

**Specialty Hospitals in Kansas:  
An Unfolding Story**

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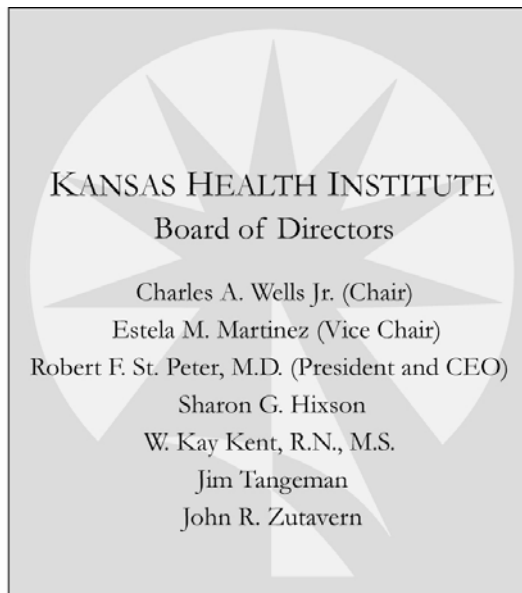
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## EXECUTIVE SUMMARY

Hospitals that serve specific populations, such as children or psychiatric patients, have been common for some time. However, a new type of specialty hospital has emerged in recent years, spurring a health policy debate in Kansas and across the nation. These new facilities typically provide a limited set of services in a single clinical specialty, such as cardiology, orthopedics, or surgery, and are usually organized as for-profit businesses with physician ownership. Eleven such facilities are located in Kansas, a relatively high proportion of the 100 or so specialty hospitals operating nationwide.

Proponents of specialty hospitals claim that the “focused factory” approach of performing a high volume of procedures within a narrow clinical scope results in economic efficiencies, clinical expertise, and high quality. Critics of specialty hospitals believe that physician investment in these facilities creates a conflict of interest and steers referrals of high profit patients from full service general hospitals to physician-owned specialty hospitals. These critics claim that the loss of such patients leaves general hospitals with a population of sicker, higher-cost patients and hinders their ability to offer a full range of services and community benefits.

To better understand the impact of specialty hospitals in Kansas, the Kansas Health Institute (KHI) conducted an analysis of specialty and general hospital services and markets. Through a partnership with the Kansas Department of Health and Environment (KDHE), KHI assessed data from Kansas specialty and general hospitals to provide insight into the following questions: (1) How do Kansas specialty hospitals differ in the range of services offered and in degree of specialization? (2) How do utilization, payer mix, and other indicators differ between Kansas specialty and general hospitals? (3) What is the impact of specialty hospital competition on utilization of general hospitals? and (4) Have specialty hospitals led to an increase in Kansas’ utilization of health care services?

The data provide clear answers to the first two questions and mixed conclusions on the others. The key findings follow.

- Specialty hospitals provide a limited range of services, treat fewer types of cases, and are more focused on surgical procedures than general hospitals.
- Specialty hospitals treat a higher proportion of Medicare patients and lower proportions of Medicaid and uninsured patients than general hospitals.
- The impact of specialty hospitals on their general hospital competitors is mixed.
  - In the Kansas City area market, the entry of specialty hospitals coincided with an increase in joint replacement and back and neck surgeries at both general and specialty hospitals, suggesting that a larger supply of providers drove an increase in service volume.
  - In the Wichita market, increases in the number of coronary bypass surgeries at specialty hospitals coincided with a sharp decline in the volume of these procedures at competing general hospitals.
  - In rural markets, increases in the number of hysterectomies at specialty hospitals coincided with a sharp decline in the volume of these procedures at competing general hospitals.
  - For other services, no consistent patterns are evident regarding the impact of specialty hospitals on general hospitals and overall utilization.

The Medicare payment system, which tends to overpay for some cases (particularly surgical procedures) and underpay for others, has created a powerful incentive for both general and specialty hospitals to build service lines around those more profitable procedures. The Centers for Medicare and Medicaid Services (CMS), the federal agency that administers Medicare, is taking steps to curb these incentives by developing changes that will more directly tie payments to the severity of patients' illnesses and the actual costs of treatment.

The state role in addressing the growth and impact of specialty hospitals is more limited, particularly in a state like Kansas that does not generally favor methods, such as Certificate of Need (CON) laws, that regulate health facility development. Nevertheless, there are steps that should be taken at the state level to monitor the market and to enhance our knowledge of the



effects of changes in the health care system. Based on this analysis, KHI proposes the following policy options:

- As part of its legislatively mandated studies on specialty hospitals and hospital licensure (to be completed in March 2007), the Kansas Health Policy Authority (KHPA) should:
  - Collect information directly from general hospitals on organizational, service, and other changes that have been made in response to specialty hospital competition.
  - Collect information directly from specialty hospitals on investors and ownership, including involvement of investors in other health care services and facilities (e.g., ambulatory surgery centers).
  - Collect quality of care data (e.g., mortality rates, surgical infection rates, readmissions) from specialty and general hospitals.
  - Assess the pros and cons of expanding the scope of licensure regulations to include issues such as provision of services to Medicaid and uninsured patients and collection of information on ownership and investor compensation arrangements.
  - Evaluate the reintroduction of a Certificate of Need program to assist in achieving state policy goals related to health facility, equipment, and service development.
- KHPA and KDHE, in cooperation with stakeholders such as the Kansas Hospital Association and Kansas Surgical Hospital Association, should establish a mandatory data collection and monitoring system that routinely gathers utilization, financial (including ownership, investor compensation arrangements, and investor involvement in other health care services and facilities), and quality of care data from general hospitals, specialty hospitals, and ambulatory surgery centers.

The direction being taken by the federal government — to modify Medicare payment to eliminate the incentives caused by the higher profitability of some cases over others — may well level the playing field between specialty and general hospitals. If these payment changes have the anticipated impact, there will likely be a profound change in the environment for both new and existing specialty hospitals. Financial incentives for creating new specialty facilities will be

lessened and there may well be a “shakeout” in the specialty hospital marketplace. Implementation of an enhanced system of data collection and monitoring will allow state policymakers to both anticipate the scope and impact of these changes in health care financing and delivery and monitor them as they occur.

## INTRODUCTION

Hospitals that serve specific populations, such as children or psychiatric patients, have been common for some time. However, a new type of specialty hospital has emerged in recent years, spurring a health policy debate in Kansas and across the nation. These new facilities typically offer a limited set of services in a single clinical specialty, such as cardiology, orthopedics, or surgery, and are usually organized as for-profit businesses with physician ownership. Eleven such facilities are located in Kansas, a relatively high proportion of the 100 or so specialty hospitals operating nationwide.

Proponents of specialty hospitals claim that the “focused factory” approach of performing a high volume of procedures within a narrow clinical scope results in economic efficiencies, clinical expertise, and high quality.<sup>1</sup> These hospitals frequently feature new facilities and equipment and desirable patient amenities, such as single occupancy rooms, gourmet food, and overnight accommodations for family members. Physicians often state that specialty hospitals provide them with an enhanced voice in administrative activities, easier scheduling, and fewer competing expectations (e.g., emergency room coverage). Specialty hospital supporters also believe that the presence of these facilities encourages innovations in the marketplace by increasing competition for hospital services.

Critics of specialty hospitals believe that physician investment in these facilities creates a conflict of interest and steers referrals of high profit patients out of full service general hospitals to physician-owned specialty hospitals. These critics argue that the loss of profitable patients hinders the ability of general hospitals to subsidize low-margin services, such as emergency departments, and provide community benefits, such as uncompensated care and prevention and screening programs. They note that many specialty hospitals do not provide emergency services or other community-oriented programs and by catering to high-income and/or well-insured patients, do not provide their “fair share” of services to the Medicaid population and the uninsured.

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<sup>1</sup> “Focused factory,” a term that originated in manufacturing, refers to a producer that focuses on a narrow product mix for particular customers in a specific market, rather than producing various products for many customers in multiple markets.

In response to concerns that specialty hospitals and their owners benefit from unfair competitive advantages, the Medicare Modernization Act of 2003 imposed a moratorium on payment for physician referrals of Medicare patients to new specialty hospitals in which the referring physicians have ownership or investment interests. The moratorium, which effectively halted the start-up of new specialty hospitals because of the high proportion of Medicare patients typically treated in these facilities, expired in June 2005. At that time, the Centers for Medicare & Medicaid Services (CMS), the federal agency that administers the Medicare program, decided to postpone the processing of new enrollment applications from specialty hospitals as it considered policy changes that might impact these facilities.

Subsequently, as part of the Deficit Reduction Act (DRA) of 2005, the secretary of the U.S. Department of Health and Human Services was instructed to develop a “strategic and implementing plan” that addresses issues of physician investment in specialty hospitals. This plan was released in August 2006 and requires that specialty hospitals disclose physician investment and compensation arrangements and accept patient transfers for which they have the capacity to provide appropriate care, even if they do not have emergency departments. CMS will also establish demonstration projects that allow profit-sharing arrangements between general hospitals and their physicians. Upon release of the plan, the moratorium on new specialty hospitals expired (U.S. DHHS, 2006).

CMS has also announced that over the next several years, it will phase in substantial revisions to the hospital inpatient prospective payment system (PPS) to improve the accuracy of hospital payment rates. Among the planned changes to the inpatient PPS are a re-weighting of Diagnosis Related Groups (DRGs) based on hospital costs rather than charges, and adjusting the DRGs to account for the severity of patients’ illnesses.<sup>2</sup> The proposed changes address concerns that the existing payment system creates incentives to “cherry pick” profitable cases and are expected to significantly impact payments to specialty hospitals (CMS, 2006).<sup>3</sup>

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<sup>2</sup> DRGs are a classification of diagnoses that groups patients that demonstrate similar hospital resource consumption and length of stay patterns. There are more than 500 DRGs representing the range of diagnoses treated in hospitals (DRG Guidebook 2000).

<sup>3</sup> “Cherry picking” refers to selectively choosing patients based on particular characteristics, such as profitability.

A body of recent research has addressed many of the issues surrounding specialty hospitals and their impact on the general hospitals with which they compete. It is clear, for example, that specialty hospitals treat more profitable patients with less severe illnesses and are less likely to provide emergency services than general hospitals (Greenwald et al., 2006; Guterman, 2006; MedPAC, 2005; U.S. DHHS, 2005; U.S. GAO, 2005; U.S. GAO, 2003). In addition, specialty hospitals serve a lower proportion of Medicaid patients and provide less uncompensated care than general hospitals (Greenwald et al. 2006; U.S. DHHS, 2005).<sup>4</sup> Quality of care in the specialty hospitals that have been studied is at least as good as in general hospitals and specialty hospitals exhibit high levels of patient satisfaction (Greenwald et al., 2006; Cram, 2005; U.S. DHHS, 2005).

Less clear is whether the clinical decisions of physician-owners of specialty hospitals are affected by their investments in these facilities, although there is some evidence that physicians do react to financial incentives (and other factors) when determining where to admit their patients (Greenwald et al., 2006; Guterman, 2006; Mitchell, 2005). Also unclear is the impact of specialty hospitals on the financial status of general hospitals and the services they provide. The research thus far does not demonstrate that specialty hospitals have done financial harm to their general hospital competitors, but researchers point out that existing studies of this issue are based on few observations and have taken place at an early point in the development of specialty hospitals (Guterman, 2006; MedPAC, 2005).

To shed light on the impact of specialty hospitals in Kansas, the Kansas Health Institute (KHI) has conducted an analysis of specialty and general hospital services and markets. Through a partnership with the Kansas Department of Health and Environment (KDHE), we assessed available data and provided insight into the following questions: (1) How do Kansas specialty hospitals differ in the range of services offered and in degree of specialization? (2) How do utilization, payer mix, and other indicators differ between Kansas specialty and general hospitals? (3) What is the impact of specialty hospital competition on utilization of general

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<sup>4</sup> Specialty hospital proponents argue that, as for-profit entities, specialty hospitals pay taxes in amounts that exceed the charity care contributions of not-for-profit general hospitals. This issue is discussed later in the report.

hospitals? and (4) Have specialty hospitals led to an increase in Kansans' utilization of health care services?

## **DATA AND METHODS**

### **SOURCES OF DATA**

This analysis was principally conducted using three databases. First, we utilized Medicare hospital cost reports, which are available as public use files from CMS. Cost reports, which are submitted to CMS by both general and specialty hospitals each year, contain detailed information on hospital expenses and revenues and summary data on hospital utilization. Balance sheets and other financial statement information are also included in hospital cost reports. We collected and analyzed cost reports submitted by Kansas general and specialty hospitals from 1995 to 2003.

The second dataset used was the Kansas Hospital Association (KHA) discharge database. This database, which is maintained by KDHE, contains patient-level information on every discharge from Kansas general hospitals and includes fields such as admission and discharge dates, diagnosis (reported as DRG), payer, and zip code of residence. General hospital discharge data for the period 1995 to 2003 was used for the analysis.

The third source of data was a database similar to the KHA general hospital discharge database described above, but specific to specialty hospitals. Through an agreement with KDHE, the state's specialty hospitals submitted patient-level information for the same data fields collected for the KHA discharge database. KDHE and KHI staff reviewed these data upon submission, and through an iterative process with the specialty hospitals, improved their usefulness. Specialty hospital data from 1999 to 2003 are available in this database, covering the period during which most Kansas specialty hospitals opened and began providing services.

### **IDENTIFICATION OF SPECIALTY HOSPITALS**

A key first task in the analysis was the identification of the study group — i.e., the facilities that would be defined as “specialty hospitals.” In declaring the moratorium described above, the Medicare Modernization Act of 2003 defined specialty hospitals as “primarily or exclusively engaged in the care and treatment of one of the following categories: (i) Patients with a cardiac condition. (ii) Patients with an orthopedic condition. (iii) Patients receiving a surgical procedure.” (MMA, 2003) Federal and state regulations, however, do not further interpret this

definition, nor do they use it to designate facilities as specialty or general hospitals. At the current time, specialty hospitals are certified by Medicare and licensed by the state of Kansas under the same statutes and regulations as general hospitals. In Kansas, hospitals are licensed as “hospitals” or “special hospitals,” but the hospitals themselves elect the category of their licensure and there are few distinctions in the standards used to assess the facilities.

For guidance, we turned to the working definition of specialty hospitals used by the Medicare Payment Advisory Commission (MedPAC), an independent agency that advises Congress on issues affecting the Medicare program. It identified specialty hospitals as facilities that are physician-owned; provide at least 45 percent of their Medicare cases in cardiac, orthopedic, or surgical services or at least 66 percent in two major diagnostic categories (MDCs), with the primary one being cardiac or orthopedic;<sup>5</sup> had a minimum volume of at least 25 total Medicare cases during 2002; and have submitted Medicare cost reports and claims for 2002 (MedPAC, 2005). This definition, or variants of it, has been adopted and used by other researchers as well (see, for example, Greenwald et al., 2006).

We used the MedPAC definition of specialty hospitals, modifying it slightly to better fit the data available for our study. For example, the MedPAC definition is limited to Medicare cases in 2002 because their database contained only Medicare claims for that year. Because our database contains information on all inpatients treated in Kansas specialty and general hospitals over a period of years, we did not limit ourselves to examining only Medicare cases in a single year. In addition, MedPAC considered only physician-owned hospitals as specialty hospitals. Although we believe that all Kansas specialty hospitals have some physician ownership, we have not assessed ownership records as part of this analysis and, therefore, do not include an ownership provision in our definition. Nevertheless, we followed the basic MedPAC construct and defined a specialty hospital as a facility that meets the following criteria:

- At least 45 percent of cases must be in cardiac, orthopedic, or surgical services, or

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<sup>5</sup> MDCs are broad classifications of diagnoses, usually grouped by body system (e.g. Diseases and Disorders of the Circulatory System, Diseases and Disorders of the Musculoskeletal System and Connective Tissue). Twenty-five MDCs, encompassing more than 500 DRGs, constitute the range of cases treated in hospitals (DRG Guidebook 2000).



- At least 66 percent of cases must be in two MDCs, with the primary one being cardiac or orthopedic.

Applying this definition to the discharge data sets described above, we identified 11 Kansas specialty hospitals. These facilities are shown in Table 1:

**Table 1. Kansas Specialty Hospitals**

<b>Specialty Hospital</b>	<b>Location</b>	<b>First Year of Operation</b>
Kansas Heart Hospital	Wichita	1999
Salina Surgical Hospital	Salina	1999
Kansas Surgery & Recovery Center*	Wichita	2000
Kansas City Orthopaedic Institute	Leawood	2000
Doctor's Hospital	Leawood	2000
Manhattan Surgical Center	Manhattan	2001
Surgical & Diagnostic Center of Great Bend	Great Bend	2001
Emporia Surgical Hospital	Emporia	2002
Galichia Heart Hospital	Wichita	2002
Heartland Surgical Specialty Hospital**	Overland Park	2004
Kansas Spine Hospital**	Wichita	2004

\*Kansas Surgery & Recovery Center opened earlier, but complete discharge data before 2000 are not available.

\*\* Because our general hospital database contains data through 2003, we excluded from the study the two specialty hospitals that opened after that date. Our analysis compares the experience of the nine remaining specialty hospitals to that of Kansas general hospitals.

## HOSPITAL MARKET GROUPING

To protect the confidentiality of the hospitals in the study, we usually do not identify particular hospitals by name in this report. Instead, we assess the impact of specialty hospitals by categorizing them, when appropriate, into groups based on their location. Kansas specialty hospitals operate in six distinct market areas. Two of these — the Kansas City and Wichita metropolitan areas — are relatively large urban markets. The remaining Kansas specialty hospitals are located in four smaller rural markets.<sup>6</sup> For the purposes of reporting the results of this analysis, we categorize hospitals, where appropriate, into three groups representing the markets in which they operate — Kansas City area, Wichita, and rural.

