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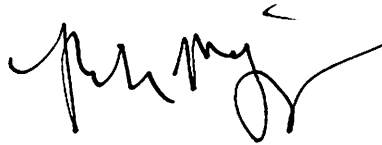
May 23, 2008

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SUBJECT: GMP Approval Letter for Amanda Lawson

I have read and approved Amanda Lawson's graduate management project, a strategic management analysis for Missouri Baptist Medical Center, a member of BJC HealthCare.

A handwritten signature in black ink, appearing to read 'Rick Majzun', with a stylized flourish at the end.

**Rick Majzun
Vice President, Strategic Planning
BJC HealthCare, Inc.**

Army-Baylor University Graduate Program in Health and Business Administration

Graduate Management Project
Strategic Management Analysis: Missouri Baptist Medical Center (MBMC)

Presented to Major Paul R. Brezinski, PhD, FACHE

In partial fulfillment of the requirements for
Administrative Residency

By
Captain Amanda M. Lawson, FACHE

Fort Sam Houston, TX
June 13, 2008

Table of Contents

	Page
Abstract	4
Acknowledgements.....	5
Disclaimer	6
List of Tables	7
List of Figures	8
Introduction.....	9
External Environment	11
Trend Plot Analysis.....	18
Service Area Competitor Analysis.....	21
Service Area and Category	21
Service Area Profile	23
Service Area Structural Analysis	31
Competitor Analysis	36
Strategic Grouping.....	39
Synthesis of External Analysis	40
Internal Environment	40
Value Chain	42
Competitive Strengths and Weaknesses	43
Critical Success Factors	46
Strategic Implications	46
Directional Strategies.....	48
Developing Strategic Alternatives	48

Potential Strategy Maps	49
Selection and Explanation of Strategy Map.....	51
TOWS Matrix	51
SPACE Matrix	53
Service Delivery Strategies.....	55
Pre-service Activities	55
Point-of-service Activities	55
After-service Activities	59
Support Delivery Strategies	59
Culture.....	60
Structure.....	61
Resources	62
Action Plan.....	63
References.....	67
Appendix A: Campus Map	75
Appendix B: Competitor Information.....	76
Appendix C: Current Market Development.....	86
Appendix D: Potential Market Development	87

Abstract

This graduate management project offers a thorough strategic management analysis of Missouri Baptist Medical Center (MBMC). MBMC, a member of BJC HealthCare, is located approximately 15 miles west of Saint Louis, Missouri. The situational analysis begins with an external evaluation of MBMC's operational environment and a profile of its main competitors. Opportunities for MBMC include its location in an affluent area and its affiliation with a large health system. MBMC also faces several threats and strong competition. An internal examination of MBMC and an explanation of its existing directional strategies revealed passionate staff and financial strength. Potential strategies for MBMC to pursue in the next one to three years include strengthening relationships with physicians. The analysis concludes with the selection of a strategy map and associated action plans, such as expansion into other attractive markets.

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Disclaimer

Some of the information contained in this strategic management analysis is sensitive and proprietary in nature. The author of this project has signed a confidentiality agreement. The confidentiality of this information must be maintained by the appointed Baylor University faculty reader. BJC HealthCare, Inc. and Missouri Baptist Medical Center (MBMC) do not authorize the release of these contents without expressed permission. Any disclosures made outside of this reading arrangement, even for academic purposes, are unauthorized. Individually identifiable or protected health information was not used in the development of this study. Finally, the opinions expressed in this document are my own and do not reflect those of the United States Government, the Department of Defense, or Baylor University.

List of Tables

	Page
Table 1: MBMC Trend Plot Issues	19
Table 2: Information on MBMC and Main Competitors.....	37
Table 3: Competitive Relevance of MBMC Strengths	43
Table 4: Competitive Relevance of MBMC Weaknesses.....	44
Table 5: MBMC Primary Care Physician Development Plan	64

List of Figures

	Page
Figure 1: Trend Plot for MBMC.....	20
Figure 2: BJC HealthCare Primary Service Area (PSA) Map.....	21
Figure 3: MBMC Markets with Percentage of Discharges.....	22
Figure 4: Saint Louis CORTEX Development Plan.....	26
Figure 5: Residence Location of MBMC Patients.....	30
Figure 6: Location of MBMC Main Competitors.....	37
Figure 7: Strategic Grouping of MBMC and Main Competitors.....	39
Figure 8: MBMC Service Value Chain	42
Figure 9: Potential Strategy Map I for MBMC.....	50
Figure 10: Potential Strategy Map II for MBMC	51
Figure 11: TOWS Matrix for MBMC.....	52
Figure 12: SPACE Matrix for MBMC.....	53
Figure 13: Balanced Scorecard for MBMC	65

Introduction

Missouri Baptist Medical Center (MBMC) is a member of BJC HealthCare, an integrated healthcare delivery system that was the first of its kind in the nation to join an academic center, Washington University School of Medicine, with suburban, rural and urban healthcare facilities (Smith, 1995). MBMC, a 489-bed acute-care hospital, is located approximately 15 miles west of the City of Saint Louis, Missouri. MBMC offers the full spectrum of medical and surgical services, including 24-hour adult and pediatric emergency care (Facts about BJC Health Care, 2007). MBMC had net revenue of \$370 million in 2007, up 8.2 percent from \$347 million in 2006 (Saint Louis Business Journal, 2008).

The history of MBMC dates back to 1884 when Doctor William Mayfield joined with the Third Baptist Church of Saint Louis to establish the Missouri Baptist Sanitarium, which opened in 1886 (Missouri Baptist Medical Center Facts, 2007). Over the next century, the facility continued to expand its services and open new locations. Missouri Baptist Medical Center continues to offer high-quality medical services with sophisticated technology. Through its excellent staff of primary care physicians and specialists, as well as employees trained in various disciplines, Missouri Baptist Medical Center offers services across the spectrum of medical specialties with the exception of organ transplant services and burn treatment (Missouri Baptist Medical Center Facts, 2007). A map of the MBMC campus is shown in Appendix A.

In 1987, the name of the hospital was changed to Missouri Baptist Medical Center, and in 1994, Missouri Baptist Medical Center became a member of BJC HealthCare, the largest health care system in the Saint Louis area (Missouri Baptist Medical Center Facts, 2007). Missouri Baptist Medical Center solidified its affiliation with BJC HealthCare through its powerful commitment to public service and the establishment of extensive suburban and rural networks.

MBMC benefits from its affiliation with BJC HealthCare, especially through the resources available at the corporate level, such as strategic planning, capital asset management, supply chain management, managed care contracting, legal services, and access to additional capital for large projects.

MBMC is the recipient of many prestigious awards. MBMC was rated as Missouri's number one hospital for cardiac care and gastrointestinal medical treatment and number two for stroke care by HealthGrades, the nation's leading independent health care ratings organization (Missouri Baptist Medical Center Facts, 2007). By attaining the ranks of the top 5 percent of hospitals nationwide, MBMC received the HealthGrades Distinguished Hospital Award for Clinical Excellence™ in 2006 and 2007. The HealthGrades Distinguished Hospital Award for Clinical Excellence recognizes hospitals that have demonstrated superior clinical quality over a seven-year time period, based upon an analysis of Medicare patient records. MBMC also achieved a HealthGrades 5-Star rating in 2005 and 2006 for overall cardiac services, cardiology services, heart surgery, coronary bypass surgery and valve replacement surgery. The hospital also earned Specialty Excellence Awards™ for pulmonary and critical care (Missouri Baptist Medical Center Facts, 2007).

MBMC has established a reputation for delivering quality healthcare in the Saint Louis market. However, the facility is encountering several challenges that could hamper its long-term success. The biggest threats to MBMC's future viability are physician-owned ventures, particularly given the fact that population growth is projected to be flat for the next three years (BJC Health Care Strategic Planning, 2007). The market is saturated with quality health care providers and volume growth has recently been stagnating. MBMC must differentiate itself from its competition and pull away market share to succeed, since there is no untapped customer base

in the primary service area (PSA) from which to grow additional volume. MBMC patients are above average in household income at \$54,227 and most have private health insurance (BJC HealthCare Strategic Planning, 2006). This particular demographic tends to have higher expectations for a positive and personalized experience. That presents an opportunity for MBMC to focus on the delivery of patient-centered service to attract and maintain patients.

The following comprehensive strategic management analysis seeks to answer three primary questions. First, where is MBMC now? Next, where does MBMC want to go? Finally, how does MBMC get there?

External Environment

The following analysis will describe legislative, demographic, and economic trends in MBMC's external environment, including those occurring at the national, state, and local level. Swayne, Duncan, and Ginter (2005) posit that strategic thinking is directed toward positioning an organization most effectively within its changing external environment. Hospitals operate within a complex environment of social, political, and economic forces. In order to be successful, hospitals must anticipate changes in their external environment, plan ahead, and respond accordingly. The following sections include specific information regarding MBMC's general, legislative, social, economic, technical and competitive environment.

General Healthcare Environment. The following characteristics describe the United States (U.S.) healthcare system: no central agency governs the system; access to health care services is based on insurance coverage, health care is delivered under imperfect market conditions; third-party insurers act as intermediaries between the financing and delivery functions; existence of multiple payers makes the system cumbersome; balancing of power among various players prevents any single entity from dominating the system; legal risks

influence practice behavior; development of new technology creates an automatic demand for its use; new service settings have evolved along a continuum; and quality is no longer accepted as an unachievable goal in the delivery of health care (Shi and Singh, 2004). This requires U.S. healthcare organizations to strategically navigate a complex system in order to be successful.

Legislative and Political. In December 2003, the Medicare Modernization Act introduced several provisions that reduced covered services or reimbursement rates for the federal Medicare program. Rates of reimbursement have been frozen for several areas, eroding profits for hospitals and physicians as expenses continue to outpace revenues (Medicare Modernization Act Update, 2003). Similar changes have occurred in state Medicaid programs. Since 2001, 22 states have reduced the level of reimbursement received by industry participants without a corresponding offset or increase to compensate for the service costs incurred.

Recent Gallup polls have shown that Americans are very concerned about healthcare costs and believe the issue to be of political urgency (2007). When asked for specific opinions regarding health care in America, 64 percent felt it is the responsibility of the government to make sure all Americans have health care coverage, 41 percent felt the current system should be replaced, and 17 percent felt the health care system is in a state of crisis (Gallup, 2007). Regardless of party affiliation, President Bush's successor will likely push for reform in America's health care system. The leading candidates each have a health care plan. The Republican nominee does not favor universal coverage, but the Democratic nominee supports the idea. The basic elements of both plans are listed below.

Senator John McCain opposes federally mandated universal coverage. He vows to increase awareness and promote the use of existing children's health insurance programs while expanding community health centers. He supports health care tax dividends for low-income

Americans, medical malpractice reform, health and wellness programs, coordinated disease and case management programs, improving electronic record-keeping, expanding health savings accounts, and encouraging small businesses to band together to negotiate lower rates with health care providers (CNN, 2008). An important part of his plan is to use competition to improve the quality of health insurance with greater variety to match people's needs, lower prices, and portability.

Senator John McCain also believes that families should be able to purchase health insurance nationwide, across state lines (MSNBC, 2008). While still having the option of employer-based coverage, every family will also have the option of receiving a direct refundable tax credit of \$2,500 for individuals and \$5,000 for families to offset the cost of health insurance. Families will be able to choose the insurance provider that suits them best and the money would be sent directly to the insurance provider. Those obtaining innovative insurance that costs less than the credit can deposit the remainder in expanded health savings accounts. In terms of access for those Americans who are traditionally uninsurable, such as those with pre-existing conditions, John McCain's plan includes provisions for those without prior group coverage and those with pre-existing conditions. The plan envisions working with state governments to establish a Guaranteed Access Plan (GAP) for traditionally uninsurable persons. One approach would establish a nonprofit corporation that would contract with insurers to cover patients who have been denied insurance and could join with other state plans to enlarge pools and lower overhead costs. There would be reasonable limits on premiums, and assistance would be available for Americans below a certain income level (MSNBC, 2008).

On the contrary, Senator Barack Obama's plan would create a national health insurance program for individuals who do not have employer-provided health care and who do not qualify

for other existing federal programs (CNN, 2007). The plan allows individuals to choose between the new public insurance program as one option among other private insurance plans that meet certain coverage standards. Employers who do not provide health coverage for employees would be required to pay into the national health insurance program. Senator Obama's plan mandates individual coverage for all American children, but not adults. His plan allows individuals below age 25 to be covered through their parents' plans. The annual cost of his plan is estimated between \$50 billion and \$65 billion, to be paid for by eliminating Bush tax cuts for those earning over \$250,000 (CNN, 2007).

Although comprehensive health care reform at the federal level would affect all health care organizations, the direct impact is hard to predict. In addition to federal healthcare reform efforts, the state of Missouri recently considered a new state health insurance program called Insure Missouri. If the new state health program had been successful, there would have been a foreseeable effect on MBMC. The program called for a state website where individuals could buy individual insurance policies with help for people earning less than 85 percent of the federal poverty level (BJC HealthCare Strategic Planning, 2008). This is much lower than the current threshold for state Medicaid assistance at 225 percent above the poverty level. The most radical change is that participants would be required to contribute one to five percent of their income to a health saving account. The program would have cost taxpayers \$46 million, much less than the \$600 million proposal from the governor, who wanted to expand coverage to many more Missouri residents. Due to many shortfalls, such as low community support and incomplete coverage for children, the plan was recently rejected by the state legislature (BJC HealthCare Strategic Planning, 2008). Although this plan was rejected for various reasons, the political

climate in the state is still ripe for healthcare reform. MBMC will need to closely follow legislative efforts and changes at the federal and state level for the foreseeable future.

Economic. In 2005, the U.S. Department of Health and Human Services (HHS) reported that national health expenditures had reached 16 percent (\$1.9 trillion) of the GDP, with hospital care amounting to 31 percent (\$611.6 billion) of the total expenditures (CMS, 2006). In the U.S. today, it is estimated that 16.8 percent of the population (46.6 million people) are without health insurance coverage (Nation Master, 2007). As health care delivery costs continue to rise, innovative strategies must be implemented to contain expenses while delivering high-quality service. In his 2006 State of the Union address, President Bush vowed, “For all Americans, we must confront the rising cost of care, strengthen the doctor-patient relationship, and help people afford the insurance coverage they need” (The White House).

Social and Demographic. By 2020, almost 15 percent of the U.S. population will be over 65 and 2 percent will be over 85. By 2015, these numbers are almost 17 percent and nearly 3 percent respectively (US Census Bureau, 2006). In Missouri, the over 65 and over 85 populations are almost a percentage point higher than the national average each year (US Census Bureau, 2006). A 2003 study found that almost 44 percent of hospitals bills in the U.S. are for elderly patients (AHRQ, 2004). At that time, the elderly comprised only 12 percent of the U.S. population. In 2004, the average life expectancy in the U.S. was almost 78 years (U.S. Census Bureau, 2004). This demographic shift will surely lead to a higher demand for healthcare services in addition to an associated increase in health care expenditures.

Another troubling trend in terms of increased healthcare utilization and associated costs, is the rapidly rising prevalence of overweight and obese Americans, as defined as a body mass index (BMI) of greater than 25 and 30, respectively. Overweight and obese individuals are at a

greater risk of developing serious and ongoing health problems, such as type II diabetes and heart disease. The national estimated cost of obesity was almost \$93 billion in 2002 (CDC). At present, 32 percent of the nation's population is obese (Nation Master, 2007). The prevalence of obesity in Missouri is slightly lower at 29 percent, but has nearly doubled in less than 25 years (CDC, 2006). While that seems like better news in terms of related costs, the health care expenditures associated with obesity in Missouri are higher than 34 other states (CDC, 2002).

These demographic trends have substantial economic consequences and may jeopardize the ability of employers and government entities to provide health insurance coverage for the US population in the future. In the decades to come, fundamental changes in the financing and delivery of health care will be crucial. Efforts to improve population health management and develop preventative medicine programs are especially necessary to raise the health status of the populous and control rising healthcare costs.

Technological. To be competitive in the marketplace, state of the art medical equipment and techniques are essential. However, the already high cost of purchasing sophisticated computer-based technologies will continue to rise. Significant advances in medical technologies are anticipated well into the future. Additionally, technology systems used to meet administrative needs in business operations including billing, inventory, and education systems are critical to hospital operations. Computer-based medical record and drug ordering systems are becoming increasingly popular, as health care organizations seek more sophisticated methods of delivering patient care (Shi and Singh, 2004). In his 2006 State of the Union address, President Bush said this country needs to make "wider use of electronic records and other health information technology, to help control costs and reduce dangerous medical errors" (The White House, 2007).

Competitive. The hospital industry is highly competitive. In the early 1990s, the number of hospital beds decreased and payment reform had a negative impact on income (Smith, 1995). A shift toward integrated networks took hold in the hospital industry. Several factors emerged as critical to a hospital's success, including the ability to offer a wide variety of quality services, the development of physician and nurse relationships, access to capital, accreditation by the Joint Commission or a similar accrediting body, and the receipt of quality awards.

Additional pressure has been placed on hospitals due to cost constraints resulting from changing or declining reimbursement from public and private payors combined with increasing numbers of uninsured patients. Starting in 1965 with the enactments of Medicare and Medicaid, the healthcare industry has been impacted by major legislative changes (CMS, 2004). In 1973, the Healthcare Maintenance Organization (HMO) Act provided funding for the development of HMOs. In 1985, the Emergency Medical Treatment and Labor Act (EMTALA) required hospitals participating in Medicare that operated active emergency rooms to provide appropriate medical screenings and stabilizing treatments for all patients. In 1997, the Balanced Budget Act (BBA) established new Medicare and Medicaid managed care options and requirements. The BBA also slowed the rate of growth in Medicare spending and extended the life of the trust fund for ten years (CMS, 2004). Finally, the Medicare Prescription Drug, Improvement, and Modernization Act (MMA) of 2003 created substantial change for hospitals. MMA covers new preventive benefits and prescriptions drugs. It also allowed for competition among health plans to foster innovation and also considers beneficiary income for the first time since the inception of the program (CMS, 2004).

MBMC must organize and prioritize these issues to decide which ones are important enough to include in strategic plans. A technique used for this purpose is a trend plot analysis.

Trend Plot Analysis

A trend identification and extrapolation process was conducted to assess the trends of the Saint Louis hospital market, their relative impact on MBMC, and the likelihood of those trends continuing into the future. This simple tool was chosen for its ease of use and ability to forecast trends. MBMC, as outlined below in Table 1, is facing several external issues. Several trends, such as the aging population, are listed along with an associated impact on the organization and a probability of the trend occurring. Based on extensive research of MBMC's environment, the most likely and critical trends are increasing competition from physicians and ambulatory care centers, a growing population of uninsured or underinsured patients, the lack of robust physician development strategies, and a potential shortage in skilled workers (J. M. Magruder, 2007). The issues identified on Figure 1 below have a significant impact on the organization (vertical y-axis) and are likely to occur in the future (horizontal x-axis).

