.1	3.6	5.4	—	—	—
	2,3	0.0	2.3	5.2	—	—	—	0.0	2.2	2.5
DePaul Hospital	0	0.0	0.9	1.4	0.0	0.0	1.3	1.0	0.6	0.9
	1	5.1	2.3	2.3	2.0	3.1	3.4	2.5	1.5	1.7
	2	—	—	—	0.0	3.6	5.4	—	—	—
	2,3	*	2.3	5.2	—	—	—	0.0	2.2	2.5
Des Peres Hospital	0	*	—	—	0.0	0.0	1.3	1.7	0.6	0.9
	1	*	—	—	0.7	3.1	3.4	3.8	1.5	1.7
	2	—	—	—	*	3.6	5.4	—	—	—
	2,3	*	—	—	—	—	—	0.0	2.2	2.5
Jefferson Memorial Hospital	0	1.4	0.9	1.4	*	0.0	1.3	0.0	0.6	0.9
	1	2.6	2.3	2.3	4.6	3.1	3.4	2.8	1.5	1.7
	2	—	—	—	5.9	3.6	5.4	—	—	—
	2,3	0.0	2.3	5.2	—	—	—	0.0	2.2	2.5
Missouri Baptist Medical Center	0	1.0	0.9	1.4	*	0.0	1.3	0.9	0.6	0.9
	1	0.9	2.3	2.3	2.6	3.1	3.4	0.0	1.5	1.7
	2	—	—	—	3.3	3.6	5.4	—	—	—
	2,3	0.0	2.3	5.2	—	—	—	0.0	2.2	2.5
St. Alexius Hospital	0	0.0	0.9	1.4	*	—	—	0.0	0.6	0.9
	1	12.5	2.3	2.3	*	—	—	4.8	1.5	1.7
	2,3	0.0	2.3	5.2	—	—	—	25.0	2.2	2.5
St. Anthony's Medical Center	0	1.3	0.9	1.4	0.0	0.0	1.3	0.0	0.6	0.9
	1	0.0	2.3	2.3	4.1	3.1	3.4	2.7	1.5	1.7
	2	—	—	—	2.2	3.6	5.4	—	—	—
	2,3	11.1	2.3	5.2	—	—	—	2.9	2.2	2.5
	3	—	—	—	0.0	0.0	9.8	—	—	—
St. John's Mercy Medical Center	0	1.4	0.9	1.4	0.0	0.0	1.3	2.0	0.6	0.9
	1	3.7	2.3	2.3	6.9	3.1	3.4	5.4	1.5	1.7
	2	—	—	—	*	3.6	5.4	—	—	—
	2,3	0.0	2.3	5.2	—	—	—	0.0	2.2	2.5
St. John's Mercy Hospital—Washington	0	0.0	0.9	1.4	*	—	—	0.0	0.6	0.9
	1	0.0	2.3	2.3	*	—	—	2.7	1.5	1.7
	2,3	0.0	2.3	5.2	—	—	—	0.0	2.2	2.5
St. Joseph Health Center	0	0.0	0.9	1.4	*	0.0	1.3	0.0	0.6	0.9
	1	0.0	2.3	2.3	4.3	3.1	3.4	5.1	1.5	1.7
	2	—	—	—	2.6	3.6	5.4	—	—	—
	2,3	0.0	2.3	5.2	—	—	—	0.0	2.2	2.5
St. Joseph Hospital—Kirkwood	0	0.0	0.9	1.4	0.0	0.0	1.3	0.0	0.6	0.9
	1	0.0	2.3	2.3	0.8	3.1	3.4	0.0	1.5	1.7
	2	—	—	—	0.0	3.6	5.4	—	—	—
	2,3	0.0	2.3	5.2	—	—	—	0.0	2.2	2.5
St. Joseph Hospital West	0	0.0	0.9	1.4	*	—	—	3.0	0.6	0.9
	1	0.0	2.3	2.3	*	—	—	0.0	1.5	1.7
	2,3	0.0	2.3	5.2	—	—	—	0.0	2.2	2.5
St. Louis University Hospital	0	*	—	—	*	0.0	1.3	0.0	0.6	0.9
	1	*	—	—	0.0	3.1	3.4	0.0	1.5	1.7
	2	—	—	—	2.6	3.6	5.4	—	—	—
	2,3	*	—	—	—	—	—	3.6	2.2	2.5
St. Luke's Hospital	0	0.8	0.9	1.4	*	0.0	1.3	1.2	0.6	0.9
	1	5.2	2.3	2.3	2.4	3.1	3.4	0.8	1.5	1.7
	2	—	—	—	9.7	3.6	5.4	—	—	—
	2,3	0.0	2.3	5.2	—	—	—	0.0	2.2	2.5
St. Mary's Health Center	0	0.0	0.9	1.4	*	0.0	1.3	0.0	0.6	0.9
	1	2.8	2.3	2.3	2.5	3.1	3.4	2.9	1.5	1.7
	2	—	—	—	4.2	3.6	5.4	—	—	—
	2,3	0.0	2.3	5.2	—	—	—	0.0	2.2	2.5

Note: Bold type indicates infection rate was higher, as compared with all Missouri hospitals based on significance tests.

* Indicates a facility was not required to report, did not provide the service, or data sample size was too small. Both abdominal hysterectomy and hip repair have a combined Risk Group 2, 3 and do not have separate Risk Groups 2 or 3. See glossary on page 28 for detailed definitions of Risk Groups.

** St. Anthony's Medical Center was the only St. Louis hospital that performed coronary artery bypass graft procedures on patients in Risk Group 3.



