MPR Reference No.: 6229

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Analysis of Niche Hospitals in Texas and the Financial Impact on General Hospitals

Final Report
December 1, 2006

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EXECUTIVE SUMMARY

In Texas as in other states, the proliferation of niche hospitals has raised concern about the potential financial impact of these hospitals on full-service general hospitals. In this report, we report findings from three lines of inquiry related to niche hospitals in Texas:

- A comparison of the financial status of niche hospitals and general hospitals in Texas and an empirical analysis of the impact of niche hospitals on general hospital margins and their uncompensated care loads.
- A description of physician referral patterns in Texas, comparing referrals from physician-owners to niche and general hospitals with those from physicians who refer to niche hospitals but do not have an ownership interest in them.
- An inquiry into stakeholder perceptions about the impacts of niche and other physician-owned hospitals in Texas and their recommendations for policy change.

THE GROWTH OF NICHE HOSPITALS IN TEXAS

Niche hospitals now represent approximately six percent of all licensed hospitals in Texas, compared to just two percent in 2000. In 2004, about half of the general, multi-service hospitals in Texas operated in health service areas (HSA) where a niche hospital also operated. All of the niche hospitals in Texas are for-profit facilities. In markets where general and niche hospitals compete directly, a slightly higher percentage of the general hospitals are for-profit. Of the 185 general hospitals that competed in the same HSA with niche hospitals in 2004, 35 percent were for-profit.

HOSPITAL CAPACITY AND MARGINS

The average capacity of niche hospitals in Texas is much smaller than that of general hospitals. In 2004, niche hospitals averaged 27-staffed beds per hospital, compared to 146-staffed beds in general hospitals. General hospitals in HSAs that included a niche hospital were nearly 10 times as large as the niche hospitals in those HSAs—with 195-staffed beds in 2004, compared to 27-staffed beds per niche hospital. However, while niche hospitals had less than 20 percent of the bed capacity of general hospitals in 2004, they averaged more than 67 percent of the operating room capacity of general hospitals in their market areas

General hospitals averaged more than six times the number of admissions as niche hospitals in 2004 (6,717 admissions per year versus 1,069 admissions among niche hospitals operating for at least one year), and general hospitals located in HSAs with a niche hospital averaged an even higher rate of admissions (9,155) per year. Reflecting their larger capacity, general hospitals averaged 85,000 outpatient visits compared with fewer than 10,000 outpatient visits per niche hospital.

Although all licensed hospitals in Texas must have a functioning emergency room, the emergency volume in general hospitals was more than 30 times that of niche hospitals in 2004. Niche hospitals averaged just 683 emergency visits, compared with an average of more than 22,000 emergency visits to general hospitals statewide, and more than 29,000 emergency visits to general hospitals in HSAs with one or more niche hospitals.

Anecdotes of selective referrals to niche hospitals and transfers of Medicaid and uninsured patients to general hospitals have peppered the debate about niche hospitals in Texas and in other states. In Texas, niche hospitals reported a much higher percentage of private-pay patients in 2004 than did general hospitals (54 percent versus 31 percent), but a lower percentage of Medicare patients (34 percent versus 41 percent in general hospitals). In 2004, Medicaid patients accounted for just 3 percent of admissions to niche hospitals, compared with 19 percent of the admissions to general hospitals.

From 2000 to 2004, we observed trends in hospital admissions and utilization that suggested a significant realignment of hospital activity and profitability. Specifically:

- Admissions to both niche and general hospitals increased, but niche hospitals saw an average increase in admissions that was twice that of all general hospitals (12.7 percent versus 6.0 percent). In HSAs with at least one niche hospital, admissions to general hospitals actually declined by 3.4 percent.
- For both niche and general hospitals in the same HSAs, the average number of outpatient visits per hospital declined, but the rate of decline was faster among the general hospitals (-6.6 percent) than among niche hospitals (-4.5 percent).
- The proportion of patients in niche hospitals that were private-pay dropped from 62 percent to 54 percent, while the proportion that were Medicare patients increased. General hospitals in HSAs with at least one niche hospital reported a similar decline in the proportion of private-pay patients but a smaller increase in the proportion of Medicare patients, while the proportion of Medicaid patients rose.
- The average number of inpatient surgeries performed in niche hospitals grew three times as fast (11.6 percent) as that in general hospitals (less than 4 percent). Among general hospitals in HSAs with at least one niche hospital, the average number of inpatient surgeries dropped 7.7 percent.

During this period, the operating margins of general hospitals declined. Located in the faster-growing population centers in Texas, general hospitals in HSAs with at least one niche hospital reported slightly higher average operating margins than general hospitals overall from 2002 to 2004, but distinctly lower operating margins than the niche hospitals. In 2004—when the number of niche hospitals reached an historic high—the operating margins of general hospitals in HSAs with a niche hospital dropped below the average of all general hospitals in Texas.

THE IMPACT OF NICHE HOSPITALS ON GENERAL HOSPITAL MARGINS

Despite the notable decline in general hospital operating margins from 2000-2004, we did not find that the presence of niche hospitals or their volume of admissions, controlling for other factors, adversely affected their operating margins, total margins, or uncompensated care as a percent of revenues. Instead, the most important predictor of general hospitals' financial performance was its status as a for-profit or nonprofit facility. Substituting the definition of niche hospitals used by the Centers for Medicare and Medicaid Services (CMS) for the Texas statutory definition of a niche hospital did not appreciably change these findings.

For-profit general hospitals systematically had much higher operating margins than nonprofit general hospitals and slightly lower amounts of uncompensated care. For-profit facilities systematically had lower total margins, controlling for other factors, potentially related to new construction and other expansion initiatives that nonprofit general hospitals have not undertaken or have financed differently.

The financial prospects for both general and niche hospitals in Texas are fundamentally linked to their payer mix. In Texas, niche hospitals have a higher proportion of private pay patients than general hospitals, but the privately insured proportion of their patients has decreased over time as the proportion enrolled in Medicare has increased. In contrast, general hospitals saw an increase in both the proportion of Medicare and Medicaid admissions.

Greater dependence on Medicare as a payer may drive significant change in the prospects for niche hospitals and on competition for patients in coming years. Medicare payment for selected cardiac services is scheduled to change in 2007, and Medicare payment for surgical and orthopedic services may change in 2008. It seems likely that reduced Medicare payments for these services will encourage niche hospitals to market more aggressively to commercially insured patients—possibly forcing insurers to admit niche hospitals into their networks, and also increase physician-owners' financial incentives to selectively admit high-margin patients. In turn, general hospitals may respond to preserve their margins by increasing the price or volume of services for which they do not compete with niche hospitals—increasing total health care costs in the state.

Such effects in Texas would be important to monitor. However, the difference between the CMS and Texas definitions of a niche hospital will make it difficult to monitor the effects on either total health care costs or general hospital margins. A more comprehensive definition of a niche hospital—at minimum, incorporating the CMS definition into Texas's current statutory definition, as well as improvements in reporting by hospitals and ambulatory surgical centers in the state, could greatly improve the ability of the state to understand the impacts of a growing niche hospital sector.