Opportunities also exist in MBMC's environment, such as growing areas for market development and an increase in the number of outpatient visits. The goal for MBMC is to exploit positive trends and minimize or eliminate negative trends with targeted strategic actions. These action plans will be developed once additional information is collected and analyzed.

The next step in developing a comprehensive strategic plan after the identification and ranking of environmental threats and opportunities is a service area competitor analysis. This analysis includes the definition of service area and category, a service area profile with additional demographic and economic information, a structural analysis on the industry, and the identification of competitors operating in the same market.

Table 1

MBMC Trend Plot Issues

Graph Plot	Issue	Opportunity/ Threat (O/T)	Impact on the organization (1-10)	Probability of Trend Continuing (1-10)
A	Development of physician engagement strategies	O	8.0	7.5
B	Decreasing percentage of national expenditures on hospital care	T	7.0	7.0
C	Pressure on professional fees leading to physicians as competitors	T	7.0	8.0
D	Reduction in outpatient volume and market share growth	T	6.5	4.5
E	Reduction in Medicare/insurance reimbursement amounts	T	8.5	8.5
F	Increasing carve-outs of profitable ambulatory services	T	8.5	6.5
G	Partnerships between physicians and publicly traded companies	T	6.0	5.0
H	Uncertainty about impact of future health care legislation	T	4.0	5.0
I	Increasing number of freestanding ambulatory surgical centers	T	7.5	7.0
J	Rise in hospital acquisitions and mergers	O	5.0	5.0
K	Rise of consumer-directed healthcare	O	7.5	8.0
L	Opportunity to sell EMR to private practices	O	6.0	7.0
M	Highway construction may keep local volume up	O	5.0	4.0
N	Total hospital outpatient visits are increasing	O	7.5	7.0
O	Total hospital inpatient visits are decreasing	T	6.5	7.0
P	Median average age of PPE is increasing	T	6.0	6.0
Q	Accelerating need for ICU beds	O	5.0	8.0
R	Opportunity in related post-acute care	O	7.0	7.0
S	Erosion of some local competing organizations	O	6.0	4.0
T	Increasing population of uninsured and underinsured patients	T	8.0	8.5
U	Aging/impending retirement of critical staff	T	7.5	8.5
V	Demand for nurses outpacing supply	T	7.0	6.5
W	Growing elderly population	T	7.5	9.5
X	Increasing cost of supplies	T	7.0	5.5
Y	Escalating competition from hospitals, physicians, and niche providers	T	9.5	9.5
Z	Looking to outlying markets for business due to slow or negative population growth in primary markets	O	5.0	6.0

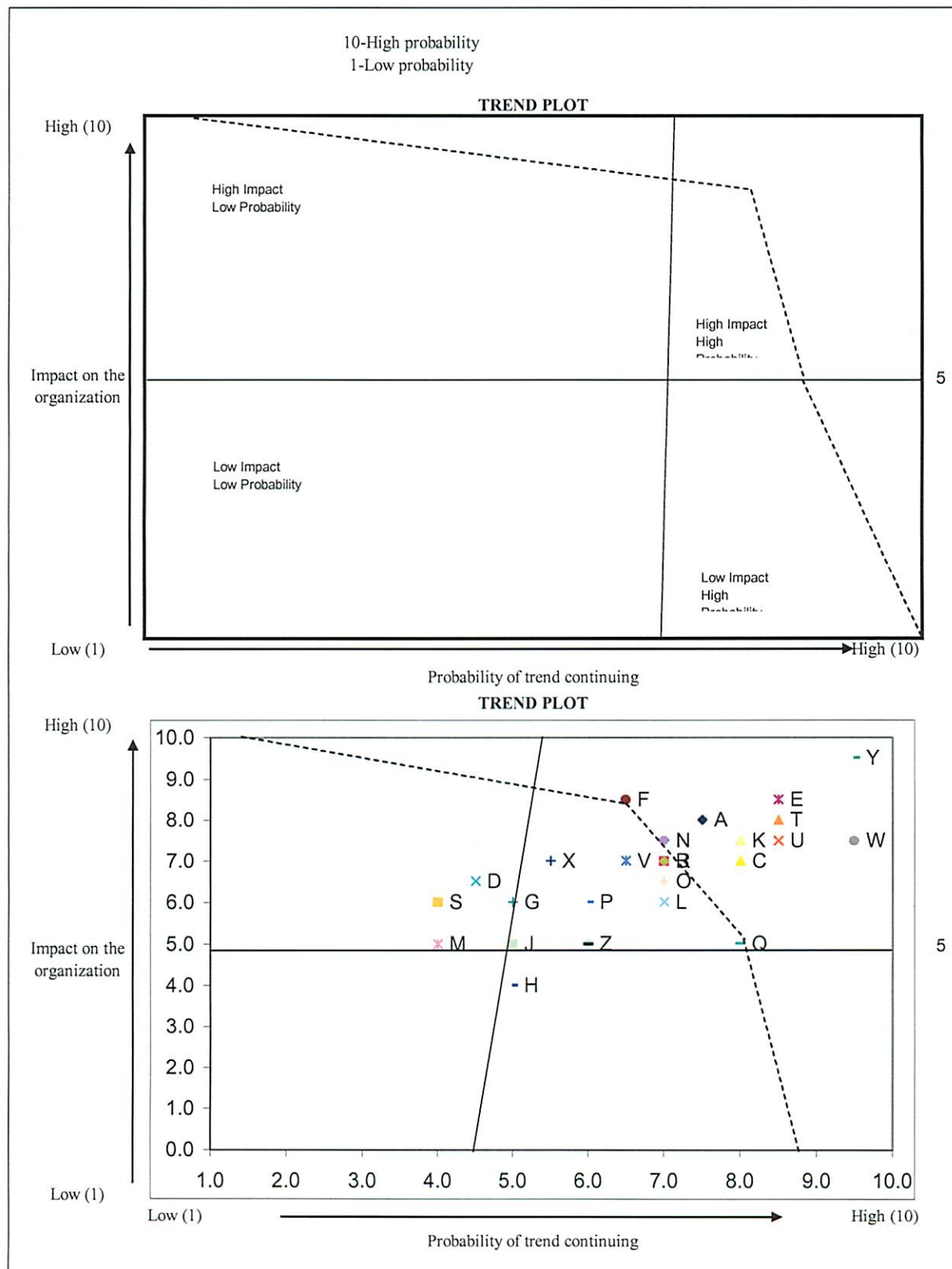


Figure 1. Trend Plot for MBMC

Service Area Competitor Analysis

An entity can define their service category, perform a structural analysis, and assess their competition with a service area competitor analysis. This information helps an organization to better understand the supply (providers) and demand (customers) forces operating in the market.

Service Area and Category

The service category of MBMC is acute hospital care and the general service area is around Saint Louis, Missouri. The City of Saint Louis is bordered on the west by Saint Louis County and the east by the Mississippi River, which separates Missouri and the state of Illinois. The primary service area (PSA) for BJC HealthCare facilities includes the 12 counties in Eastern Missouri and Western Illinois shown in Figure 2 below. These 12 counties also make up the Saint Louis Metropolitan Statistical Area (MSA) as defined by the U.S. Census Bureau.

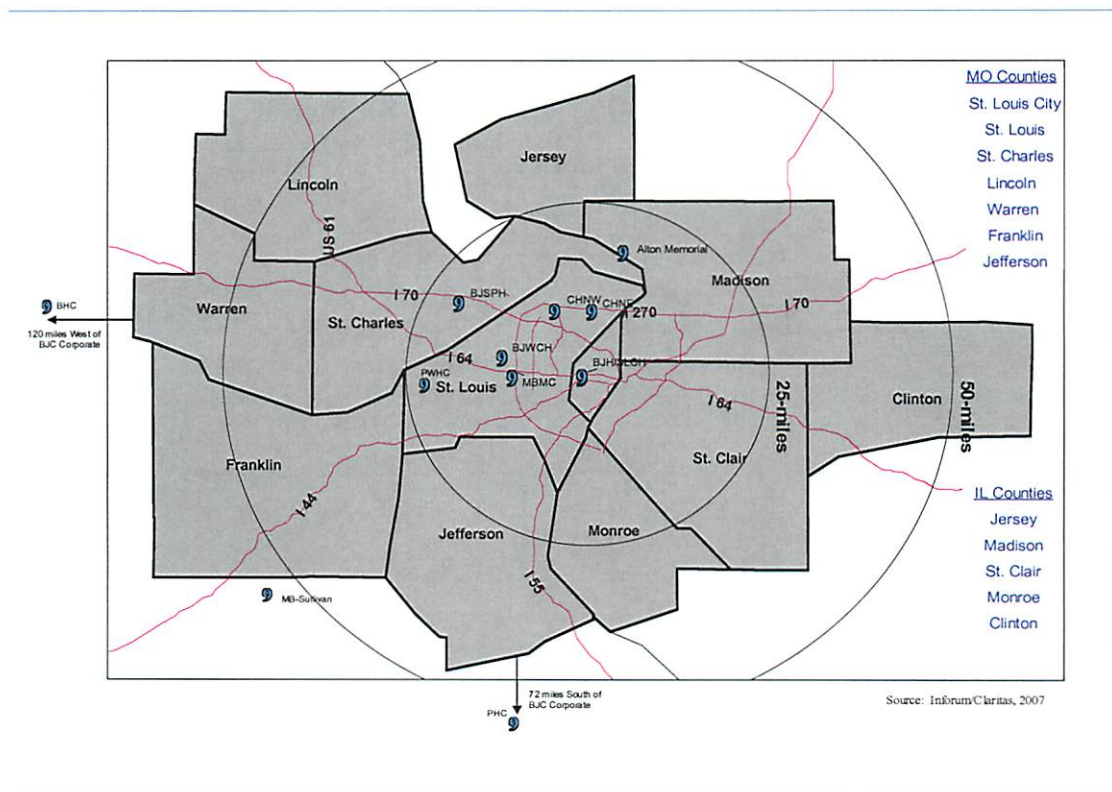


Figure 2. BJC HealthCare Primary Service Area (PSA) Map.

MBMC is located west of the city of Saint Louis in Town and Country (Saint Louis County) and the overwhelming majority of MBMC patients live in Missouri, specifically in the west and south parts of the county. The PSA of MBMC, illustrated below in Figure 3, has the highest concentration of discharges at 46 percent (BJC HealthCare Strategic Planning, 2006). Due to location of MBMC in the affluent west county area, very few of the facility's patients are indigent or commuting from the downtown Saint Louis or Southwestern Illinois areas for their hospital care.

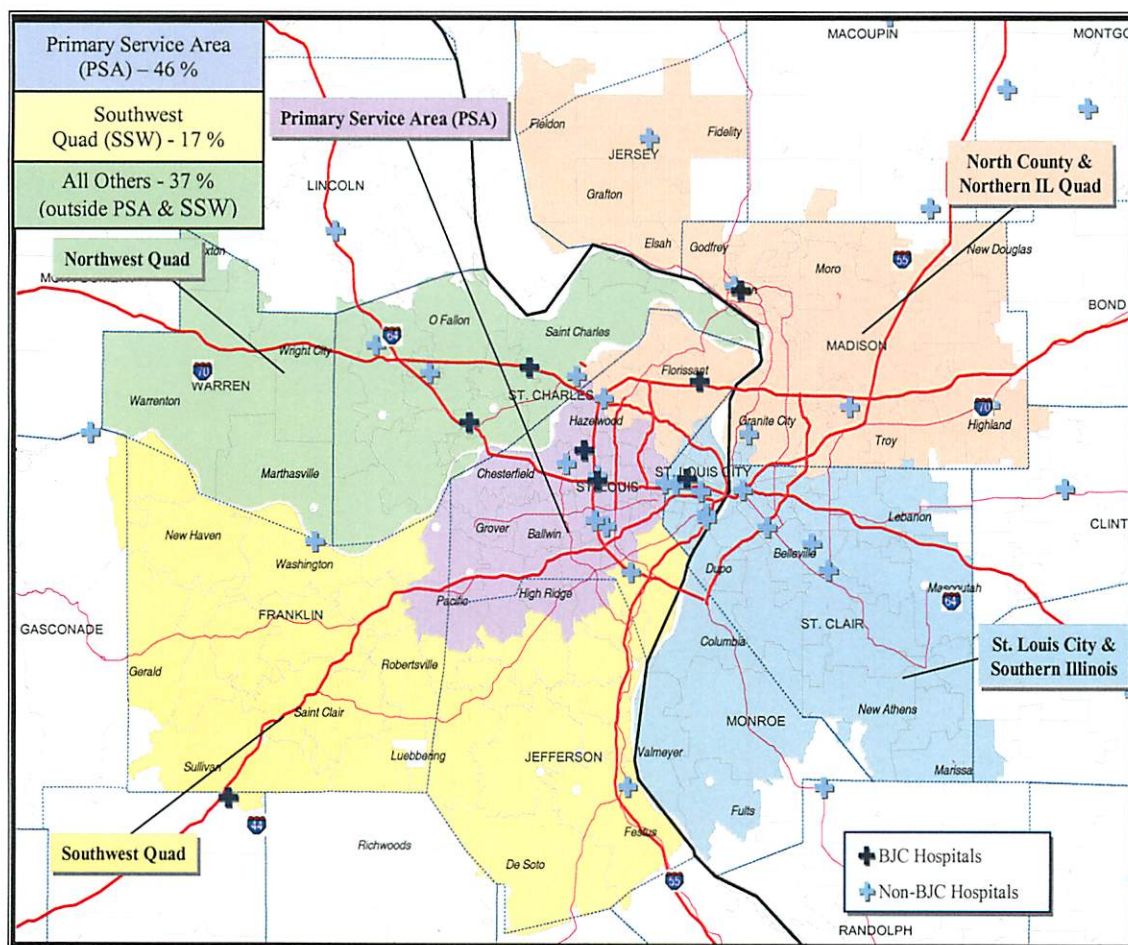


Figure 3. MBMC Markets with Percentage of Discharges

Unlike hospitals located closer to the state border, MBMC does not have a Medicaid contract with Illinois and would most likely have to write off care provided to Illinois residents as bad debt. The two major academic teaching hospitals in the Saint Louis area, Barnes-Jewish Hospital (BJH in conjunction with the Washington University School of Medicine) and Saint Louis University Hospital (SLUH), are located downtown in the city of Saint Louis, much closer to state border. Both facilities have Medicaid contracts with Illinois and are the closest Level I trauma facilities to the Southwestern Illinois counties in the PSA. BJC HealthCare also has a community hospital located in Madison County, Illinois. Illinois residents predominantly seek medical care at the numerous community hospitals and physician offices located near their homes.

Service Area Profile

The service area profile identifies key competitively relevant issues in five categories; general, economic, demographics, psychographic, and health status (Swayne et al., 2005).

General. Hospitals will be forced to manage ongoing changes in the U.S. health care delivery system and respond to external pressures by improving productivity, reducing costs, and collaboration with larger healthcare organizations (Shi and Singh, 2004).

The U.S. hospital market is highly fragmented with nearly 5,750 independent hospitals (AHA, 2006). Eighty-five percent of the nation's hospitals are tax-exempt and operated by charities, religious organizations, or the government (AHA, 2006). The demand for hospital care is primarily driven by the demographic makeup of the populations hospitals serve. The state of Missouri defines a nonprofit corporation as, "a corporation formed to carry out a charitable, educational, religious, literary or scientific purpose" (Missouri Department of Economic Development, (2007). A nonprofit corporation does not pay federal or state income taxes. The

IRS and state tax agencies allow these organizations a special tax-exempt status due to the benefits the public derives from their charitable activities.

The Saint Louis area has earned a reputation for excellence in medicine and biotechnology, mainly due to the alliance between Washington University, a top five medical school, and Barnes-Jewish Hospital, a top ten hospital in the United States (U.S. News and World Report, 2006). According to U.S. News and World Report, only 18 of the 5,462 U.S. hospitals surveyed were considered elite in the 16 medical specialties evaluated, from cancer and heart disease to respiratory disorders and urology. This small group scored at least two standard deviations above the mean in a minimum of six of the sixteen specialties. Barnes-Jewish Hospital was joined by Cleveland Clinic, Johns Hopkins Hospital, and Mayo Clinic at the top of the list (U.S. News and World Report, 2006).

Barnes-Jewish Hospital, a BJC HealthCare facility, is the fifth largest hospital in the United States by number of staffed inpatient beds (AHD, 2008). The Washington University School of Medicine is a major center of health care education and research, playing a major role in many of the nation's key medical research projects, such as the Human Genome Project (USDOE, 2008). In addition, the Saint Louis University Medical School has a formidable partnership with SSM Health Care. The partnerships of health care systems with academic medical research institutions and the presence of international pharmaceutical and bioscience companies, such as Pfizer and Monsanto, contribute to the area's robust health care industry.

Economic. There are several issues of concern in the Saint Louis economy. In recent years, the corporate landscape in Saint Louis has been dramatically altered by the acquisitions and mergers of multi-national corporations (Saint Louis Economy, 2007). This includes Mallinckrodt (purchased by Tyco), McDonnell-Douglas (merged with Boeing), SBC (became

AT&T), May Department Stores (purchased by Federated Department Stores), Ralston Purina (purchased by Nestle). Despite the exodus of multiple industrial powerhouses, several U.S. corporations remain headquartered in Saint Louis, including Anheuser-Busch, Energizer, Monsanto, Express Scripts, Charter Communications, Hardee's, Enterprise Rent-A-Car, and Emerson Electric (Saint Louis Economy, 2007). The Saint Louis metro area is home to over 50 general practice, teaching and research hospitals. Some of the world's best physician scientists have been attracted by the flourishing health care and related industries. Since physicians are the main volume drivers for hospitals, the challenge for all area healthcare organizations is to establish and maintain close ties with physicians (Katz, 1995).

The city is located within 500 miles of two-thirds of the agricultural land in the United States, which comprises almost 52 percent of the country's total land area (USDA, 2007). The United States produced nearly 19 percent of the world's agriculture yield in 2007 (USDA). The Vice President of Technology for Battelle Memorial Institute (global science and research enterprise known mostly for managing laboratories and research projects) commented that St. Louis is positioned to become the leading center for plant sciences in the country and a major center for the life sciences (Saint Louis Commerce Magazine, 2005). The national correspondent for the Organisation for Economic Co-operation and Development's (OECD) biotechnology research program is a professor at the nearby, University of Missouri (OECD, 2007). The Center of Research, Technology, and Entrepreneurial Exchange (CORTEX) project is underway to build a life science research and development district in and around the main BJC HealthCare, Washington University, and Saint Louis University campuses (Saint Louis Commerce Magazine, 2005). The map (Figure 4) below shows the layout of the CORTEX development plan.

of health resources in the area is both a blessing and a curse to individual hospitals operating in the Saint Louis market. In summary, top talent is available, but competition to retain it is fierce. Over ten percent of the Saint Louis metro area is employed in healthcare jobs and the turnover rate is over twenty percent (Saint Louis County Planning Department, 2006).