Hospital Financial Performance 1996–2005

Summary of Aggregate Financial Statements and Financial Indicators for St. Louis Area Hospitals

All figures are in millions of dollars.	1996 ¹	1997 ¹	1998 ¹	1999 ²	2000 ^{1,2}	2001 ²	2002 ²	2003 ²	2004 ²	2005 ²
Income Summary										
Total Gross Charges	\$ 6,597	\$ 6,930	\$ 7,535	\$ 8,201	\$ 9,024	\$ 10,165	\$ 11,348	\$ 12,739	\$ 14,024	\$ 15,334
Less: Allowances	3,058	3,350	3,823	4,412	5,116	5,836	6,504	7,614	8,550	9,386
Net Patient Revenue	3,539	3,581	3,712	3,789	3,908	4,329	4,844	5,125	5,474	5,948
Other Operating Revenue	188	148	186	201	183	143	153	192	211	201
Total Operating Revenue	3,727	3,728	3,899	3,991	4,091	4,472	4,997	5,317	5,685	6,149
Total Operating Expenses	3,576	3,605	3,807	3,961	4,096	4,412	4,810	5,054	5,483	5,950
Income (Loss) from Operations	151	123	91	29	(4)	60	187	263	202	199
Non-Operating Revenue	125	186	164	71	49	28	(13)	234	181	120
Excess (Deficit) of Revenues Over Expenses	\$ 276	\$ 309	\$ 255	\$ 100	\$ 45	\$ 88	\$ 174	\$ 497	\$ 383	\$ 319
Balance Sheet										
Current Assets:										
Cash and Marketable Securities	\$ 247	\$ 402	\$ 405	\$ 442	\$ 66	\$ (77)	\$ (73)	\$ (76)	\$ (257)	\$ (337)
Net Patient Accounts Receivable	713	714	854	885	826	773	769	758	771	820
Other Receivables	70	32	80	25	39	24	22	32	40	30
Other Current Assets	237	194	120	119	8	90	96	119	198	212
Total Current Assets	1,267	1,342	1,460	1,471	939	810	814	833	752	725
Land, Building and Equipment Cost	3,495	3,798	4,431	4,275	4,462	4,830	5,069	5,391	5,643	5,946
Accumulated Depreciation	(1,860)	(2,046)	(2,367)	(2,287)	(2,455)	(2,633)	(2,691)	(2,892)	(3,030)	(3,238)
Net Land, Building and Equipment Cost	1,635	1,752	2,064	1,988	2,007	2,197	2,378	2,499	2,613	2,708
Investments Held by Trustee	207	209	309	325	309	353	305	405	602	732
Deferred Financing Costs	9	6	2	2	4	3	1	1	2	2
Other Cash and Investments	850	1,140	545	396	436	436	408	471	589	605
Other Assets	535	578	662	744	983	1,071	1,095	1,328	1,503	1,616
Total Assets	\$ 4,503	\$ 5,026	\$ 5,042	\$ 4,926	\$ 4,678	\$ 4,870	\$ 5,001	\$ 5,537	\$ 6,061	\$ 6,388
Liabilities and Fund Balance										
Current Liabilities	\$ 717	\$ 597	\$ 665	\$ 695	\$ 649	\$ 736	\$ 737	\$ 779	\$ 882	\$ 969
Long-term Debt	1,130	1,031	1,303	1,207	1,067	1,120	1,109	1,088	1,115	959
Other Liabilities and Reserves	274	266	117	113	217	238	271	284	277	283
Fund Balance	2,382	3,132	2,957	2,911	2,744	2,776	2,884	3,385	3,787	4,177
Total Liabilities and Fund Balance	\$ 4,503	\$ 5,026	\$ 5,042	\$ 4,926	\$ 4,678	\$ 4,870	\$ 5,001	\$ 5,537	\$ 6,061	\$ 6,388
Endowment, Specific Purpose and Other Restricted Fund Balances	\$ 121	\$ 119	\$ 111	\$ 114	\$ 96	\$ 97	\$ 100	\$ 126	\$ 162	\$ 169
Financial Indicators										
Operating Margin	4.07%	3.30%	2.34%	2.19%	0.16%	2.55%	5.09%	5.15%	3.80%	3.41%
Profit Margin	7.19%	7.89%	6.27%	2.47%	1.08%	1.95%	3.50%	8.96%	6.54%	5.08%
Return on Equity	11.59%	9.88%	8.62%	3.44%	1.62%	3.17%	6.03%	14.69%	10.12%	7.63%
Mark-up Percentage (Charges over Cost)	84.5%	92.2%	97.9%	107.0%	120.9%	133.2%	139.3%	152.6%	156.4%	158.2%
Allowances as % of Charges	46.4%	48.3%	50.7%	53.8%	56.7%	57.4%	57.3%	59.8%	61.0%	61.2%

¹ As a result of hospital mergers in 1996, 1997, 1998, and 2000, financial data for certain hospitals was reported for less than 12 months.¹⁹ Information for Crossroads Regional Hospital (as the former Doctors Hospital—Wentzville) was not available for 1998. Crossroads was acquired by SSM Health Care in November 2005 and is currently named St. Joseph Health Center—Wentzville.

² The following non-operating expenses are included in Operating Expenses for fiscal years 1999 = \$57,896,271, 2000 = \$10,677,065, 2001 = \$54,564,859, 2002 = \$67,005,588, 2003 = \$10,843,167, 2004 = \$14,119,291, and 2005 = \$10,809,957. In 2002, Barnes—Jewish Hospital's (\$21,240,477) non-operating loss was included in non-operating revenue. Normandy Community Hospital has been excluded from fiscal year 1999 and Bethesda General Hospital, Compton Heights Hospital, and Woodriver Township Hospital have been excluded from fiscal year 2000 in this table since extraordinary charges associated with their closure in those years caused results to be unreliable. St. Alexius and Forest Park hospitals were sold to Doctors Community Healthcare Corporation in 2004, and due to the transfer in ownership, 2002, 2003, and 2004 data could not be verified.

Sources: Centers for Medicare and Medicaid Services Medicare Cost Reports and audited hospital financial statements. Note: Changes in previously reported data are based on most current information available including numerous restatements. All figures are rounded. All data in this table are not adjusted for inflation. Differences in accounting practices for expenses and investment income across hospital systems may understate some St. Louis hospital systems' profits. Although consistent with accepted accounting principles, hospital systems may allocate 100% of certain expenses (i.e., executive salaries) and investment income proportionately to individual subsidiary hospitals while others retain some or all of these dollars at the system level. BHC has worked to collect this information and adjust for differences as possible but due to limited access to data, viewers should make comparisons with this in mind. BHC will continue its efforts to fully accommodate these differences in future reports and will adjust data retrospectively to allow trends to be evaluated.