ADMISSIONS TO PHYSICIAN-OWNED HOSPITALS

Admissions by physician owners accounted for more than half of all discharges from physician-owned niche hospitals in 2004. In addition, the admitting patterns of physician owners differed significantly from those of non-owners with admitting privileges to physician-owned niche hospitals. In 2004, physician owners admitted 42 percent of specialty-appropriate cases to their own niche hospital, while non-owners admitted just 30 percent of such patients.

Across all physician-owned niche hospitals, the difference in the admission patterns of physician owners compared with non-owners was driven largely by physician owners' high rate of admissions to orthopedic hospitals. Physician owners of orthopedic hospitals admitted 65 percent of all patients they hospitalized during 2004 to hospitals that they owned. Non-owners with admitting privileges to physician-owned orthopedic hospitals admitted just 34 percent of their patients to these hospitals.

The payer and severity mix of patients admitted to physician-owned niche hospitals also differed from general hospitals. In 2004, admissions to physician-owned niche hospitals were more likely to be privately insured and less likely to be self-pay/charity or Medicaid patients. In addition, they were much less likely to be severely ill or at the highest risk of mortality. These admitting patterns were consistent across types of niche hospital, and also largely the same for owners and non-owners.

We infer from these findings that financial incentives probably drive the significantly higher rates of self-referral to physician-owned niche hospitals in Texas. Such financial incentives may include any scheduling preferences that physician owners enjoy, as well as the income and capital gains they may derive from ownership of a profitable hospital. Other factors that may affect admitting patterns—including insurance networks and patient preferences—are unlikely to differ so systematically between owners and non-owners as to drive the significant differences in referral patterns that we observed.

In addition, it seems reasonable to infer that the high rate of self-referral to physician owned niche hospitals in Texas exacerbates the effects of biased referral to general hospitals that we observed. That is, while physician owners are significantly more likely to admit patients to their own facilities, a higher percentage of those patients are privately insured and/or low-severity. The admission patterns of non-owners similarly were biased toward admitting privately insured and low-severity patients to the niche hospital. While we found no systematic effect on the margins of general hospitals associated with the presence of niche hospitals, many general hospitals clearly struggle with relatively high rates of Medicaid and self-pay admissions, as well as a heavier load of high-severity patients associated with payers—such as Medicaid and Medicare—that may not reimburse full cost. Biased admissions from physicians who are affiliated with physician-owned niche hospitals would eventually magnify the problems of these hospitals.

STAKEHOLDER PERCEPTIONS AND RECOMMENDATIONS

To help understand the impact of niche hospitals on general hospitals and on access, quality and costs of health care in Texas, we conducted a series of interviews with stakeholders in five geographic areas: Dallas, Houston, Tyler, Lubbock, and the Valley.

Physician dissatisfaction with existing general hospitals reportedly provided much of the incentive for the development of niche and physician-owned hospitals in Texas. Physician-owned hospital representatives, in particular, rarely identified financial motivations. Instead, many cited insufficient physician involvement in hospital decisions, concerns about quality of care, and inefficiencies for physicians and patients as the catalysts for the development of niche hospitals. In turn, the development of these hospitals prompted the general hospitals to attempt

to repair strained relationships with physicians that have built their own facilities; replace physicians who have left general hospital practice; and invest with physicians on joint ventures to retain a proportion of business that might otherwise go to the new facilities.

Health plans in Texas generally have made case-by-case decisions about whether to include niche or physician-owned hospitals in their networks. They have considered factors such as whether contracting with the niche hospital would disrupt their existing relationships with general hospitals, the proportion of specialists in the community that the new hospital represents; and the rates the new hospital has requested. Currently, many niche and physician-owned hospitals do not have contracts with the health plans in their markets. Although the hospitals reported great interest in gaining entrance to the health plan networks, many general hospitals have lobbied the health plans to exclude niche and physician-owned hospitals.

The impact of niche and physician-owned hospitals on general hospitals varied within and across markets. A number of general hospital representatives reported losses in profitable specialty service volume due to the entry of a niche or physician-owned hospital and were concerned about maintaining their ability to subsidize less profitable services and care for uninsured patients. However, no general hospital representative interviewed for this study reported having made significant cutbacks to date. Because most of the large, public hospitals' patients are low-income and uninsured, and other hospitals generally do not compete for these patients safety net hospitals reported less effect from niche or other physician-owned hospitals.

Representatives from general hospitals often reported that niche and other physician-owned hospitals treat larger proportions of insured patients and patients with less complicated conditions than do general hospitals. They believed that the physician owners of niche and physician-owned hospitals "cherry pick" the patients they refer to their own hospitals. In addition, they contended that, because niche and other physician-owned hospitals typically have limited emergency capacity, they largely avoid the more difficult emergency cases as well as the uninsured patients who present at emergency departments for routine care. Representatives from niche and other physician-owned hospitals generally conceded that they do not treat many Medicaid or uninsured patients, but said that they do not actively avoid them.

Stakeholders in general were not concerned that niche and physician-owned hospitals have added unnecessary capacity—largely due to population growth in many communities and the increased demand for health services. Most community stakeholders detected no significant differences in prices or costs between general and niche and physician-owned hospitals, but many were concerned that competition with niche and physician-owned hospitals increases the costs of nurse and physician recruitment and staffing.

Stakeholders typically did not perceive a difference in quality between general and niche facilities. However, many cited a range of benefits associated with niche and physician-owned hospitals including lower infection rates, increased efficiency, and greater patient amenities (such as private rooms and better food). Some general hospital representatives and other community stakeholders acknowledged that increased competition with niche and physician-owned hospitals has made general hospitals more attentive to customer service.

In the absence of policy or regulatory changes, most stakeholders expected the Texas health care market to continue on its current path, with additional hospital construction throughout the state and increased competition for profitable services. Few stakeholders anticipated

retrenchment of physician hospital ownership, although some expected that forthcoming changes in Medicare reimbursement might cause some niche hospitals to close or merge with general hospitals over the next few years.

Overall, representatives of all types of hospitals, as well as other community stakeholders, wanted to "level the playing field" in terms of hospitals' ability to sustain their facilities and care for their patients. Representatives of niche and other physician-owned hospitals typically recommended no interventions beyond allowing them greater access to health plan networks, contending that free markets promote healthy competition and provide better patient choice. Few stakeholders favored reintroduction of a certificate-of-need (CON) process to regulate the development of niche hospitals.

However, leaders of general hospitals argued that, if niche and other physician-owned hospitals remain and continue to develop, they should contribute fairly to emergency services and care for low-income and uninsured people by either offering services or providing funding for safety-net providers. Many stakeholders agreed that the state should focus on enacting policies that would preserve, and enhance the safety net and access to care for the uninsured.

I. THE FINANCIAL STATUS OF NICHE AND GENERAL HOSPITALS IN TEXAS

A. INTRODUCTION

In Texas as in other states, the proliferation of niche hospitals has raised concern about the potential financial impact of these hospitals on full-service general hospitals. Critics contend that niche hospitals skim the most profitable patients in their service area, providing high-margin services to privately insured and Medicare patients and leaving less profitable services and patients—in particular, Medicaid patients and the uninsured—to general hospitals. Consequently, the entry of a niche hospital may erode the financial health of the general hospital in that service area, threatening its viability and, ultimately, the availability of affordable care for vulnerable populations.