Annual growth in healthcare expenditures in Missouri is rising as fast as the national average rate of 7 percent (Missouri State Health Facts, 2006). The rising cost of healthcare is causing individuals and third-party payors to search for low cost alternatives. The average revenue per inpatient admission in the Saint Louis area is \$12,993 (AHD, 2007). This is higher than the national average of \$10,000 revenue per inpatient admission (Hoover's, 2007). The median income of households in the City of Saint Louis is \$29,156 and the median income for a family was \$32,585. Saint Louis has over twice the national average of persons living below the poverty line. In sharp contrast, Saint Louis County is the most affluent county in the state of Missouri. The median income for a household in Saint Louis County was \$52,097, and the median income for a family was \$61,680 (Saint Louis County Planning Department, 2006). The average health care expenditure per capita is \$5,283 in the U.S. and \$5,444 in MO (Missouri State Health Facts, 2006). These economic trends are problematic for all healthcare organizations, but are especially troublesome for not-for-profit hospitals.

A primary mission of not-for-profit facilities is to provide charity care to indigent populations. However, the hospitals must also compete with area not-for-profit and for-profit entities while maintaining an operating margin in order to stay open to serve the community. Not-for-profit (NFP) hospitals have come under increased scrutiny for being too focused on their bottom lines and adopting more aggressive business practices. However, all hospitals must operate with effective business models in order to remain viable.

Although the financial stability of NFP is important, one can argue that it is more important to regain the public's trust by demonstrating the benefits of having local NFP hospitals. The Saint Louis Post-Dispatch newspaper reported in 2008 that the charity care provided by area NFPs had declined for the third consecutive year while the number of uninsured climbed almost 2 percent. The report went on to indicate that area hospitals enjoyed a half percent higher profits than the national average, yet they contributed almost 2.5 percent less charity care than the national average. BJC HealthCare and its competitors have vehemently disputed these claims, citing numerous community health programs and projects that were not included in the report (Saint Louis Post Dispatch, 2008).

BJC HealthCare incurred a cost of nearly \$104 million for bad debt and charity care in 2006. BJC provides a 25 percent discount on self-pay patients' bills and consistently offers the largest dollar amount of community benefit to the Saint Louis area (BJC HealthCare, 2007). MBMC contributed \$18.7 million in charity care and bad debt to the community in 2005. Given the climate of increasing numbers of uninsured, declining reimbursements, and growing competition from specialty hospitals, the healthcare system in general is under great strain (Weckwerth and Krennek, 2006).

Demographic. Between 1950 and 2000, the City of Saint Louis lost more than half its population and some areas are still in urban decline (U.S. Census Bureau, 2006). Saint Louis is now the 18th largest U.S. metropolitan area, with a population of 2,801,033. This metropolitan area includes the independent city of Saint Louis as well as the surrounding counties of Saint Louis, Saint Charles, Jefferson, Madison (Illinois), and Saint Clair (Illinois). The City of Saint Louis is 51.4 percent African-American and 43.9 percent Caucasian. 51.4 percent of adults are married and 21.9 percent have children. Over half of the city's households are dual income

(Saint Louis City Planning Office, 2006). Conversely, Saint Louis County is 70.8 percent Caucasian and 24.2 percent African-American. Fifty-one percent of households are married couples and 31.6 percent have children (Saint Louis County Planning Department, 2006). Fifty-six percent of Missourians are covered by employer-based insurance compared to 54 percent of Americans, while 27 percent of Missourians and 26 percent of Americans are covered by government-funded insurance (Missouri State Health Facts, 2006). In 2003, 10.2 percent of Saint Louisans reported their health as fair or poor and 10.1 percent reported that they had no health care coverage (Saint Louis County Planning Department, 2006).

The affluent Saint Louis suburbs are the most attractive locations for hospitals and ambulatory centers due to increasing or flat (as opposed to decreasing) population growth and a much better payor mix than urban areas. Similar trends exist elsewhere in the nation with urban areas experiencing out-migration and a higher percentages of uninsured residents and residents who rely on government-sponsored programs. Missouri Baptist patients live mostly in the 22 zip codes shown in Figure 5 on the following page. Most are located within or nearby the metropolitan Saint Louis area, with the highest concentration in Saint Louis County neighborhoods (Strategic Planning, 2006).

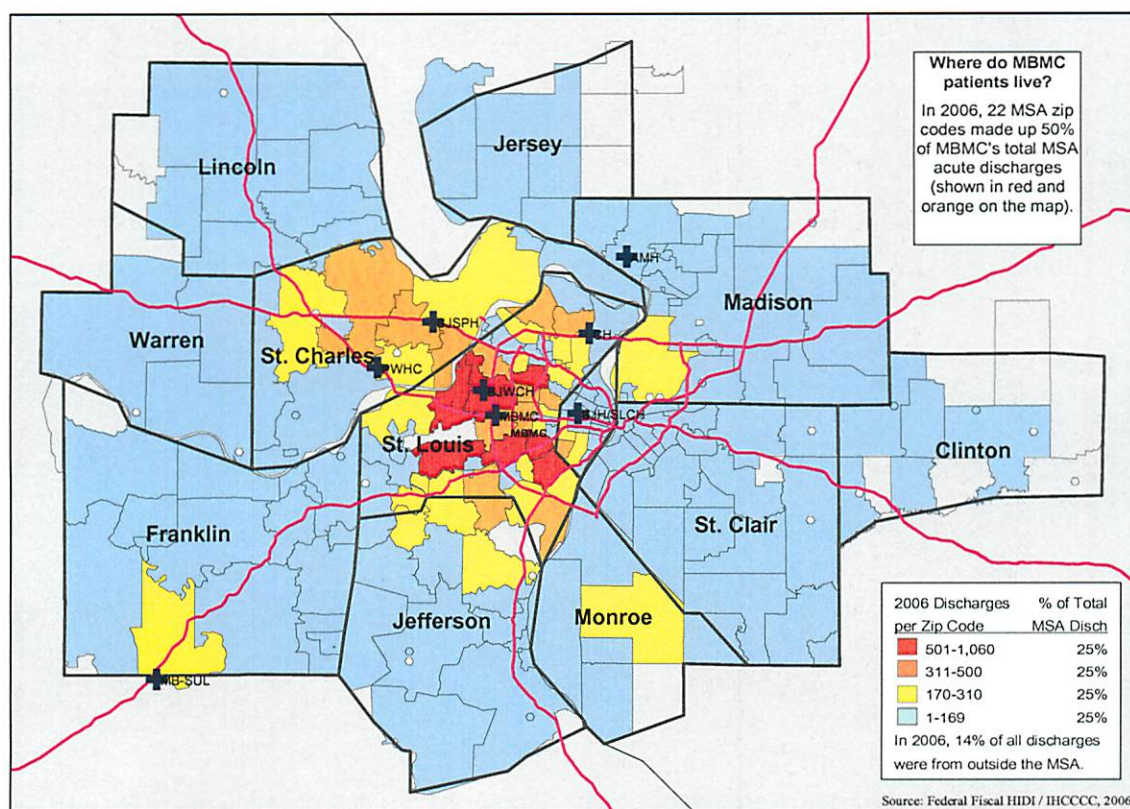


Figure 5. Residence Location of MBMC Patients

Psychographic. Saint Louis has a rich history and is known for its Italian, French, and German heritage. The city was named after France's King Louis IX and was incorporated in 1809. It is often referred to as the Gateway City since many settlers passed through on their journey west. Saint Louis is a destination for 22.3 million tourists per year (Saint Louis Convention and Visitors Commission, 2007). A famous landmark and tourist attraction, the Jefferson National Expansion Memorial Gateway Arch is the nation's tallest monument at 630 feet. The city and surrounding area possess many wonderful parks and restaurants, as well as recreation, sports, entertainment, and performing arts venues. The Association of Religion Data Archives reported in 2000 that 33 percent of those living in Saint Louis indicate their religious preference as Roman Catholic. This percentage is significantly higher than all other religions and

denominations. Although the population is diverse, Saint Louis is known as a beer and baseball town (Saint Louis Regional Chamber and Growth Association, 2007). The Anheuser-Busch Companies are headquartered in Saint Louis along with three major sports franchises: the Major League Baseball Cardinals, the National Football League Rams, and the National Hockey League Blues.

Health Status. According to Nation Master, the nation's health index ranges from 22.67 to -20.95 and is based on 21 factors, such as access to health care providers and the affordability of health care (2006). Missouri ranks 36th of 50 states at -2.89 (StateMaster, 2006). Sexually transmitted diseases, obesity, and diabetes related illnesses are several of the more prevalent health problems in Missouri. Community health efforts featuring prevention and education programs are currently targeting these health problems. Several collaborative cross-functional teams comprised from the area's public and private health organizations have been organized to reduce stigma, improve entry, increase cultural competency, and coordinate care for high users (Regional Health Commission, 2007).

These external factors must be addressed in an effective hospital strategy. Positive issues, such as, an affluent demographic and the strong presence of biotechnology resources, can be capitalized on and negative issues such as, poor health status and population decline, must be appropriately addressed.

Service Area Structural Analysis

A service area structural analysis considers the environmental forces in the hospital industry, which is competitive in nature.

Threat of New Entrants. The threat of new entrants into the hospital market in Saint Louis, Missouri is fairly low. About 60 percent of the Saint Louis hospital market is dominated

by three large health systems: BJC HealthCare, SSM Health Care, and Saint John's Mercy Health Care (Smith, 1995). In addition, a certificate of need (CON) is required to open a new hospital and all hospitals must be certified by the Centers for Medicare and Medicaid Services (CMS, 2005) in order to receive reimbursement from federal and state payors. The CON rules in Missouri require that any single piece of equipment with a purchase price over a million dollars must have a CON, but construction projects over a million dollars do not require a CON (BJC Health Care Government Relations, 2008). Thus, existing hospitals can build on their campuses without applying for a CON if they are not making individual equipment purchases over a million dollars.

However, hospitals must still receive planning and zoning committee approval from local municipalities. The Town and Country planning and zoning process is known to be more difficult than most due to a requirement to maintain more green space than other cities in the surrounding area. Therefore, MBMC must be creative in its design and construction work to make sure green space is not diminished by renovation or expansion projects on its campus. The CON rules do protect existing hospitals from the entry of specialty hospitals, such as heart hospitals, into the market (BJC Health Care Government Relations, 2008). Physicians and other private investors have either been able to keep their equipment purchases under the million-dollar threshold when opening free-standing surgical centers and imaging facilities in the Saint Louis area or they have simply not applied for CON. There is no subpoena power associated with CON in Missouri, so if an entity doesn't apply for or doesn't receive a CON, it is likely that there will be no recourse (BJC Government Relations, 2008).

In summary, new entrants may be deterred by the existence of CON laws for new acute and specialty hospitals, in addition to the decline of profitable services being delivered in an

inpatient setting, have led to a decrease in the attractiveness of the hospital industry in recent years.

One of the greatest threats to community hospitals located in affluent areas is the entrance of specialty hospitals and freestanding imaging and surgical centers. Remaining competitive against these entrants is one of MBMC's greatest challenges. In order to generate adequate patient volume, a new entrant must invest extensive capital resources to attract well-trained, professional staff and establish a reputation for quality service, both necessary for building relationships with physicians and alliances with managed care organizations (MCOs).

Intensity of Rivalry. The intensity of rivalry among existing hospitals is high. Slow industry growth and declining reimbursement rates have fueled intense competition among the players in the market. MBMC chose to align with BJC in June of 1994 in order to better position itself for long-term success (Smith, 1995). Affiliation with BJC resulted in consolidation of some administrative functions at the corporate level, which reduced MBMC's labor costs. Labor costs are typically the highest overhead for organizations; hence the resulting economies of scale from consolidation of functions, such as human resources and procurement, at the system level have benefited MBMC and other BJC hospitals. If physicians are employed by an organization, their salaries are incorporated into overhead. In the Saint Louis area, 63 percent of employed physicians specialize in primary care (BJC HealthCare Strategic Planning, 2006). Data is not available at the individual hospital level, but Saint John's Mercy Health System employs 131 physicians, SSM Medical Group employs 136 physicians, and BJC Medical Group employs 85 physicians (BJC HealthCare Strategic Planning, 2006). Many independent hospitals have exited the market by virtue of acquisition by or mergers with larger health systems (Zuckerman, 2005). From 1995 to 2005, fifteen Saint Louis metropolitan statistical area (MSA) facilities have

merged or been acquired by large health systems, such as Tenet and Sisters of Mercy, and three area facilities closed (BJC HealthCare Strategic Planning, 2006).

Threat of Substitutes. The threat of substitutes is high. Health care services of similar quality and scope are available at thirteen other area hospitals, seven of which are non-BJC facilities. In addition, there are numerous physician-owned practices and freestanding ambulatory care centers operating in the area. Several studies (Katz, 1995; Meyer and Hicks, 1998) have concluded that the Saint Louis market knowingly maintains excess capacity and are especially critical of the number of specialty physicians and inpatient beds in the area. On the contrary, other studies have suggested that Saint Louis needs to expand its emergency departments and inpatient units to accommodate surges for flu season or to respond to a mass casualty event (Bazzoli et al., 2003 and Kimery, 2008). Due to the lack of current and accurate capacity data, a major capacity analysis project is currently underway at BJC.

Buyer Power. The bargaining power of customers (buyers) is high. Government entities or large MCOs are typically financing health care and are increasingly demanding higher quality and lower costs for their insured populations. United Health Care and WellPoint (Anthem) are the major insurance carriers in Saint Louis. These firms are able to negotiate competitive rates with area hospitals.

Government agencies are beginning to respond to patient preferences and are increasingly aware of the high value the public places on the delivery of quality health care. The Department of Health and Human Services (HHS), in conjunction with the Centers for Medicare and Medicaid Services (CMS), has designated quality health care as its top priority. A new web-based tool, Hospital Compare, was developed for the public to use as method of gathering information about the quality of care delivered in the nation's hospitals (CMS, 2005).

Also, numerous studies have recently shown continuity of care to be correlated with high patient satisfaction scores. Continuity of care can be defined as an ongoing personal relationship between the patient and clinician characterized by personal trust and responsibility (Fan, Burman, McDonell, and Fihn, 2004). Nutting, Goodwin, Flocke, Zyzanski, and Stange (2003) studied a large sample (4,454) of family practice patients that demonstrated the increased value patients place on continuity of care, resulting in higher patient satisfaction scores. Finally, Fan et al (2004) surveyed 21,689 patients and found that continuity of care is strongly associated with higher patient satisfaction. Thus, a patient-centered care model featuring continuity between patients and their providers has become increasingly popular in hospitals seeking to improve patient satisfaction.

Supplier Power. The bargaining power of suppliers is moderate to high, depending on career specialty and geographic location. For example, physicians and nurses typically have higher bargaining power than allied health professionals. Rural areas often have more difficulty attracting personnel. Health care professionals have the most powerful supplier role in the hospital industry. Pharmaceutical, medical equipment, and medical supply firms are also integral to the delivery of health care. On the other hand, health care suppliers are primarily interested in maximizing shareholder or personal wealth by selling their products and services. (Shi and Singh, 2004). A main concern of leadership teams in Saint Louis area hospitals, and many other health care organizations across the country, is present and future recruitment and retention of qualified medical and nursing professionals. Competitors often attempt to beat compensation and incentive packages offered by others, which can lead to bidding wars over desirable employees. To develop appropriate short and long-term strategies, an organization must possess competitor information, a key piece of business intelligence.

Competitor Analysis

Hospitals must be knowledgeable about their competitors in order to make intelligent business decisions. Three health systems dominate the Saint Louis market. In 2006, the three systems held 60 percent of market share (measured by number of discharges): BJC HealthCare had 31 percent market share, SSM Health Care had 18 percent market share, and Saint John's Mercy Health Care had 11 percent market share (Saint Louis Metropolitan Hospital Council, 2007).

MBMC has seven main competitors: Des Peres Hospital, Saint Anthony's Medical Center, Saint John's Mercy Medical Center, Saint Luke's Hospital, SSM DePaul Health Center, SSM Saint Joseph Health Center, and SSM Saint Mary's Health Center. Additional background information on each facility, such as specific locations and available services, is contained in Appendix B. The locations of the facilities are shown in Figure 6 on the following page.

Data from the American Hospital Directory (2006) for the eight facilities is listed below in Table 2. The number of licensed beds, total discharges, and gross patient revenue of the main competitors serving patients in Saint Louis County is included. Several other hospitals operate in the greater Saint Louis metropolitan area, but are not direct competitors due to dissimilarities in location, size, mission, and type or amount of services. Examples of indirect competitors are academic, pediatric, and psychiatric hospitals.

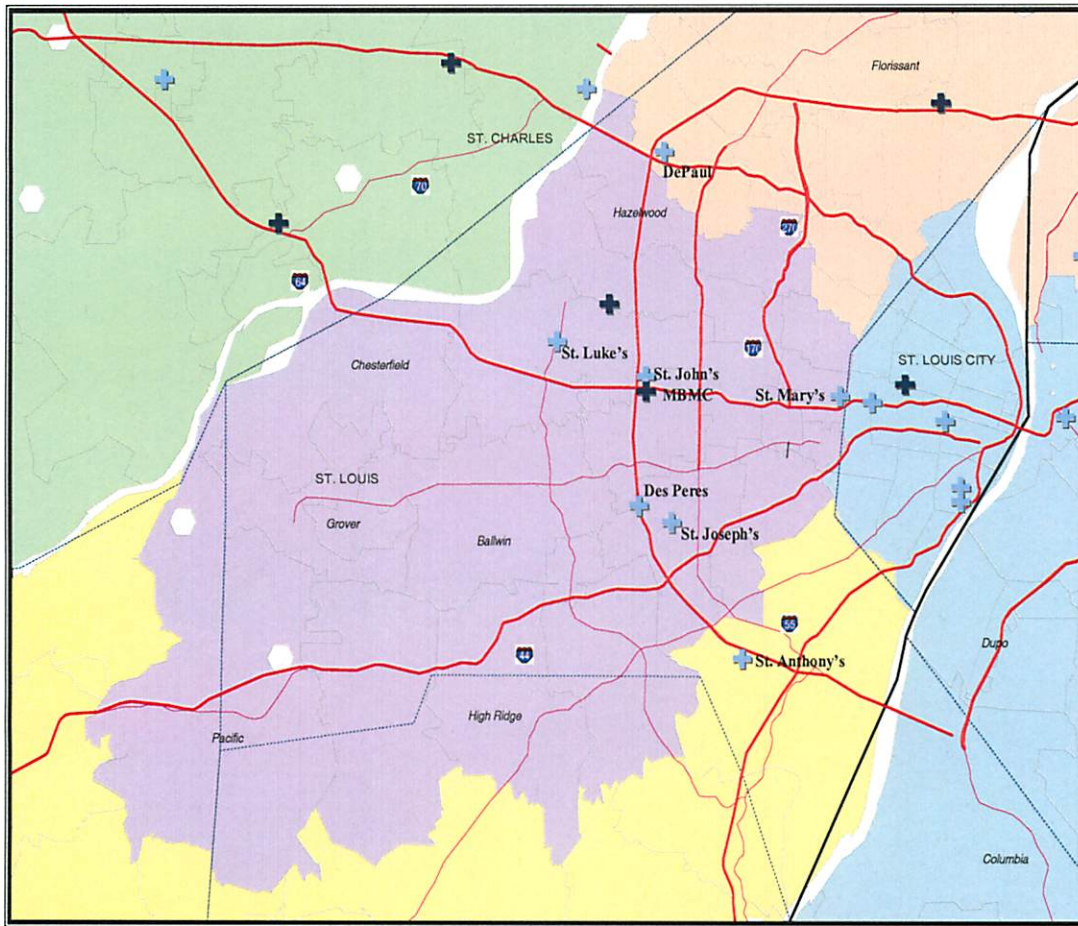


Figure 6. Location of MBMC and Main Competitors.