St. Louis Area Hospital Industry 1996–2005

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Missouri Hospitals										
Barnes-Jewish Hospital ¹	5.43%	4.05%	3.03%	-0.13%	-0.47%	2.79%	3.73%	4.34%	3.58%	3.75%
Barnes-Jewish Hospital—St. Peters	4.11	4.35	1.55	3.87	10.79	11.25	18.18	19.08	13.04	14.13
Barnes-Jewish Hospital—West County	6.04	3.99	1.25	4.21	11.04	24.67	26.86	26.82	23.29	16.05
Cardinal Glennon Hospital	6.02	9.07	4.58	5.17	12.72	7.60	12.35	9.93	14.16	10.51
Christian Hospitals	5.60	2.62	-7.50	-9.52	-8.83	-7.87	6.92	6.84	4.78	0.88
DePaul Health Center	-6.52	-4.17	0.00	-5.90	1.40	-0.47	2.47	4.43	4.88	7.36
Des Peres Hospital ²	-4.45	-11.35	-8.87	11.15	9.66	11.61	13.36	11.95	8.06	7.33
Forest Park Hospital ²	1.97	-25.42	-2.96	7.54	-14.47	-1.45	2.76	2.64	-24.69	-6.03
Jefferson Memorial Hospital	4.86	6.90	3.99	1.80	1.89	1.25	-0.50	-0.80	-0.66	0.73
Kindred Hospital	16.64	22.91	19.33	1.06	-2.57	-7.24	7.71	8.11	19.60	7.63
Lincoln County Memorial Hospital	2.70	-1.91	-7.50	-3.46	-2.63	4.97	3.05	-8.53	-0.05	2.53
Missouri Baptist Hospital—Sullivan	4.27	-3.13	0.37	-6.49	-5.54	-1.85	2.17	9.16	13.10	10.18
Missouri Baptist Medical Center	8.69	8.67	6.18	3.36	4.02	9.36	15.96	15.61	15.36	12.38
St. Alexius Hospital ³	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-8.23	0.49
St. Alexius Hospital—Broadway Campus ^{2,3}	1.55	-16.64	-4.84	-2.51	-10.95	-9.63	-8.85	0.37	N/A	N/A
St. Alexius Hospital—Jefferson Campus ^{2,3}	-5.96	-7.34	7.05	9.46	-0.40	6.55	-8.84	-16.73	N/A	N/A
St. Anthony's Medical Center ⁴	6.28	5.59	6.52	0.72	-7.73	-4.37	-8.47	0.00	2.06	1.51
St. John's Mercy Hospital—Washington	10.89	9.70	10.78	9.72	3.48	4.88	4.84	3.04	3.88	3.25
St. John's Mercy Medical Center	6.38	5.43	7.33	5.69	2.73	0.62	2.13	3.44	3.67	1.73
St. Joseph Health Center—St. Charles	4.10	4.38	-0.26	-0.39	-0.43	2.63	2.74	4.12	1.27	1.25
St. Joseph Hospital—Kirkwood	1.70	3.09	4.13	2.99	0.97	0.88	4.22	1.23	-0.99	-13.33
St. Joseph Health Center—Wentzville ⁵	-18.85	2.61	N/A	27.00	-45.50	-25.25	-19.77	-13.93	-24.26	-47.21
St. Joseph Hospital West—Lake St. Louis	4.62	3.65	5.75	8.91	3.66	10.62	10.70	4.84	3.15	5.67
St. Louis Children's Hospital	3.77	2.87	4.25	5.17	3.57	3.68	5.01	4.85	8.23	10.08
St. Louis University Hospital ²	4.66	6.13	-4.37	11.25	1.65	12.55	18.36	7.95	-5.82	-7.86
St. Luke's Hospital	3.44	3.47	4.94	4.12	4.21	4.83	4.51	3.58	3.37	3.13
St. Mary's Health Center	5.08	9.02	8.50	5.02	3.15	2.11	4.93	5.23	5.57	6.81
Aggregate for Missouri Hospitals	4.28%	3.40%	2.44%	2.55%	0.40%	3.08%	5.60%	5.58%	4.06%	3.59%
Illinois Hospitals										
Alton Memorial Hospital	6.23%	6.97%	-0.97%	1.93	2.07%	11.15%	14.19%	15.44%	15.56%	13.11%
Anderson Hospital	6.20	11.35	11.30	4.56	1.03	1.61	-0.15	-0.90	-5.48	2.01
Gateway Regional Medical Center	2.30	-4.13	-2.15	-2.17	-8.35	-11.21	7.75	7.60	12.43	18.71
Kenneth Hall Regional Hospital (E. St. Louis)	2.32	3.14	0.00	-1.88	-9.53	-13.67	-25.10	-16.97	4.76	-12.04
Memorial Hospital of Belleville	4.22	6.67	2.76	2.30	0.77	-0.82	-0.56	-1.52	-2.01	-4.01
St. Anthony's Health Center (Alton) ⁶	4.20	3.81	2.00	-6.30	-0.46	5.46	4.32	0.36	-3.30	-3.16
St. Elizabeth's Hospital (Belleville)	1.39	1.64	2.20	0.79	-1.41	-4.07	-1.36	2.21	-4.22	-4.24
St. Joseph Hospital (Breese, IL)	6.28	13.10	9.53	9.87	9.89	12.14	10.72	12.30	11.82	11.72
Touchette Regional Hospital	-5.86	-9.24	-8.52	-6.15	-7.73	-15.76	0.36	1.22	3.37	-1.12
Aggregate for Illinois Hospitals	2.83%	2.76%	1.79%	0.03%	-1.28%	-0.86%	1.79%	2.36%	2.11%	2.28%
Aggregate for St. Louis Area Hospitals	4.07%	3.30%	2.34%	2.19%	0.16%	2.55%	5.09%	5.15%	3.80%	3.41%

¹ Barnes Hospital and The Jewish Hospital of St. Louis merged to become Barnes-Jewish Hospital in fiscal year 1996. Their combined 1996 Medicare Cost Report (MCR) included 11 months of Barnes Hospital data and 12 months of Jewish Hospital data.