This chapter considers the empirical evidence behind the concern about the impact of niche hospitals on general hospital financing and services. We compare the financial status of niche hospitals and general hospitals in Texas, their location, payer mix, and other selected characteristics. We then present a statistical analysis of the financial impact of niche hospitals on the operating margins, total margins, and uncompensated care levels of general hospitals. Key findings are summarized at the end of the chapter.

B. DATA SOURCES AND HOSPITAL SELECTION

The analyses in this chapter are based on data from the American Hospital Association (AHA), the Area Resource File (ARF), and the U.S. Census Bureau as well as licensure information from the Texas Department of State Health Services (DSHS).[1] According to the licensure information, 611 hospitals were licensed and operating in Texas as of June 2006. Of these 611 hospitals, 37 were identified as niche hospitals an estimated 22 additional hospitals were under construction (Table I.1).

More detailed, current information about hospitals operating in Texas was obtained from the AHA Annual Survey of Hospitals and Hospital Tracking Database. While the survey captures information about most licensed hospitals in Texas, it does not capture data from all hospitals (response is voluntary), and some hospitals report incomplete data.[2] Nevertheless, the AHA survey offers the best available data to conduct this type of financial analysis. As reported in Table I.1, 24 of the 28 niche hospitals operating in Texas in 2004 responded to the AHA survey with complete data and are included in the descriptive and statistical analyses.

[1] The American Hospital Association (AHA) Annual Survey of Hospitals and Hospital Tracking Database provides information on hospital ownership status, staffed bed size, payer mix, hospital margin, and uncompensated care attributed to bad debt and charity care. The Texas Department of State Health Services (DSHS) provided these data for 2000 through 2004. The 2004 Area Resource Files (ARF) are compiled by the Health Resources and Service Administration; these data include information on market characteristics, such as the number of physicians and ambulatory surgery centers within each county.

[2] Hospital response rates ranged from 90 to 95 percent during the 2000-2004 period.

TABLE I.1

TOTAL NUMBER OF TEXAS HOSPITALS AND NICHE HOSPITALS: ALL LICENSED HOSPITALS AND HOSPITALS IN THE AHA SURVEY, BY YEAR

	2000	2001	2002	2003	2004	2005	June 2006	Under Construction
Licensed Hospitals								
Total hospitals	550	550	564	579	606	619	611	22
Niche hospitals	11	27	26	27	28	36	37	2
Percent of total hospitals	2%	5%	5%	5%	5%	6%	6%	9%
AHA Survey Hospitals								
Total hospitals	527	529	520	532	548	—	—	—
Niche hospitals	9	9	12	15	24	—	—	—
Multi-service general hospitals	357	359	351	353	360	—	—	—
Specialized general hospitals	118	121	125	127	133	—	—	—
Other general hospitals	43	40	32	37	31	—	—	—

Sources: Texas DSHS, Regulatory Licensing Unit; and the AHA Annual Survey of Hospitals and Hospital Tracking Database, 2000-2004. The count of hospitals under construction was based on the Facility Construction Report (January 18, 2006) of the Texas DSHS Regulatory Licensing Unit. A facility was designated as "under construction" if its estimated completion date was after July 1, 2006.

Notes: A long dash (—) indicates that data were unavailable for that period. Niche hospitals were identified on the basis of the statutory definition and criteria established in SB 872 (see Appendix A). The estimate of niche hospitals under construction in Texas is based on the Facility Construction Report and a search of local news articles, and may underestimate the actual number under construction.

In addition, it was necessary to separate non-niche specialized hospitals from other general hospitals.[3] We identified 133 of the 548 hospitals reporting to the AHA in 2004 as non-niche specialized hospitals—focusing on psychiatric care, rehabilitation, pediatric care, long-term acute care, care for tuberculosis, and care for alcohol or other chemical dependence. The remaining general hospitals—384 facilities in 2004—were multi-service general hospitals; these are the general hospitals we compared with niche hospitals in the state.

[3] The Texas Regulatory Licensing Unit in DSHS licenses not only multi-service hospitals, but also niche and other specialized hospitals, as general hospitals.

C. THE GROWTH OF NICHE HOSPITALS IN TEXAS

The total number of hospitals licensed in Texas grew from 550 in 2000 to 611 as of June 2006 (Table I.1).[4] Niche hospitals accounted for much of this growth, tripling from 11 to 37 from 2000 to June 2006. Niche hospitals now represent approximately six percent of all licensed hospitals in Texas, compared to just two percent in 2000.

In 2004, nine of the 24 niche hospitals in Texas that responded to the AHA survey specialize in orthopedic surgery, and ten concentrate on general surgery (Table I.2). The remaining five focus on cardiac and other procedures. From 2000 to 2004, the number of niche hospitals in each specialty area increased at roughly the same rate.

In 2004, about half of the general, multi-service hospitals in Texas operated in health service areas (HSA) in which a niche hospital also operated.[5] Nevertheless, niche hospitals are highly concentrated in a select number of large metropolitan areas of the state: in 2004, just 21 percent of HSAs in Texas had a niche hospital (Table I.3).

TABLE I.2

NICHE HOSPITALS BY HOSPITAL SPECIALTY AND
GENERAL HOSPITALS IN THE AHA SURVEY, 2000-2004

	2000	2001	2002	2003	2004
Niche Hospitals	9	9	12	15	24
Surgical	3	3	5	6	9
Orthopedic	4	4	5	7	10
Cardiac and other	2	2	2	2	5
General Hospitals	357	359	351	353	360
In markets with niche hospitals	114	115	119	126	185
In markets with no niche hospitals	243	244	232	227	175
Total	**366**	**368**	**363**	**368**	**384**

Source: MPR analysis of AHA Survey Dataset, 2000-2004.

[4] In 1985, Texas repealed its CON law. The DSHS Regulatory Services Unit issues licenses for new construction based on architectural and life safety code requirements.

[5] An HSA is a standard geographic measure based on the travel distances of Medicare patients seeking hospital care (Makuc et al. 1991). We examined alternative measures of hospital market areas (such as the county in which the hospital is located and the trauma service area, as established by the DSHS) to test the sensitivity of the results to how markets were defined. Neither measure performed as meaningful market areas in the analysis.

TABLE I.3

HEALTH SERVICE AREAS AND COUNTIES
WITH A NICHE HOSPITAL, 2000-2004

Market Area	2000	2001	2002	2003	2004
HSAs with a niche hospital	5	6	7	8	13
Percent of all HSAs	8%	10%	11%	13%	21%
Counties with a niche hospital	5	6	8	9	15
Percent of all counties	2 %	2 %	3 %	4 %	6 %

Source: MPR analysis of AHA Survey Data, 2000-2004.

Note: In each year, there were 61 HSAs and 254 counties in Texas.