Table 2

Information on MBMC and Main Competitors

Facility Name	Licensed Beds	Total Discharges	Patient Days	Gross Patient Revenue (\$000s)
St. John's	979	37,252	255,656	\$1,672,678
SSM St. Mary's	564	27,998	146,003	\$1,160,622
St. Anthony's	566	24,008	142,202	\$870,909
MBMC	489	21,082	112,911	\$824,936
SSM DePaul	472	18,575	103,921	\$759,527
St. Luke's	418	19,692	110,175	\$693,453
Des Peres	167	8,646	38,940	\$470,265
SSM St. Joseph's	273	8,432	33,587	\$347,355
Total	3928	165,685	943,395	\$6,799,745

The 2006 market share of each facility was analyzed for three key service lines: obstetrics, oncology, and cardiology (BJC HealthCare Strategic Planning, 2007). St. John's has the highest inpatient market share for obstetrics (33 percent), oncology (14 percent), and cardiology (13 percent). MBMC is second to St. John's for obstetrics (19 percent) and oncology (10 percent) and third behind St. John's and St. Luke's for cardiology (9 percent). St. Mary's has the lowest market share in these key service lines. When compared to the 2005 market share data, MBMC is up a percentage point in oncology and down a percentage point for both cardiology and obstetrics (BJC HealthCare Strategic Planning, 2007).

More specific data on where patients are seeking care and where physicians are referring their business is not currently available. The state of Missouri does not require hospitals to report this information or to share what is reported with other hospitals. Members of the Missouri Hospital Association receive basic information, such as inpatient volume, a year in arrears. BJC HealthCare subscribes to this organization and uses this information to make some projections and assumptions when more current data is not available (BJC HealthCare Strategic Planning, 2008).

However, BJC HealthCare conducts market research using focus groups, patient and physician surveys, and other techniques to assist its member hospitals in making informed strategic decisions. Additional research and analysis using these methods pointed to a decline in obstetrics due to constrained capacity and the lack of all-private rooms, while the decline in cardiology was attributed to an increase in business at nearby physician-owned cardiac cath labs (BJC HealthCare Strategic Planning, 2007). Another way to compare competing organization is by grouping them according to certain characteristics.

Strategic Grouping

Most of the Saint Louis area hospitals offer a wide range of medical services and all are currently accredited by the Joint Commission. However, individual quality differences among hospitals are often difficult to determine. Standardized reporting and transparency on quality measures are national goals, but not yet the norm in the state of Missouri and other parts of the United States. The hospitals grouped together on the upper right side of Figure 7 below have the highest revenue and number of inpatient beds, while the hospitals grouped together on the lower left side of the graph have the least beds and associated revenue. St. John's is in its own grouping due to its much larger size and associated income relative to its closest competitors. The groups are in close position on the graph, indicating that the strategic decisions of the hospitals in one strategic group strongly affect the members of the other group (Swayne et al., 2005). All of the hospitals are main competitors of MBMC and major players in the Saint Louis health care market.

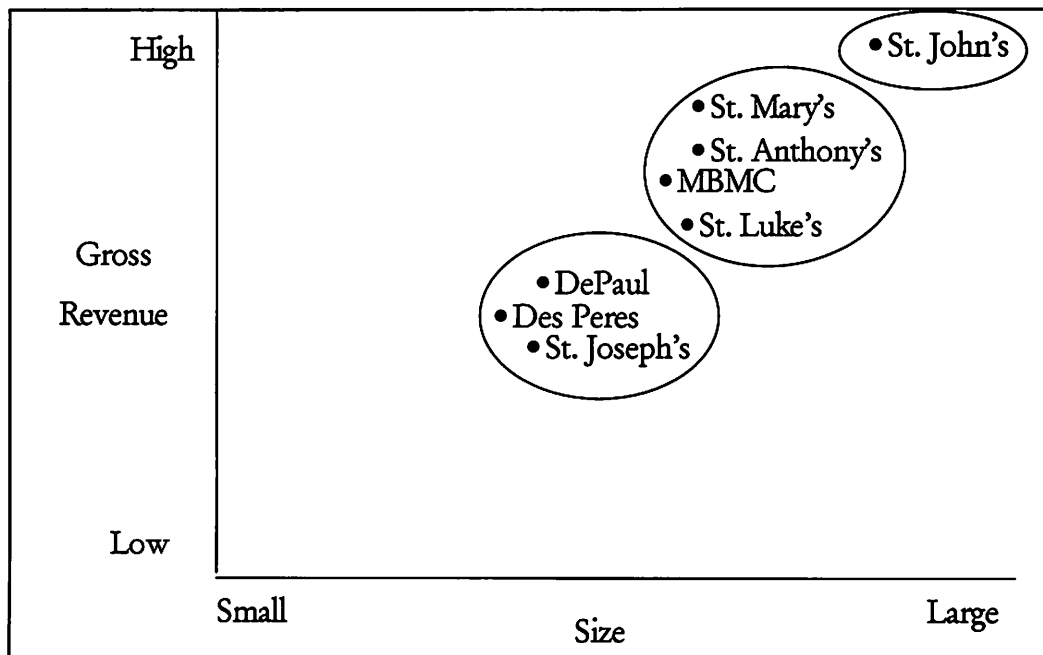


Figure 7. Strategic Grouping of MBMC and Main Competitors

Synthesis of External Analysis

U.S. hospitals operate in a complex and competitive environment. The high costs of health care delivery in the U.S. continue to rise, due in part to the aging American population and a troubling obesity epidemic. These groups often require a much higher acuity of health care services than the average person. Studies have shown treatment costs to be 20 percent higher for obese individuals and the cost to keep elderly individuals alive an additional year ranges widely from \$38,000 to \$132,000 depending on the level of technology used to treat their chronic diseases (RAND Corporation, 2006). This phenomenon places pressure on hospital systems to meet the needs of their populations, in terms of providing access to safe and effective health care, while also keeping their operating costs low enough to remain viable. MBMC is a historically successful hospital with a reputation for high quality staff and services. However, it faces intense competition and a high threat of substitutes. Its major competitors are all well-established, offer a variety of services, and are located in close proximity to each other.

Internal Environment

Through the years, numerous clinical advancements have been made at Missouri Baptist Medical Center. It now offers the Cardiac and Vascular Center, the Missouri Baptist Cancer Center, the Breast HealthCare Center, the Digestive Disease Center and the unique Clinical Nursing Institute. In 2002, more than 3,800 babies were delivered in the recently renovated obstetrics department. What began with one patient, one doctor and one room in 1884 has grown into a thriving medical center with 489 beds, more than 1,400 staff physicians and more than 2,700 employees (Missouri Baptist Medical Center Facts, 2007). All of these attributes have led to the formulation of MBMC's current objectives and strategic plan. MBMC's core objectives are to build a thriving workforce, create a patient-centered environment, improve clinical quality

and safety, improve efficiency and financial performance, and position for the future (J. M. Magruder, 2007).

MBMC's overarching strategies are to be an early adopter of technology, to become a regional referral center with an emphasis on critical care, to establish satellite sites for downstream volume and revenue to the main campus, and to develop strong physician relationships (J. M. Magruder, 2007).

The main strategic priorities of MBMC include addressing issues of excess or constrained capacity with bed modeling along with a facility renovation and expansion plan. Among other things, the plan calls for an additional 45 inpatient beds and the conversion of some existing semi-private patient rooms to private suites. The next priority is to spur growth in relationships with primary care physicians in order to generate business for the MBMC hospitalists and specialists while also generating additional outpatient business, such as imaging and surgery. An additional priority is to establish outreach markets in the growing and underserved areas of Missouri, such as Columbia, Sullivan, Overland, and Eureka. Appendix C shows MBMC's current market development, while Appendix D is a potential market for additional development.

The expansion of key volume-driven service lines, such as cardiology, women and infants, and oncology, is also a strategic priority. Detailed service line plans, using a model adapted from Charles F. Knight's planning process at Emerson Electric in the late 1980s, for key areas will assist operational management in the development of specific strategies for long-term growth. The investment of human and capital resources is intended to maintain and effectively market current centers of excellence, such as cardiology, women's services, surgery, imaging, cardiology, oncology, and emergency services. A close focus on the gynecology/obstetrics, cardiology, and oncology service lines appear especially critical for successful positioning in the

west Saint Louis County market. MBMC's key priorities are to stabilize the senior management team amid recent key position changes and to elevate the financial rigor of the organization (J.M. Magruder, 2007). Additional priorities include the development of a master campus plan, board engagement and support, and the recruitment and retention of nursing and allied health professionals. To determine sources of competitive advantage or disadvantage, MBMC services and programs must be analyzed. A way to organized and visualize value creation in a health care organization is through the development of a value chain (Swayne et al., 2005).

Value Chain

An organizational value chain can be used to display key elements that create value in an organization and also to develop implementation strategies for an organization (Swayne et al., 2005). The value chain displayed below (Figure 8) was developed to identify and assess how MBMC creates value in the hospital market. Service delivery activities are listed on the top and support activities are listed on the bottom.

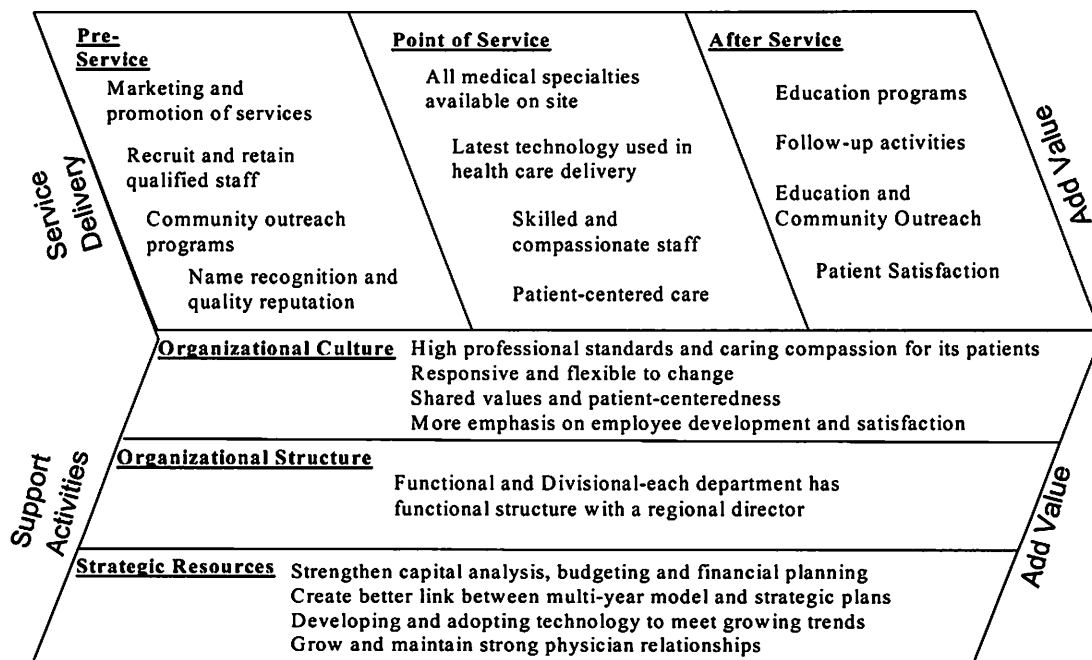


Figure 8. MBMC Service Value Chain

This value chain can be used as a framework to assess MBMC's internal environment and also to develop value-adding service delivery and support strategies later in the planning process. The identification of critical success factors is key to determine where to focus precious financial and human resources for a positive strategic impact on the organization.

Competitive Strengths and Weaknesses

MBMC's competitive strengths, displayed in Table 3 below, are its high quality professional staff, desirable location in west Saint Louis county, several award-winning service lines, affiliation with BJC HealthCare, establishment of satellite clinics in growing outlying markets, plans for facility renovation and expansion, strong earnings, high staff and patient satisfaction scores, and strong leadership. A significant competitive strength for MBMC is that is more financially healthy, in terms of debt to equity and other key ratios, than virtually all of its competitors and is affiliated with the largest and most financially strong parent organization in the region.

Table 3

Competitive Relevance of MBMC Strengths

Strengths	Valuable? (High/Low)	Rare? (Yes/No)	Immitability? (Easy/Difficult)	Sustainable? (Yes/No)	How much competitive advantage (CA) provided?	What action should MBMC take?
<i>Service Delivery</i>						
Desirable location	H	N	D	Y	No short-term CA	Devote few resources
Several award-winning service	H	Y	D	Y	Long-term CA	Develop as much as
High patient satisfaction scores	H	N	D	Y	No short-term CA	Maintain as much as possible
<i>Organizational Culture</i>						
Strong leadership	H	Y	D	Y	Long-term CA	Develop as much as
High staff satisfaction scores	H	N	D	Y	No short-term CA	Maintain as much as possible
<i>Organizational Structure</i>						
Satellite cites provide downstream volume	H	Y	D	Y	Long-term CA	Develop as much as possible
<i>Strategic Resources</i>						
High quality professional staff	H	N	E	Y	No short-term CA	Maintain as much as possible
Renovated/expanded facilities	H	Y	D	N	Short-term CA	Exploit as much as
Strong earnings	H	Y	D	Y	Long-term CA	Develop as much as
Affiliation with BJC HealthCare	H	Y	D	Y	Long-term CA	Develop as much as possible

MBMC's competitive weaknesses, listed below in Table 4, include the lack of strong physician engagement strategies and difficulty in renovating and expanding due to strict zoning laws. Other weaknesses include the recent loss of inpatient and outpatient market share volume to competitors, high vacancy rates and low daily census in some medical/surgical units, and a steep rise in the number of area freestanding ambulatory surgical centers (ASCs). There is also a need to strengthen the link of strategic and operational plans to BJC's multi-year financial model.

Table 4

Competitive Relevance of MBMC Weaknesses

Weaknesses	Is it valuable? (High/Low)	Is it common? (Yes/No)	Is it correctable? (Easy/Difficult)	Competitor sustainability? (Yes/No)	How much competitive disadvantage (CDA) provided?	What action should MBMC take?
<i>Service Delivery</i>						
Cost containment pressures	H	Y	D	N	No Short-term CDA	Keep watching closely
High patient ratios, staff burnout	H	Y	D	Y	Short-term CDA	Attention is demanded
<i>Culture</i>						
Lack of strong physician engagement	H	N	D	Y	Short-term CDA	Attention is demanded
<i>Organizational Structure</i>						
Not enough presence in outlying markets	H	N	D	Y	Serious CDA	Move quickly to correct it
<i>Strategic Resources</i>						
Strict zoning laws hamper construction	H	N	D	Y	Serious CDA	Move quickly to correct it
Some loss of volume to ASCs	H	Y	D	N	Short-term CDA	Attention is demanded

Specific action plans are aimed at to reduce or eliminate these weaknesses. For example, physician development plans are underway to address physician engagement and provide a forecast of specialist recruitment needs to support the future growth of each service line (BJC HealthCare Strategic Planning, 2006). The relationship between the hospital and the local planning and zoning committee has improved in recent months during discussions on the campus renovation and expansion plan and its direct community benefits, such as the inclusion of dedicated facilities for health education and support programs in addition to the construction of a

landscaped nature trail approved for public use (BJC HealthCare Strategic Planning, 2006).

MBMC saw the largest decline at negative 7.4 percent among west county hospitals in outpatient surgery volume from 2003-2005 (BJC HealthCare Strategic Planning, 2006). Overall, west county hospitals' total outpatient same-day-surgery volumes decreased by negative 4.3 percent from 2003 to 2005. In 2004, MBMC treated 9.2 percent of total outpatient surgical volume within their PSA (BJC HealthCare Strategic Planning, 2006). There is a tremendous opportunity for MBMC to market outpatient surgical services to capture additional market share. MBMC performed 742 OP orthopedic surgeries in 2004, while the HealthSouth-Ballas center (the highest orthopedic performing ASC) performed 553 surgeries.

Saint John's Mercy Medical Center, a direct competitor of MBMC, was the outpatient orthopedic surgery leader in the PSA, with 1,131 procedures in 2004 (BJC HealthCare Strategic Planning, 2006). All ASCs in total saw roughly 22 percent of the orthopedic surgical procedures in 2004, with no hospital placing a close second. ASCs doubled in number between 2002 and 2006, from 15 to 30, and grew from 26 to 30 between 2005 and 2006 (BJC HealthCare Strategic Planning, 2006). Free-standing surgical centers, imaging centers, as well as on-campus joint venture cath labs and cancer centers are appearing throughout the PSA and will continue to threaten the position of MBMC and other acute care hospitals.

Physicians have been referring more surgical procedures to physician-owned facilities, but marketing efforts have been directed toward educating patients on the risks of not having the resources to respond to unforeseen emergencies or complications in the same building. Physician services have also been working to meet with surgeons to find out why they are not referring as heavily to MBMC and what they can do to recover the business. Other operational

improvements, such as more opportune hours and expedient scheduling, have been made to address the convenience of surgical services for patients.

To further evaluate the internal environment, MBMC's relevant competitive strengths and weaknesses were used to create the following strategic implications.