² As a result of hospital mergers in 1996, 1997, 1998, and 2000, financial data for certain hospitals was reported for less than 12 months.¹⁹ St. Alexius and Forest Park hospitals were sold to Doctors Community Healthcare Corporation in 2004, and due to the transfer in ownership, 2002, 2003 and 2004 data could not be verified.

³ Beginning in 2004, St. Alexius—Broadway Campus and St. Alexius—Jefferson Campus reported on a combined basis under St. Alexius Hospital.

⁴ From 1997 to 1999, statistics for St. Anthony's Medical Center and St. Clement's Hospital are combined under St. Anthony's Medical Center.

⁵ St. Joseph Health Center—Wentzville (as the former Doctors Hospital—Wentzville) filed a 7 month Medicare Cost Report for 1996 and fiscal year 1998 information was unavailable. They filed an 8.5 month MCR for fiscal year 2000 just prior to acquisition by Essent Healthcare of Missouri June 28, 2000 and were renamed Crossroads Regional Hospital. They were acquired by SSM Health Care in November 2005.

⁶ Beginning in 1992, statistics for St. Anthony's Hospital and St. Clare's Hospital are combined under St. Anthony's Health Center.

Sources: Centers for Medicare and Medicaid Services Medicare Cost Reports and audited hospital financial statements. All data in this table are not adjusted for inflation.

Note: Changes in previously reported data are based on most current information. Hospitals no longer in operation as of 2005 are not individually listed, but their results for 1996–2005 are included in aggregate figures. Normandy Community Hospital has been excluded from fiscal year 1999 and Bethesda General Hospital, Compton Heights Hospital, and Woodrider Township Hospital have been excluded from fiscal year 2000 in this table since extraordinary charges associated with their closure in those years caused financial results to be unreliable.



St. Louis Area Hospital Industry 1996–2005

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Missouri Hospitals										
Barnes-Jewish Hospital ¹	6.65%	8.40%	7.08%	1.73%	0.78%	3.20%	1.41%	16.80%	11.58%	7.11%
Barnes-Jewish Hospital—St. Peters	9.30	9.71	5.60	8.25	10.05	8.22	14.96	21.19	14.35	13.63
Barnes-Jewish Hospital—West County	3.58	1.52	-2.08	-2.37	-0.47	15.12	19.73	20.00	16.02	15.42
Cardinal Glennon Hospital	11.00	16.63	18.03	11.66	19.38	8.29	11.91	10.22	16.04	12.68
Christian Hospitals	7.08	5.05	-5.17	-7.93	-10.80	-10.36	3.86	13.19	8.73	2.23
DePaul Health Center	-6.30	-4.05	0.15	-5.90	1.55	-0.43	2.58	4.51	4.87	7.61
Des Peres Hospital ²	-4.81	-14.12	-8.87	9.65	7.17	6.15	7.91	7.78	4.18	3.29
Forest Park Hospital ²	0.45	-19.46	-2.99	2.95	-18.91	-4.07	-0.86	2.64	-24.69	-6.03
Jefferson Memorial Hospital	4.94	6.89	4.02	1.56	2.40	1.62	0.86	0.71	0.45	2.01
Kindred Hospital	16.64	22.90	19.33	1.06	-2.57	-7.24	7.76	8.13	19.64	7.66
Lincoln County Memorial Hospital	4.47	-0.45	-5.87	-2.53	-2.15	5.90	3.42	-8.34	0.05	3.16
Missouri Baptist Hospital—Sullivan	4.27	-3.07	-11.56	-6.28	-5.95	-2.95	1.35	8.52	11.11	10.05
Missouri Baptist Medical Center	13.75	14.55	11.79	4.75	4.14	7.41	14.69	17.33	17.08	13.77
St. Alexius Hospital ³	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-8.23	0.49
St. Alexius Hospital—Broadway Campus ^{2,3}	3.93	-8.54	-4.07	-10.13	-11.53	-9.39	-8.86	0.37	N/A	N/A
St. Alexius Hospital—Jefferson Campus ^{2,3}	-5.95	-7.15	7.00	8.02	-2.86	2.34	-7.94	-16.71	N/A	N/A
St. Anthony's Medical Center ⁴	15.31	19.73	20.80	0.92	-3.87	-3.98	-7.31	1.88	7.79	6.40
St. John's Mercy Hospital—Washington	20.80	22.36	10.98	6.13	2.23	4.74	4.06	2.95	3.82	3.48
St. John's Mercy Medical Center	9.64	13.89	8.03	3.93	2.73	-0.79	1.52	3.42	3.37	1.79
St. Joseph Health Center—St. Charles	5.25	5.57	1.64	2.97	0.26	2.89	2.91	4.24	1.21	1.28
St. Joseph Hospital—Kirkwood	1.83	2.53	4.33	3.07	0.72	0.91	4.51	1.60	-0.74	-13.24
St. Joseph Health Center—Wentzville ⁵	-18.81	7.19	N/A	27.00	-45.45	-25.58	-19.77	-13.93	-24.26	-47.21
St. Joseph Hospital West—Lake St. Louis	8.15	8.49	10.33	13.79	6.22	10.99	11.23	5.20	2.92	5.62
St. Louis Children's Hospital	11.84	10.58	14.08	10.67	5.81	5.30	3.39	16.10	15.19	14.24
St. Louis University Hospital ²	9.74	8.36	-2.48	-2.57	-0.86	3.45	8.04	7.73	-5.82	-7.86
St. Luke's Hospital	8.52	5.28	6.48	5.60	5.60	5.90	4.91	4.16	4.06	4.20
St. Mary's Health Center	8.18	12.09	10.56	8.27	5.99	3.58	5.47	5.74	6.86	7.92
Aggregate for Missouri Hospitals	7.48%	8.29%	6.37%	2.50%	0.95%	2.04%	3.75%	9.55%	6.89%	5.17%
Illinois Hospitals										
Alton Memorial Hospital	6.71	8.87	1.22%	0.57%	3.48	12.98%	13.96%	21.63%	19.91%	16.65%
Anderson Hospital	7.50	13.92	13.40	6.59	3.19	4.13	1.12	0.11	-4.28	3.13
Gateway Regional Medical Center	3.03	-2.91	-2.37	-1.43	-6.37	-9.99	7.75	7.60	12.43	18.71
Kenneth Hall Regional Hospital (E. St. Louis)	5.19	7.14	1.03	-0.08	-8.37	-12.49	-25.10	-16.94	4.91	-11.82
Memorial Hospital of Belleville	10.89	10.92	8.68	5.37	7.10	1.69	-1.53	0.12	-0.31	-0.51
St. Anthony's Health Center (Alton) ⁶	5.52	5.55	5.48	-4.42	1.74	5.42	4.63	2.18	-2.63	-2.05
St. Elizabeth's Hospital (Belleville)	3.43	4.66	8.88	4.94	1.08	-0.60	-1.04	5.01	-1.04	-1.84
St. Joseph Hospital (Breese, IL)	9.52	16.46	17.35	14.41	14.60	18.49	11.33	19.10	18.94	18.40
Touchette Regional Hospital	-3.54	-7.28	-6.83	-4.72	-7.28	-14.77	0.76	1.69	3.96	-0.57
Aggregate for Illinois Hospitals	5.44%	5.56%	5.68%	2.29%	1.80%	1.39%	1.82%	5.02%	4.23%	4.52%
Aggregate for St. Louis Area Hospitals	7.19%	7.89%	6.27%	2.47%	1.08%	1.95%	3.50%	8.96%	6.54%	5.08%