## LIMITATIONS OF THE DATA AND THE STUDY DESIGN

There are several limitations to the data and approach used in the study. First, the general and specialty hospital discharge databases are self-reported. These data undergo some checks for completeness and internal consistency when submitted, but are not otherwise verified. Problems with the data for some general and specialty hospitals include large discrepancies (i.e., greater than 10 percent) between discharge data and cost report data that could not be explained and instances of apparent uncorrected errors (e.g., unlikely fluctuations from year to year in payer mix).

Second, in some cases, the discharge data are incomplete. For example, some fields, such as race/ethnicity, were not consistently reported by hospitals. As a result, analyses that required these data were not conducted. Third, the discharge data sets contain only inpatient information for Kansas hospitals. Analyses based on outpatient utilization or out-of-state hospitals were therefore not conducted. Outpatient and out-of-state hospital information, particularly for Missouri hospitals, would be necessary to develop a complete picture of the impact of specialty hospitals, especially in the Kansas City area. Finally, our study is largely descriptive and we have not conducted multivariate analyses of the data. Further data limitations are discussed, where appropriate, in the report.

Despite these limitations, this study uses the best available data and is the most complete analysis, to date, of Kansas specialty hospitals and their impact. Areas for further study, including development and use of more accurate and appropriate databases, are discussed in the report.

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<sup>6</sup> Rural, in this context, refers to areas outside of federally defined metropolitan areas.

# ANALYSIS

## SPECIALTY HOSPITAL SERVICES

Although single-specialty physician-owned hospitals are categorized generally as “specialty hospitals,” both the Government Accountability Office (GAO) and CMS identified key differences between types of specialty hospitals. Cardiac hospitals, for example, more closely resemble full service general hospitals than orthopedic and surgical hospitals, which are more like ambulatory surgery centers. Cardiac hospitals, however, are still smaller, more likely to be physician-owned, and less likely to have emergency departments than general hospitals. GAO also found that specialty hospitals, regardless of their focus, are more likely than general hospitals to be organized on a for-profit basis (U.S. DHHS, 2005; U.S. GAO, 2005; U.S. GAO, 2003). This analysis examines these differences and describes the degree of specialization and the range of services offered by specialty hospitals in Kansas.

### Service Lines

To determine the degree of specialization of specialty hospitals, we identified specialty hospital service lines — i.e., the types of cases, identified by DRG, that define the focus of a specialty hospital’s services (the determination of service lines also serves as a base for much of our further analysis). Because we are not aware of a standard hospital industry definition of a “service line,” we determined service lines empirically by analyzing the specialty hospital discharge database and identifying the most common DRGs treated in each specialty hospital. We defined service lines as those DRGs that constitute at least 10 percent of a specialty hospital’s cases. Ten percent was chosen because it represents a substantial proportion of a hospital’s cases, yet is low enough that it does not overemphasize a particular set of cases or type of patients (although some specialty hospitals do focus almost exclusively on a single DRG, as discussed below).

To avoid single year aberrations or differences in services between start-up periods and later operations, we aggregated data from all years of operation for each specialty hospital through 2003. Every specialty hospital had at least one DRG that constituted at least 10 percent of its cases. In total, we identified 13 service lines, representing nine distinct DRGs, in the nine Kansas specialty hospitals. All of these service lines represent surgical cases. In comparison, only six of

more than 40 general hospitals in the state (excluding Critical Access Hospitals), reached the 10 percent level in cases not related to newborns and all of these diagnoses represented medical cases.<sup>7</sup> One of these six facilities is a children’s hospital, which is a type of specialty facility (although it does not meet the specialty hospital definition used in this analysis).

Table 2 shows the DRGs that constitute the service lines for Kansas specialty hospitals. For reporting purposes, specialty hospitals are grouped by market area, as discussed above. Service lines are reported in order of prevalence of the particular types of cases.

**Table 2. Specialty Hospital Service Lines**

<b>Market Area</b>	<b>DRG</b>	<b>DRG Description</b>
Kansas City Area Specialty Hospitals (n=2)	209	Major Joint & Limb Reattachment Procedures of Lower Extremity
	500	Back & Neck Procedures except Spinal Fusion without Complications and Comorbidities
	498	Spinal Fusion except Cervical without Complications and Comorbidities
Wichita Specialty Hospitals (n=3)	209	Major Joint & Limb Reattachment Procedures of Lower Extremity
	527	Percutaneous Cardiovascular Procedure with Drug-Eluting Stent without Acute Myocardial Infarction
	107	Coronary Bypass with Cardiac Catheterization
	125	Circulatory Disorders except Acute Myocardial Infarction with Cardiac Catheterization without Complex Diagnosis
	517	Percutaneous Cardiovascular Procedure with Non-Drug-Eluting Stent without Acute Myocardial Infarction
Rural Specialty Hospitals (n=4)	359	Uterine & Adnexa Procedures for Non-Malignancy without Complications and Comorbidities
	358	Uterine & Adnexa Procedures for Non-Malignancy with Complications and Comorbidities

The proportion of cases in each specialty hospital that are represented by a service line range from 11 percent to 76 percent (as discussed above, a service line constitutes at least 10 percent of a hospital’s cases). In three specialty hospitals, a single DRG — DRG 209, Major Joint & Limb

<sup>7</sup> Critical Access Hospitals (CAHs) are small, rural facilities that typically treat a less complex mix of cases than non-CAHs. In addition, they are not subject to reimbursement by Medicare under the DRG-based Prospective Payment System and therefore face a different set of financial incentives and expectations. As a result, they are not directly comparable to specialty or general hospitals and are excluded from the analysis. In addition, we did not consider newborn-related cases in general hospitals to represent a “service line” because these services are not comparable to the types of services provided by specialty hospitals (as defined for this analysis).

Reattachment Procedures of Lower Extremity, more commonly known as joint replacements of the hip, knee, or ankle — constituted more than two-thirds of all cases. As noted above, there are also a limited variety of DRGs represented — the 13 service lines in the specialty hospitals are made up of nine different DRGs that together account for nearly half (47%) of all specialty hospital cases. Only two of these (DRGs 209 and 359) represent one-fourth of all cases in specialty hospitals. In addition, only one of these service lines (DRG 358) encompasses patients with complications and comorbid conditions.

Differences in service lines by market area also reflect the different types of specialty hospitals operating in these areas. Two of the Wichita specialty hospitals are cardiac facilities and four of the five Wichita service lines represent cardiovascular conditions. Orthopedic specialty hospitals, which are located in both the Kansas City and Wichita areas, focus on joint replacements and back surgeries, while the surgical hospitals in the rural markets are performing a substantial number of hysterectomies.

### **Degree of Specialization — Surgical Discharges**

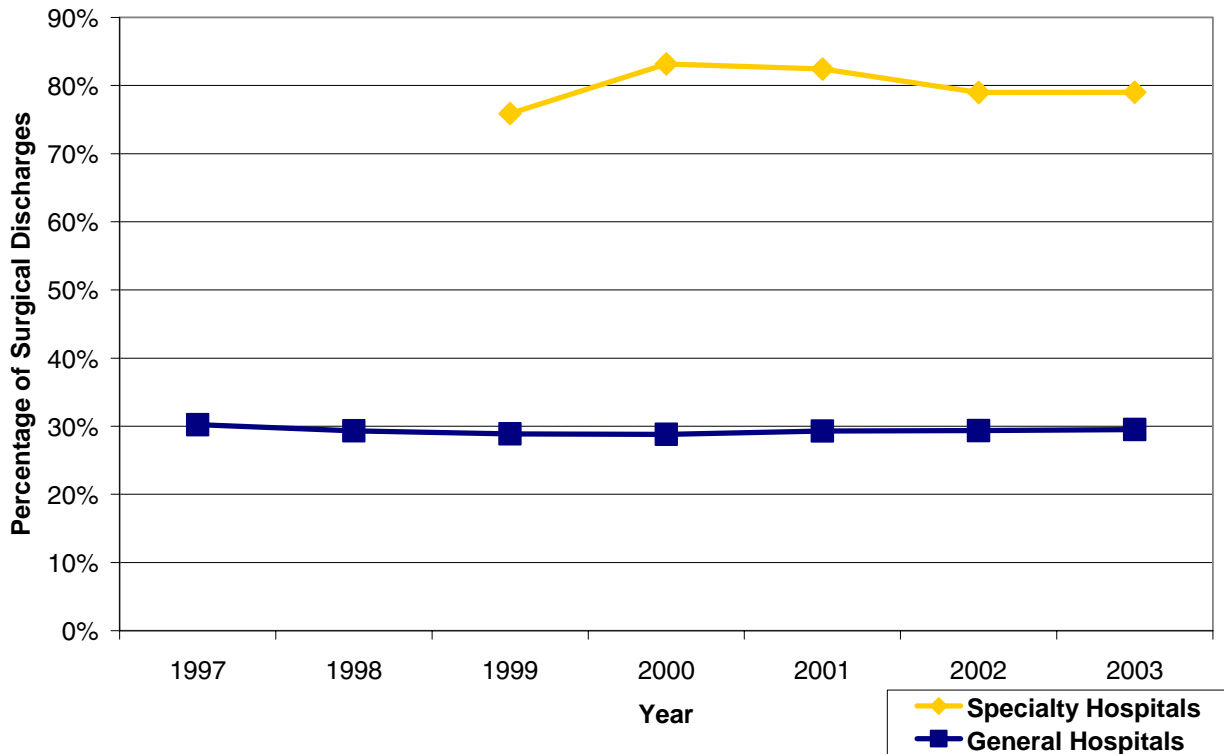
As noted above, the primary service lines in all Kansas specialty hospitals are surgeries. This is not surprising, as many specialty hospitals are organized to focus on surgical cases. Table 3 shows the proportion of surgical discharges in Kansas specialty and general hospitals and emphasizes the different focus of these facilities. As shown in the range column, even the most surgically intensive general hospitals have a lower proportion of surgical cases than the least surgically intensive specialty hospitals.

	<b>Aggregate Percentage of Surgical Discharges (all hospitals)</b>	<b>Range of Percentage of Surgical Discharges (per hospital)</b>
Specialty Hospitals	80%	71% – 99%
General Hospitals	28%	17% – 36%

We also examined whether specialty hospitals have had an impact on the aggregate proportion of surgical discharges provided in general hospitals. As shown in Figure 1, despite the

entry of specialty hospitals into the state since 1999, the overall percentage of surgical cases in Kansas general hospitals facing specialty hospital competition has remained relatively constant.<sup>8</sup> Although specialty hospitals provide a substantial number of surgeries, the volume of cases they treat remains relatively small compared to the total number of cases treated in general hospitals. As a result, the mix of medical and surgical cases in general hospitals is unaffected at the aggregate level.

**Figure 1. Impact of Specialty Hospitals on Surgical Discharges in Kansas General Hospitals that Face Specialty Hospital Competition**



Although specialty hospitals have not affected the overall mix of surgical and medical cases provided in general hospitals, they have, in some cases, impacted the volume of particular surgical DRGs provided at these facilities. This issue is discussed later in the report.

<sup>8</sup> General hospitals that face specialty hospital competition are defined as those that provide specialty hospital lines of business to residents of specialty hospital service areas. The determination of specialty hospital service areas is discussed later in the report.

## Degree of Specialization — Major Diagnostic Categories

Another way to assess the degree of specialization in a hospital is to determine the number of MDCs treated in the facility. As noted above, there are 25 MDCs that represent broad classifications of diagnoses, grouped by body system. Table 4 shows the average number and range of MDCs treated in Kansas specialty and general hospitals. As demonstrated by these data, specialty hospitals treat a far more limited range of MDCs than general hospitals.

**Table 4. MDCs Treated in Specialty and General Hospitals (1997–2003)**

	<b>Average Number of MDCs (per hospital)</b>	<b>Range of MDCs (per hospital)</b>
Specialty Hospitals	13	7–19
General Hospitals	25	23–25

## Degree of Specialization — Diagnosis Related Groups

Similar to the MDC analysis, we examined the average number and range of DRGs treated in Kansas specialty and general hospitals (as noted above, diagnoses are grouped into more than 500 DRGs). As shown in Table 5, this DRG analysis mirrors the results of the MDC analysis — specialty hospitals treat patients who fall within a more limited range of diagnoses than do general hospitals.

**Table 5. DRGs Treated in Specialty and General Hospitals (1997–2003)**

	<b>Average Number of DRGs (per hospital)</b>	<b>Range of DRGs (per hospital)</b>
Specialty Hospitals	85	38–180
General Hospitals	412	351–500

## Inpatient-Outpatient Service Mix

As noted above, research has shown that some specialty hospitals are primarily outpatient facilities that resemble ambulatory surgical centers, while others are more like general hospitals. We compared the proportion of inpatient business in general hospitals and specialty hospitals overall and then in the different types of specialty hospitals. Specialty hospitals were

stratified into two groups for this assessment — cardiac hospitals (Kansas Heart Hospital and Galichia Heart Hospital) and orthopedic/surgical hospitals (Kansas City Orthopaedic Institute, Manhattan Surgical Center, Kansas Surgery & Recovery Center, Surgical & Diagnostic Center of Great Bend, Emporia Surgical Hospital, Salina Surgical Hospital, and Doctor’s Hospital). The proportion of inpatient business is measured by dividing aggregate inpatient charges by aggregate total charges for all years of service. The results are shown in Table 6.

**Table 6. Proportion of Inpatient Business at Specialty and General Hospitals (1997–2003)**

Hospital Type	Inpatient Charges/ Total Charges
General Hospitals	65%
All Specialty Hospitals	63%
Cardiac Hospitals	83%
Orthopedic and Surgical Hospitals	41%

Taken as a group, specialty hospitals are similar to general hospitals in the proportion of business they conduct on an inpatient basis. Different types of specialty hospitals, however, differ greatly on this measure. As shown in the table, cardiac hospitals are predominantly inpatient facilities and orthopedic and surgical hospitals are predominantly outpatient facilities.

**Payer Mix**

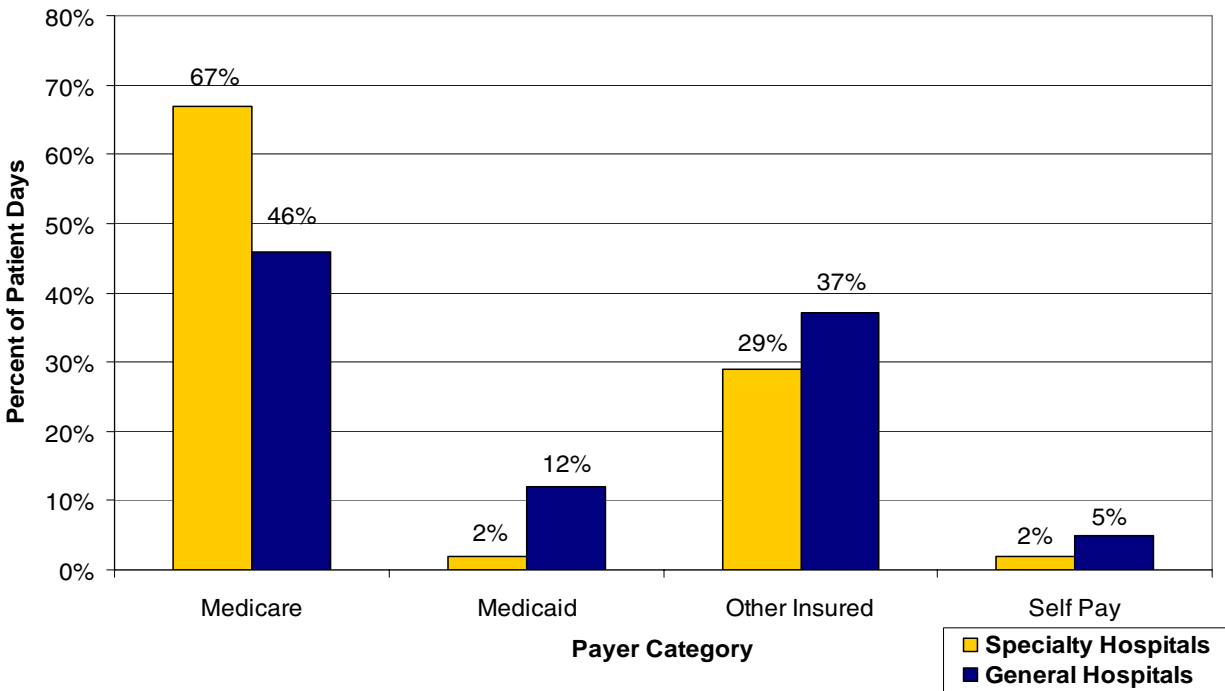
A common criticism of specialty hospitals is that they treat a disproportionate number of Medicare and other insured patients and do not treat their “fair share” of Medicaid patients and the uninsured. In addition, research conducted by MedPAC attributed much of the interest in establishing specialty hospitals to the fact that some Medicare DRGs are more profitable than others, due to changes over time in technology and the resources required to treat these cases. Specialty hospitals treat a greater proportion of these high profit Medicare cases than general hospitals (MedPAC, 2005).

Figure 2 shows overall payer mix at Kansas specialty and general hospitals, measured as the percentage of patient days covered by each payer category — Medicare, Medicaid, otherwise



insured (Blue Cross and Blue Shield and other third party payers), and self pay.<sup>9</sup> Payer mix is shown for 2003, when the specialty hospitals in the study had been open for at least two years. (One specialty hospital did not report payer data, so the specialty hospital figures represent eight of the nine facilities in the study.)

**Figure 2. Kansas Specialty Hospitals Treated a Higher Proportion of Medicare Patients and Lower Proportions of Medicaid and Uninsured Patients than Kansas General Hospitals in 2003**



As illustrated in Figure 2, the proportion of Medicare days in Kansas specialty hospitals is higher than in Kansas general hospitals. In addition, the proportion of Medicaid and uninsured patient days in specialty hospitals is only a fraction of that in general hospitals. Payer mix in both specialty and general hospitals varies by location and service mix.