Critical Success Factors

MBMC's critical success factors are: collaborative and high-performing leadership at all levels of the organization; sustainable and continuous volume growth of 3 to 4 percent; affordability and access to 9 to 12 percent of revenue for capital reinvestment; high quality of care (exceeding standards on clinical indicators required by CMS and Joint Commission, such as infection rates); availability of interested and qualified staff; strong value proposition for patients and physicians; and a strategic plan that provides a clear roadmap for short and long-term positioning.

The far and above most critical priority for MBMC's success is to maintain or build competitive service lines as compared to the other acute care hospitals and also free-standing imaging and surgical centers operating in the area. This will be accomplished through a multi-faceted approach, to include: strengthening partnerships with physicians, marketing the hospital as a destination for clinical and service excellence (key for residents of Saint Louis County), discipline in financial decision-making to protect against any threats to cash flow, and continued efforts to improve operational efficiency.

Strategic Implications

The competitively relevant strengths and weaknesses of MBMC have strategic implications. A strategy to develop lasting physician relationships is especially critical for future viability. Service line targeting and planning, as well as volume opportunities, will require close

examination and attention by MBMC leadership. Specific strategic plans will be developed for the five key service lines that drive the most volume and associated revenue. These include: Oncology, Women and Infants, Ortho/Neuro/Spine, Cardiology/Pulmonology, and Emergency Services (BJC Health Care Strategic Planning, 2007). For example, building a stronger link between the Women and Infants program at MBMC and physicians from Saint Louis Children's Hospital (SLCH). Saint Louis Children's Hospital has been recognized as one of the nation's top children's hospitals in all of the seven rated specialties (U.S. News and World Report, 2007). The rankings for this year's America's Best Children's Hospitals were based on a new and improved methodology that weighed a three-part blend of reputation, outcome, and care-related measures such as nursing care, advanced technology, subject matter experts, credentialing and other factors. A stronger partnership connecting MBMC and SLCH would lead to increased attention from expecting mothers, pursuing the highest quality pediatric care for their newborns, and their physicians when making a selection on where to deliver.

Finally, MBMC's facility needs to be expanded and renovated to meet the needs of the community it serves. A critical factor in achieving patient safety and satisfaction is the planning, design, and construction of private patient rooms. Studies have shown that private rooms speed healing time and improve patient satisfaction (Hoover and Schoeck, 2006). Studies have also shown that private rooms can decrease infection rates by up to 45 percent, a patient safety issue. A comprehensive strategic campus plan includes renovation to increase the percentage of private medical/surgical patient rooms from 39 to 68 (BJC Health Care Strategic Planning, 2008). After both phases are completed, the number of licensed beds will decrease from 489 to 416. However, the ratio of private to semi-private rooms will rise from 50/50 to 80/20. The loss of 73 beds is

more than worth the ability to address safety concerns and accommodate patient preferences with private rooms.

Once the external and internal environments have been assessed, specific strategic alternatives can be evaluated and selected. However, these analyses must be linked to the directional strategies developed by MBMC's key leaders and stakeholders to set the tone and establish a course for the organization.

Directional Strategies

Organizational leaders formulate directional strategies to communicate the organization's purpose and intentions to internal and external stakeholders. Swayne et al suggest that directional strategies should be well communicated and that they serve as statements about what the organization should be doing and how they should conduct their business (2005). The mission of MBMC is, "To improve the health of the people and communities we serve." The vision of MBMC is, "Through our exceptional people, we deliver extraordinary care." And, the values of MBMC are: compassion, excellence, integrity, respect, and teamwork. These strategies are closely aligned with MBMC's daily operations and delivery of care (Missouri Baptist Medical Center Facts, 2007). These strategies effectively address the core values and guiding principles of the organization. The development of specific strategic choices and plans must be closely aligned with MBMC's directional strategies and philosophy of care for patients and their families.

Developing Strategic Alternatives

Strategic planning entails reaching conclusions about information, setting a course of action, and documenting performance. On the other hand, strategy formulation incorporates broad decisions that set the fundamental direction of an organization. Once directional strategies

have been established, the remaining adaptive, market entry, and competitive strategies can be formulated. Information about MBMC's external environment and competitor information is used along with the organization's directional goals and core competencies to achieve well-formulated adaptive strategies. These strategies provide the primary methods of achieving the vision of the organization, market entry strategies provide methods for access or entry to the market, and competitive strategies provide the competitive advantage in the market (Swayne et al., 2005). A value chain was chosen to organize the key elements at MBMC that will lead to the development of appropriate adaptive, market entry, and competitive strategies.

Potential Strategy Maps

The strategic maps for MBMC, as displayed in Figures 9 and 10, explain the long-term focus of the organization. These adaptive, market, and competitive strategies are aligned with MBMC's directional strategies and will enhance their likelihood of long-term success in the hospital market.

The first option, shown in Figure 9 below, for an adaptive strategy, is to penetrate further into outlying suburban markets, where population growth is higher than in the urban areas. The payor mix of the residents is typically also more attractive. Product development, especially in primary and pediatric care, will be essential to capturing these markets. Satellite locations could be established in the surrounding areas to further the brand name and increase access and convenience for potential patients. The associated market entry strategy would be internal development, since internal resources would be used for these undertakings. BJC can assist MBMC with planning and funding new projects. The appropriate competitive strategies would be to establish a posture of analyzer and differentiation positioning. An analyzer does not pursue overly aggressive or conservative actions. Instead, this posture works best when an

organization needs to maintain core products and services while pursuing other areas to offer services.

A St. John's type facility would be more inclined to be a prospector who first purchases the latest equipment due to its larger size and capability to handle the highest levels of acuity. To succeed as an analyzer, existing centers of excellence at MBMC could be leveraged against newer or more risky service lines and areas. The market-wide differentiation from competitors of existing products and all new service offerings, in addition to new geographic areas, would definitely set MBMC apart from its competition and provide sources of long-term competitive advantage. MBMC would be known for its high level of medical and surgical care instead of focusing on just one or two service lines.

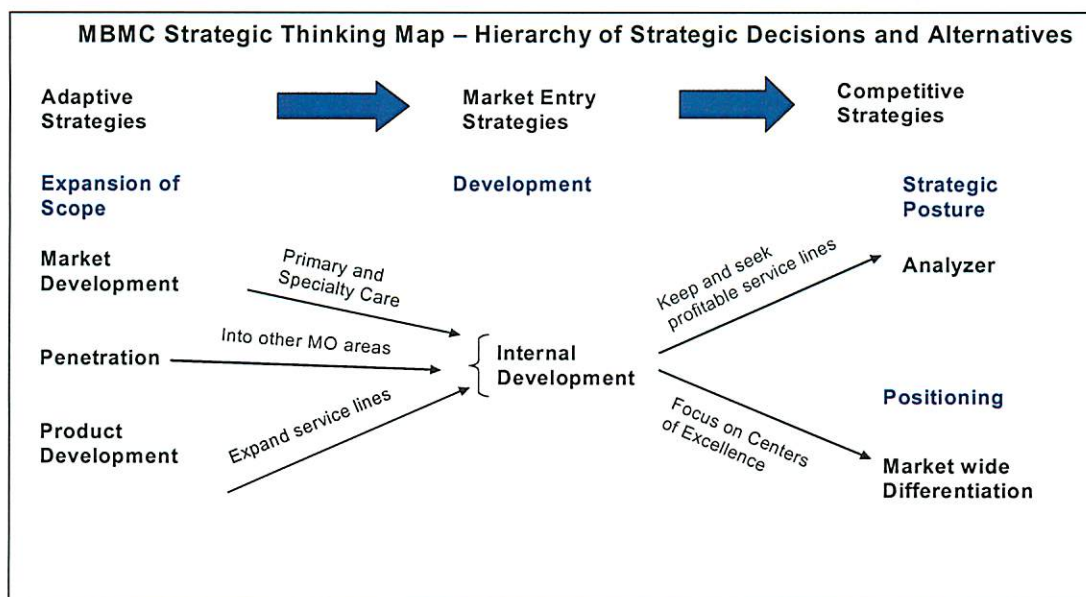


Figure 9. Potential Strategy Map I for MBMC

The second map (Figure 10 below) takes a different approach. MBMC could maintain its scope by enhancing its existing service lines through improved efficiency. A market entry strategy would be to purchase the newest technology and pursue high levels of automation. The

prospector posture would entail the exploration of new services and areas and be the first to offer them. The focus differentiation would apply only to the select new or established services that were successful and widely demanded by patients and their families.

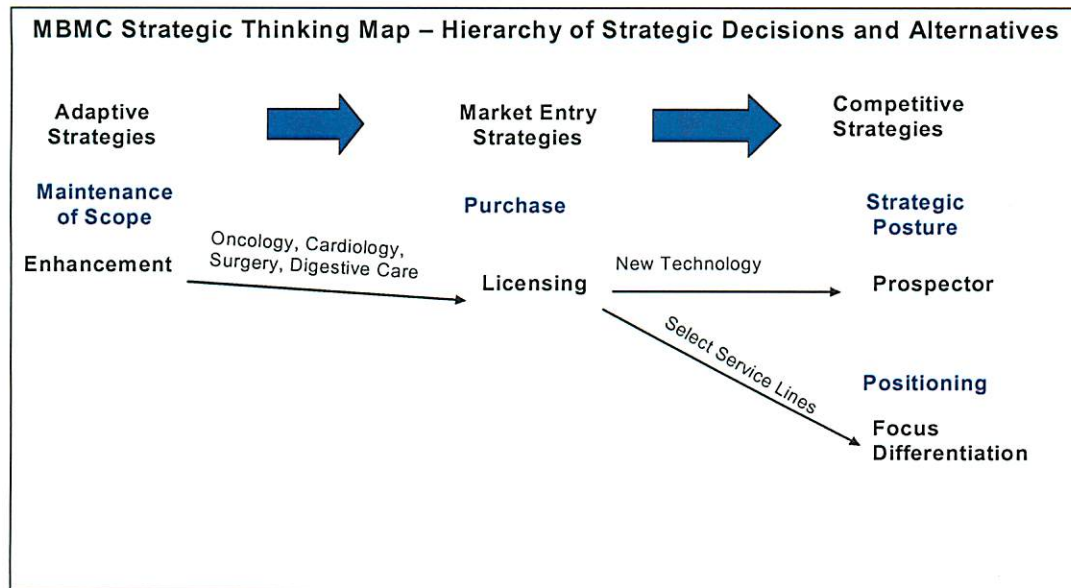


Figure 10. Potential Strategy Map II for MBMC

Selection and Explanation of a Strategy Map

MBMC has several alternatives to choose from in terms of its adaptive, market entry, and competitive strategies. The following strategic management tools were used to evaluate and select an appropriate strategy map for MBMC.

TOWS Matrix

A Threats Opportunities Weaknesses Strengths (TOWS) Matrix (shown in Figure 11) was created to help MBMC select appropriate strategies. In the Future Quadrant, MBMC will pursue market development for additional outpatient services and product development of key service lines. In the Internal Fix-it Quadrant, MBMC will enhance efficiency of internal operations and pursue market development in outlying areas to create additional downstream business. In the External Fix-it Quadrant, MBMC will pursue enhanced marketing campaigns

and facility design in addition to market and product development for desired service lines. In the Survival Quadrant, MBMC will retrench against environmental threats through financial stability and careful strategic decision-making. The results from this technique are more aligned with the first strategic thinking map, where MBMC is not the first or last mover in the market.

	List Internal Strengths	List Internal Weaknesses
	Ideal location and community hospital setting Technology MBMC board and foundation Offer variety of specialties	Campus layout is not well organized, inefficient Lack of physician alignment, link with BJCMG Need facility improvements
List External Opportunities	Future Quadrant #4	Internal Fix-it Quadrant #2
Information Systems and technology (non-clinical) Leader in critical care Adopt different care model, improve workflow Establish satellite cites Wellness, outreach programs Staff development, mentorship	Market development Product development Penetration Related Diversification	Product development Enhancement Market development
List External Threats	External Fix-it Quadrant #3	Survival Quadrant #1
Freestanding centers, attractive joint ventures with physicians Healthcare policy reform Aging workforce, labor shortages	Market development Product development Enhancement	Retrenchment

Figure 11. TOWS Matrix for MBMC

SPACE Matrix

The development of a Strategic Position and Action Evaluation (SPACE) Matrix allows an organization to determine the correct posture (aggressive, competitive, conservative, or defensive). Swayne et al (2005) suggest that an organization operating in a relatively unstable environment with an attractive service category and financial strength should assume a competitive posture. Factors determining environmental stability, service category strength, competitive advantage, and financial strength were scored. MBMC is financially healthy and operates in a fairly instable environment. The lower score on environmental stability and higher scores on financial strength and service category strength revealed that MBMC should assume a

competitive posture (Figure 12). Also, MBMC has a wide variety of attractive services and solid profits with potential for growth, but faces strong competition to gain and maintain market share. The assumption of a competitive posture could entail product enhancement and increased marketing to increase and protect competitive advantage as a high-quality and patient-focused organization. A competitive indication is aligned with an analyzer posture and differentiation position, as presented in the first potential strategy map.

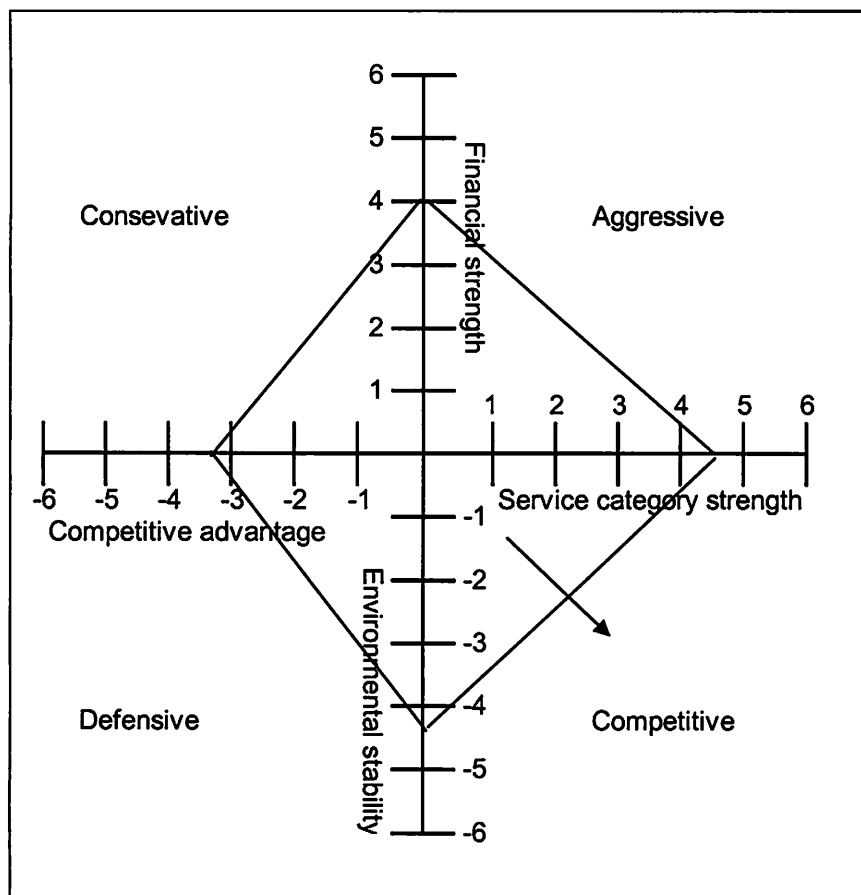


Figure 12. SPACE Matrix for MBMC

Upon analysis of both maps using the TOWS and SPACE matrices, the first map (Figure 9) offers the greatest opportunity for MBMC's future success. Most of the strategies can be fully implemented with existing resources. The already compassionate staff will be easily engaged to develop more patient and family centered care delivery models. A successful satellite

location has been developed at Missouri Baptist – Sunset Hills. After a thorough market analysis and the selection of one or more locations, the Sunset Hills model can be replicated to develop other satellite facilities. The intense competition from other hospitals and free-standing centers will not improve in the near future. A strategy to continually purchase the latest technology and medical equipment would be a detriment to MBMC financially and could only provide a short-term competitive advantage over competitors. An arms race could quickly ensue, resulting in an oversaturated market. A combination of retrenchment activity to protect against environmental threats, combined with some prospector behavior into growing communities will be the best strategy for MBMC to pursue for the next few years.

Service Delivery Strategies

Value adding service delivery strategies can be divided into three categories: pre-service, point-of-service, and after-service (Swayne et al., 2005). Several examples of MBMC service delivery strategies are explained in the following sections.

Pre-service Activities

Pre-service activities include training, marketing, parking, signage, and branding. Increased branding of the MBMC name and logo in addition to improved marketing campaigns to educate consumers on MBMC services are currently needed. Construction is currently underway in an attempt to improve parking and reduce confusion on the main MBMC campus. Additional valuable activities would be improved staff training and development. The reduction in turnover and associated human resource costs among key staff positions through mentorship programs and leadership training would be a source of competitive advantage. Centralized scheduling could be another opportunity to satisfy patients and streamline operations and satisfy patients.

Point-of-service Activities

MBMC strives to provide high-quality, personalized care at the point of service to its patients. MBMC has received numerous awards for clinical excellence and high satisfaction scores from patients. Several special programs and services are highlighted below.

The Missouri Baptist Cardiac and Vascular Center's team of four cardiothoracic surgeons, 28 cardiologists and electrophysiologists, and specially trained health-care professionals specialize in the prevention, diagnosis, treatment and rehabilitation of heart disease. In 2002, the cardiothoracic surgeons at Missouri Baptist Cardiac and Vascular Center performed more heart surgeries than any other Saint Louis area hospital (Missouri Baptist Medical Center Facts, 2007). In 2002, more procedures were performed in the cardiac catheterization labs at the Missouri Baptist Cardiac and Vascular Center than at any other facility in Saint Louis County. This is an area of distinction from its competitors, several of which offer comprehensive cardiac services.

In 2002, MBMC opened Missouri Baptist HealthCare in Sunset Hills to offer south Saint Louis County residents a convenient location with primary care physicians and specialties, including cardiac diagnostic, X-ray, ultrasound, mammography, podiatry and pharmacy services (Missouri Baptist Medical Center Facts, 2007). This site has been extremely successful and can be used as a model for future development.

The medical and radiation oncologists, nurses, social workers and clinical professionals in the Missouri Baptist Cancer Center provide screening and early detection, diagnosis, intervention and rehabilitation for cancer patients and patients with blood disorders. Since April 2001, the Breast HealthCare Center, which offers comprehensive breast health services including mammography services, ultrasounds, biopsies, consultation services and prevention education.

The Breast HealthCare Center staff includes radiologists dedicated to reading mammograms. Results are typically available 24 to 48 hours after a mammogram is taken and each screening mammogram result is reviewed by two radiologists before results are made available to the patient (Missouri Baptist Medical Center Facts, 2007).