¹ Barnes Hospital and The Jewish Hospital of St. Louis merged to become Barnes-Jewish Hospital in fiscal year 1996. Their combined 1996 Medicare Cost Report (MCR) included 11 months of Barnes Hospital data and 12 months of Jewish Hospital data.

² As a result of hospital mergers in 1996, 1997, 1998, and 2000, financial data for certain hospitals was reported for less than 12 months.¹⁹ St. Alexius and Forest Park hospitals were sold to Doctors Community Healthcare Corporation in 2004, and due to the transfer in ownership, 2002, 2003, and 2004 data could not be verified.

³ Beginning in 2004, St. Alexius—Broadway Campus and St. Alexius—Jefferson Campus reported on a combined basis under St. Alexius Hospital.

⁴ From 1997 to 1999, statistics for St. Anthony's Medical Center and St. Clement's Hospital are combined under St. Anthony's Medical Center.

⁵ St. Joseph Health Center—Wentzville (as the former Doctors Hospital—Wentzville) filed a 7 month Medicare Cost Report for 1996 and fiscal year 1998 information was unavailable. They filed an 8.5 month MCR for fiscal year 2000 just prior to acquisition by Essent Healthcare of Missouri June 28, 2000 and were renamed Crossroads Regional Hospital. They were acquired by SSM Health Care in November 2005.

⁶ Beginning in 1992, statistics for St. Anthony's Hospital and St. Clare's Hospital are combined under St. Anthony's Health Center.

Sources: Centers for Medicare and Medicaid Services Medicare Cost Reports and audited hospital financial statements. All data in this table are not adjusted for inflation.

Note: Changes in previously reported data are based on most current information. Hospitals no longer in operation as of 2005 are not individually listed, but their results for 1996–2005 are included in aggregate figures. Normandy Community Hospital has been excluded from fiscal year 1999 and Bethesda General Hospital, Compton Heights Hospital, and Woodriver Township Hospital have been excluded from fiscal year 2000 in this table since extraordinary charges associated with their closure in those years caused financial results to be unreliable.



Fiscal Year 2006 Financial Data (000)								
St. Louis Area Hospitals	Fiscal Year	2006 Total Revenue	2006 Total Operating Revenue	2006 Total Expenses*	2006 Gain from Operations	2006 Net Profit	2006 Operating Margin	2006 Profit Margin
St. John's Mercy Health Care								
St. John's Mercy Medical Center	6/30	638,151	637,890	600,551	37,892	37,600	5.94%	5.89%
St. John's Mercy Hospital, Washington	6/30	86,342	86,327	81,436	4,448	4,906	5.15	5.68
Total		\$724,493	\$724,217	\$681,987	\$42,340	\$42,506	5.85%	5.87%
Other								
St. Anthony's Medical Center	6/30	364,945	352,813	346,404	6,409	18,541	1.82%	5.08%
St. Elizabeth's Hospital (Belleville)	6/30	160,720	159,378	159,121	257	1,600	0.16	1.00
St. Joseph Hospital (Breese, IL)	6/30	34,735	33,680	30,123	3,556	4,611	10.56	13.28
St. Luke's Hospital	6/30	350,284	339,285	329,197	10,088	21,087	2.97	6.02
Jefferson Memorial Hospital	9/30	106,953	105,258	105,330	(71)	1,624	-0.07	1.52
Total		\$1,017,637	\$990,414	\$970,175	\$20,239	\$47,463	2.04%	4.66 %

* Total Expenses include non-operating expenses that may have an effect on profit margins. Non-operating expenses are not used in the calculation of operating margins.

Technical Notes

Hospital Financial Data

The St. Louis Area Business Health Coalition (BHC) has analyzed hospital financial data for the last 24 fiscal years. Data for these analyses are gathered from hospital audited financial statements, licensing surveys and Centers for Medicare and Medicaid Services Medicare Cost Reports (MCR). The resulting reports are based upon standard accounting assumptions and procedures.