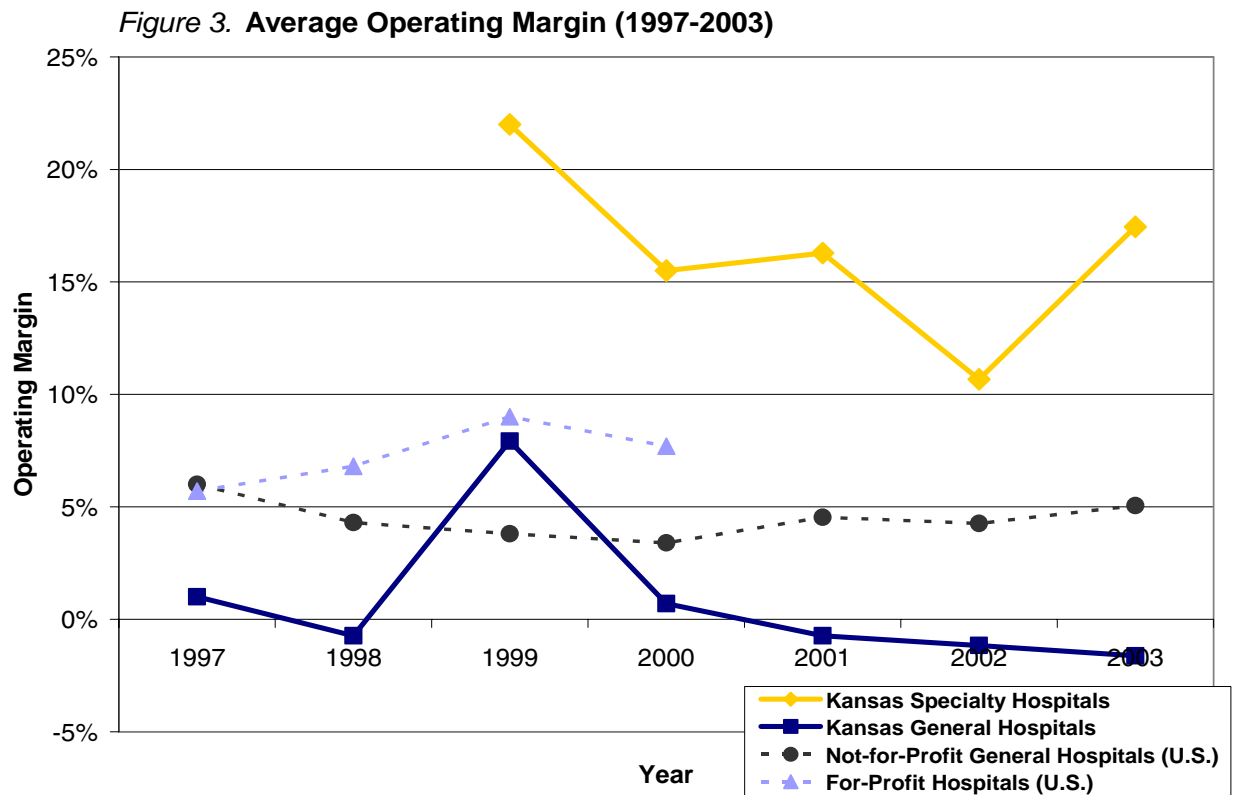
CMS found that the sum of specialty hospital taxes and uncompensated care exceeds the amount of uncompensated care provided by general hospitals, most of which are not-for-profit and exempt from taxation (Greenwald et al., 2006; U.S. DHHS, 2005). Nevertheless, these data underscore that a legitimate policy debate still exists about the responsibility of health care

<sup>9</sup> Patients in the “self pay” category are those who are not covered by third party insurance. They are also referred to in this report as “uninsured” or those who pay for services “out-of-pocket.”

providers, who operate under state licensure, to treat a representative proportion of the population in need of care. This issue is addressed further in the discussion section of the report.

## Profit Margins

Figure 3 shows average operating margins, as reported in hospital cost reports, for Kansas specialty and general hospitals. (Operating margin is computed by subtracting operating expenses from operating revenue and dividing the remainder by operating revenue.) For comparison purposes, operating margins of not-for-profit and for-profit general hospitals in the United States are also shown.



Notes: Data for Kansas specialty and general hospitals are from Medicare cost reports. Data for U.S. not-for-profit and for-profit general hospitals from 1997 to 2000 are from MedPAC. MedPAC stopped reporting on operating margins after 2000. Data for U.S. not-for-profit general hospitals from 2001 to 2003 are from Solucient Inc. For-profit hospital data for 2001 to 2003 are not available.

In assessing these figures, several caveats are important. First, as detailed in the note to the chart, the sources are different for much of these data. Second, although we believe that the data presented in the hospital cost reports are intended to represent after-tax margins for the specialty hospitals, the cost report includes no clear instructions on this point. It is possible, therefore, that

hospitals interpret the reporting requirements differently. We were unable to clarify this issue, despite discussions with several hospital cost report accountants and the Medicare fiscal intermediary for Kansas.

Third, two recent studies conclude that Medicare cost reports alone may not be a reliable indicator of the financial performance of hospitals (Chen et al., 2005; Chen et al., 2004). Finally, we are unable to fully explain the abrupt changes in Kansas general hospital margins in 1999 and specialty hospital margins in 2000 and 2002. The general hospital figure may be the result of unusually high margins reported by several hospitals during that year; the reason for these high margins is unclear and likely unique to those facilities. The fluctuation in the specialty hospital data is likely a result, in part, of the small number of facilities and the fact that some specialty hospitals were still in a start-up phase during this period.

Although these data problems obscure the issue to some extent, the chart illustrates the high profit margins that can be achieved in specialty hospitals. This is not unexpected; as discussed above, recent research demonstrates that specialty hospitals treat a more profitable mix of patients than general hospitals. The high proportion of specialty hospital patient days that are covered by Medicare raises a potentially volatile policy issue regarding the role of public funds in generating high profits in investor-owned hospitals.

## **SPECIALTY HOSPITAL COMPETITION**

An aspect of the specialty hospital debate that is not settled is the impact of specialty hospital competition on general hospitals. This section of the report examines this issue and describes specialty hospital service areas and the health care markets in which they operate.

### **Specialty Hospital Service Areas**

To determine the general hospitals with which specialty hospitals compete, we first established the service area for each specialty hospital in its service line(s) — i.e., the geographic area in which most of the specialty hospital's patients within the service line DRG reside. A common method of defining the service area of a hospital is to array the zip code areas in which its patients reside from highest to lowest by number of discharges. The service area is then

typically defined as the zip code areas that constitute the first 70 to 80 percent of patient volume. This standard hospital industry definition, however, is inappropriate in the case of specialty hospitals. Although specialty hospitals, like most hospitals, draw many patients from the area immediately surrounding the facility, they also tend to draw patients from a broader, more diffuse region because of their specialty focus. Use of the 70 to 80 percent standard, therefore, creates exceptionally large service areas in some cases and does not allow a straightforward determination of general hospital competitors.

As a result, for purposes of this analysis, we narrowed the definition of service area for a specialty hospital to encompass the zip code areas that constitute the first 50 percent of patient volume in each specialty hospital's service line(s). This standard identifies a service area for each specialty hospital that is both reasonable in size and includes most of the facility's patients in its service lines. As we did in determining service lines, we aggregated data from all years of operation for each specialty hospital. Using this method, specialty hospital service areas ranged in size from two zip code areas constituting a single service line to 34 zip code areas constituting two service lines.

## **Market Analysis**

As discussed above, specialty hospitals in Kansas operate in six distinct market areas. Two of these — the Kansas City and Wichita metropolitan areas — are relatively large urban markets with multiple general hospital competitors. The remaining Kansas specialty hospitals are located in four smaller, rural markets, each of which includes only one or two general hospital competitors. The entry of specialty hospitals into these very different environments results in different impacts on the general hospital competitors and the markets themselves. In this section of the report, we examine these markets and describe the impact of specialty hospital entry on utilization of the cases most commonly treated in the specialty hospitals.

We assessed specialty hospital service line volume at each of the specialty hospitals and the general hospitals with which they compete. For each specialty hospital, we identified the general hospitals that also provide the specialty hospital service lines (defined by DRG) to patients from

the specialty hospital service area. General hospital competitors and the makeup of the market areas are further described below.

We also compared utilization trends for service line cases from each specialty hospital service area to utilization trends for the same types of cases in Kansas general hospitals that do not face direct specialty hospital competition. In selecting the comparison group, we attempted to balance hospital complexity and the likelihood that a hospital provides the service line with a desire to identify facilities that face minimal specialty hospital competition. The resulting comparison group comprises the 10 Kansas general hospitals that have at least 70 beds and are 60 or more miles from a specialty hospital.

We recognize that there are patients who travel more than 60 miles for hospital services, particularly for specialty procedures. Excluding appropriately sized hospitals that are 60–80 miles from a specialty hospital from the comparison group, however, would diminish the value of the group considerably by eliminating hospitals that treat substantial numbers of service line cases (in some instances, leaving virtually no hospitals that conduct these cases in the comparison group). Sixty miles was chosen as the cutoff, therefore, to ensure a robust comparison group. We understand, however, that some of the resulting comparison hospitals may be influenced by the presence of a specialty hospital 60 or more miles distant.

The market areas and service lines discussed in this section of the report are representative of the results for all market areas and service lines that we analyzed. Full discussions and analyses of other market areas and service lines are included in Appendix A. For confidentiality purposes, data are aggregated and the specialty and general hospitals are not identified.

### ***The Kansas City Area Market***

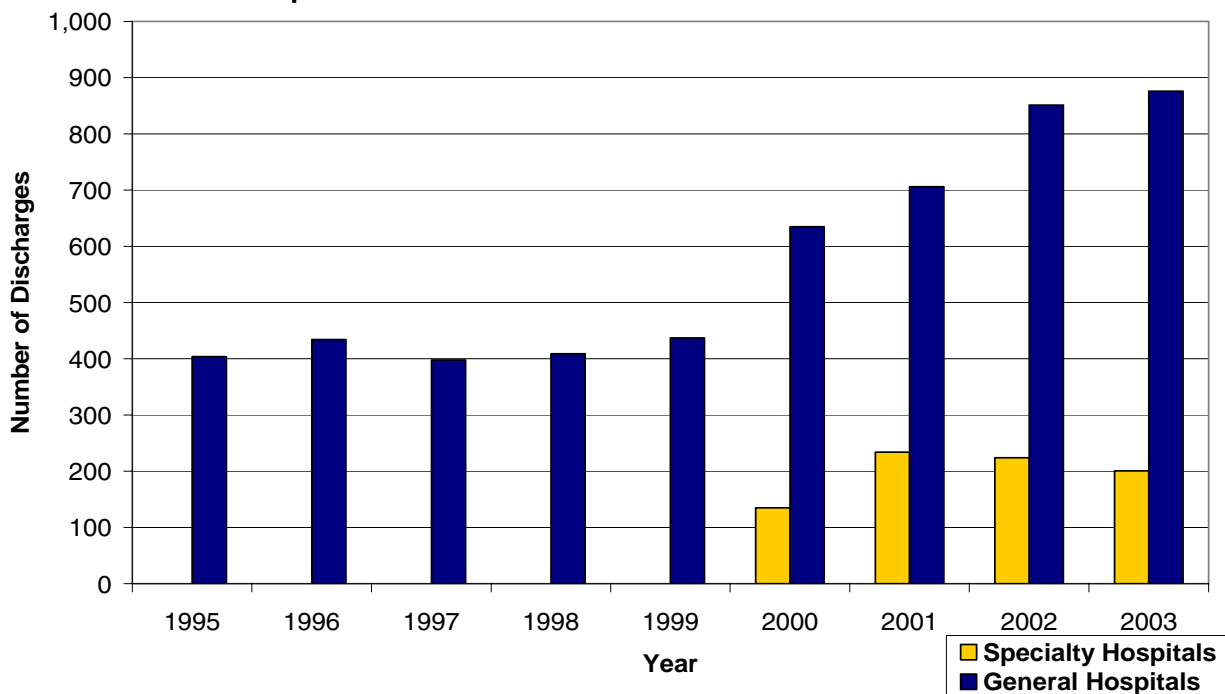
Two specialty hospitals located in the Kansas City area are included in this analysis — Kansas City Orthopaedic Institute and Doctor’s Hospital, both located in Leawood. (As discussed above, a third specialty hospital in this market, Heartland Surgical Specialty Hospital, located in Overland Park, opened in 2004 and is not included in the study.) Utilization in the specialty hospital service lines at specialty and general hospitals is discussed next.

### Service Line — DRG 209

Cases of DRG 209, Major Joint & Limb Reattachment Procedures of the Lower Extremity, make up a large proportion of the services provided by some specialty hospitals. Multiple general hospitals in the Kansas City area also provide this service to a large number of patients. In 1999, the year before specialty hospitals entered this market, 10 different Kansas hospitals discharged more than 400 DRG 209 patients from the service areas of the Kansas City specialty hospitals that maintain this service line. By 2003, 12 different Kansas hospitals discharged more than 1,000 such patients from these service areas. Most of these cases were conducted at the specialty hospitals and four general hospital competitors.

Figure 4 shows the volume of DRG 209 discharges from the service areas at specialty and general hospitals. As shown in this chart, the entry of specialty hospitals into the market in 2000 coincided with a sharp increase in the number of lower extremity joint replacements in the general hospitals. The entry of specialty hospitals, coupled with the increase in procedures at general hospitals, produced a sharp increase in the total number of these cases from the service areas, as shown in Figure 5.

**Figure 4. Entry of Specialty Hospitals into the Kansas City Market Coincided with Growth in the Number of DRG 209 Discharges from General Hospitals**



**Figure 5. Total DRG 209 Cases from the Kansas City Service Areas Have Increased Sharply Since the Entry of Specialty Hospitals into the Market**

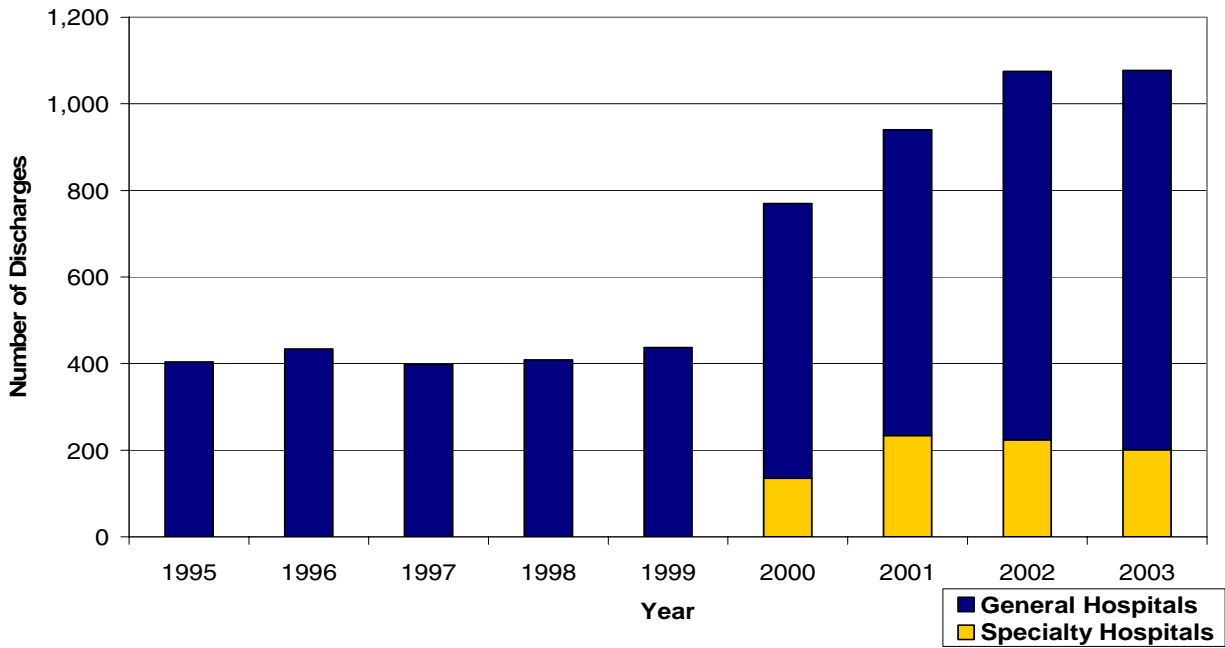
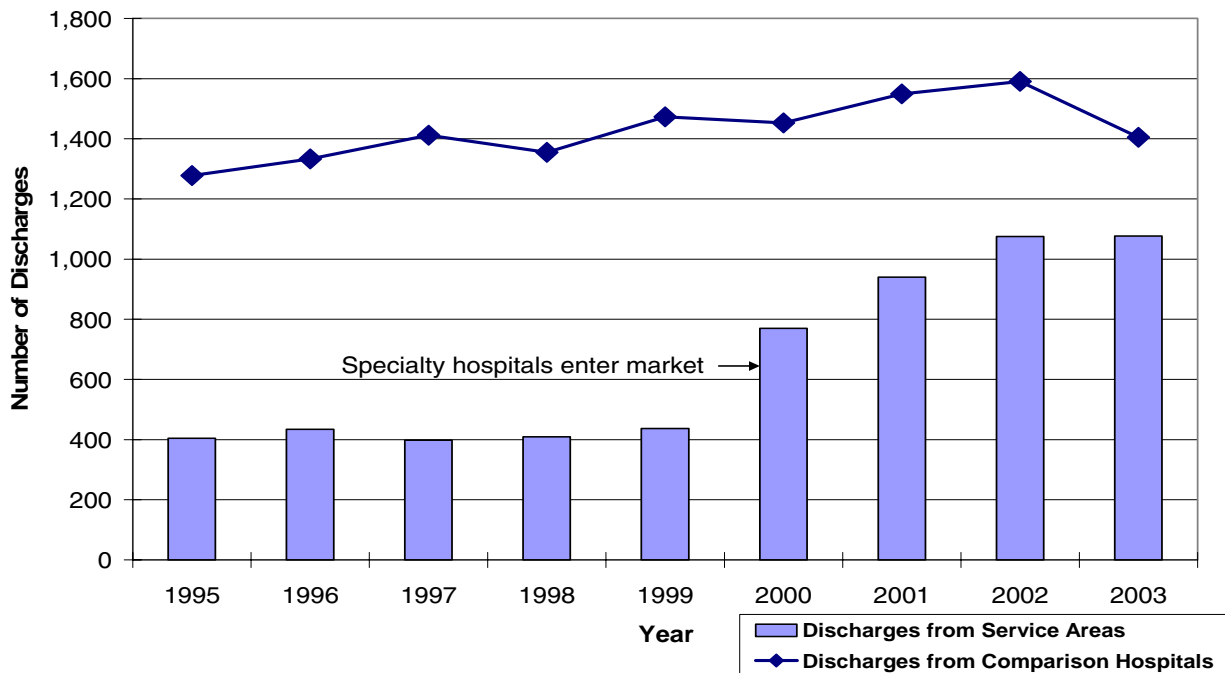


Figure 6 compares the growth in DRG 209 discharges from the Kansas City service areas to the growth in these cases treated at the comparison hospitals from 1995 to 2003.