The Cancer Education and Information Center, which provides education and information on cancer diagnosis, treatment, emotional support and community resources, has helped hundreds of patients, their families and the public since it opened in 1996. The Cancer Research Program has been recognized three years in a row by the prestigious Cancer and Leukemia Group B for the number of patients it has accrued into clinical trials. In June 2003, the Cancer Research Program was one of only nine hospitals nationally to be recognized for its involvement in clinical trials by the American Society of Clinical Oncology (Missouri Baptist Medical Center Facts, 2007).

The Ortho/Neuro/Spine Program provides education, physical therapy, rehabilitation, drug therapies and surgical intervention programs designed to meet the needs of its orthopedic patients. The Digestive Disease Center offers a full range of diagnostic and interventional endoscopy services for inpatients and outpatients experiencing gastrointestinal or pulmonary disease. The Center was created in April 2002 to accommodate the dramatic growth in the hospital's endoscopy program. MBMC has averaged a 20 percent increase in the number of endoscopies every year since 1999 (Missouri Baptist Medical Center Facts, 2007).

The MBMC Obstetrics Department features 42 newly renovated and private postpartum rooms. Twelve are newly renovated labor/delivery/recovery rooms; four are newly renovated high-risk antepartum rooms; two are newly renovated Caesarian section rooms; and

two are newly renovated nurseries, one for well-baby care and one for special care. In 2002, more than 3,800 babies were delivered at MBMC.

The Saint Louis Children's Hospital Pediatric Center at MBMC recently moved to the first floor of the hospital, directly behind the adult Emergency Department. The unit has seven beds for same-day surgery and emergency patients and five beds for patients under observation. A pediatrician is on-site 24 hours a day, seven days a week. The pediatric emergency department is open 1200 to 2400, Monday through Friday, and 0800 to 2400 on weekends. When the pediatric ED is closed, a pediatrician will see all pediatric patients in the main ED. Physicians and nurses who specialize in emergency medicine staff the MBMC Emergency Department. Emergency physicians are on-site 24 hours a day, seven days a week (Missouri Baptist Medical Center Facts, 2007).

The MBMC campus has been under construction for the past several years in effort to renovate structures, and to improve the layout and traffic flow. A 150,000 square foot East Pavillion, including an Emergency Department and Women and Infants area was recently completed. ED physicians are especially satisfied with the redesign of the facility. They have also implemented a process where a triage nurse and physician initially see patients, reducing their wait time and getting medications and treatments started more quickly (BJC HealthCare Strategic Planning, 2008). Almost 90 percent of patients are seen by a physician within 30 minutes of arrival and over 30 percent see a physician within 15 minutes. Discharges and admissions now run much more smoothly. In 18 percent of cases, patients are treated and discharged immediately by the physician conducting the initial evaluation. The process has been considered a major success, since the ED experienced a 10 percent increase in volume from 2006 to 2007 (BJC HealthCare Strategic Planning, 2008).

Finally, plans are underway to tear down the South Building to make room for the construction of a West Pavilion in an effort to decompress the main bed tower and also to move closer to the goal of 80 percent private rooms, from the current ratio of about 50 percent. The project, estimated to cost around \$89 million, will also include revamped operating rooms and a parking garage (St Louis Business Journal, 2008).

After-service Activities

The measurement of patient satisfaction is an important after-service activity. Seventy-four percent of MBMC patients responded that nurses always communicated well and 83 percent responded that physicians always communicated well. MBMC scores are higher than the national average at 73 and 79 percent respectively (CMS, 2008). The overall patient satisfaction rating for MBMC is 69 percent and the national average is 63 percent (CMS, 2008). Compared to the national average of 67 percent, 73 percent of MBMC patients would recommend the hospital to family and friends (CMS, 2008). MBMC performed better than all of its competitors, except for Saint John's, on the prevailing number of Hospital Compare measures.

Understandably, Saint Louis County residents have communicated to MBMC that they prefer the private rooms available at Saint John's over the semi-private rooms at MBMC. Although currently at a respectable level, a future goal of MBMC is to improve patient satisfaction.

Another important after-service activity is the placement of patients in post-acute or long-term care settings. MBMC works alongside BJC Home Healthcare to provide the best possible discharge planning, case management, and social services to their patients. This ensures that continuity of care is in place and that a patient and family focus is maintained.

An organization's service delivery strategies are usually examined along with support delivery strategies. Both can be displayed with the construction of a value chain like the one displayed in Figure 8.

Support Delivery Strategies

Value adding support delivery strategies can be divided into three sections: culture, structure, and resources (Swayne et al., 2005). A variety of MBMC's support delivery strategies are described below.

Culture

The culture at MBMC is a hybrid of friendly compassion and technical skill. Today's staff emulates the kindness and consideration envisioned by the hospital's founders in the late 1800s. Since opening in 2000, the Clinical Nursing Institute at MBMC has been a valued resource helping to develop expert nurses who are compassionate, respectful of patients, and passionate about service excellence at MBMC. Thousands of nurses and other healthcare professionals have participated in one of the Institute's courses, workshops or seminars. Numerous MBMC physicians and specialists have provided diagnosis and treatment for hundreds of patients in Missouri and Illinois communities whose hospitals comprise the MBMC Rural Outreach Program (Missouri Baptist Hospital Facts, 2007).

Another aspect that shapes MBMC's culture is its female president, Joan Magruder. Unlike most health care organizations and other major industries, where 95 percent of chief executive officers are male, MBMC has a female chief executive (ACHE, 2002). Before assuming the role of President at MBMC, Ms. Magruder held management positions at Johns Hopkins Hospital and executive positions at BJC HealthCare, Inc. She is the first female president in the BJC system. According to an ACHE survey, about 11 percent of female,

compared to 25 percent of male healthcare executives achieved CEO positions. This may not sound like a striking number, but 85 percent of healthcare workers are women (ACHE, 2002). Women also tend to earn about 19 percent less than their male counterparts (Hoss, 2004). Another study found that women are more likely to emphasize patient safety and quality than men (Gentry, 2003). Although the gender imbalance in leadership roles is a sensitive subject to some, the unique attribute of a female president sets the organization apart from the majority of hospitals in the nation and all other area hospitals.

The American Hospital Association selected MBMC from among hundreds of hospitals nationally for its leadership and innovation in patient care quality, safety and commitment. In conjunction with the Missouri Baptist Convention, MBMC has been providing medical supplies and personnel to the Children's Medical Mission in Belarus, a country still suffering ill effects from the Chernobyl nuclear disaster in 1986. The commitment to patient safety and quality care is exemplified by every health-care professional at Missouri Baptist Medical Center. This commitment was recognized and rewarded on a national scale when the American Hospital Association honored the hospital by bestowing upon it the 2002 Quest for Quality Prize.

Missouri Baptist Medical Center physicians, nurses and health-care professionals participate in numerous health fairs, screenings and educational programs offering wellness and prevention tips to the Saint Louis community, including an annual Missouri Baptist Heart Fair. Patients and families of every faith are offered a variety of chaplaincy services daily by the MBMC Pastoral Care Department (Missouri Baptist Medical Center Facts, 2007).

MBMC has hired a new marketing director with extensive community hospital experience and also increase the department's budget in order to compete with the growing

number of advertisements from long-time competitors and new free-standing facilities. This will support a more focused marketing strategy.

Structure

MBMC has the functional organization structure typical of a community hospital, with a President and six Vice Presidents (Medical Affairs, Foundation, Nursing, Operations, Finance, and Human Resources). The organization's nearly 2,700 employees are organized within departments. The 1,400 staff physicians are not employees, but are overseen by the Chief Medical Officer (J. M. Magruder, 2007). This model is also used at the other hospitals, although some have more employed doctors than others.

MBMC is seeking to employ more primary care physicians to produce additional downstream business to the hospital. More specific data is not available on the referral activities of non-employed (the majority) of physicians practicing in the area's community hospitals. Although it is widely known that most are credentialed and practice at multiple facilities. After the year is over, volume on loyalists (physicians who refer greater than 60 percent of their business), splitters (refer 40 to 60 percent of their business) and non-aligned (refer less than 40 percent of their business). Some of the 100 percent non-aligned are employed by other hospitals, thus it is logical that all of their business is going elsewhere and the opposite can be said for 100 percent loyalists. The specific action plan to re-align more physicians is included later in the text.

Resources

The 55 acres on which Missouri Baptist Medical Center sits includes the hospital, the Clinical Nursing Institute, parking garages and medical office buildings. The hospital campus currently includes four medical office buildings and two parking garages; one is located on the

west end and another on the north end of the campus (Missouri Baptist Medical Center Facts, 2007).

Service quality, reputation, technology, and physician relationships are critical success factors for MBMC. To remain competitive in the market, MBMC must maintain current centers of excellence and seek to grow the primary care physician base. Currently, MBMC has a 0.29 primary-to-specialist ratio, which by competitive standards is slightly lower than hospitals of similar focus and size. The primary care groups on campus have significant wait times for patients prior to receiving appointments and many are actively recruiting additional staff with MBMC's assistance. MBMC's on-campus non-primary care physician presence is most heavily orthopedic, with general surgery a close second (BJC HealthCare Strategic Planning, 2007).

While MBMC is concentrating most intently on recruiting primary care physicians to its campus, several surgeons have noted that specialists, especially cardiology, are needed as many key physicians approach retirement. The hospital is at marginal risk of losing cardiology volume due to defection. However, MBMC faces continued volume challenges with general surgery defection to ASCs. The opening of Suburban Surgical could result in the loss of six of MBMC's top ten surgeons, who account for nearly 15 percent of the hospital's total surgical volume and up to 50 percent of its outpatient general surgical volume (BJC HealthCare Strategic Planning, 2007). MBMC is actively working with this group to develop a mutually beneficial arrangement.

Action Plan

Action plans are developed from the chosen strategies displayed on MBMC strategy map. Action plans include objectives, activities, timelines, and responsibilities (Swayne et al., 2005). A balanced scorecard approach will be used to measure MBMC's future performance. The

ability of MBMC and BJC executive leadership to effectively communicate MBMC's strategy will be paramount to its success.

Additional marketing and branding with the MBMC name and logo, combined with campus development and improvement, are strategic priorities. Analysis for new marketing plans can begin with MBMC's current share of discharges in its target markets. As previously mentioned (shown in Figure 3), the two target markets for MBMC are its PSA quadrant with 46 percent market share and the SSW quadrant with 17 percent of market share. Continued upgrades and improvements to the MBMC campus are important to meet customer expectations for convenience and privacy. In addition, the planned construction and renovation projects allow the opportunity for expansion in growth areas and renovation from semi-private to private rooms in the older medical and surgical units.

Overall, MBMC will need to concentrate on "re-alignment" or full employment of physicians within the market as there is a surplus of all physician types in MBMC's service area. MBMC is attempting to recruit nearly 20 primary care physicians to its campuses by 2015. Table 5 displays the primary care development plan for MBMC. One key to success will be staggering recruitment to allow for effective practice build-up and growth. In order to maintain downstream volume, the hospital will also need to recruit two to three specialists in the areas of general surgery and oncology (BJC HealthCare Strategic Planning, 2007).

Table 5

MBMC Primary Care Physician (PCP) Development Plan

2006 Key Statistics	
Total key private PCPs (80% of total minus IPC)	30
Number of discharges attended	3,340
Average discharges per PCP	111.3
Total discharges (excluding newborns)	21,566
Percent of total discharges	15.5%

2007 - 2015 PCP Recruitment Required to Maintain Current Discharge Percentage	2007	2008	2009	2010	2011	2012	2013	2014	2015	Net Need by 2015
Target discharges (excluding newborns)	22,520	23,114	23,733	24,378	25,060	25,762	26,484	27,225	28,005	--
Discharges from key PCPs	3,488	3,580	3,676	3,776	3,881	3,990	4,102	4,216	4,337	--
Number of physicians	31	32	33	34	35	36	37	38	39	--
Incremental PCPs relative to prior year	1	1	1	1	1	1	1	1	1	9
Estimate of replacement PCPs	0	2	1	1	1	1	1	1	1	9
Total PCP recruitment needed	1	3	2	2	2	2	2	2	2	18

After the implementation of specific strategies, actual performance must be measured against desired performance to determine effectiveness. The balanced scorecard, shown in Figure 13 on the following page, was created to assist MBMC with the assessment of progress in the implementation of action plans and the measurement of their overall success. The mission of MBMC is displayed at the top of the scorecard because, as a directional strategy and reason for the organization's existence, it should drive all operations and decisions. Four perspectives (financial, customer, internal, learning and growth) are captured in the balanced scorecard contained in Figure 13.

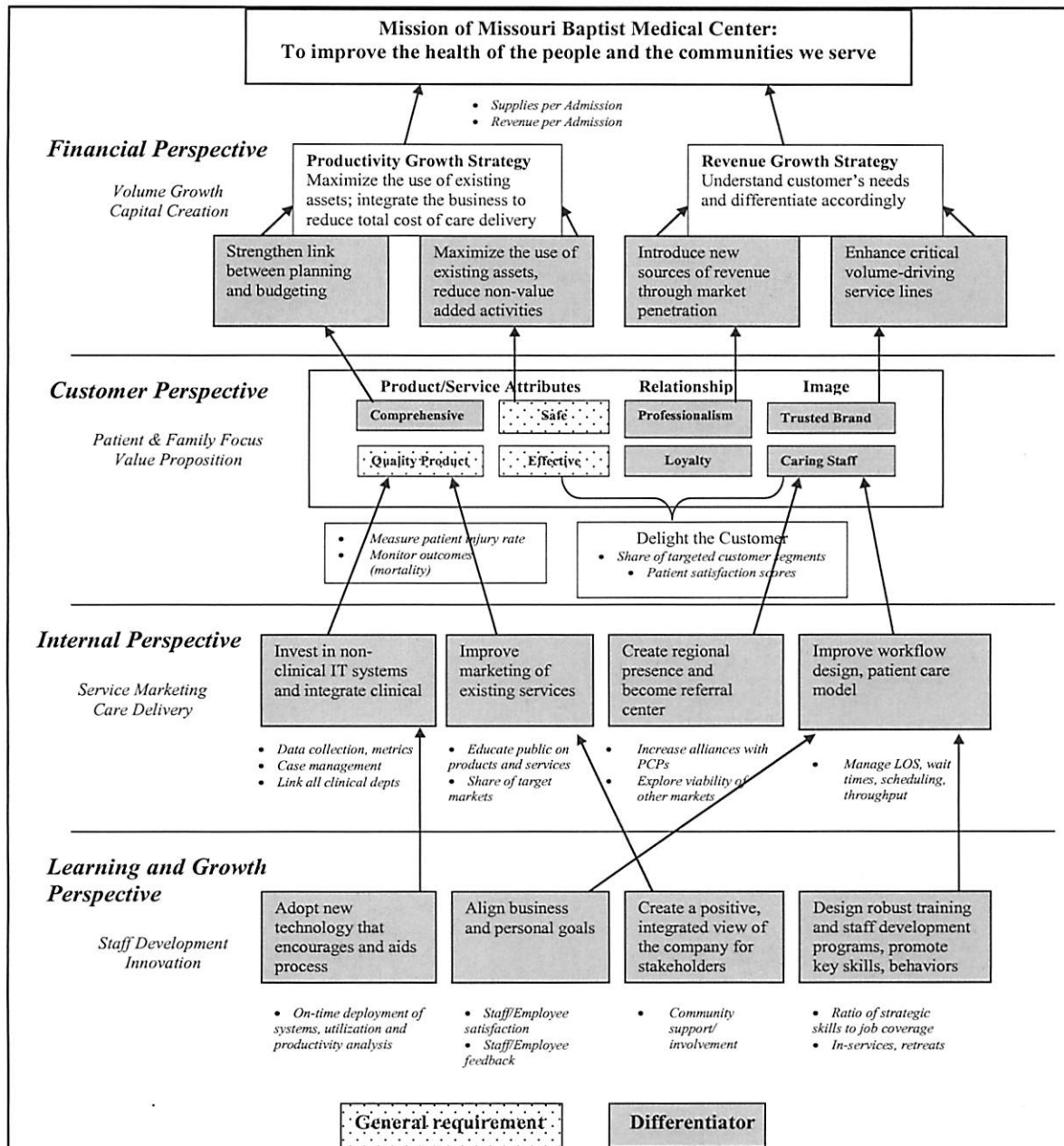


Figure 13. Balanced Scorecard for MBMC

Specific goals and metrics are listed with the strategies as all of them should be closely aligned. An example is to attack supply costs and then measure the supply cost per admission. Another is to pursue specific staff development and mentorship programs and then assess physician and employee satisfaction levels.

Cadotte and Bruce (2003) discuss the importance of an organization's business plan in detailing customer profiles, target markets, product lines, and marketing strategy along a logical path. MBMC could enhance organizational effectiveness with this approach of tightly linking strategic, operational, and tactical plans. MBMC possesses a talented leadership team and is committed to the community it serves. The organization will continue to prevail against environmental challenges and competitive threats through its compassionate and skilled delivery of comprehensive medical services. The maintenance of a strong patient and family focus will set MBMC apart from its competitors well into the future.

References

- Agency for Healthcare Research and Quality (AHRQ). (2004). Healthcare cost and utilization project. Retrieved April 30, 2008, from <http://www.hcup-us.ahrq.gov/reports/statbriefs/sb6.pdf>
- American College of Healthcare Executives (ACHE). (2002). A comparison of the career attainments of men and women healthcare executives. Retrieved April 14, 2008, from http://www.ache.org/PUBS/research/genderstudy_execsummary.cfm
- American Hospital Association (AHA). (2006). Fast facts on U.S. hospitals. Retrieved October 30, 2007, from <http://www.aha.org/aha/resource-center/Statistics-and-Studies/fast-facts.html>
- American Hospital Directory (AHD). (2006). Missouri hospitals. Retrieved September 13, 2007, from http://www.ahd.com/list_cms.php?mprovid=andlisting=1
- American Hospital Directory (AHD). (2007). U.S. hospitals. Retrieved September 13, 2007, from http://www.ahd.com/list_cms.php?mprovid=andlisting=1
- Association of Religion Data Archives. (2000). Retrieved October 30, 2007, from http://www.thearda.com/mapsReports/reports/Metro/7040_2000.asp
- Bazzoli, G. J., Brewster, L. R., Liu, G., and Kuo, S. (2003). Does U.S. hospital capacity need to be expanded. *Health Affairs*, 22(6), 40-54.
- BJC Health Care, Inc. (2007). Facts. Retrieved July 19, 2007, from <http://www.bjc.org/>
- BJC Health Care Government Relations. (2008). Missouri certificate of need rules. Saint Louis, MO: author.
- BJC Health Care Strategic Planning. (2006). MBMC competitor information. Saint Louis, MO: author.

BJC Health Care Strategic Planning. (2006). MBMC market development. Saint Louis, MO: author.