A financial profile is produced for each institution which is then verified by the individual institutions. When an individual institution disagrees with the financial profile, sup-

porting documentation is submitted before changes are made to the profile. From the individual reports, aggregate tables are produced reflecting St. Louis area Missouri hospitals and St. Louis area Illinois hospitals.

In some situations, prior year data are updated based on revised MCR and/or current hospital audited financial statements. As a result, the data presented in this document reflect the most current information available to the BHC and may differ from previous reports. ■

Financial Formulas (For Leap years: Use 366 for all formulas using days)

OPERATING MARGIN

$$\frac{(\text{Total Operating Revenue} - \text{Operating Expenses})}{\text{Total Operating Revenue}}$$

PROFIT MARGIN

$$\frac{\text{Excess of Revenue Over Expenses}}{(\text{Total Operating Revenue} + \text{Non-operating Revenue})}$$

RETURN ON EQUITY

$$\frac{\text{Excess of Revenue Over Expenses}}{\text{Fund Balance}}$$

MARK-UP PERCENT

$$\left(\frac{\text{Total Gross Charges}}{\text{Total Operating Expenses}} \right) - 1$$

ALLOWANCES AS PERCENT OF CHARGES

$$\frac{\text{Allowances}}{\text{Total Gross Charges}}$$

COST TO CHARGE RATIO

$$\frac{\text{Total Operating Expenses}}{\text{Total Gross Charges}}$$

OCCUPANCY PERCENTAGE

$$\frac{\text{Patient Days}}{\text{Number of Beds} \times 365}$$

Technical Notes

Herfindahl–Hirschman Index

The Herfindahl–Hirschman Index (HHI) has been used by the Department of Justice (DOJ) in the antitrust area as one aid in determining the degree of market concentration when evaluating the potential harm to consumers of proposed mergers in a market. Market concentration is a function of the number of firms in a market and their respective market shares. The Herfindahl–Hirschman Index (HHI) was calculated for the St. Louis region by summing the squares of the hospital and health network market shares using hospital admissions as the proxy for market share. Within the St. Louis region, the squared market shares of the individual hospitals and the combined squared market share for each hospital system are summed producing the regional HHI. This technique gives proportionately greater weight to the market shares of larger systems, in accord with their increased potential for exercising market power resulting in anticompetitive behavior such as increased prices (see example below). The geographic market is an important factor in merger analysis and in calculating the HHI as well. For the aggregate statistics produced in this study, the metropolitan statistical area (MSA) has been used to define the geographic market. It is important to note that the Federal Trade Commission (FTC) and the Department of Justice (DOJ) have used different definitions of the geographic market when analyzing mergers in a region that have at times been either larger or smaller than the MSA definition depending on the circumstances surrounding the merger. Therefore, the HHI values shown in this study may not be comparable to those values used in specific antitrust investigations conducted by the FTC and the DOJ.

The meaning of the HHI values in evaluating an industry in a

given market are broadly defined as 1) Unconcentrated, HHI < 1,000; 2) Moderately Concentrated, HHI >1,000 and <1,800; and 3) Highly Concentrated, HHI >1,800.

Market concentration in the St. Louis region based on 2005 data grew to 1,555, a 2.4% increase over the previous year. The boost in hospital consolidation resulted mainly from facility acquisition and hospitals' gains in market share. Hospital admissions in 2005 were relatively flat as compared to 2004, so gains in market share by some facilities occurred at the expense of others. In 2007, BJC's new hospital in O'Fallon, MO opened and SSM's new facility neared completion. The estimated increase in the HHI for the St. Louis region as a result of these two new facilities is projected to be 4%. This estimate factors in the reduced number of admissions resulting from the promised closure of SSM's St. Joseph Hospital—Kirkwood when SSM's new facility in Fenton opens. The St. Louis hospital market is currently experiencing a building boom with renovation and expansion of nearly every facility. While some of this will increase inpatient capacity there will also be a substantial increase in outpatient service capacity. Since inpatient hospital admissions are used in this example as a proxy for market share, it does not take into consideration the influence of increased outpatient service capacity on market consolidation, therefore, the HHI could actually be much higher. In the future, BHC's goal is to refine measures of HHI and excess capacity to include the effect of outpatient expansion. Efforts toward this goal will be supported by publicly available information on outpatient utilization that will be used to establish a new method that will more accurately assess the level of market consolidation. ■

Network	Discharges*	Market Share	Market Share Squared	HHI Index
BJC HealthCare	119,805	29.9%	0.089403	894
SSM Health Care	77,663	19.4	0.037569	376
St. John's Mercy Health Care	45,128	11.3	0.012685	127
Tenet HealthSystem	23,426	5.8	0.003418	34
Non-Merged Hospitals				
Anderson Hospital	7,049	1.8	0.000309	3
Gateway Regional Medical Center	8,706	2.2	0.000472	5
Forest Park Hospital	9,358	2.3	0.000545	5
Jefferson Memorial Hospital	10,986	2.7	0.000752	8
Kenneth Hall Regional Hospital (East St. Louis, IL)	3,113	0.8	0.000060	1
Kindred Hospital	502	0.1	0.000002	0
Lincoln County Memorial Hospital	1,151	0.3	0.000008	0
Memorial Hospital of Belleville	14,245	3.6	0.001264	13
St. Alexius Hospital	10,117	2.5	0.000638	6
St. Anthony's Health Center (Alton, IL)	5,108	1.3	0.000163	2
St. Anthony's Medical Center	28,432	7.1	0.005035	50
St. Elizabeth's Hospital (Belleville)	12,995	3.2	0.001052	11
St. Joseph Hospital (Breese)	2,140	0.5	0.000029	0
St. Luke's Hospital	18,254	4.6	0.002075	21
Touchette Regional Hospital	2,503	0.6	0.000039	0
Sub-total Non-Merged Hospitals+	134,659	33.6%	+	124
Total	400,681	100%	1.000000	1,555

+ Market shares of each hospital were individually squared and added together for the HHI Index.

* Source: Centers for Medicare and Medicaid Services 2005 Medicare Cost Reports and internal utilization statements. Market share is based on the number of discharges. Hospital network configurations shown on this page are current as of 2007.