The growth in niche hospitals in Texas reflects early development in the metropolitan areas, where they first appeared, as well as development in new markets. By 2004, niche hospitals operated in more than a dozen HSAs across the state (Figure I.1), with a significant market presence in Dallas, Harris, Travis, and Bexar counties (see Appendix B). However, niche hospitals have also located in the border counties ("The Valley") as well as in Lubbock, El Paso, Smith, and Midland/Ector counties.

D. CHARACTERISTICS OF NICHE AND GENERAL HOSPITALS IN TEXAS

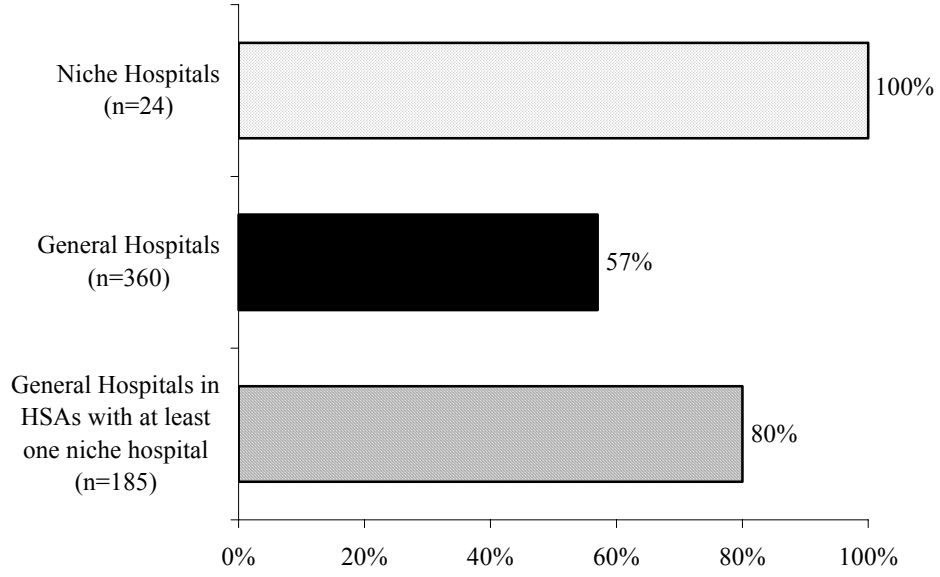
1. Location

Niche hospitals are concentrated in the major population centers of the state, where both population density and growth are relatively high. At present, all of the 24 niche hospitals in Texas are located in metropolitan counties (Figure I.1). In contrast, general hospitals are dispersed throughout the state: only 57 percent are located in a metropolitan county.

Since 2000, Texas's metropolitan areas have gained substantial new numbers of residents. From 2000 to 2004, the population in urban counties surged by 8.7 percent, compared with just 2.9 percent growth in rural counties (Table I.4). Statewide, the rate of population growth in Texas from 2000 to 2004 was 7.9 percent.

FIGURE I.1

PERCENT OF HOSPITALS IN METROPOLITAN COUNTIES, 2004



Source: MPR analysis of AHA Survey Data, 2000-2004.

TABLE I.4

POPULATION GROWTH IN METROPOLITAN AND RURAL COUNTIES IN TEXAS, 2000-2004

	2000 Population	2004 Population	Total Growth 2000-2004
Texas, total	20,851,820	22,490,022	7.9%
Metropolitan counties	17,691,880	19,237,170	8.7%
Rural counties	3,159,940	3,252,852	2.9%
United States	281,421,906	293,655,404	4.3%

Sources: Texas DSHS (www.dshs.state.tx.us/chs/popdat/ ST2000.shtm). U.S. Census Bureau, Annual Estimates of the Population for the United States: April 1, 2000 to July 1, 2004 (www.census.gov/popest/states/tables/NST-EST2004-08.pdf).

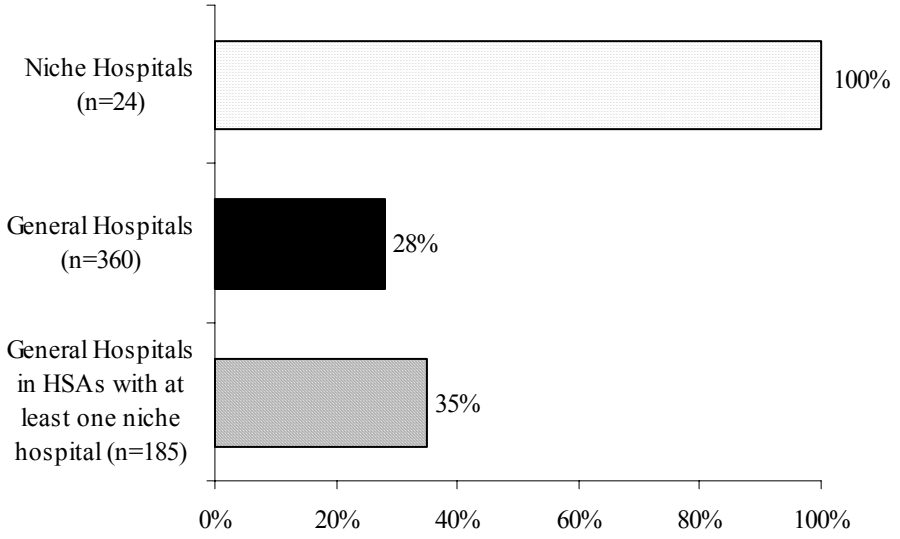
2. For-Profit Status

Most general hospitals across the nation are not-for-profit, while nearly all niche hospitals are for-profit.[6, 7] Of the 24 niche hospitals in Texas in 2004, all were for-profit (Figure I.2). Some were fully owned by for-profit corporations such as HealthSouth or MedCath; others were partially or completely owned by physicians. In contrast, of the 360 general multi-service hospitals in Texas, only 28 percent were for-profit.

In markets where general hospitals compete directly with niche hospitals, a slightly higher percentage of the general hospitals are for-profit. Of the 185 general hospitals that competed in the same HSA with niche hospitals in 2004, 35 percent were for-profit.

FIGURE I.2

PERCENT OF HOSPITALS WITH FOR-PROFIT STATUS, 2004



Source: MPR analysis of AHA Survey Data, 2000-2004

[6] A national survey of 100 specialty hospitals conducted by the Government Accountability Office (GAO) in 2003 found that more than 90 percent of niche hospitals that opened since 1990 were for profit. In addition, 70 percent of the more than 100 specialty hospitals in operation or under development were owned at least in part by physicians (GAO 2003).