**Figure 6. DRG 209 Discharges from the Kansas City Service Areas Have Increased at a Faster Rate than in Comparison Hospitals**



As shown in Figure 6, the volume of lower extremity joint replacements has grown at a faster rate in the Kansas City service areas than in comparison hospitals. Between 1995 and 2003, the number of these cases from the Kansas City service areas more than doubled, while utilization in the comparison hospitals grew by about 10 percent. The most dramatic increase in cases in the service areas occurred between 1999 and 2000, when specialty hospitals entered the market and, as shown in Figure 4, competing general hospitals substantially increased volume in this service line.

There may be several explanations for this growth trend in the service areas. It is possible, for example, that many patients who previously would have left the area for services instead received these services in Kansas City area hospitals. It is possible, as well, that the opening of the specialty hospitals drew new orthopedic surgeons into the Kansas City area or the general hospitals recruited additional orthopedists as a response to specialty hospital competition. A new physician may treat patients at both specialty and general hospitals, resulting in volume increases at both facilities. In addition, an increase in supply of physicians typically results in an increase in volume of procedures and previous research has established that physicians who may profit from referrals tend to make more such referrals (Casalino et al., 2003; Lynk and Longley, 2002; Mitchell, 2005; Mitchell, 1995). The magnitude of the difference in trends between the service area and the comparison hospitals suggests that the growth in the Kansas City area is not entirely the result of a patient-driven increase in demand for services, but an increase in the supply of providers.

### ***The Wichita Market***

Three specialty hospitals are located in Wichita and are included in this analysis — Kansas Heart Hospital, Galichia Heart Hospital, and Kansas Surgery & Recovery Center. (As discussed above, Kansas Spine Hospital opened in 2004 and is not included in the study.)

### **Service Line — DRG 209**

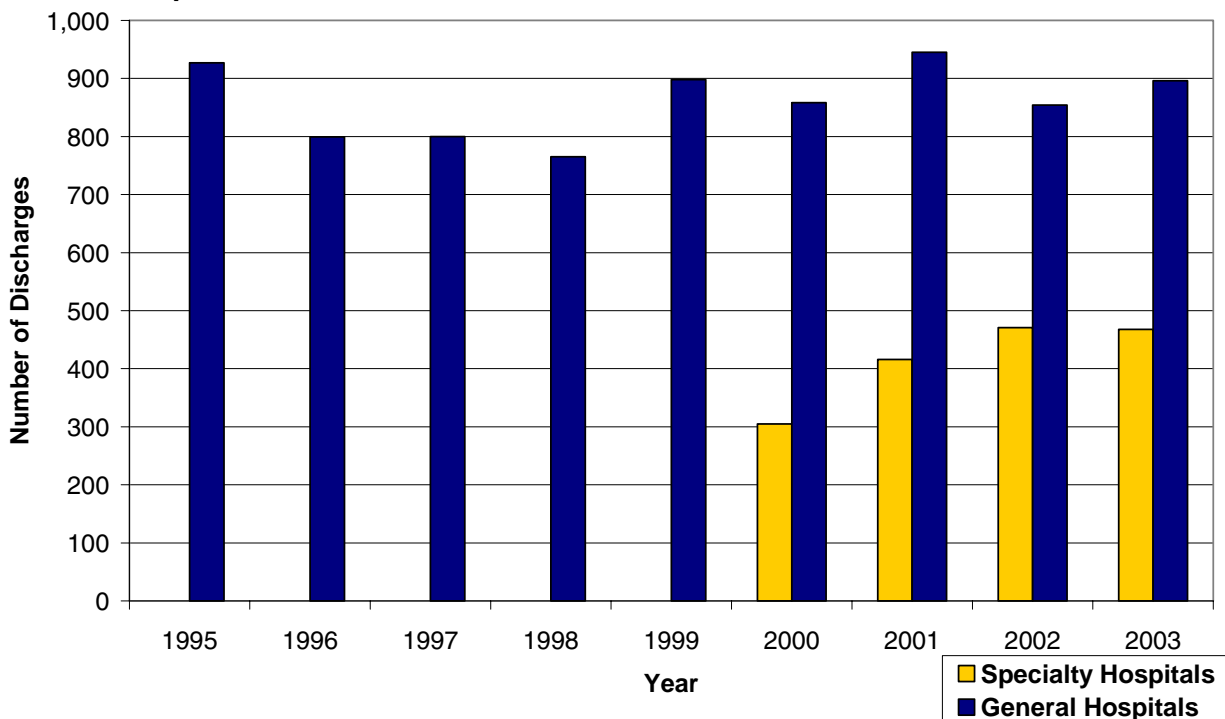
As in the Kansas City service areas, cases of DRG 209, Major Joint & Limb Reattachment Procedures of the Lower Extremity, make up a large proportion of the volume in Wichita specialty hospitals. Several general hospitals also provide this service line for a large number of



Wichita area residents. In 1999, the year before specialty hospitals entered this service line in the Wichita market, 15 Kansas hospitals conducted almost 900 lower extremity joint replacements on residents of the service areas of the Wichita specialty hospitals that provide this service line. In 2003, 17 Kansas hospitals carried out this procedure on residents of these service areas, and these facilities performed more than 1,300 cases. More than three-quarters of these cases were conducted at the specialty hospitals and at two Wichita area general hospitals.

Figure 7 shows the volume of DRG 209 cases from the Wichita service areas at specialty and general hospitals. The entry of specialty hospitals into this market has had little impact on the volume of cases treated in general hospitals, which remained relatively constant over the study period. As shown in Figure 8, however, the total number of DRG 209 cases from the service areas has increased sharply since specialty hospitals entered the market in 2000.

**Figure 7. Entry of Specialty Hospitals into the Wichita Market Has Had Little Impact on the Volume of DRG 209 Cases in Wichita General Hospitals**



**Figure 8. Total DRG 209 Cases from the Wichita Service Areas Have Increased Since the Entry of Specialty Hospitals into the Market**

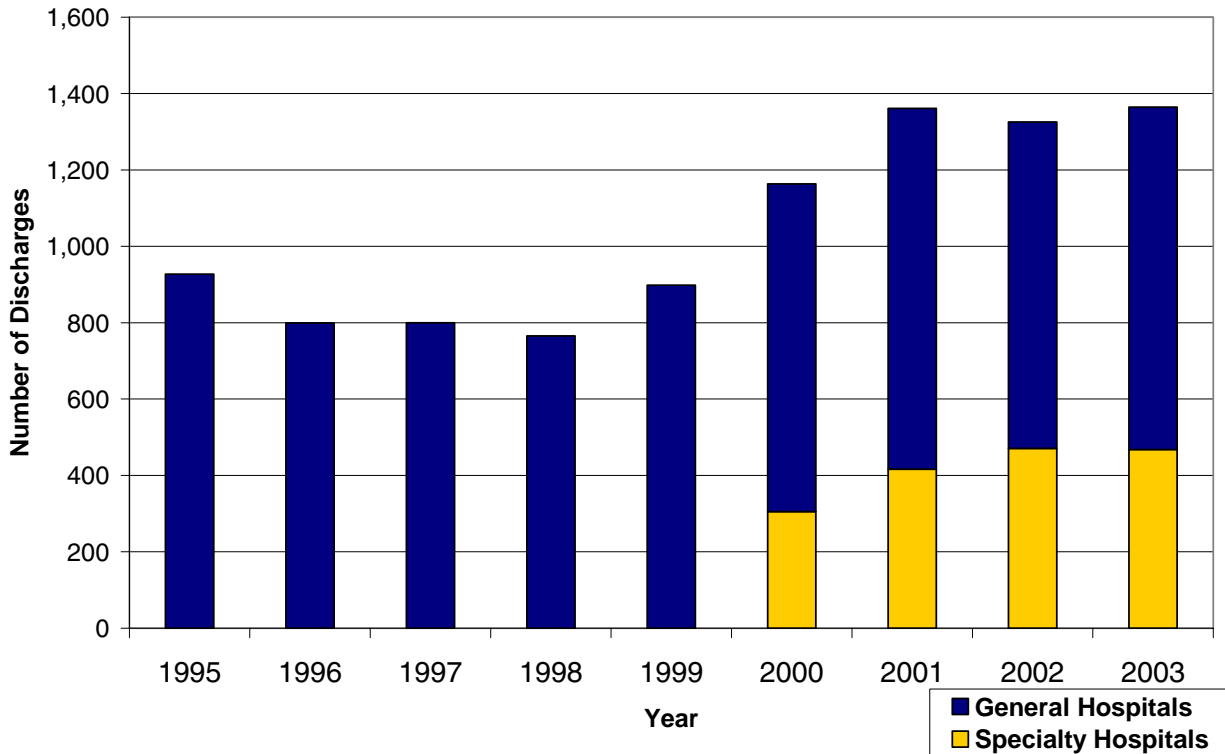
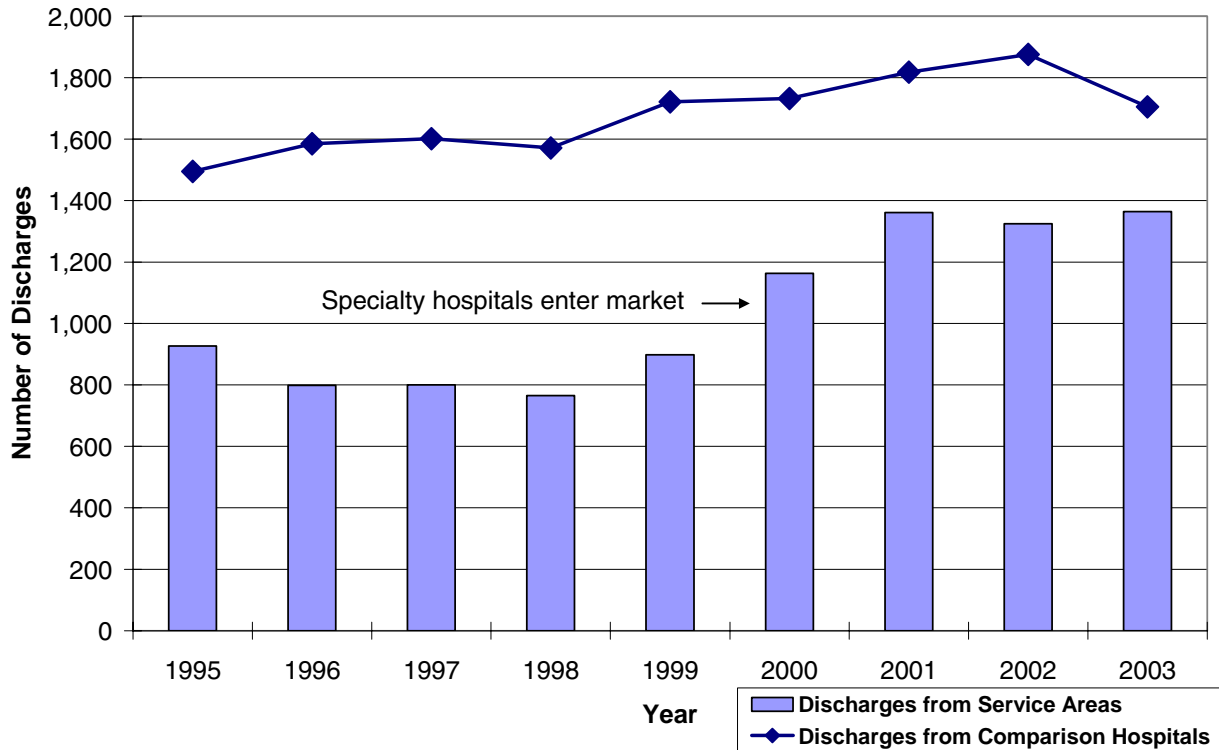


Figure 9 compares the growth in DRG 209 cases from the Wichita service areas to the growth of these cases at the comparison hospitals. The rate of growth in the service areas is similar to that exhibited at the comparison hospitals. Unlike the Kansas City service areas, the data for Wichita do not support the notion of a provider supply driven growth in case volume for this service line. The seeming lack of a negative impact on service line volume at general hospitals and the similar overall growth trend to comparison hospitals suggests that the Wichita specialty hospitals are meeting existing demand for services and are not contributing to an overall increase in utilization.

**Figure 9. DRG 209 Cases from the Wichita Service Areas Have Grown at a Similar Rate as in Comparison Hospitals (1995-2003)**

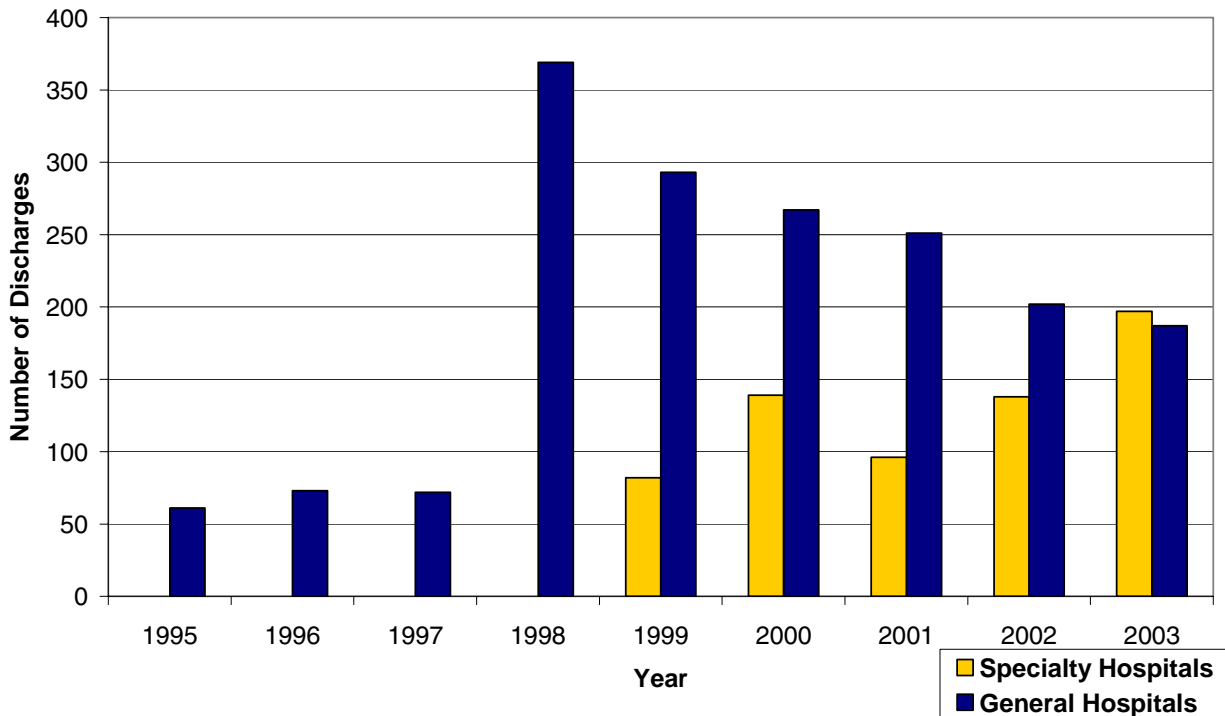


**Service Line — DRG 107**

DRG 107, Coronary Bypass with Cardiac Catheterization, is performed in cardiovascular surgery departments at both specialty and general hospitals. In addition to the specialty hospitals, two Wichita hospitals provide the majority of these procedures to residents of the Wichita service areas. As shown in Figure 10, general hospitals experienced a large increase in the number of DRG 107 cases from the Wichita service areas between 1997 and 1998. This increase may reflect, as discussed above, the location in the area of new physicians who perform this procedure.<sup>10</sup> Following the entry of specialty hospitals into the market in 1999, however, the number of cases performed at the general hospitals has steadily declined. By 2003, specialty hospitals provided a greater number of these procedures to residents of these service areas than general hospitals. As shown in Figure 11, the total number of cases from the service area has remained relatively constant since 1998.

<sup>10</sup> Alternatively, given the size of the increase, it may reflect a data reporting issue, such as a change in the way that hospitals classify these types of cases.