Missouri Disproportionate Share (DSH) Hospital Payments 2003–2005

The State of Missouri through the State/Federal Medicaid program makes hospital payments over and above other provider reimbursement for Medicaid services to certain hospitals. Hospitals qualify for these additional payments based on a number of factors outlined in Missouri Medicaid Regulations 13 CSR 70-15.010. Hospitals can receive the additional funds through enhancements to their Medicaid per diem rate, a Medicaid add on payment, and/or an uninsured reimbursement payment. The regulations define at least three categories of hospitals eligible for additional payments. In general, hospitals providing the largest amounts of Medicaid services, charity care, and incur the most bad debt receive the highest levels of additional payment. Certain other mental health and state hospitals also qualify for these payments.

Federal Law limits total Disproportionate Share payments to less than 100% of the unreimbursed cost for Medicaid and the cost of the uninsured (13 CSR 70-15.010; 17). Disproportionate Share Payments to Missouri hospitals in St. Louis City and

St. Louis County for fiscal years 2003, 2004, and 2005 are listed in the table below. The State/Federal shares for 2003, 2004, and 2005 were 38.81%/61.19%, 38.59%/61.41%, and 38.77%/61.23% respectively. Future funding for this program is subject to state and federal appropriations.

In the interest of evaluating Disproportionate Share (DSH) payments in relation to the amount of charity care provided, the amount of each hospital's DSH payment is expressed as a percent of its operating revenue, and an aggregate figure is shown at the bottom. On pages 12 and 13, charity care cost is expressed as a percent of operating revenue as well. While DSH payments are intended to offset contractual allowances related to Medicaid and losses due to bad debt, it also covers charity care. Charity care as a percent of operating revenue fell 6.7% in 2005 while DSH payments as a percent of operating revenue grew 11.7%. As a result, DSH payments as a percent of operating revenue have grown to be more than three times as high as charity care. ■

Provider	2003 DSH	2003 Operating Revenue	% of O.R.	2004 DSH	2004 Operating Revenue	% of O.R.	2005 DSH	2005 Operating Revenue	% of O.R.
Barnes-Jewish Hospital	\$ 44,017,443	\$ 944,042,713	4.66%	\$ 53,548,521	\$ 996,684,525	5.37%	\$ 66,826,803	\$1,075,362,035	6.21%
Barnes-Jewish Hospital—St. Peters	1,423,697	81,564,303	1.75	1,554,292	86,349,397	1.80	2,253,047	99,063,776	2.27
Barnes-Jewish Hospital—West County	648,299	76,849,551	0.84	676,206	78,024,315	0.87	791,783	76,926,555	1.03
Cardinal Glennon/ St. Mary's Health Center	16,822,723	350,561,287	4.80	20,805,482	405,592,339	5.13	26,969,855	449,169,911	6.00
Christian Hospitals	13,194,836	247,495,936	5.33	13,642,190	248,509,158	5.49	17,137,420	244,192,451	7.02
DePaul Health Center	3,862,123	199,046,000	1.94	5,707,514	224,876,899	2.54	10,446,128	255,139,474	4.09
Des Peres Hospital	1,886,600	93,500,203	2.02	2,149,006	98,414,763	2.18	2,602,377	106,091,411	2.45
Forest Park Hospital ¹	12,912,901	111,888,437	11.54	13,611,517	104,361,647	13.04	14,403,089	109,477,656	13.16
Jefferson Memorial Hospital	3,667,573	81,991,369	4.47	4,104,422	91,395,954	4.49	4,727,733	101,001,564	4.68
Kindred Hospital	514,629	17,687,807	2.91	289,590	18,189,883	1.59	556,415	25,801,060	2.16
Lincoln County Memorial Hospital	754,843	19,690,767	3.83	884,541	22,517,906	3.93	1,431,492	24,899,929	5.75
Missouri Baptist Medical Center	5,275,157	309,049,060	1.71	6,417,763	333,256,106	1.93	7,375,753	345,962,582	2.13
Missouri Baptist Hospital—Sullivan	1,072,524	30,282,396	3.54	1,179,073	31,292,194	3.77	1,103,494	31,564,770	3.50
St. Alexius Hospital ¹	N/A	N/A	N/A	12,648,633	86,794,253	14.57	13,999,801	96,874,984	14.45
St. Alexius Hospital—Broadway Campus ¹	5,986,272	48,109,385	12.44	N/A	N/A	N/A	N/A	N/A	N/A
St. Alexius Hospital—Jefferson Campus ¹	6,206,800	39,398,123	15.75	N/A	N/A	N/A	N/A	N/A	N/A
St. Anthony's Medical Center	9,122,027	290,918,000	3.14	12,752,262	314,980,000	4.05	9,930,702	335,731,000	2.96
St. John's Mercy Hospital—Washington	2,533,707	69,802,186	3.63	3,260,298	72,706,996	4.48	3,414,340	75,910,181	4.50
St. John's Mercy Medical Center	10,747,349	454,537,124	2.36	12,240,612	534,089,839	2.29	17,345,989	590,246,406	2.94
St. Joseph Health Center—Wentzville	1,154,199	23,239,110	4.97	1,405,441	22,956,438	6.12	1,509,769	24,218,902	6.23
St. Joseph Health Center—St. Charles	7,940,821	141,972,807	5.59	5,686,695	142,922,207	3.98	4,877,460	159,075,934	3.07
St. Joseph Hospital—Kirkwood	1,392,023	82,755,347	1.68	2,053,177	92,836,791	2.21	2,332,956	102,714,920	2.27
St. Joseph Hospital West—Lake St. Louis	1,124,960	59,601,304	1.89	1,603,348	62,463,822	2.57	2,255,706	73,399,939	3.07
St. Louis Children's Hospital	23,147,516	257,116,000	9.00	26,809,962	278,842,298	9.61	34,967,142	300,123,547	11.65
St. Louis University Hospital	20,811,401	312,102,000	6.67	21,292,206	305,981,000	6.96	23,583,497	308,619,020	7.64
St. Luke's Hospital	3,243,870	263,468,000	1.23	3,194,653	274,105,000	1.17	3,482,988	307,192,000	1.13
TOTAL	\$199,464,293	\$4,606,669,215	4.33%	\$227,517,404	\$4,928,143,730	4.62%	\$274,325,739	\$5,318,760,007	5.16%

¹ SouthPointe Hosp. merged with St. Alexius Hospital in 2003 and reported on a combined basis in 2004 as St. Alexius Hospital. Forest Park Hosp., St. Alexius Hospital—Broadway and Jefferson Campus were sold to Doctors Community Healthcare Corporation (DCHC) in November 2004 by Tenet Healthcare Corporation. Due to the transfer in ownership in 2004, 2003 and 2004 data for these hospitals could not be verified by Tenet or DCHC.