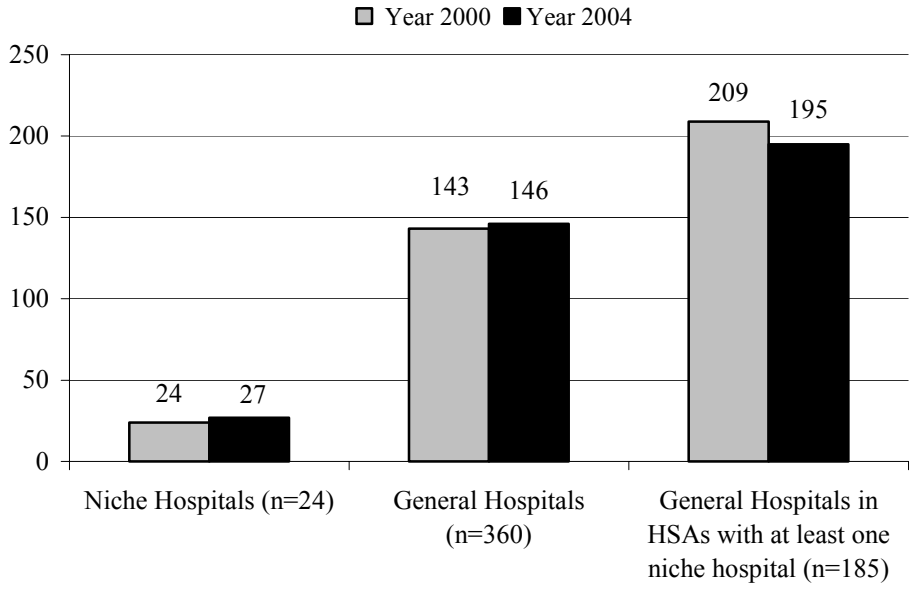
[7] Like other for-profit enterprises, for-profit hospitals have a fiduciary obligation to maximize investor wealth. As corporations, these hospitals must also pay federal and state taxes. Results from a nationwide study of hospitals from 1990 to 1997 indicate that the average total margin among for-profit hospitals was more than double that among nonprofit hospitals (Thorpe et al. 2000). In contrast, nonprofit hospitals and other nonprofit organizations are exempt from corporate taxes. Nonprofit hospitals may be charged by the state or by their charter to provide community benefit, usually in the form of charity care for indigent patients.

3. Hospital Capacity and Patient Volume

The average capacity of niche hospitals in Texas is much smaller than the average capacity of general hospitals. In 2004, niche hospitals averaged 27-staffed beds per hospital, compared to an average in general hospitals of 146-staffed beds (Figure I.3). In the metropolitan areas where niche hospitals are located, the difference in average bed size was greater still. General hospitals in HSAs that included a niche hospital were nearly 10 times as large as the niche hospitals in those HSAs—with 195-staffed beds in 2004, compared to 27-staffed beds per niche hospital.

FIGURE I.3

MEAN NUMBER OF HOSPITAL BEDS, 2000 AND 2004



Source: MPR analysis of AHA Survey Data, 2000-2004

The difference in patient volume between niche and general hospitals reflects the difference in their average size as well as a difference in use. General hospitals averaged more than six times the number of admissions as niche hospitals in 2004: 6,717 admissions per year versus 1,069 admissions among niche hospitals operating for at least one year (Table I.5). General hospitals located in HSAs with a niche hospital averaged 9,155 admissions per year.

Admissions to both niche hospitals and general hospitals increased from 2000 to 2004. Niche hospitals saw an average increase in admissions of 12.7 percent while general hospitals saw an average increase of six percent. However, in HSAs with at least one niche hospital, admissions to general hospitals actually declined by 3.4 percent during that period.

Compared with niche hospitals, general hospitals use beds more intensively, admitting more patients per bed during a year. In 2004, niche hospitals admitted 39 patients per bed on average, while general hospitals admitted 41 patients per bed and general hospitals in HSAs with at least one niche hospital admitted 44 patients per bed (Figure I.4).

TABLE I.5

MEAN NUMBER OF ADMISSIONS, OUTPATIENT VISITS, AND EMERGENCY ROOM VISITS AND PERCENTAGE CHANGE, 2000-2004

	2000	2001	2002	2003	2004	Percentage Change 2000-2004
Mean Hospital Admissions						
Niche hospitals open > 1 year	949	1,109	1,106	1,176	1,069	12.7
General hospitals	6,336	6,504	6,749	6,864	6,717	6.0
General hospitals in HSAs with at least one niche hospital	9,473	10,158	10,618	10,796	9,155	-3.4
Mean Outpatient Visits						
Niche hospitals open > 1 year	10,314	10,441	9,662	10,165	9,850	-4.5
General hospitals	77,622	81,835	87,025	86,786	85,370	10.0
General hospitals in HSAs with at least one niche hospital	110,363	111,071	119,473	116,525	103,088	-6.6
Mean ER Visits						
Niche hospitals open > 1 year	834	1,155	1,017	696	683	-18.1
General hospitals	20,025	21,035	22,398	22,991	22,120	10.5
General hospitals in HSAs with at least one niche hospital	29,314	31,459	33,985	34,630	29,407	0.3

Source: MPR analysis of AHA Survey Data, 2000-2004

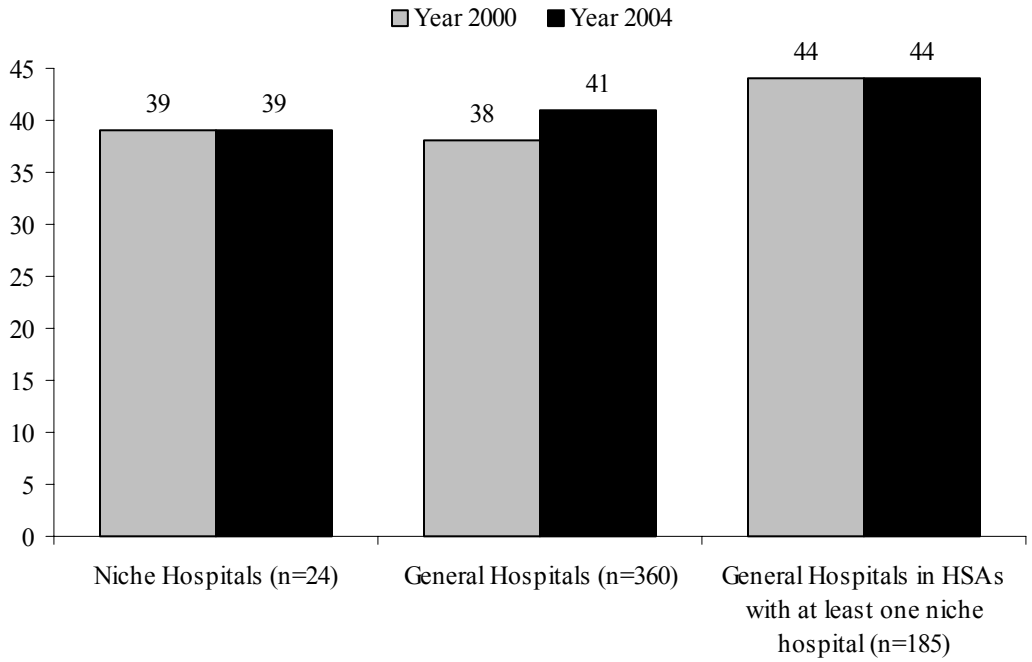
Notes: To facilitate a comparison between niche and general hospitals, we excluded newborns from the estimates in the table (maternity hospitals are excluded from the statutory definition of niche hospitals in SB 872). Neonatal admissions and admissions to swing beds are included. Outpatient visits do not include emergency room visits.