**Figure 10. Entry of Specialty Hospitals into the Market Coincided with a Decline in the Number of DRG 107 Discharges from the Wichita Service Areas that were Treated in General Hospitals**



**Figure 11. Total Number of DRG 107 Discharges from the Wichita Service Areas Did Not Change with the Entry of Specialty Hospitals into the Market**

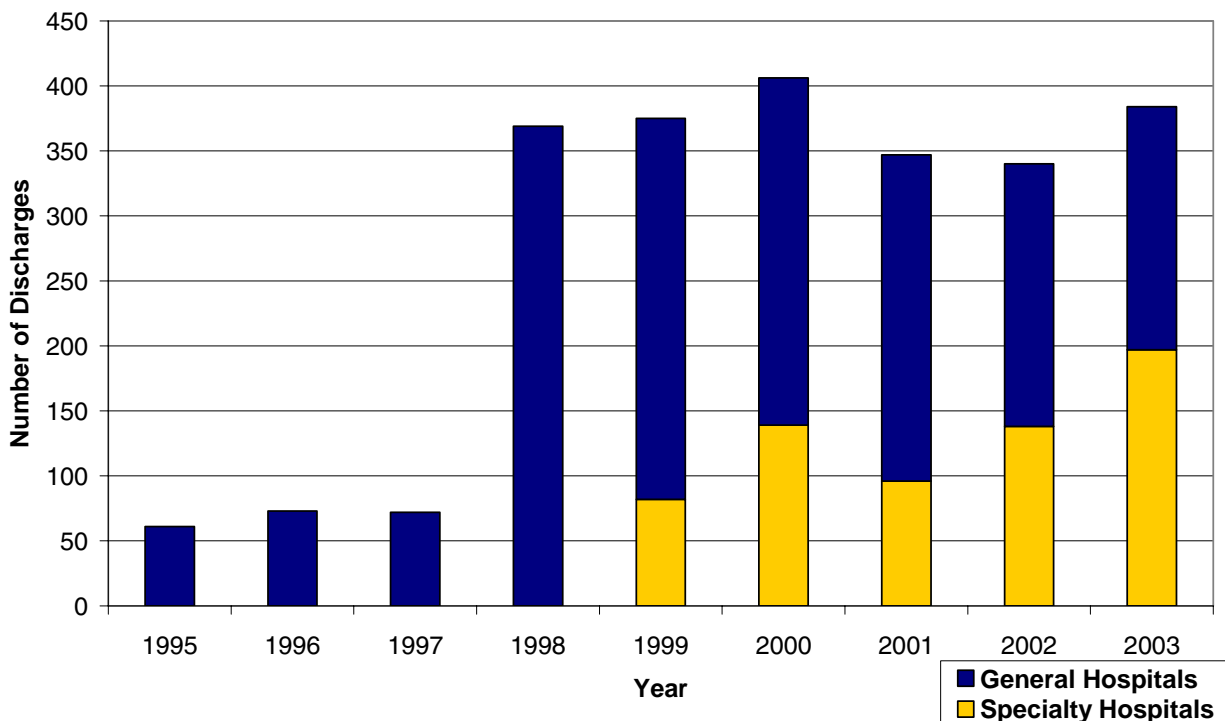
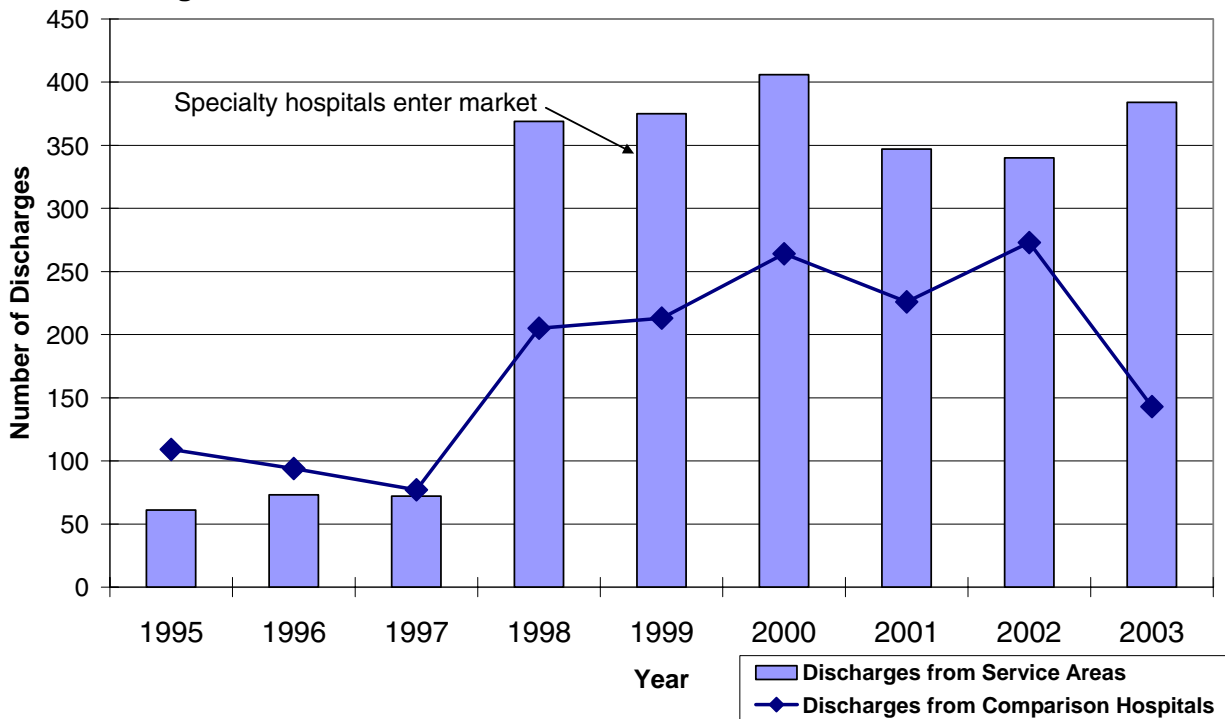


Figure 12 compares the change in volume of DRG 107 cases from the Wichita service areas to the change in volume of these cases at comparison hospitals from 1995 to 2003. These data show a similar utilization trend for cases from the Wichita service areas and in the comparison hospitals through 2002. In 2003, the number of cases performed at comparison hospitals dropped precipitously, due largely to a sharp decrease in procedures at one facility. Rather than indicating the start of a downward trend in cases in areas not impacted by specialty hospital competition, therefore, this decline is probably the result of the loss of a cardiac surgeon or other change in that facility's open heart surgery program.

**Figure 12. DRG 107 Discharges from the Wichita Service Areas Exhibited a Utilization Trend Similar to that in Comparison Hospitals through 2002**



### **Rural Markets**

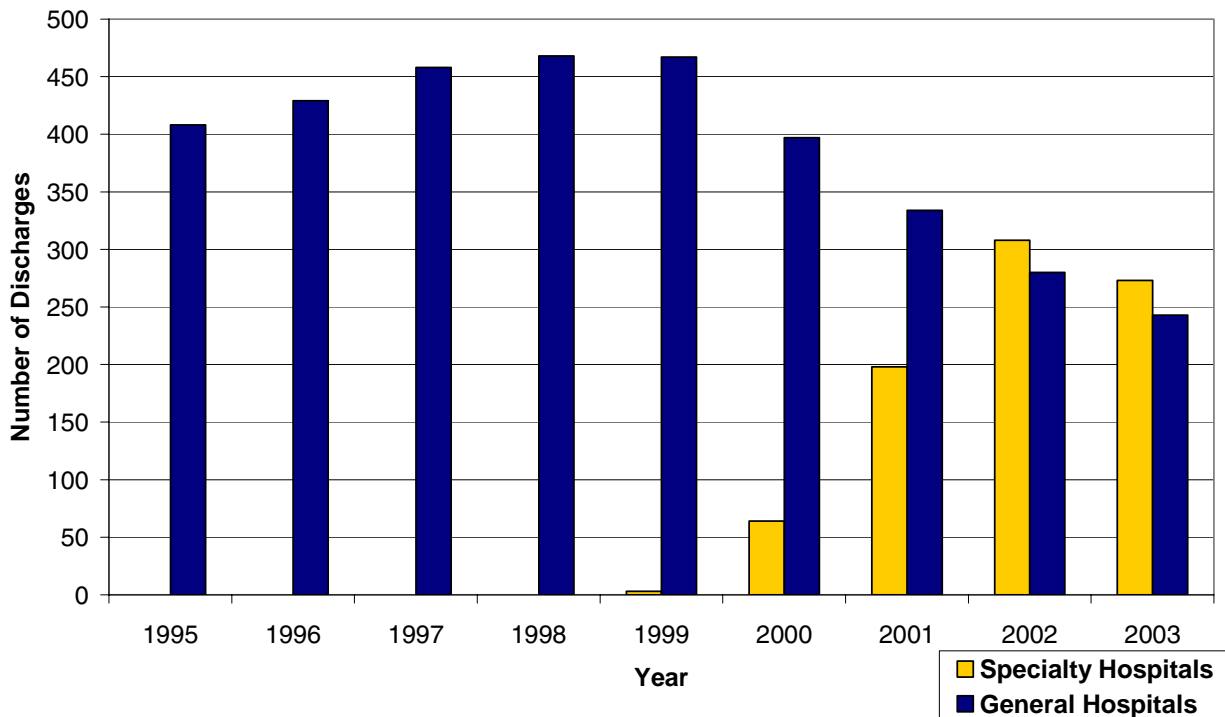
Four Kansas specialty hospitals are located in rural markets — Salina Surgical Hospital, Manhattan Surgical Center, Surgical & Diagnostic Center of Great Bend, and Emporia Surgical Hospital. Unlike the Kansas City area and Wichita specialty hospitals discussed above, each of the rural specialty hospitals competes primarily with only one or two general hospitals. Utilization of the rural specialty hospital service lines at both the rural specialty hospitals and their general hospital competitors are discussed in this section of the report. As in the rest of the

report, the specialty hospitals and their competitors are grouped for reporting and analysis purposes and individual facilities are not identified.

**Service Line — DRG 359**

DRG 359, Uterine & Adnexa Procedures for Non-Malignancy without Complications and Comorbidities, more commonly known as hysterectomy or biopsy of the uterus or fallopian tubes, is the predominant service line in the rural specialty hospitals. Figure 13 shows the volume of these cases from the rural service areas that were treated at specialty and general hospitals. These data demonstrate a clear decline in cases treated in general hospitals as rural specialty hospitals entered the market and increased their case volume. Figure 14 shows that the total number of DRG 359 cases from the rural service areas increased during this period.

**Figure 13. Entry of Specialty Hospitals into Rural Markets Coincided with a Decline in DRG 359 Discharges from these Markets that were Treated in General Hospitals**



**Figure 14. Total DRG 359 Cases from the Rural Service Areas Have Increased Since the Entry of Specialty Hospitals into the Market**

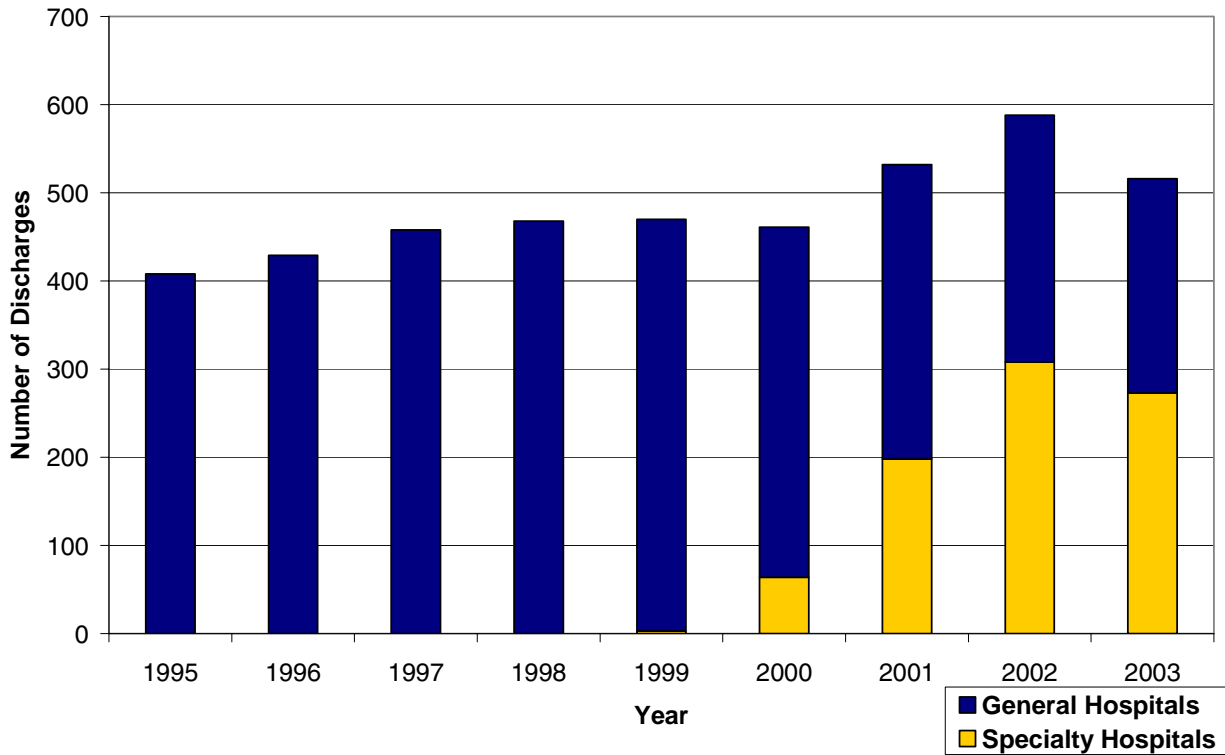
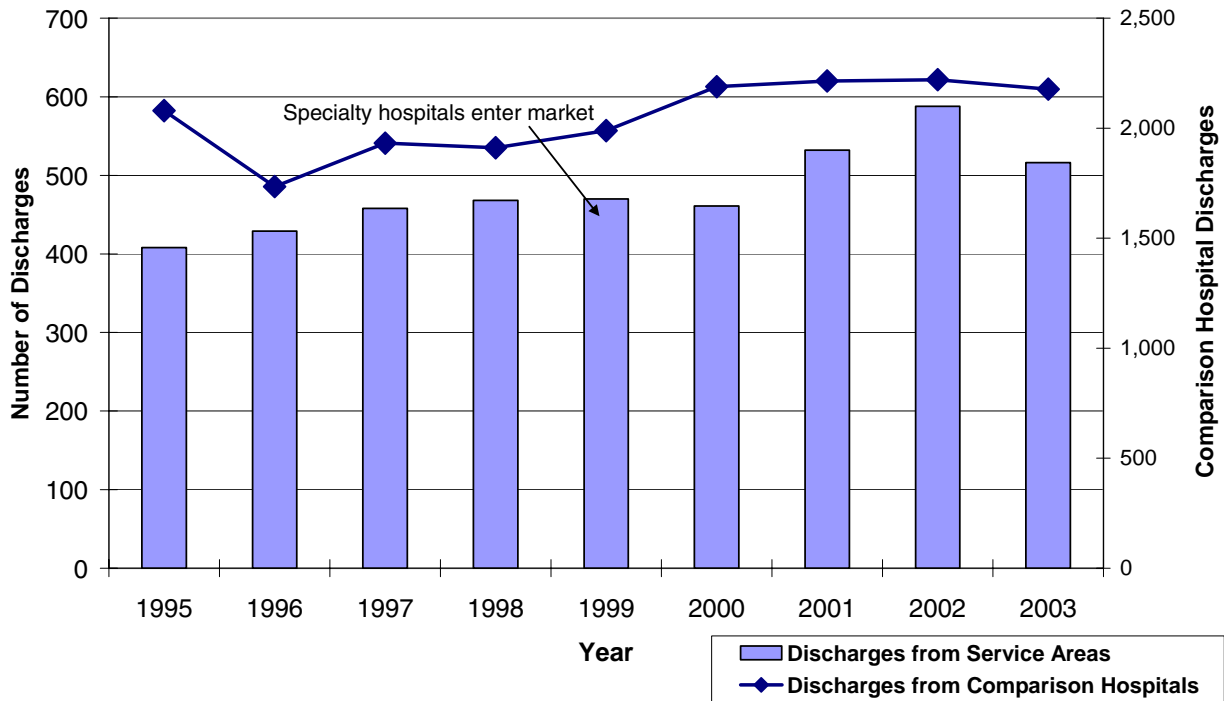


Figure 15 compares the volume of hysterectomies/biopsies from the rural service areas to the volume of these cases at the comparison hospitals from 1995 to 2003. The similar utilization trends suggest that despite the apparent impact of the specialty hospitals on the total number of cases and the number of cases treated at general hospital competitors, entry of specialty hospitals into the rural markets has not contributed to a supply driven increase in utilization.

**Figure 15. DRG 359 Discharges from Rural Service Areas and in Comparison Hospitals Have Shown a Similar Utilization Pattern (1995-2003)**





## DISCUSSION

As noted in the introduction, this study set out to provide insight into the following questions: (1) How do Kansas specialty hospitals differ in the range of services offered and in degree of specialization? (2) How do utilization, payer mix, and other indicators differ between Kansas specialty and general hospitals? (3) What is the impact of specialty hospital competition on utilization of general hospitals? and (4) Have specialty hospitals led to an increase in Kansans' utilization of health care services? The data we assessed provide clear answers to the first two questions and mixed results on the others.

### RANGE OF SERVICES AND DEGREE OF SPECIALIZATION

It should come as no surprise that specialty hospitals focus on a narrow range of services and concentrate on fewer types of patients than general hospitals. That is their intent and what they are designed to do. The degree of specialization of some of these facilities, however, is notable. In three of the nine Kansas specialty hospitals in the study, more than two-thirds of all patients are classified into the same DRG. In a fourth specialty hospital, close to half the patients share a DRG. These facilities truly represent “focused factories” of care.

Not every specialty hospital is so focused. All, however, have at least one DRG that represents more than 10 percent of their total inpatient volume. Few of the state's general hospitals achieve even that degree of specialization. Specialty hospitals treat a narrower range of diagnoses than general hospitals and two types of cases in particular — lower extremity joint replacements and hysterectomies — make up a substantial proportion of all cases treated at specialty hospitals, particularly in those facilities that focus on orthopedic and other surgical procedures.