Sources: DSH payment information obtained from the Missouri Department of Social Services. Operating revenue obtained from hospital Medicare Cost Reports and audited financial statements. This data was abstracted by the BHC and verified by individual hospitals.

Note: Changes in previously reported data are based on most current information. Data in this table not adjusted for inflation. DSH payments made for 12 month periods beginning July 1 and ending June 30. Hospital fiscal years, on which operating revenue is based, may differ.



Glossary

ACE Inhibitor (angiotensin converting enzyme): A type of medicine used to treat heart attacks, heart failure, or a decreased function of the left side of the heart (left ventricular systolic dysfunction). ACE inhibitors can help reduce the risk of death from a heart attack if taken within 24 hours of the first symptoms of a heart attack. Continued use may help prevent heart failure. ACE inhibitors work by blocking an enzyme in the body that is necessary to produce a substance (angiotensin II) that causes blood vessels to constrict. As a result, blood vessels relax and blood pressure is lowered increasing the supply of blood and oxygen to the heart.

Allowances: This element consists principally of Contractual Adjustments, which are differences between gross revenues at established rates and amounts realizable from third party payers under contractual agreements.

Available Acute Bed: A hospital bed in a specific location in a health care institution for which the hospital is prepared to provide needed services when a patient is admitted as reported in Medicare Cost Report, Worksheet S-3. This was used to calculate available occupancy percentage and excess available acute beds.

- **Licensed Acute Bed:** A State authorized bed capacity of a health care institution as reported in Missouri Hospital Profiles, Illinois Department of Health Statistics or other State agency. The numeric counts of licensed beds are typically greater than for available acute beds (see above).
- **Staffed Bed:** A term used within the hospital industry to denote a bed which is fully staffed and ready to receive a patient. A staffed bed is similar to an available bed, but the numeric count is typically less than for available beds.

Average Length of Stay: The number of patient days used divided by the number of discharges.

Average Mark-up: The percentage by which costs are increased to yield gross charges that is typically referred to as charges over costs.

Beta blocker: A type of medicine that is used to lower blood pressure, treat chest pain (angina) and heart failure, and to help prevent a heart attack. Beta blockers relieve the stress on the heart by slowing the heart rate and reducing the force with which the heart muscle contracts (to pump blood). Most heart attack patients should be given a beta blocker within 24 hours of arriving at the hospital.

Central Line-Associated Bloodstream Infection (CLAB): A central line is a flexible tube that is inserted near the patient's heart or into one of the large veins or arteries to give fluids, measure the amount of fluid in the body, or to give medication. CLAB is an infection in a patient who has a central line that was used within the 48-hour period before the onset of the infection. If the interval is longer than 48 hours, there must be compelling evidence that the infection is related to the central line.

Charity Care: Health services that were never expected to result in cash inflows. Charity care results from a provider's policy to provide health care services free of charge to

individuals who meet certain financial criteria. (American Institute of Certified Public Accountants, 1990)

Contractual Allowance Percent: The percentage of contractual adjustments by which gross charges are discounted from third party payers under contractual agreements.

Fund Balance / Unrestricted Net Assets: The difference between assets and liabilities

Left Ventricular Systolic Dysfunction (LVSD): A condition characterized by decreased function of the left side of the heart.

Left Ventricular Function Assessment (LVF): A test that checks how the heart is pumping.

Occupancy Rate: This figure is determined by dividing the number of patient days used by the number of available acute beds multiplied by the number of days in the year. Excluded are nursery, skilled nursing facility, and other long term non-acute days and beds.

Operating Margin: The portion of a firm's operating revenue retained as income. See Technical Notes for formula.

Oxygenation Assessment: Tests that check the level of oxygen in the bloodstream. They may include an ABG (arterial blood gas) or pulse oximetry (electrodes attached to a part of the body such as a finger, earlobe, or skin fold).

Patient Days: A unit of utilization calculated by multiplying the number of discharges (or admissions) by the hospital average length of stay. This term is also referred to as "Total Bed Days Used".

Profit (Loss): Excess (deficit) of revenue over expenses.

Profit Margin: Excess of revenue over expenses divided by the sum of total operating revenue and non-operating revenue.

Return on Equity: A ratio that defines the amount of net income earned per dollar of unrestricted net assets or fund balance. It is calculated by dividing the excess of revenue over expenses by the fund balance.

Surgical Site Infection Risk Scores: The performance of each facility relative to Surgical Site Infections (SSIs) has been adjusted to reflect the risk associated with the reported procedure. If a facility has a high rate after the adjustment, one can have more confidence that the facility has SSI problems that are caused by factors other than the presence of many high risk patients.

The **risk factors** that are used in adjusting a facility's performance are the degree of contamination of the wound at the time of the operation, the duration of the procedure, and the American Society of Anesthesiologists (ASA) score. The latter is an estimate of the patient's physical condition.

A **risk score of 0** indicates that the patient has a relatively **low risk** of developing a surgical site infection, while a **risk score of 3** indicates that a patient has a relatively **high risk** of developing an infection for a particular surgical procedure. Occasionally they are **combined, as in risk level 2,3**. For these surgical procedures, the **Centers for Disease Control** found that **SSI rates were similar whether the risk was a 2 or a 3**.



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