The intensity of use did not change in either niche hospitals or in general hospitals located in HSAs with at least one niche hospital. In other general hospitals—in communities that did not see increased capacity associated with the development of niche hospitals, intensity increased about 7 percent—from 38 patients per bed in 2000 to 41 patients per bed in 2004.

Patterns in outpatient visits also differed between niche and general hospitals. Again reflecting their larger capacity, general hospitals averaged 85,370 outpatient visits compared with 9,850 outpatient visits per niche hospital. For both niche and general hospitals in the same HSAs, the average number of outpatient visits per hospital declined from 2000 to 2004. However, the rate of decline was faster among the general hospitals (-6.6 percent) than among niche hospitals (-4.5 percent).

FIGURE I.4

MEAN ADMISSIONS PER BED, 2000 VS. 2004



Source: MPR analysis of AHA Survey Data, 2000-2004

The contrast in emergency room (ER) visits between niche hospitals and general hospitals is perhaps the most striking indicator of the different roles played by each in Texas. Although all licensed hospitals in Texas must have a functioning ER, the ER volume in general hospitals was more than 30 times that of niche hospitals in 2004. Niche hospitals averaged just 683 ER visits, compared with an average of more than 22 thousand ER visits to general hospitals statewide, and more than 29 thousand ER visits to general hospitals in HSAs with one or more niche hospitals. The difference apparently reflects the relatively small number of ER beds in niche hospitals, but it may also reflect the lower visibility of their ERs and less capacity to handle a full range of emergency medical needs (issues that are discussed further in Chapter III).

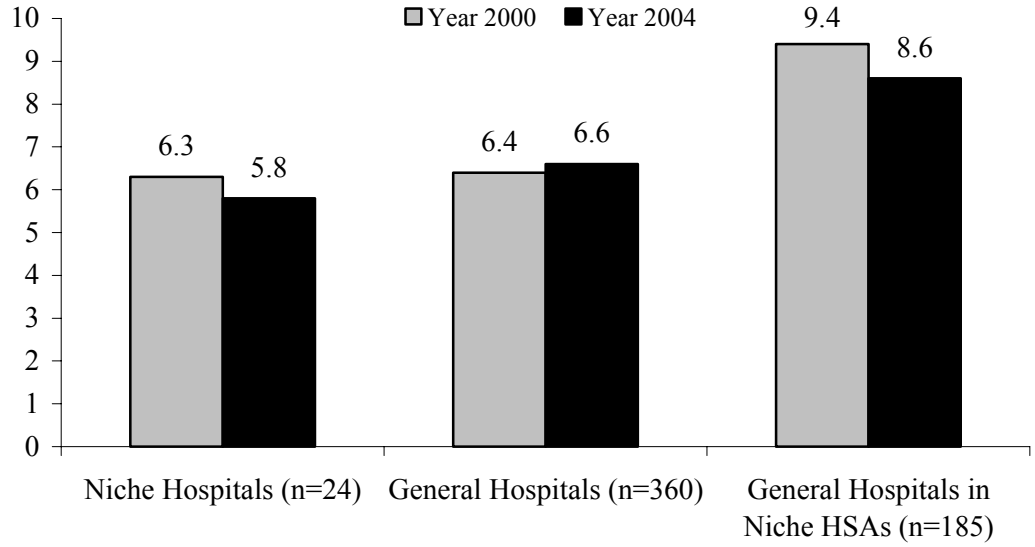
4. Operating Room Capacity and Volume

For most hospitals, operating rooms are a vital profit center. Although niche hospitals had less than 20 percent of the bed capacity of general hospitals in 2004, they averaged more than 67 percent of the operating room capacity of general hospitals in their market areas: 5.8 operating rooms per niche hospital versus 8.6 operating rooms per general hospital in the same HSAs (Figure I.5).

In 2004, the mean number of inpatient surgeries (731) performed in niche hospitals open for at least a year was about one-third of that performed in all general hospitals (2,015) and only about one-fourth the number performed in general hospitals (2,861) in the same HSAs (Table I.6). However, on average, niche hospitals performed many more outpatient surgeries than general hospitals, including general hospitals in the same HSAs.

FIGURE I.5

MEAN NUMBER OF OPERATING ROOMS, 2000 VS. 2004



Source: MPR analysis of AHA Survey Data, 2000-2004

From 2000 to 2004, the average number of inpatient surgeries performed in niche hospitals grew much faster that in general hospitals: 11.6 percent in niche hospitals, compared with less than four percent in all general hospitals. However, among general hospitals in HSAs with at least one niche hospital, the average number of inpatient surgeries dropped by 7.7 percent.

In both niche and general hospitals, the average number of outpatient surgeries declined approximately 11 percent from 2000 to 2004 (Table I.6). The development of ambulatory surgical centers may explain the downward trend in surgeries performed in both types of hospitals over those years. During this period, the number of ambulatory surgery centers in Texas grew 35 percent—from 204 facilities in 2000 to 275 facilities in 2004.

5. Payer Mix

Anecdotes of selective referrals to niche hospitals and transfers of Medicaid and uninsured patients to general hospitals have peppered the debate about niche hospitals in Texas and in other states. While empirical evidence of systematic bias in national studies has been limited, it nevertheless has fueled the sense that niche hospitals are more successful in attracting insured patients that pay higher reimbursement for care.[8]

[8] For example, GAO (2003) concluded that "…relative to general hospitals in the same urban areas, specialty hospitals in our sample tended to treat a lower percentage of Medicaid inpatients among all patients with the same types of conditions."