BJC Health Care Strategic Planning. (2006). MBMC market share files. Saint Louis, MO: author.

BJC Health Care Strategic Planning. (2007). MBMC physician development plan. Saint Louis, MO: author.

BJC Health Care Strategic Planning. (2007). MBMC service line planning. Saint Louis, MO: author.

BJC Health Care Strategic Planning. (2008). MBMC multi-year model planning. Saint Louis, MO: author.

BJC Health Care Strategic Planning. (2008). MBMC strategic campus plan. Saint Louis, MO: author.

Bureau of Labor Statistics (BLS). (2007). Saint Louis metropolitan area at a glance. Retrieved October 30, 2007, from http://www.bls.gov/eag/eag.mo_stlouis_msa.htm

Cadotte, E. R., and Bruce, H. J. (2003). *The management of strategy in the marketplace*. Mason, OH: Thomson South-Western Publishers.

Centers for Disease Control and Prevention (CDC). (2002). National estimated cost of obesity. Retrieved April 30, 2008, from http://www.cdc.gov/nccdphp/dnpa/obesity/economic_consequences.htm

Center for Disease Control and Prevention (CDC). (2006). U.S. overweight and obesity trends. Retrieved April 30, 2008, from <http://www.cdc.gov/nccdphp/dnpa/obesity/trend/maps/>

Centers for Medicare and Medicaid Services (CMS). (2004). Key legislation. Retrieved April 30, 2008, from <http://www.cms.hhs.gov/History/Downloads/CMSProgramKeyMilestones>.

pdf

Centers for Medicare and Medicaid Services (CMS). (2005). Hospital quality initiative.

Washington D.C.: author.

Centers for Medicaid and Medicare Services (CMS). (2006). National health expenditure data.

Retrieved on August 23, 2007, from http://www.cms.hhs.gov/NationalHealthExpendData/02_NationalHealthAccountsHistorical.asp

Centers for Medicaid and Medicare Services (CMS). (2008). Hospital compare. Retrieved on

March 31, 2008, from <http://www.hospitalcompare.hhs.gov/Hospital/HCAHPS/...me=Missouri&version=default&browser=IEpercent7C6percent7CWinXP>

CNN (2008). Election center: Health care. Retrieved January 15, 2008, from <http://www.cnn.com/ELECTION/2008/issues/issues.healthcare.html>

Des Peres Hospital. (2007). Hospital facts. Retrieved September 13, 2007, from <http://www.despereshospital.com/CWSContent/despereshospital>

Fan, V. S., Burman, M., McDonell, M. B., and Fihn, S. D. (2004). Continuity of care and other determinants of patient satisfaction with primary care. *Journal of General Internal Medicine*, 20(3), 226-233.

Gallup. (2007). Gallup's pulse of democracy: Healthcare costs. Retrieved April 30, 2008, from <http://www.gallup.com/poll/4708/Healthcare-System.aspx>

Gentry, S. (2004). Women hospital CEOs: Culture shift, improved IT enhance patient safety PHNS identifies trend in leadership. *Business Wire*.

HealthGrades. (2007). Methodology. Retrieved July 19, 2007, from http://www.healthgrades.com/b2b/index.cfm?fuseaction=modnbgandmodtype=b2bandmodact=faqandtv_lid=lnk_faq_bottom

Hoover, M. and Schoeck, R. (2006). Hospital uses evidence-based design to boost patient health.

Building Operating Management. 20(3), 226-233.

Hoover's. (2007). Hospital industry overview. Retrieved September 6, 2007, from http://www.hoovers.com/hospitals/--ID__60--/free-ind-fr-profile-basic.xhtml

Hoss, M. K. (2006). Women in hospital chief executive officer positions: Fact or fiction

Advancing Women in Leadership Online Journal. 1(21), 9-14.

J. M. Magruder (personal communication, September 28, 2007)

Kaiser Family Foundation. (2008). Presidential candidate health care proposals. Retrieved April

30, 2008, from http://www.health08.org/sidebyside_results.cfm?c=5&c=11&c=16

Katz, A. (1995). Saint Louis, MO: Site visit report. Health Policy Analysis Program, University of Washington: Seattle, WA.

Kimery, A. L. (2008). Hospital flu admissions highlights national 'surge' deficit. *Homeland Security Today*.

Medicare Modernization Act Update. (2003). Retrieved September 6, 2007, from <http://www.cms.hhs.gov/MMAUpdate/>

Missouri Department of Economic Development (2007). Retrieved October 30, 2007, from [http://ded.mo.gov/BDT/Community percent20 Services/Formingpercent20apercent 20NFP percent20or percent20CDC.aspx](http://ded.mo.gov/BDT/Community%20Services/Forming%20a%20NFP%20or%20CDC.aspx)

Missouri Baptist Medical Center. (2007). Facts. Retrieved September 13, 2007, from <http://www.missouribaptistmedicalcenter.org/>

Missouri State Health Facts. (2006). Retrieved September 13, 2007, from [http://www.statehealth facts.org/profileglance.jsp?rgn=27](http://www.statehealthfacts.org/profileglance.jsp?rgn=27)

MSNBC. (2008). John McCain health plan updates. Retrieved April 30, 2008, from <http://www.msnbc.com>

msnbc.msn.com/id/21243223/

Meyer, J. and Hicks, E. K. (1998). A tale of two cities: Hospital mergers in St. Louis and Philadelphia not reducing excess capacity. *Health Care Financing and Organization Findings Brief*.

Nation Master. (2006). United States health statistics. Retrieved September 6, 2007, from <http://www.nationmaster.com/red/country/us-united-states/hea-healthandall=1>

National Coalition on Healthcare. (2007). Retrieved September 6, 2007, from <http://www.nchc.org/facts/costs.html>

Nutting, P. A., Goodwin, M. A., Flocke, S. A., Zyzanski, S. J., and Stange, K. C. (2003). Continuity of primary care: To whom does it matter. *Annals of Family Medicine*, 1(3), 149-155.

Organisation for Economic Co-operation and Development. (2007).Health data. Retrieved October 30, 2007, from http://www.oecd.org/document/16/0,3343,en_2825_495642_2085200_1_1_1_1,00.html.

Regional Health Commission (2007). Annual report. Retrieved January 15, 2008, from <http://www.stlrhc.org/Resources/finalrhcreport.html>

RAND Corporation (2006). Research brief on future health spending. Retrieved October 30, 2007, from www.rand.org/pubs/research_briefs/RB9146-1/index1.html

Shi, L. and Singh, D. A. (2004). *Delivering health care in America: a systems approach*. Sudbury, MA: Jones and Bartlett Publishers.

Smith, M. D. (1995). BJC Health System: Anatomy of a merger. Saint Louis, MO: BJC Health System.

SSM DePaul Health Center. (2007). Facts. Retrieved September 13, 2007, from <http://www.ssm>

depaul.com/internet/home/depaul.nsf

SSM Saint Joseph's Health Center (2007). Facts. Retrieved September 13, 2007, from <http://www.ssmstjoseph.com/internet/home/stjoseph.nsf>

SSM Saint Mary's Medical Center. (2007). Facts. Retrieved September 13, 2007, from <http://www.stmarys-stlouis.com/internet/home/stmaryhc.nsf>

Saint Anthony's Medical Center. (2007). Facts. Retrieved September 13, 2007, from <http://www.stanthonysmedcenter.com/>

Saint John's Mercy Medical Center. (2007). Facts. Retrieved September 13, 2007, from <http://www.stjohnsmercy.org/>

Saint Louis Business Journal. (2008). Missouri Baptist draws up major plans for addition. Retrieved March 17, 2008, from <http://stlouis.bizjournals.com/stlouis/stories/2008/03/17/story3.html>

Saint Louis City Planning Office. (2006). Map stats. Retrieved September 6, 2007, from <http://www.fedstats.gov/qf/sttes/29/2965000.html>

Saint Louis Commerce Magazine (2007). Biotechnology in Saint Louis. Retrieved April 30, 2008, from http://findarticles.com/p/articles/mi_qa5380/is_200506/ai_n21372785

Saint Louis Convention and Visitors Commission (2007). Annual Report. Retrieved October 30, 2007, from <http://www.explorestlouis.com/cvc/index.asp>

Saint Louis County Planning Department. (2006). Health Facts. Retrieved September 6, 2007, from <http://www.co.st-louis.mo.us/plan/demo/>

Saint Louis Economy. (2007). Retrieved October 30, 2007, from <http://www.city-data.com/us-cities/The-Midwest/St-Louis-Economy.html>

Saint Louis Post Dispatch (2008). Taking a closer look at profits at St. Louis area hospitals.

Retrieved April 30, 2008, from <http://www.stltoday.com/stltoday/business/columnists.nsf/story/?OpenDocument>

Saint Louis Regional Chamber and Growth Association. (2007). Saint Louis quick facts.

Retrieved September 13, 2007, from <http://www.city-data.com/city/Saint-Louis-Missouri.html>

Saint Luke's Medical Center Facts. (2007). Retrieved September 13, 2007, from <http://www.stlukes-stl.com/>

State Master: Missouri Health Statistics. (2006). Retrieved September 6, 2007, from <http://www.statemaster.com/state/MO-missouri/health>

Swayne, L. E., Duncan, W. J., and Ginter, P. M. (2005). *Strategic management of health care organizations* (5th ed). Malden, MA: Blackwell Publishing.

U.S. Census Bureau. (2006). Quick facts. Retrieved September 6, 2007, from <http://quickfacts.census.gov/qfd/states/48000lk.html>

U.S. Census Bureau. (2006). Population statistics. Retrieved September 6, 2007, from <http://www.census.gov/population/documentation/txt>.

U.S. Department of Agriculture (USDA). (2007). World agricultural production. Retrieved April 30, 2008, from <http://www.fas.usda.gov/wap/current/toc.asp>

U.S. Department of Energy (USDOE). (2008). Office of Biological and Environmental Research. Human genome project. Retrieved April 30, 2008, from http://www.ornl.gov/sci/techresources/Human_Genome/research/centers.shtml

U.S. News and World Report (2007). Best hospitals. Retrieved September 6, 2007, from <http://health.usnews.com/sections/health/best-hospitals>

Weckwerth, V. E. and Krenek, B. H. (2006). Frontiers: Not-for-profit hospitals: Balancing

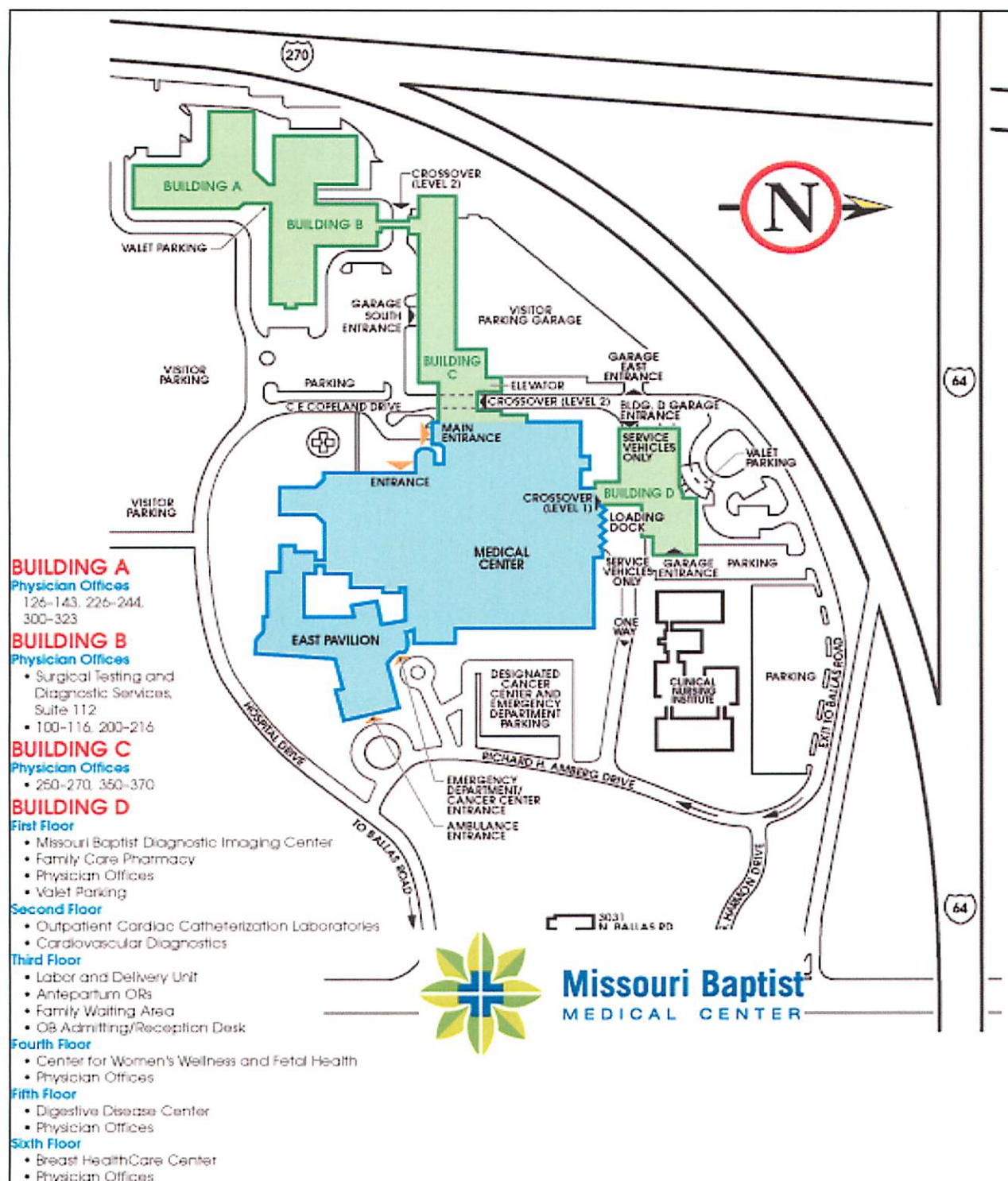
business and benefit. *Frontiers of Health Services Management*, 22(4), 45-50.

The White House (2006). State of the Union address. Retrieved September 6, 2007, from

<http://www.whitehouse.gov/stateoftheunion/2006/>

Zuckerman, A. M. (2005). *Healthcare strategic planning* (2nd ed). Chicago: Health Administration Press.

Appendix A: Campus Map



Appendix B: Competitor Information

Des Peres Hospital

Des Peres Hospital, formerly named Deaconess West Hospital, is part of Tenet Missouri, which also includes Saint Louis University Hospital. The Saint Louis University Hospital facilities are owned by Tenet and staff members (excluding physicians) are employed by Tenet. Des Peres Hospital is located 6.2 miles south of MBMC. The hospital offers a full range of services, including bariatric care, comprehensive rehabilitation, emergency care, graduate medical education, heart care, medical/surgical services, orthopedics, outpatient surgery, pain management, senior care, and wound management (Des Peres Hospital Facts, 2007).

Des Peres Hospital has 167 licensed beds and 541 full-time employees. In 2006, Des Peres Hospital had 8,646 discharges and total patient revenue of \$470.2 million (AHD, 2006). Des Peres Hospital is a teaching hospital with two physicians' office buildings located on campus and a third under construction. The founding hospital organization was established in 1948, and Des Peres Hospital was constructed in 1974 (Des Peres Hospital Facts, 2007).

Des Peres Hospital has received numerous honors and awards. In May 2006 and April 2007, Des Peres was named as a Hospital in Tenet Healthcare Corporation's Circle of Excellence, which honors Tenet hospitals with the highest levels of performance. The Circle of Excellence honors Tenet hospitals that have performed at the highest levels in the past year on performance and quality service measures. In March 2007, Des Peres Hospital was designated a UnitedHealth PremiumSM cardiac specialty center. In December 2006, Des Peres Hospital entered into a new two-year agreement with Anthem Blue Cross and Blue Shield. In November 2006, Des Peres was recognized for quality spine surgery in the 9th annual study by HealthGrades. In August 2006, Des Peres announced a \$27 million capital investment

cooperative for technology and patient care enhancements. In March 2006, Des Peres added electrophysiology services to its heart care program (Des Peres Hospital Facts, 2007).

Des Peres Hospital has begun an \$8.3 million construction and renovation project to increase capacity, add new services, and improve patient experience. The multi-phased renovation project will add new staff lounges and locker rooms, two operating room suites, an interventional cardiac catheterization lab, a new waiting area for the emergency department, a suite for a 16-slice CT, and new electrophysiology services. Also, Tenet Healthcare is planning to construct the Des Peres Medical Arts Pavilion II, a two-story 50,000-square-foot facility, for \$8.7 million. The new medical office building (MOB) will be connected to Pavilion I as well as the hospital and will house cardiology, ophthalmology, otorhinolaryngology, internal medicine, and primary care physicians (BJC HealthCare Strategic Planning, 2006).

Des Peres' major strength is its affiliation with Tenet Health Care, a major hospital company. However, Des Peres' main weaknesses are that it is smaller and less established than the majority of its competitors.

Saint Anthony's Medical Center

Saint Anthony's Medical Center has a long-established presence in Missouri and Illinois. It is located 12.9 miles southeast of MBMC. Now in its 130th year of operation, it is the third-largest medical center in the Saint Louis metropolitan area (Saint Anthony's Medical Center Facts, 2007). Saint Anthony's is a well-respected tertiary care facility, offering advanced medical treatment in a number of specialties, including cardiology, women's services, oncology, orthopedics, neurology and emergency medicine.

Saint Anthony's has 566 licensed beds and is staffed by more than 4,000 employees. More than 800 physicians and other medical professionals in private practice also serve the

hospital (AHD, 2006). The medical staff provides a comprehensive range of inpatient and outpatient medical, surgical, diagnostic, emergency and behavioral health services to more than 225,000 patients each year. Saint Anthony's had annual gross patient revenue of \$870.9 million in 2006 (Saint Anthony's Medical Center Facts, 2007).

Saint Anthony's was recognized for being one of a hundred hospitals making the greatest progress in improving hospital-wide performance between 2001 and 2005. The hospital organizations within the top 100 have set national benchmarks for the rate and consistency of improvement in clinical outcomes, safety, hospital efficiency, financial stability and growth. Saint Anthony's Medical Center added a \$3.5 million Trilogy™ system to its comprehensive cancer care services (Saint Anthony's Medical Center Facts, 2007).