Specialty hospitals are primarily providers of surgical services. At every Kansas specialty hospital, more than 70 percent of cases are surgeries. On the whole, surgical cases constitute 80 percent of all cases at specialty hospitals. In contrast, only 28 percent of all general hospital cases are surgeries and no general hospital exceeds 36 percent in its proportion of surgical cases. There are probably many reasons why specialty hospitals concentrate so heavily on surgical cases. Ease in scheduling operating room time, for example, is often cited by surgeons as a rationale for

practicing in specialty hospitals (MedPAC, 2005). There are financial motivations, as well; surgical procedures are generally more profitable for hospitals than medical procedures, and specialty hospitals are known to focus on profitable cases (Ginsburg and Grossman, 2005; MedPAC, 2005).

Many specialty hospitals are also primarily providers of outpatient services. Except for the state's two cardiac hospitals, nearly 60 percent of the charges in specialty hospitals are generated on the outpatient side. In contrast, about 35 percent of general hospital and 17 percent of cardiac hospital business is outpatient.

Finally, specialty hospitals treat relatively few complex patients. Only one of the specialty hospital lines of business — DRG 358, Uterine & Adnexa Procedures for Non-Malignancy with Complications and Comorbidities — includes patients with other illnesses or medical conditions. Several of the most common DRGs treated in general hospitals, however, include such patients (e.g., DRG 89, Simple Pneumonia & Pleurisy, Age Greater than 17, with Complications and Comorbidities and DRG 182, Esophagitis, Gastroenteritis, & Miscellaneous Digestive Disorders, Age Greater than 17, with Complications and Comorbidities).

## **SERVICES TO MEDICAID BENEFICIARIES AND THE UNINSURED**

Specialty and general hospitals differ substantially in the types of insurance coverage held by their patients. Two-thirds of specialty hospital patient days are accounted for by Medicare beneficiaries, compared to less than half of general hospital days. Specialty hospitals also provide proportionally fewer patient days for Medicaid and uninsured patients than general hospitals. Medicaid beneficiaries make up 12 percent of general hospital patient days compared with only two percent for specialty hospitals. Patients who pay out-of-pocket for services constitute five percent of general hospital patient days and two percent of specialty hospital patient days.

Critics of specialty hospitals often point to the relatively low proportion of Medicaid and uninsured patients treated in these facilities as evidence of their unfair competitive advantage over general hospitals. Like other businesses, hospitals are averse to providing services to

customers who cannot pay, or for whom payment is relatively low, as is often the case with Medicaid beneficiaries. Most general hospitals, however, are not-for-profit or public facilities and are compelled by mission or a spirit of community service to treat these patients. In addition, hospitals are required by federal law to serve all patients who enter their emergency rooms, regardless of ability to pay. Specialty hospitals, which are for-profit facilities and often don't have emergency departments, are therefore not subject to these same mission-driven or legal obligations.

Supporters of specialty hospitals counter this argument by pointing out that Medicaid beneficiaries tend to be extensive users of obstetrics and pediatric services, which are generally not provided in specialty hospitals. In addition, they maintain that for-profit facilities pay taxes and the amount of these tax payments exceeds the amount of uncompensated care provided by not-for-profit general hospitals. This was a key finding of the CMS study of specialty hospitals (Greenwald et al., 2006; U.S. DHHS, 2005). Others, however, argue that the methodology of determining “community benefit” by comparing the taxes paid by a for-profit organization with the value of social services provided by a tax-exempt entity is unfair and biased. In addition, the taxes paid by for-profit health care providers are not specifically earmarked to services for the uninsured (Guterman 2006). This example highlights the difficulty in making an “apples-to-apples” comparison between charity care services provided by not-for-profit providers and taxes paid by for-profit entities.

The issues of who should, or must, be treated in hospitals and the obligation, if any, of providers to treat certain groups of patients are important public policy questions. Except for the requirement that all patients who seek services in an emergency room receive treatment regardless of ability to pay, hospitals are under no explicit obligation to treat any particular payer class or group of patients.<sup>11</sup> Hospitals, however, operate under state authority granted through their licenses. Although licensure is generally intended as an imprimatur of quality, it may be reasonable to require certain actions that are in the public interest, such as treating a representative proportion of the population in need of care, in return for this state “stamp of

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<sup>11</sup> Not-for-profit entities must provide a community benefit in exchange for their tax-exempt status; in hospitals, this is generally interpreted as a requirement to provide charity care.

approval.” As the numbers of uninsured and underinsured increase, the responsibility of providers to treat these populations, and their ability to do so, will become ever larger health policy issues. To the extent that some providers do not treat these populations, the burden on other facilities to provide for their care will increase.

## **THE IMPACT OF SPECIALTY HOSPITALS ON GENERAL HOSPITALS**

The impact of specialty hospitals on the general hospitals with which they compete remains a difficult issue to analyze. Just as the entry of specialty hospitals into the marketplace has not had a demonstrable effect on general hospitals’ proportion of surgical cases, as illustrated in Figure 1, they also haven’t clearly impacted overall general hospital revenue and margins. Like other businesses that face competition, most general hospitals do not remain static and allow themselves to be driven from the marketplace. Instead, they respond dynamically by cutting costs, engaging in marketing efforts, starting new lines of business, and recruiting new physicians, among other strategies.

GAO reports that nearly all general hospitals make operational and clinical service changes to remain competitive, whether or not they face specialty hospital competition (U.S. GAO, 2006). Another recent study indicates that general hospitals and physicians are aggressively developing and marketing profitable specialty service lines (Berenson et al., 2006). Such responses, however, are not easily measured through analysis of the types of data included in the hospital discharge database and Medicare cost reports.

Nevertheless, in some cases, the competitive impact of specialty hospitals on their general hospital competitors is clear. In the rural service areas, for example, as specialty hospitals opened and began treating patients in their lines of business, volume in these same lines of business at general hospitals declined. This same phenomenon can be seen in the Wichita service areas for cardiac DRGs 107 and 125 (discussed in the Appendix A). What is still unknown, at this point, is the impact of volume declines in these lines of business on the long-term financial health of the general hospitals and their ability to provide community benefits. We know that these DRGs are high revenue, high profit procedures for most hospitals and declining case volume will cause a

loss of revenue. We need more information, however, on how general hospitals have responded to these competitive pressures.

The negative impact, if any, of specialty hospital competition may be particularly profound in the rural service areas. As noted, these areas are each home to only one or two general hospitals, making them particularly vulnerable to access problems if these hospitals face financial difficulties leading to declines in service. In addition, at least three of the general hospitals in the rural service areas support CAHs and other rural providers in rural health networks (several urban hospitals in the Kansas City and Wichita areas are also rural health network supporting hospitals). These supporting hospitals play key roles in these networks, providing clinical, administrative, and other support services to network members. Financial hardships at the supporting hospitals, therefore, may impact the delivery of services not just in the area surrounding these facilities, but in rural communities throughout the state.<sup>12</sup>

For other service lines and service areas, the direct impact of specialty hospitals on general hospital utilization is not as apparent. Entry of specialty hospitals into the Kansas City service areas, for example, did not result in a decline in volume of lower extremity joint replacements in area general hospitals, even though the specialty hospitals perform large numbers of these procedures. Instead, the total volume of cases from the service area increased and specialty and general hospitals shared in this growth.

Specialty hospitals may get patients by taking market share from general hospitals. If the specialty hospitals were not there, patients in need of services would presumably be treated by the existing providers, general hospitals. Yet, when the entry of additional providers into a market spurs growth in service volume, both the specialty and general hospitals may benefit from the additional utilization.

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<sup>12</sup> CAHs and rural health networks have been developed as part of the Kansas Rural Health Options Project (KRHOP), a federally funded partnership between KHA, KDHE, the Kansas Board of Emergency Medical Services, and the Kansas Medical Society. Eighty-three small rural hospitals in Kansas are certified as CAHs, more than two-thirds of all acute care hospitals in the state.

Following the opening of specialty hospitals in the Kansas City area, the number of cases of DRGs 209 and 500 (discussed in the Appendix A) grew at a faster rate than in comparison hospitals. The data suggest that this utilization growth is the result of an increase in supply of providers inducing additional demand. The disparity in utilization growth rates between specialty hospital service areas and comparison hospitals, however, is evident only for these two lines of business in the Kansas City area. For other lines of business in other service areas, utilization trends are similar to those in comparison hospitals or show no clear pattern.

## **POLICY OPTIONS**

The evidence on the impact of specialty hospitals is mixed. But even if they do cause financial harm to their general hospital competitors and do induce unnecessary care, the policy options available at the state level to address these issues are limited. GAO found that specialty hospitals tend to locate in states, like Kansas, where hospitals are permitted to add beds or build new facilities without first obtaining state approval for such increases in capacity (U.S. GAO, 2003). Kansas long ago abolished its Certificate of Need (CON) program, the avenue through which hospital construction and expansion were regulated. Although there have been discussions about reviving CON regulations (specifically to stem the growth of specialty hospitals), there does not appear to be a political consensus in the state to increase regulation in this way. In addition, the various stakeholders involved in this debate have been unable to craft a CON proposal that does not also affect the ability of general hospitals to grow and add new programs, services, and facilities.

Another approach to addressing this issue is to change the requirements for hospital licensure, as proposed in House Bill 3013, introduced during the 2006 Kansas legislative session. This bill would have modified the definition of “general hospital” under Kansas law and created a new licensure category, “limited care center,” for specialty hospitals. The bill did not pass, however, and despite categorizing specialty hospitals more clearly for licensure purposes, would not have directly limited their development.

The federal government plays a much more direct role in addressing the policy and legal issues raised by specialty hospitals. For example, while the motivations of physicians and others

who start specialty hospitals are certainly varied and may include desires for more autonomy, less bureaucracy, and better patient care, it is also undoubtedly true that specialty hospital development is closely related to financial incentives in the Medicare inpatient PPS. MedPAC found that specific factors within the Medicare payment system result in some patients being more profitable to treat than others and these are the patients upon which specialty hospitals tend to focus (MedPAC, 2005). Changing the Medicare payment system to “level the playing field” is a federal, not a state, issue.

The federal government is taking steps to change Medicare payment to hospitals. CMS plans to phase in, over a three-year period, substantial revisions to the inpatient PPS to address concerns that the existing payment system creates incentives for specialty hospitals to “cherry pick” profitable cases. These revisions will tie payment more closely to cost and adjust for severity of illness (CMS, 2006).

The other financial incentive tied to specialty hospital development is the potential for physician owners to profit from selective referrals of patients to their own facilities. This type of conflict of interest has long been recognized and federal law generally prohibits physicians from referring Medicare patients to facilities in which they or their immediate family members have financial interests. This self-referral prohibition, commonly known as the “Stark Law” after its chief congressional sponsor, includes an exception that permits physicians who have an ownership interest in an entire hospital to refer patients to that facility. This “whole hospital” exception is based on the premise that individual physicians are unlikely to own a large enough share of an entire hospital to realize substantial financial gain from referral to that facility. The Stark Law does prohibit physicians, however, from referring patients to a hospital department or subdivision in which they have a financial interest (U.S. GAO, 2003).

Specialty hospital critics claim that by providing a limited range of services, specialty hospitals are not “whole hospitals” and are, in effect, free standing hospital departments that should thus be subject to the provisions of the Stark Law. These critics point out that most physicians who invest in specialty hospitals retain their admitting privileges at competing general hospitals. As a result, they can select which of their patients to admit to the specialty hospital and

which to the general hospital (Iglehart, 2005). In addition, although the share of a specialty hospital owned by a single physician is typically very low, the share owned in the aggregate by physicians in revenue-sharing group practices is often much higher (U.S. GAO, 2003). The whole hospital exception to the Stark Law, therefore, may no longer be relevant to the evolving health care marketplace. Reinterpretation of the applicability of the whole hospital exception to specialty hospitals or an update of the Stark Law to close this loophole are both under the purview of the federal government.

Although the ability of the state to directly address the issues that drive the development of specialty hospitals is limited, there are actions that can be taken at the state level. The appropriations bill passed by the 2006 Kansas Legislature and signed by the governor mandates that the Kansas Health Policy Authority (KHPA) conduct studies of specialty hospitals and Kansas hospital licensure laws and develop recommendations concerning these issues, including appropriate definitions for “general hospital,” “special hospital,” and “specialty hospital.” KHPA is required to complete these studies by March 2007 and submit a report to the Legislature during the 2007 session (Kansas Legislature, 2006).

In hindsight, the growth in specialty hospitals in Kansas could probably have been predicted, given the regulatory environment in the state, well-recognized biases in the Medicare payment system, and the continuing evolution of medical practice and technology. The specialty hospital phenomenon has followed an explosion in outpatient facilities such as ambulatory surgery and diagnostic centers that arose in response to a similar regulatory, financial, and technological environment. Establishment and use of an organized and systematic data collection and monitoring scheme may allow better tracking of market developments and assist policymakers in anticipating, understanding, and responding to changes in the health system (including the unintended consequences of policy decisions made at both the state and federal levels).

Based on this analysis, KHI proposes the following options to Kansas policymakers:

- As part of its legislatively mandated studies on specialty hospitals and hospital licensure, KHPA should:



- Collect information directly from general hospitals on organizational, service, and other changes that have been made in response to specialty hospital competition.
  - Collect information directly from specialty hospitals on investors and ownership, including involvement of investors in other health care services and facilities (e.g., ambulatory surgery centers).
  - Collect quality of care data (e.g., mortality rates, surgical infection rates, readmissions) from specialty and general hospitals.
  - Assess the pros and cons of expanding the scope of licensure regulations to include issues such as provision of services to Medicaid and uninsured patients and collection of information on ownership and investor compensation arrangements.
  - Evaluate the reintroduction of a Certificate of Need program to assist in achieving state policy goals related to health facility, equipment, and service development.
- KHPA and KDHE, in cooperation with stakeholders such as the Kansas Hospital Association and Kansas Surgical Hospital Association, should establish a mandatory data collection and monitoring system that routinely gathers utilization, financial (including ownership, investor compensation arrangements, and investor involvement in other health care services and facilities), and quality of care data from general hospitals, specialty hospitals, and ambulatory surgery centers.

The direction being taken by the federal government — to modify Medicare payment to eliminate the perverse incentives caused by higher profitability of some cases over others — may well level the playing field between specialty and general hospitals. If these payment changes have the impact that CMS and MedPAC expect, there will likely be a profound change in the environment for both new and existing specialty hospitals. Whether or not changes are made to the Stark Law, the financial incentives for creating new specialty facilities will be lessened and there may well be a “shakeout” in the specialty hospital marketplace. Implementation of an enhanced data collection and monitoring system will allow state policymakers to better anticipate the scope and impact of these changes in health care financing and delivery.

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## **APPENDIX A**

## APPENDIX A

The market areas and service lines included in the main body of the report are representative of the results for other market areas and service lines that were studied. Analysis and discussion of these other market areas and service lines are included here in the same format as presented in the report. As in the report, for confidentiality purposes, data are aggregated and the specialty and general hospitals are not identified.

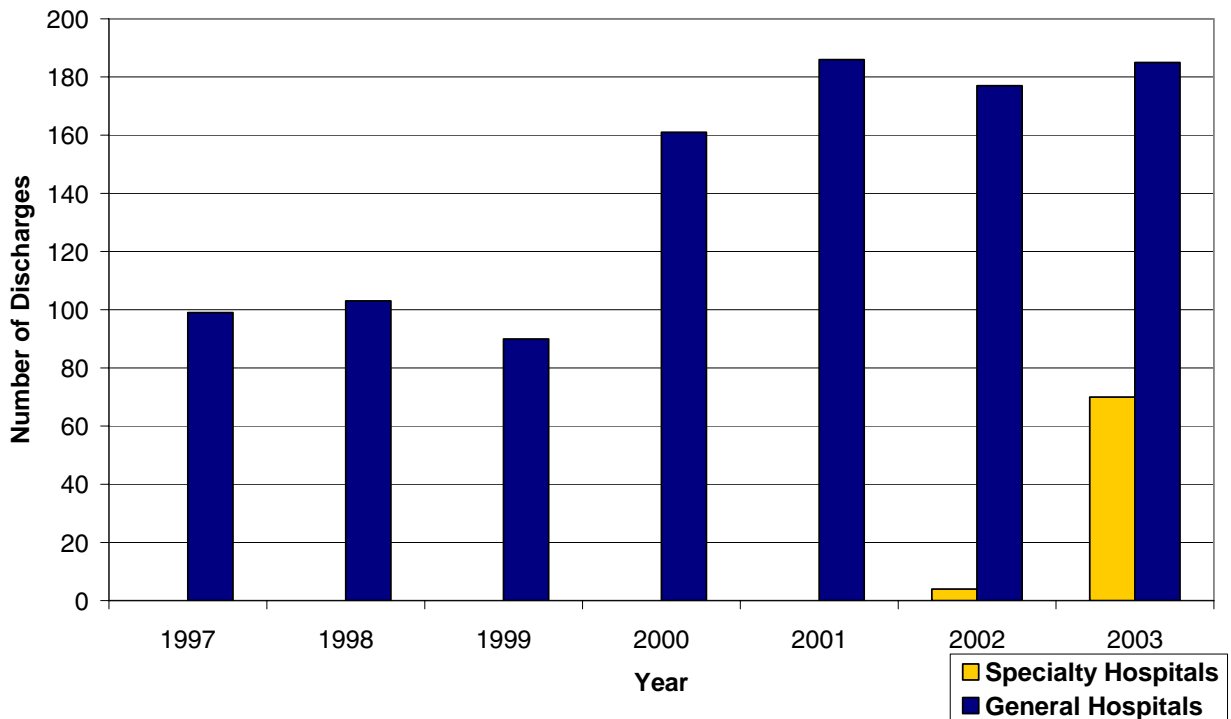
### ***The Kansas City Area Market***

#### ***Service Line — DRG 500***

Cases of DRG 500, Back & Neck Procedures except Spinal Fusion without Complications and Comorbidities, represent the service line with the second highest number of discharges in Kansas City area specialty hospitals. Procedures included within this DRG include repair of vertebral fractures, spinal cord biopsies, and excision of intervertebral discs. As expected in a metropolitan market, a number of other hospitals also provide these services to patients from this area. Although there are six main general hospital competitors for this service line, however, no single hospital provides a particularly large volume of cases.