TABLE I.6

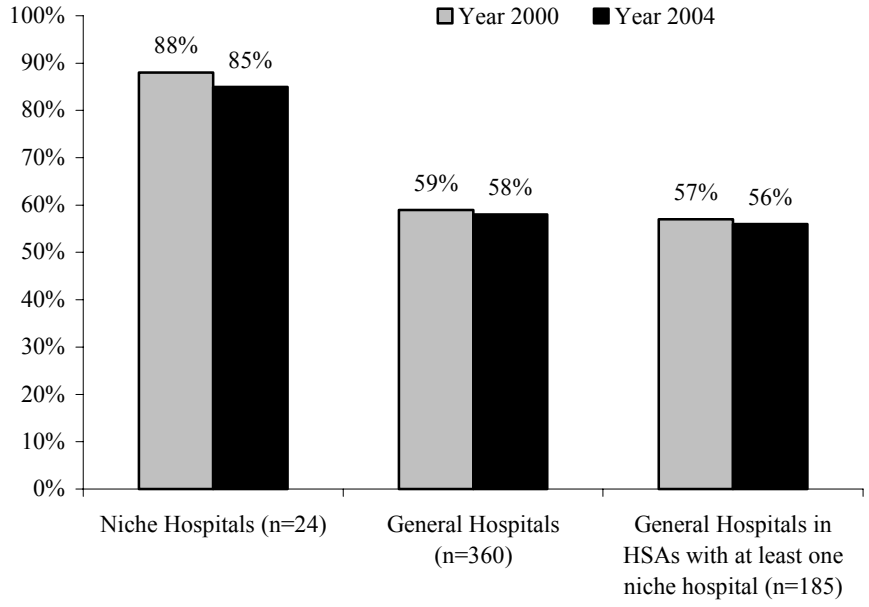
MEAN NUMBER OF INPATIENT, OUTPATIENT, AND TOTAL SURGERIES, 2000-2004

	2000	2001	2002	2003	2004	Change 2000-2004
Mean Inpatient Surgeries						
Niche hospitals open > 1 year	655	652	686	737	731	11.6%
General hospitals	1,940	1,925	2,031	2,081	2,015	3.9%
General hospitals in HSA with a niche hospital	3,099	3,104	3,232	3,332	2,861	-7.7%
Mean Outpatient Surgeries						
Niche hospitals open > 1 year	4,679	3,863	3,916	4,651	4,185	-10.6%
General hospitals	2,766	2,753	2,904	2,914	2,732	-1.2%
General hospitals in HSA with a niche hospital	4,165	4,347	4,465	4,312	3,695	-11.3%
Mean Total Surgeries						
Niche hospitals open > 1 year	5,334	4,515	4,602	5,388	4,916	-7.8%
General hospitals	4,706	4,678	4,935	4,995	4,747	0.9%
General hospitals in HSA with a niche hospital	7,264	7,451	7,697	7,644	6,556	-9.7%

Source: MPR analysis of AHA Survey Data, 2000-2004.

FIGURE I.6

OUTPATIENT SURGERIES AS A PERCENT OF TOTAL SURGERIES, 2000 AND 2004

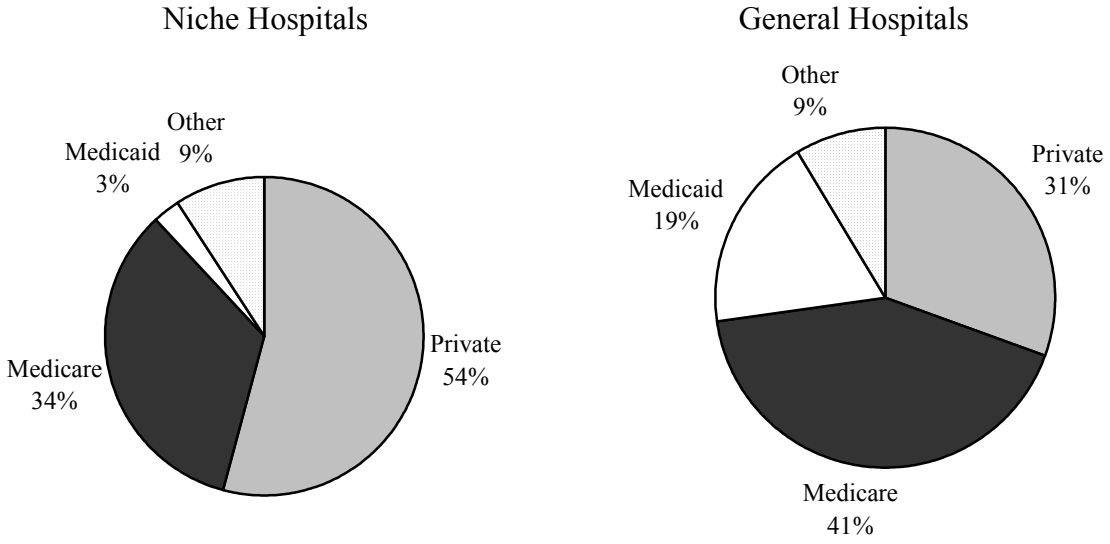


Source: MPR analysis of AHA Survey Data, 2000-2004.

In Texas, niche hospitals reported a much higher percentage of private-pay patients in 2004 than did general hospitals (54 percent versus 31 percent), but a lower percentage of Medicare patients (34 percent versus 41 percent in general hospitals) (Figures I.7). Together, privately insured and Medicare patients constituted 88 percent of all admissions to niche hospitals in Texas in 2004, compared with just 72 percent of all admissions to general hospitals.

FIGURE I.7

AVERAGE PAYER MIX IN HOSPITALS AS A PERCENT OF TOTAL ADMISSIONS, 2004



Source: MPR analysis of AHA Survey Data, 2000-2004.

In contrast, niche hospitals in Texas accept remarkably few Medicaid patients, who represent relatively low reimbursement as a percent of cost. In 2004, Medicaid patients accounted for just 3 percent of admissions to niche hospitals, compared with 19 percent of the admissions to general hospitals.

From 2000 to 2004, the proportion of patients in niche hospitals that were private-pay dropped from 62 percent to 54 percent, while the proportion that were Medicare patients increased. The share of Medicaid patients remained low and stable, at two to three percent of all admissions. (Table I.7)

General hospitals in HSAs with at least one niche hospital reported a similar decline in the proportion of private-pay patients but a smaller increase in the proportion of Medicare patients. On net, the proportion of patients in general hospitals that were either private-pay or Medicare-enrolled fell three percentage points from 2000 to 2004, while the proportion of Medicaid patients rose.

TABLE I.7

ADMISSIONS BY PAYER AS A PERCENT OF TOTAL ADMISSIONS
TO NICHE AND GENERAL HOSPITALS, 2000-2004

	2000	2001	2002	2003	2004	Change 2000-2004
Niche Hospitals Open > 1 Year						
Private	62.4	66.3	60.1	55.3	54.1	-8.3
Medicare	26.0	23.1	20.2	32.6	33.9	7.9
Medicaid	2.4	3.3	2.1	2.3	2.8	0.4
Other	9.2	7.3	17.6	9.8	9.2	0.0
All General Hospitals						
Private	28.2	28.1	27.1	26.0	25.6	-2.6
Medicare	46.6	47.2	46.5	46.6	47.8	1.2
Medicaid	15.9	15.7	16.8	17.6	17.4	1.5
Other	9.3	9.0	9.6	9.8	9.2	-0.1
General Hospitals in HSAs with Niche Hospitals						
Private	35.2	35.9	33.1	31.0	30.5	-4.7
Medicare	40.5	39.0	38.5	40.4	42.2	1.7
Medicaid	15.7	16.8	19.0	19.4	18.7	3.0
Other	8.6	8.3	9.4	9.2	8.6	0.0

Source: AHA Survey Data, 2000-2004.