In 2006, Saint Anthony's Hospital was designated as a premium cardiac specialty care center by United Healthcare. The hospital gave EKG monitors to paramedics in its service areas and was the first designated chest pain center in the Saint Louis metropolitan statistical area (MSA). The chest pain unit has 16 dedicated beds and a community education component. The hospital has a joint venture with The Metro Heart Group for diagnostic and interventional cardiology care. Saint Anthony's has engaged MayoClinic.com to provide timely, trusted medical content on its homepage and has established urgent care centers in Arnold, Fenton and Lemay, Missouri. Saint Anthony's began a two-year \$90 million redesign and construction in 2006 with the goal of enhancing patient access and care with 90 all-private acute care patient rooms, the latest operating room technology in 24 flexible suites designed to accommodate outpatient surgery and recovery, and a second major entrance for convenient access to all of its heart services. The plans also call for a new four-story surgery and patient care tower, containing

fully integrated cardiology and cardiovascular services, a new chest pain center, and a surgical intensive care unit (BJC HealthCare Strategic Planning, 2006).

The hospital's main strengths are its large size and long history in Saint Louis as well as its early designation as a chest pain center. On the contrary, Saint Anthony's main weakness is its lack of affiliation with a major health system or academic institution.

Saint John's Mercy Medical Center

Saint John's is located 1.1 miles north of MBMC and has 979 licensed beds. It is staffed by 6,318 health care professionals and served by 1,152 physicians (AHD, 2006). Gross patient revenue was almost \$1.7 billion in 2006. A member of Saint John's Mercy Health Care and sponsored by the Sisters of Mercy Health System, Saint John's Mercy is one of the nation's largest Catholic hospitals and the second-largest hospital in the Saint Louis MSA. Saint John's operates the only Level I Trauma Center and Level III Neonatal Intensive Care Unit in Saint Louis County. Saint John's Mercy offers services in nearly all clinical specialties (Saint John's Mercy Medical Center Facts, 2007).

By providing comprehensive health services within the Saint Louis community, Saint John's Mercy has progressively evolved from a 25-bed infirmary for women and children in 1871 to its current medical center campus in west Saint Louis County, which comprises nearly 80 acres. Saint John's comprehensive services include audiology, behavioral health, blood donor services, breast care, burn care, cancer care, childbirth care, child development, child psychiatry, diabetes services, eye care, family medicine, fertility care services, gastroenterology services, graduate medical education, heart care, hospitalist services, hyperbaric and wound treatment, imaging services, outpatient surgery, pediatric plastic surgery, mobile mammography, neonatal intensive care, neurodiagnostic laboratory services, neuropsychology, nursing services, nutrition,

pastoral Services, pediatrics, perinatal care, pharmacies, physician referral services, rehabilitation services, respiratory care, skilled nursing care, sports therapy services, surgery services, and women's services (Saint John's Mercy Medical Center Facts, 2007).

St John's strengthened its domination of the Saint Louis women and infants market with the 2004 expansion of their Women and Children Health Center. From 2003 to 2005, Saint John's pediatrics market share grew from 9.6 percent to 11.4 percent. The hospital recently completed the Women and Children Health Center addition to the main patient tower and achieved a record number of childbirths (7,248) and number of patient days in the neonatal intensive care unit (23,698). Also, Saint John's Mercy has been approved as a Comprehensive Community Cancer Program by the Commission on Cancer of the American College of Surgeons and has opened The David C. Pratt Cancer Center to compete with Barnes-Jewish Hospital's Siteman Cancer Center. (BJC HealthCare Strategic Planning, 2006).

Saint John's strengths include its status as a fully accredited teaching hospital; a 96-bed Heart Hospital; a 100,000-square-foot Cancer Center; a new addition of private rooms exclusively for mothers and babies; a comprehensive Children's Hospital; an inpatient/outpatient Surgery Center; and a 120-bed Skilled Nursing Center. Saint John's Mercy Medical Center is established as a leader in patient care, medical education and research (Saint John's Mercy Medical Center Facts, 2007).

The hospital's size may also be a source of weakness. Saint John's large size gives it an advantage in creating economies of scale, but can be disconcerting to patients seeking an individualized experience. Patients' firsthand accounts of their experience at Saint John's often include, "being lost in the shuffle" or feeling like they are "just a number, not a patient" (BJC HealthCare, 2007).

Saint Luke's Hospital

Saint Luke's is located 5.6 miles west of MBMC and has been providing comprehensive health care services to the Saint Louis region for 140 years (Saint Luke's Medical Center Facts, 2007). Saint Luke's is a 418-bed non-profit hospital, which earned \$693.4 million in patient revenue in 2006 (AHD).

Saint Luke's recent accomplishments include implementing a facility-wide medication barcode identification system and real-time electronic patient monitoring capabilities for physicians. Saint Luke's has received many honors and awards, including: Top 100 Hospital for Overall Performance in 2005 by Solucient® health data source; the only hospital in the Saint Louis region to be named a Top Benchmark Hospital; one of America's 50 Best Hospitals for 2007 by HealthGrades; One of the Best Places to Work in Saint Louis for 2007 by the *Saint Louis Business Journal*; ranked fifth in the Top Ten of Fertility Centers in the nation by *Child* magazine; received the Silver Award (second place) for Patient Education Information via its quarterly health magazine and the Bronze Award (third place) for Patient Education Information via its hospital web site (Saint Luke's Medical Center Facts, 2007).

Saint Luke's Hospital is set to embark on a 30-year expansion plan that could see its square footage increase to more than a million square feet in the growing community of Chesterfield, Missouri (located west of Saint Louis County). The plan includes additions to its main campus and the development of nearly 80 acres of prime real estate into a West Campus. The first phase of construction will be a two-story, 70,000-square-foot outpatient services building in response to a 5 percent increase in outpatient registrations in 2005. The hospital plans to move basic imaging, cardiology, physical therapy and sports medicine into the new facility to open up space in the main hospital. In the future, the hospital plans to build a five-story,

220,000-square-foot ambulatory care center and a five-story, 120,000-square-foot medical office building (MOB) on its new West Campus. Saint Luke's main campus expansion plans include a 26,700-square-foot, two-story patient tower expansion; a 70,000-square-foot, two-story diagnostic addition; and a 1,000-square-foot skywalk connecting the patient tower to the medical office building. Also on the main campus, the hospital plans to break ground on a two-story, 16,000-square-foot cardiovascular intensive care unit (BJC HealthCare Strategic Planning, 2006).

The hospital's strengths include its reputation for quality, long history, and established presence in multiple area locations. On the contrary, a weakness is Saint Luke's lack of affiliation with a major health network or academic institution. BJC HealthCare and SSM Health System affiliated hospitals often have greater access to capital and human resources than independent hospitals.

SSM DePaul Health Center

DePaul Health Center is located 10.6 miles north of MBMC. The hospital has 472 licensed beds and 1,872 full-time employees, with 718 staff physicians and 560 volunteers. In 2006, annual admissions were 18,575 and outpatient visits totaled 106,140. Patient revenue for that year was \$759.5 million (AHD, 2006).

SSM DePaul Health Center is a full-service Catholic hospital with a 177-year history and a member of SSM Health Care (SSM DePaul Health Center Facts, 2007). Opened in 1828, SSM DePaul was the first hospital west of the Mississippi River and the oldest continuously existing business in Saint Louis. DePaul is undergoing significant renovation and expansion on its main campus, including the addition of a new parking garage, new cardiac catheterization labs, a new patient unit, and a third medical office building with an ambulatory surgery center. Recently,

DePaul doubled its ER capacity to 70,000 annual visits. DePaul also opened a second sleep center as well as a new chest pain center, which offers the latest minimally-invasive heart surgeries. SSM DePaul Health Center offers comprehensive services and serves patients from across the Saint Louis area and surrounding communities of Bridgeton, Florissant, Hazelwood, Saint Ann, Olivette, Saint John, Maryland Heights and Overland.

SSM DePaul has earned national recognition for quality care. SSM DePaul was one of only three hospitals in the country to receive the Premier Award for Quality from Premier, Inc. in more than one category and the only recipient in Missouri. SSM DePaul also received the HealthGrades 5-Star Award and the Malcolm Baldrige National Quality Award. SSM DePaul's Celebrates New Physician Partnership won the 2006 Missouri Quality Award and its weight-loss institute is recognized as a Center of Excellence (SSM DePaul Health Center Facts, 2007). SSM DePaul Health Center constructed an 80,000 square-foot MOB with a common entrance for all three of its MOBs and a 15,000 square-foot ambulatory surgery center. Other construction projects include new cardiac catheterization labs, remodeling of the cafeteria, an updated inpatient rehabilitation unit, a new 30-bed telemetry unit, and a five-story, 670-space parking garage (BJC HealthCare Strategic Planning, 2006).

The hospital's strengths are its affiliation with SSM and quality reputation. A weakness is its smaller size and less robust service lines in comparison to its competitors.

SSM Saint Joseph's Health Center

SSM Saint Joseph Health Center is located in historic downtown Saint Charles, Missouri, 13.3 miles northwest of MBMC and has been in operation since 1885 (SSM Saint Joseph's Health Center Facts, 2007). Today, the hospital has 273 licensed beds and patient revenue was \$347 million in 2006 (AHD, 2006).

SSM Saint Joseph Health Center's list of services includes: behavioral medicine, clinical nutrition services, community education, doula services, emergency and trauma services, home health services, hospice services, hospitalist services, hospitality services, cancer care, mammography, massage therapy, maternal-fetal medicine, obstetric services, occupational therapy, orthopedic services, pain management, pastoral care, physician referral, pulmonary rehabilitation, radiology services, respiratory care, rheumatology, specialty services, speech therapy, senior services, sleep disorders center, general surgery, and vascular surgery (SSM Saint Joseph's Health Center Facts, 2007).

SSM Saint Joseph Health Center has been recognized on multiple occasions for its quality. The hospital received the 2005 Missouri Quality Award and the Malcolm Baldrige National Quality Award. SSM Saint Joseph Health Center is the first recipient of the MissouriPRO Quality Award and is identified as one of the nation's 100 lowest cost providers (SSM Saint Joseph's Health Center Facts, 2007).

SSM Health Care-Saint Louis plans to build a 158-bed hospital (Saint Clare's Hospital) and medical campus near Fenton, MO. Opening soon, the \$215 million complex will replace Saint Joseph Hospital in Kirkwood, MO. The hospital will have 115 fewer licensed beds than Saint Joseph, but will feature all-private rooms, a 24-hour emergency room, heart services, cancer care, women's health and obstetrics, orthopedics, and surgery (BJC HealthCare Strategic Planning, 2006). Saint Clare's Hospital will be less of a direct competitor to MBMC than Saint Joseph Health Center due to its location twice as far away.

The hospital's strengths are its affiliation with SSM, large size, and multiple area locations. On the contrary, a major weakness is its location in relation to a major two-year highway construction project.

SSM Saint Mary's Health Center

Saint Mary's had a total patient revenue of nearly \$1.2 billion in 2006 is located 8.1 miles east of MBMC. Saint Mary's is licensed for 564 beds, employs 2,100 people and has more than 800 physicians on staff, representing all medical specialties (AHD, 2006). Saint Mary's Health Center is a major teaching hospital affiliated with the Saint Louis University Department of Obstetrics and Gynecology.

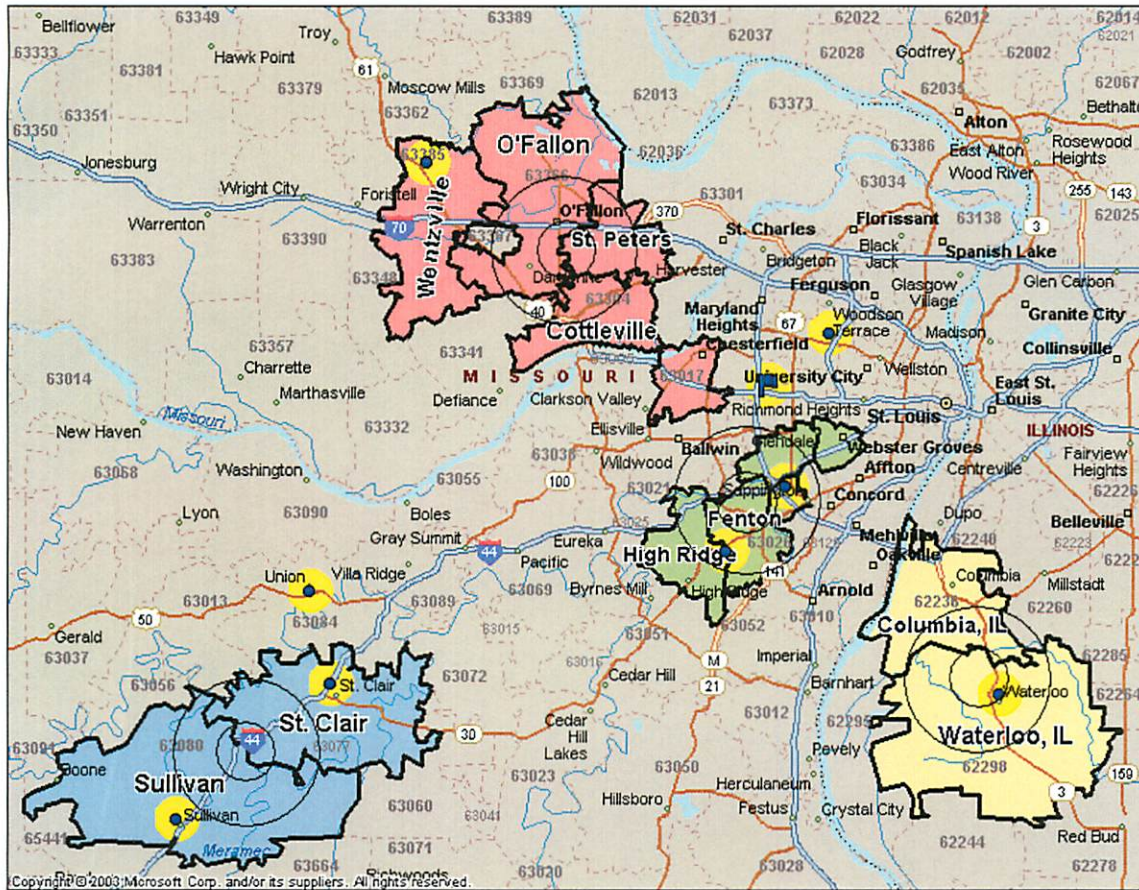
Services at Saint Mary's include comprehensive obstetrics and cardiology services, including high-risk obstetrics and open-heart surgery. The hospital also offers a wide variety of outpatient services. Saint Mary's services include: breast health, cancer care, cardiology, emergency care, endoscopy center, knee and hip center, neurology, senior care center, and women's health (SSM Saint Mary's Medical Center Facts, 2007).

In 2005, Saint Mary's opened a newly renovated \$4.2 million endoscopy and gastrointestinal unit with the opportunity for physicians to perform about 70 procedures a day, 20 more than what was previously done in the original space. Also in 2005, Saint Mary's announced the addition of a sophisticated electrophysiology lab that will offer medicine's latest diagnostic and interventional cardiac procedures (BJC HealthCare Strategic Planning, 2006).

Saint Mary's began offering computer-assisted knee replacement in 2006 and acquired a medical linear accelerator for \$2 million in 2007. This device is most commonly used for external beam radiation treatments for cancer patients (SSM Saint Mary's Medical Center Facts, 2007).

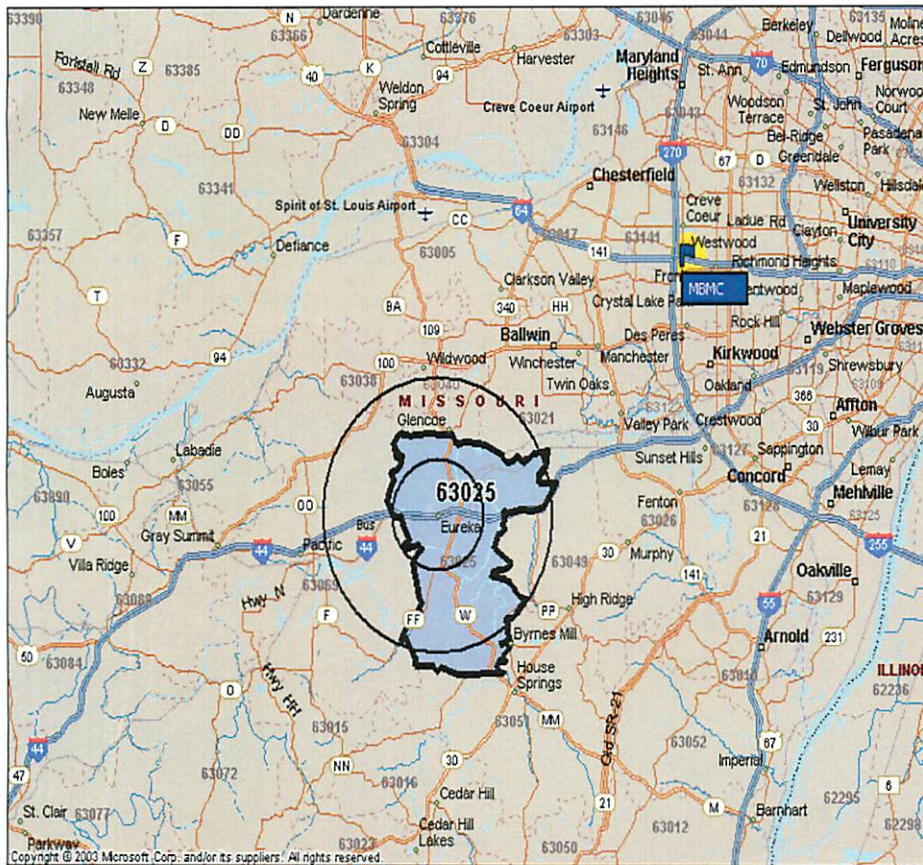
Saint Mary's strengths include its convenient location and affiliation with SSM. A major weakness is Saint Mary's inability to expand its existing campus.

Appendix C: Current Market Development



Zip Code Area	2003 Pop.	2008 Growth
O'Fallon	64,008	
St. Peter's	71,765	
Cottleville	42,471	
Chesterfield	41,940	
Wentzville	15,011	
Total	235,195	2.2%
Zip Code Area	2003 Pop.	2008 Growth
Webster Groves	34,200	
Kirkwood	37,789	
Sunset Hills	4,431	
Fenton	5,725	
High Ridge	14,715	
Total	96,860	0.3%
Zip Code Area	2003 Pop.	2008 Growth
Columbia, IL	10,854	
Waterloo, IL	14,800	
Total	25,654	1.8%
Zip Code Area	2003 Pop.	2008 Growth
Sullivan	11,610	
St. Clair	11,128	
Total	22,738	0.8%

Appendix D: Potential Market Development



- Potential market development in Eureka, MO, located 14 miles southwest of MBMC
- Eureka's population (based upon zip code 63025) in 2005 was roughly 12,600 and is expected to grow by 2.0 percent annually to reach 14,000 by 2010
- The 2004 estimated average household income is \$103,275 and the payor mix of Eureka is predominantly private insurance, averaging 52 percent of total discharges from 2002 – 2004