Figure A-1 shows the volume of DRG 500 discharges from the Kansas City service areas at specialty and general hospitals. Because we have only two years of specialty hospital data for this service line, it is difficult to draw conclusions about the impact of the specialty hospitals on case volume at their general hospital competitors. However, the data clearly show that a steady growth in cases in general hospitals from 1999 to 2001 ceased in 2002, coinciding with the entry into the market of this service line at specialty hospitals. Figure A-2 shows that the total volume of these procedures increased sharply in 2003 from previous levels.

**Figure A-1. Entry of Specialty Hospitals into the Kansas City Market Has Not Affected Volume of DRG 500 Discharges from General Hospitals**



**Figure A-2. Total DRG 500 Cases from the Kansas City Service Areas Have Increased Since the Entry of Specialty Hospitals into the Market**

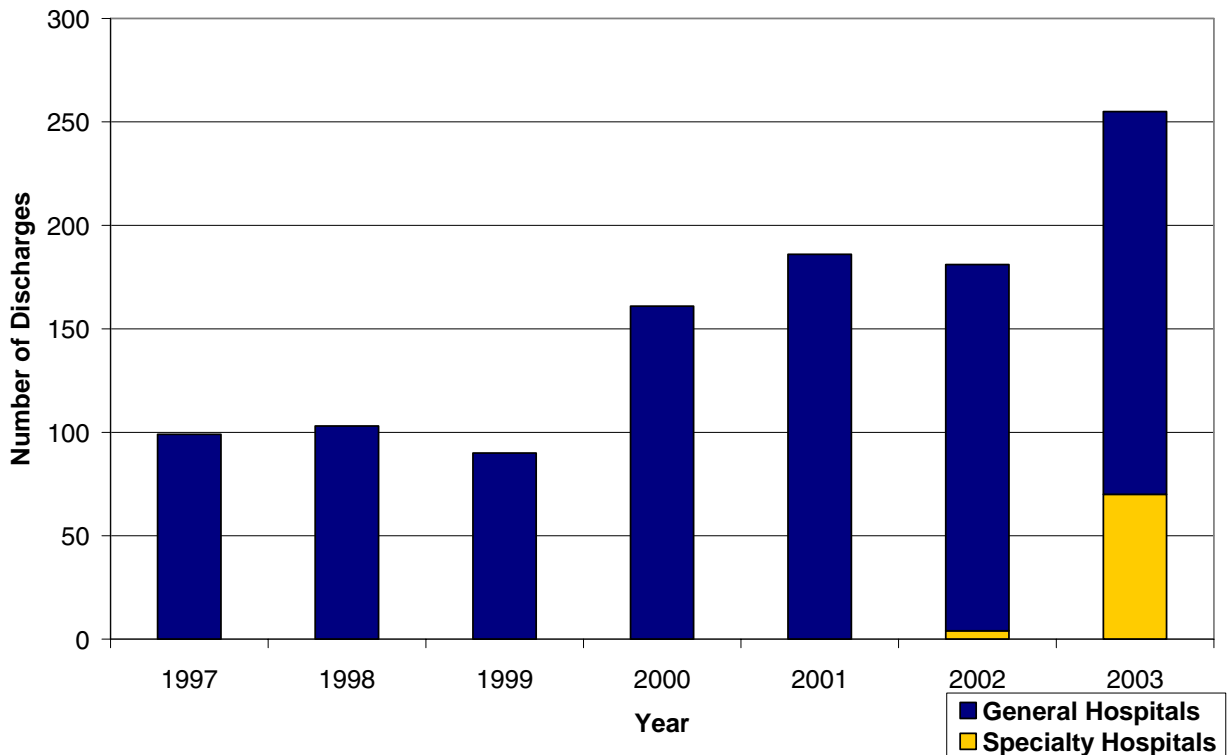
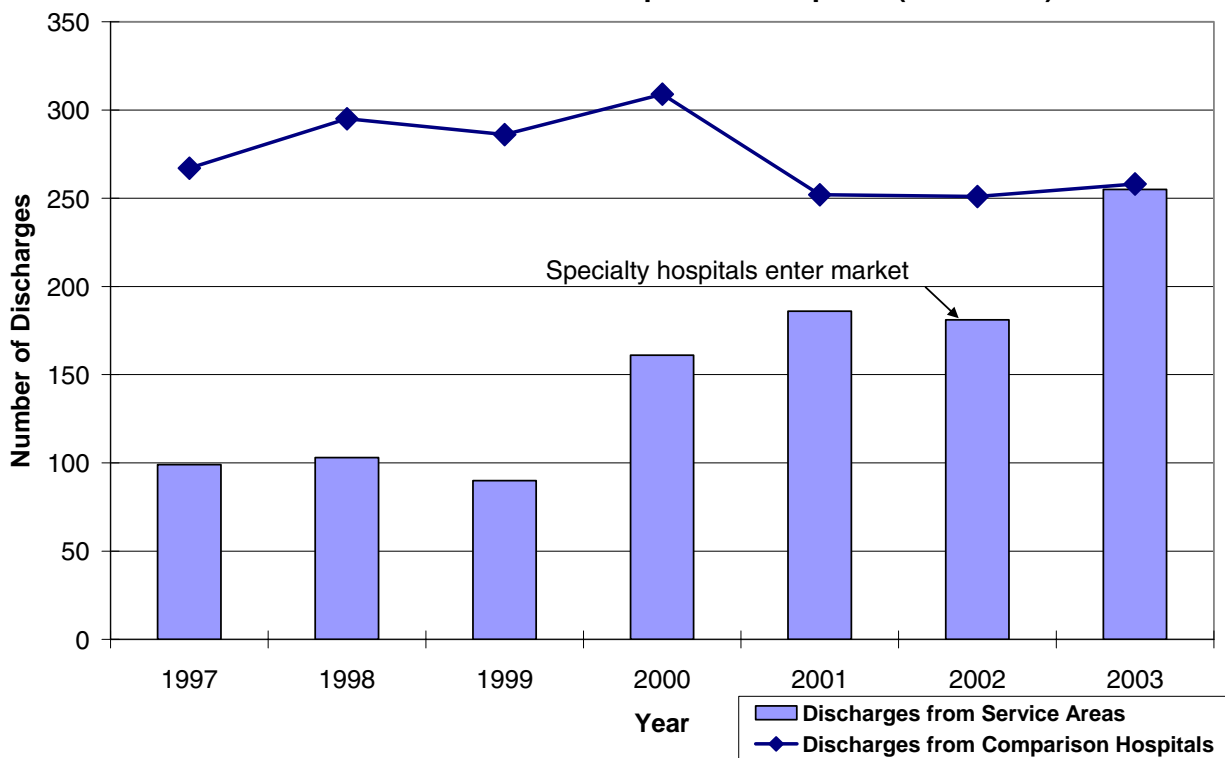


Figure A-3 compares the volume of DRG 500 discharges from the Kansas City service areas with volume at the comparison hospitals from 1997 to 2003. This chart shows that the number of cases from the Kansas City service areas increased substantially from 1997 to 2003, while volume at the comparison hospitals fluctuated but remained essentially flat. As in the case of DRG 209 in the Kansas City area, discussed earlier, there are several possible explanations for these different trends. Nevertheless, the data suggest that the growth in utilization may be the result of an increase in the supply of providers.

**Figure A-3. DRG 500 Cases from the Kansas City Service Areas Have Increased at a Faster Rate than in Comparison Hospitals (1997-2003)**



Service Line — DRG 498

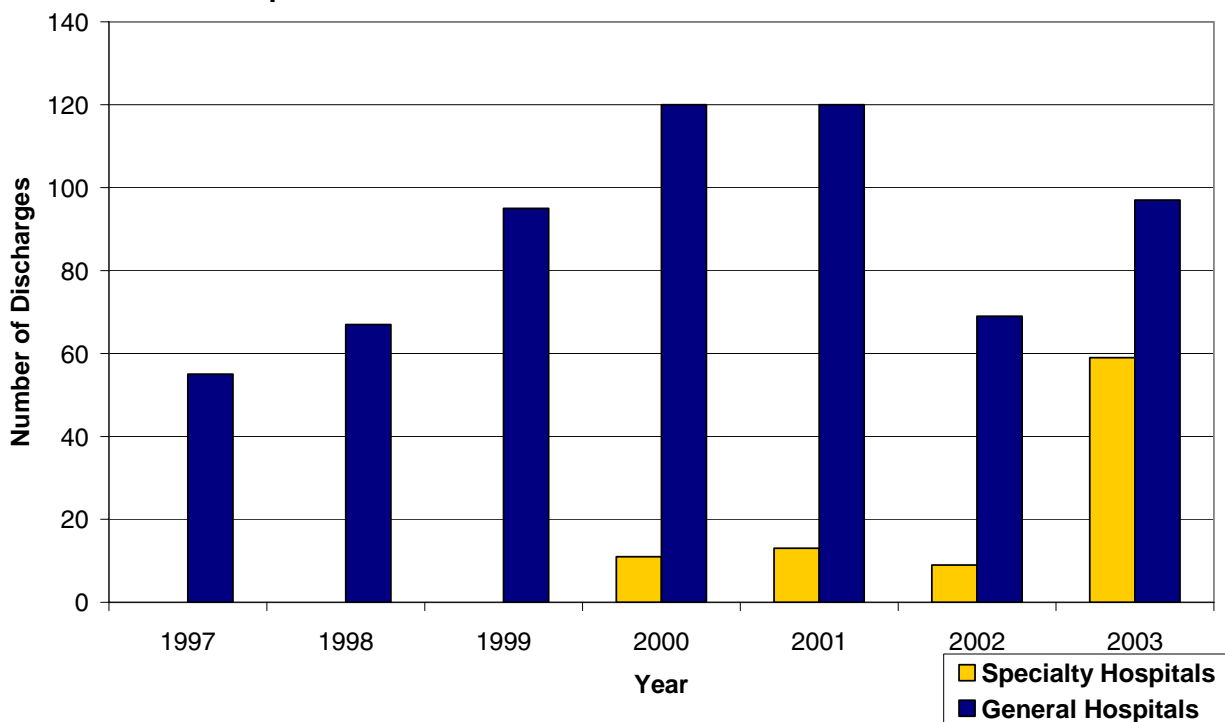
The third service line provided by Kansas City area specialty hospitals is DRG 498, Spinal Fusion except Cervical without Complications and Comorbidities. As with DRG 500, a number of general hospitals also provide this service, but none of these competitors perform a large number of procedures.

Figures A-4 and A-5 show the volume of DRG 498 cases from the Kansas City service areas at specialty and general hospitals. These data show a steady increase in volume at general



hospitals through 2000 and 2001, followed by fluctuating volume in subsequent years. The entry of specialty hospitals into this market and service line in 2000 had no obvious impact on utilization in the general hospitals. However, a substantial decline in cases in general hospitals from 2001 to 2002 is paralleled by a smaller decline in specialty hospitals. Substantial increases in volume in both types of facilities occur from 2002 to 2003. This pattern may be the result of the loss of a physician (or physicians) to the area in 2002, followed by the recruitment of a new physician (or physicians) in 2003. Because physicians may refer cases both to specialty and general hospitals, such changes in physician supply could cause similar volume fluctuations in both types of facilities.

**Figure A-4. Entry of Specialty Hospitals into the Kansas City Market Has Not Consistently Affected Volume of DRG 498 Discharges from General Hospitals**



**Figure A-5. Total DRG 498 Cases from the Kansas City Service Areas May Have Increased with the Entry of Specialty Hospitals into the Market**

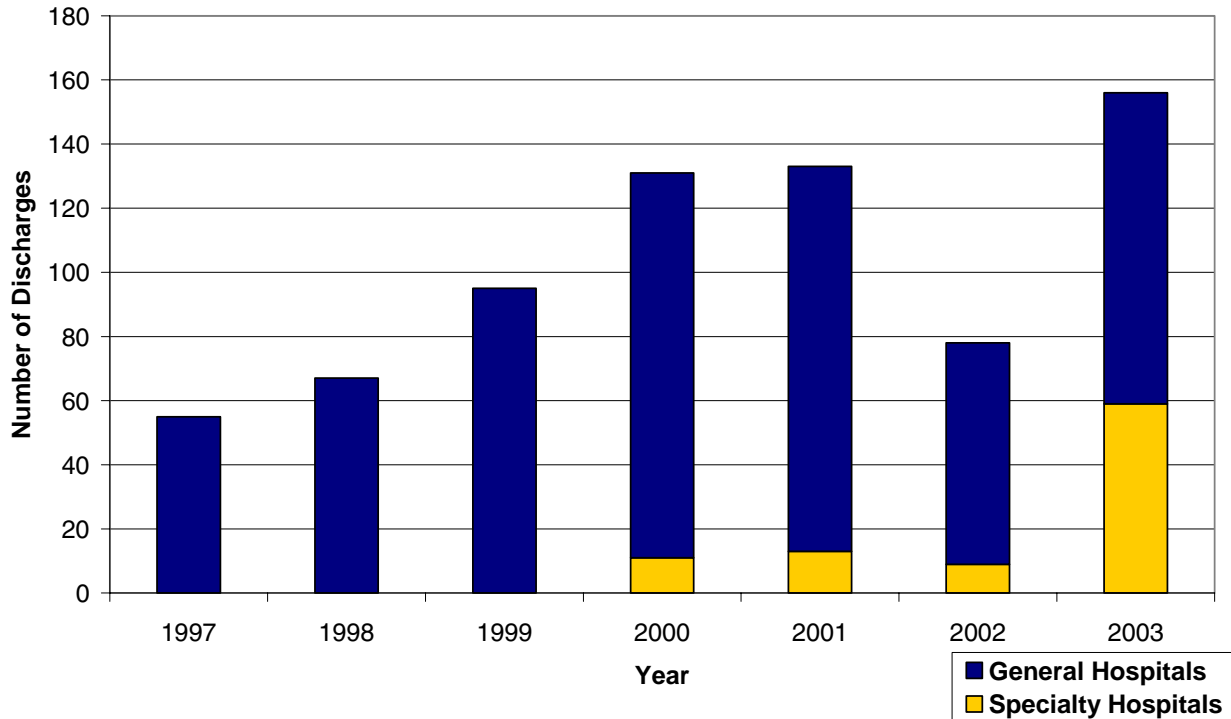
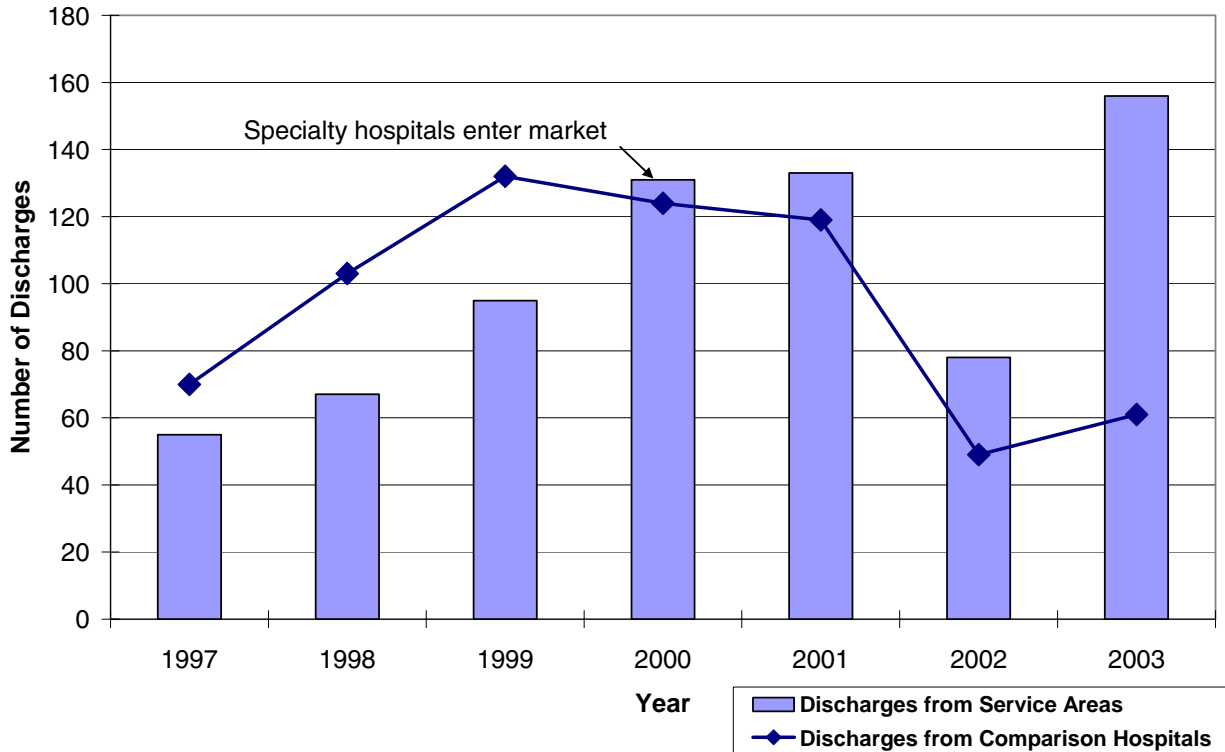


Figure A-6 shows utilization of DRG 498 cases from the Kansas City service areas and in the comparison hospitals from 1997 to 2003. This chart suggests that both groups of hospitals faced similar physician supply issues. The loss of a single physician (or physician group practice) could account for the decline in cases from 2001 to 2002 in both the Kansas City hospitals and in the comparison hospitals. Likewise, recruitment of a new surgeon could explain the increase in cases from the Kansas City service areas from 2002 to 2003.

**Figure A-6. DRG 498 Cases from the Kansas City Service Areas and in Comparison Hospitals Show Similar Utilization Trends**



***The Wichita Market***

**Service Line — DRG 527**

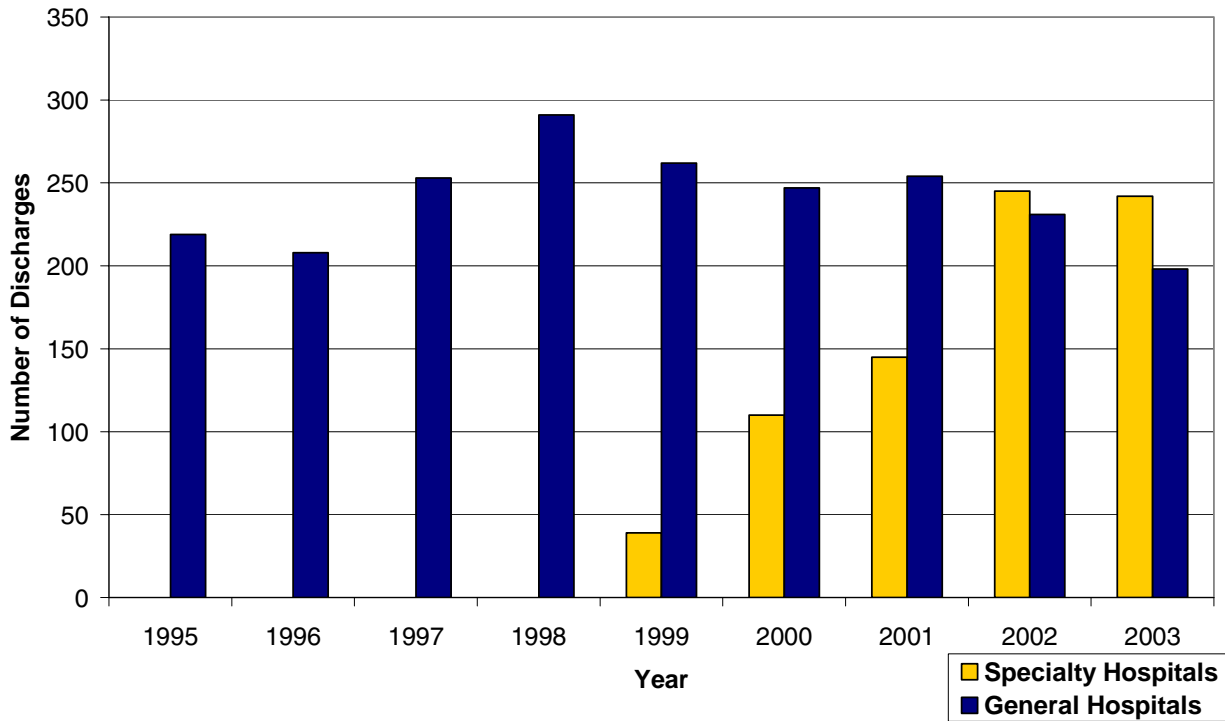
DRG 527, Percutaneous Cardiovascular Procedure with Drug-Eluting Stent without Acute Myocardial Infarction, represents the Wichita specialty hospital service line with the second largest proportion of specialty hospital cases. However, because this is a new DRG that was first used in 2003, baseline data for the period before specialty hospitals entered the market is not available and we cannot assess trends.

**Service Line — DRG 125**

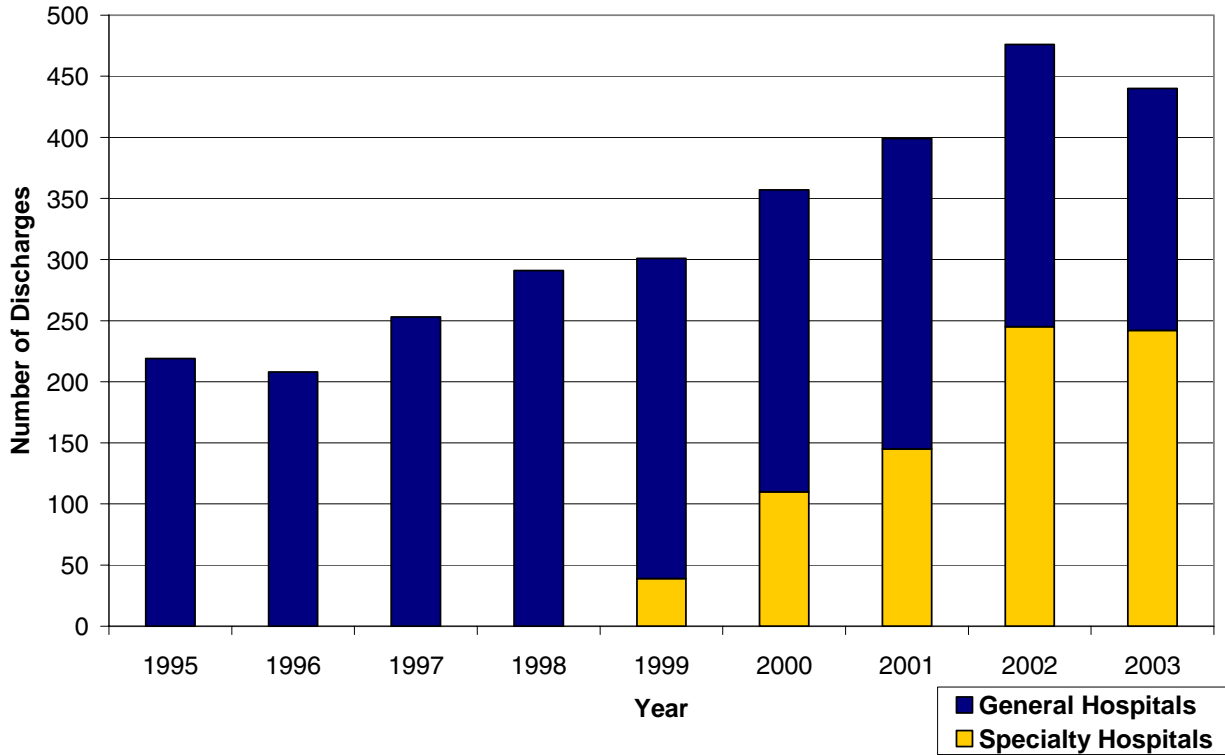
DRG 125, Circulatory Disorders except Acute Myocardial Infarction with Cardiac Catheterization without Complex Diagnosis, is the fourth service line in Wichita specialty hospitals. The most common cases found within this DRG are chest pain, angina, and coronary atherosclerosis. As with DRG 107, discussed in the report, the Wichita specialty hospitals and two general hospital competitors are the predominant providers of this service line to residents of the Wichita service areas.

Figure A-7 shows the volume of DRG 125 cases from the service areas at specialty and general hospitals. Entry of the specialty hospitals into the market and increases in the number of cases performed at these facilities corresponds with a decline in the volume of cases treated in the general hospitals. As shown in Figure A-8, however, despite the decline in general hospital volume, the total number of cases from the service area has increased. Figure A-9 then shows the trend in utilization of DRG 125 cases from the Wichita service areas and in the comparison hospitals. These trends are very similar, suggesting that the increase in provider supply in Wichita has not led to an undue increase in utilization.

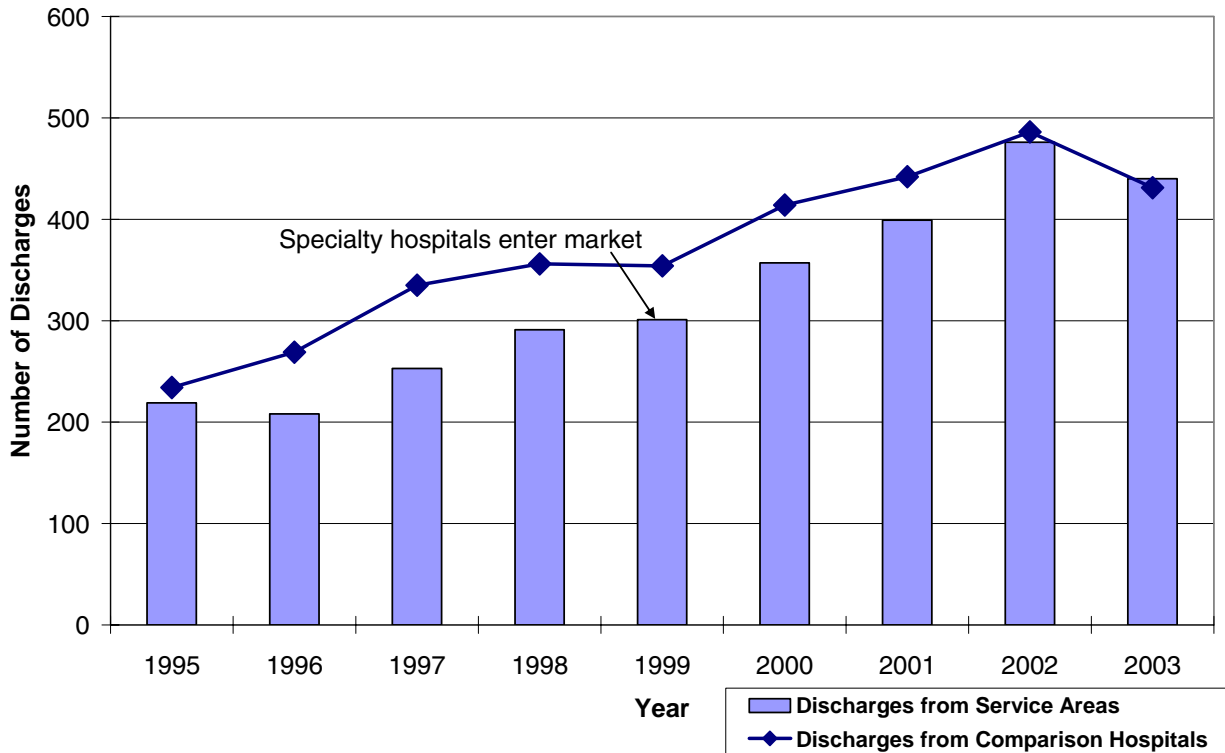
**Figure A-7. Entry of Specialty Hospitals into the Market Coincided with a Decline in the Number of DRG 125 Cases from the Wichita Service Areas that were Treated in General Hospitals**



**Figure A-8. Total DRG 125 Cases from the Wichita Service Areas Have Increased Since the Entry of Specialty Hospitals into the Market**



**Figure A-9. DRG 125 Cases from the Wichita Service Areas Have Grown at a Similar Rate as in Comparison Hospitals (1995-2003)**



### Service Line — DRG 517

DRG 517, Percutaneous Cardiovascular Procedure with Non-Drug-Eluting Stent without Acute Myocardial Infarction, is the fifth Wichita specialty hospital service line. This DRG is identical to DRG 527, above, except that the stent that is inserted in the procedure does not introduce a drug into the blocked vessel. This DRG was introduced in 2001, so only three years of data are available, all following the entry of specialty hospitals to the market. As a result, baseline data for the period before specialty hospitals entered the market are not available and we cannot assess trends.

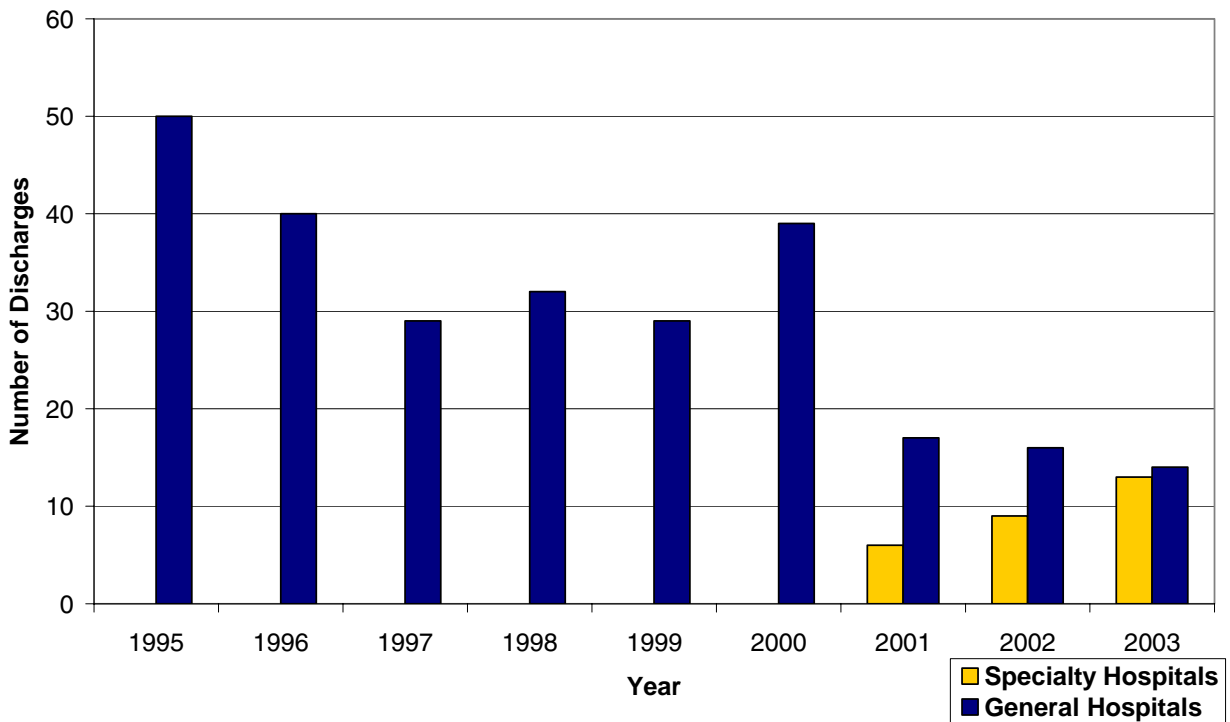
### **Rural Markets**

#### Service Line — DRG 358

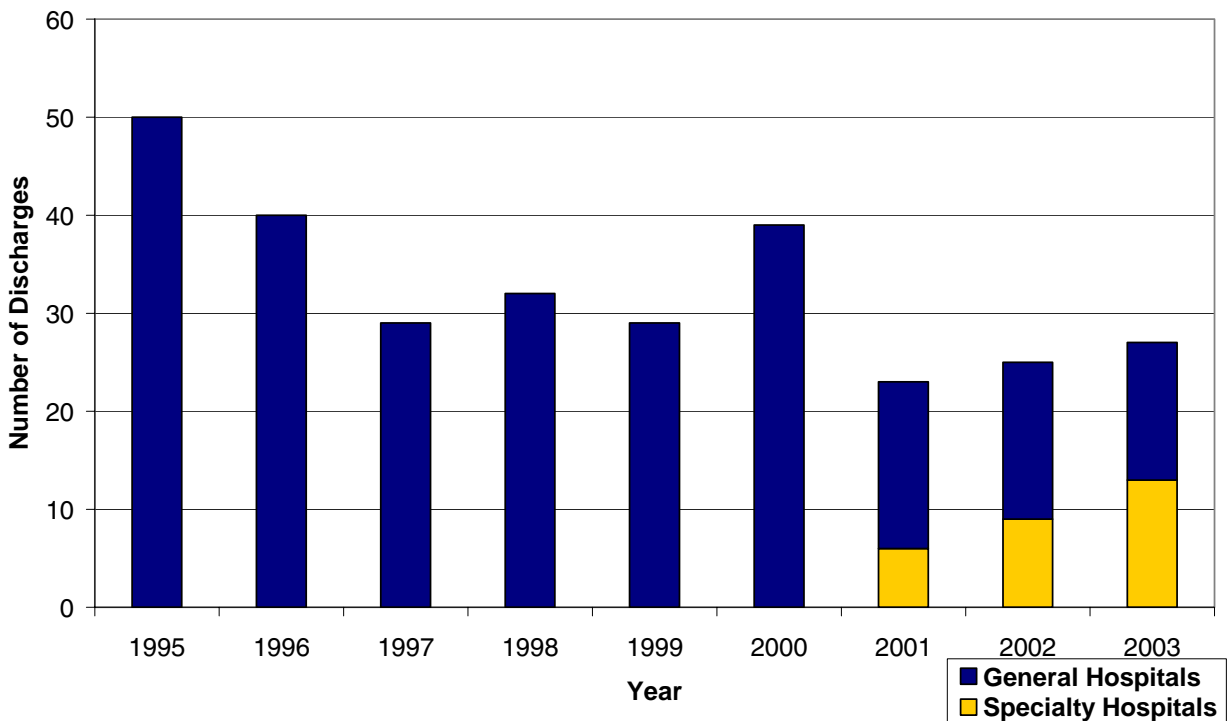
DRG 358, Uterine & Adnexa Procedures for Non-Malignancy with Complications and Comorbidities, is the second service line provided by rural specialty hospitals. This DRG is identical to DRG 359, discussed in the report, but applies to patients who have complications and comorbid conditions along with their primary diagnosis. Although it represents a service line, the number of DRG 358 cases from the rural service areas treated at both specialty and general hospitals is far lower than the number of cases of DRG 359. These cases also represent the only specialty hospital service line in which patients are diagnosed with complications and comorbidities.

As shown in Figures A-10 and A-11, entry of specialty hospitals into rural markets for this service line coincided with a decline in the number of cases that were treated in general hospitals and an overall decline in the number of cases from the rural service areas. Figure A-12, which compares the change in volume of this service line in the service areas and at comparison hospitals, shows no discernible utilization patterns or trends.

**Figure A-10. The Entry of Specialty Hospitals into Rural Markets Has Coincided with a Decline in DRG 358 Cases from these Markets that were Treated in General Hospitals**



**Figure A-11. The Entry of Specialty Hospitals into Rural Markets Has Coincided with a Decline in the Total Number of DRG 358 Cases from these Markets**



**Figure A-12. DRG 358 Discharges from Rural Service Areas and at Comparison Hospitals (1995-2003)**