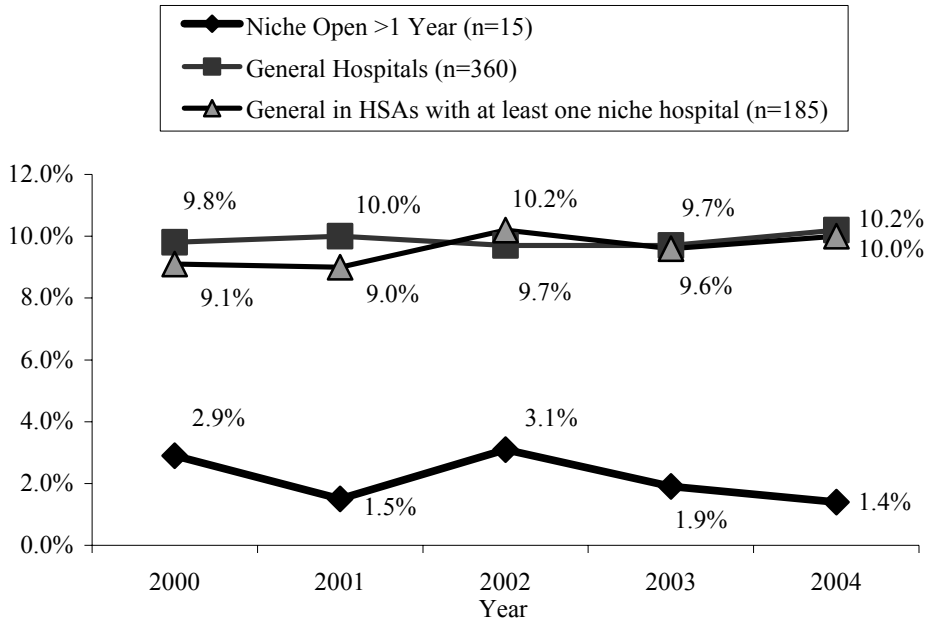
Note: The 2004 hospital payer mix is based on mean values for private admissions, Medicare admissions, and Medicaid admissions as a percent of total admissions. Other admissions include self-pay, uninsured, TRICARE, and miscellaneous payers

General hospitals provide a considerable amount of uncompensated care, including both charity care and bad debt. From 2000 to 2004, general hospitals' uncompensated care equaled approximately ten percent of revenues, with very little change over the period (Figure I.8). In contrast, niche hospitals provided uncompensated care equal to just two to three percent of revenues over this time period.[9]

[9] All niche hospitals in Texas are for-profit organizations and therefore pay taxes. Assessing whether the amount paid in taxes is equivalent to the amount of uncompensated care that general hospitals provided is beyond the scope of this study.

FIGURE I.8

MEAN UNCOMPENSATED CARE AS A PERCENT OF REVENUE:
NICHE OPEN AT LEAST ONE YEAR AND GENERAL HOSPITALS, 2000-2004



Source: MPR analysis of AHA Survey Data, 2000-2004.

6. Operating and Total Margins

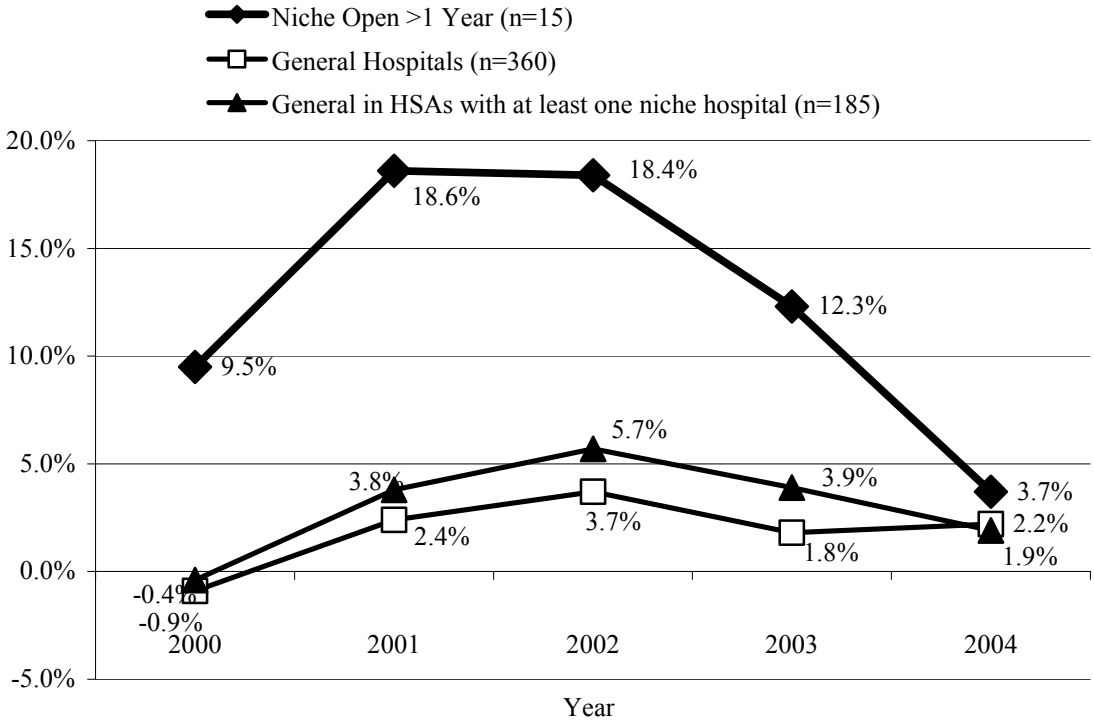
Probably the most telling indicator of differences in the service and payer mix associated with niche and general hospitals is the difference in their mean operating margins as a percent of their revenues—in effect, a measure of annual profits. To compare the operating and total margins of niche and general hospitals, we omitted from the data, niche hospitals that had been in operation for only one year. These hospitals had very low margins associated with startup and could not reasonably be compared with general hospitals, of which all had been operating for longer periods.[10]

From 2000 to 2004, niche hospitals that had been operating for at least one year reported an average operating margin that ranged from 10 to 18 percent from 2000 to 2003, dropping to a level similar to that of general hospitals in 2004—approximately four percent (Figure I.9). The decline in niche hospitals' average operating margins as a percent of revenue since 2002 may be related to the surge in the development of these hospitals since 2001, with newer hospitals reporting lower operating margins in the first years after startup (even omitting their first-year experience from consideration).

[10] Recall that all hospitals reporting part-year or missing data—either niche or general hospitals—also were omitted from this analysis, as well as the preceding descriptive analysis based on the AHA survey data.

FIGURE I.9

MEAN OPERATING MARGIN AS A PERCENT OF REVENUE, 2000-2004



Source: MPR analysis of AHA Survey Data, 2000-2004.

In contrast, general hospitals started the period reporting average operating losses against revenue of –1.0 percent in 2000.[11] Their operating margins improved until 2002, peaking at five percent of revenues that year. From 2002 to 2004, however, the operating margins of general hospitals again declined. As reported by stakeholders in Texas (and described in Chapter III), that drop may have been related to competition with niche hospitals for on-call physicians, nurses, and other staff—a dynamic that reportedly exacerbated the cost effects of the general shortage of these professionals in Texas.

Located in Texas's faster-growing population centers, general hospitals in HSAs with at least one niche hospital—reported slightly higher average operating margins than general hospitals overall from 2002 to 2004, but distinctly lower operating margins than the niche hospitals. In 2004—when the number of niche hospitals reached an historic high—the operating margins of general hospitals in HSAs with a niche hospital dropped below the average of all general hospitals in Texas.

Similar patterns are evident with respect to total hospital margins in Texas from 2000 to 2004. Total margins include non-operating revenues and expenditures, such as capital gains and

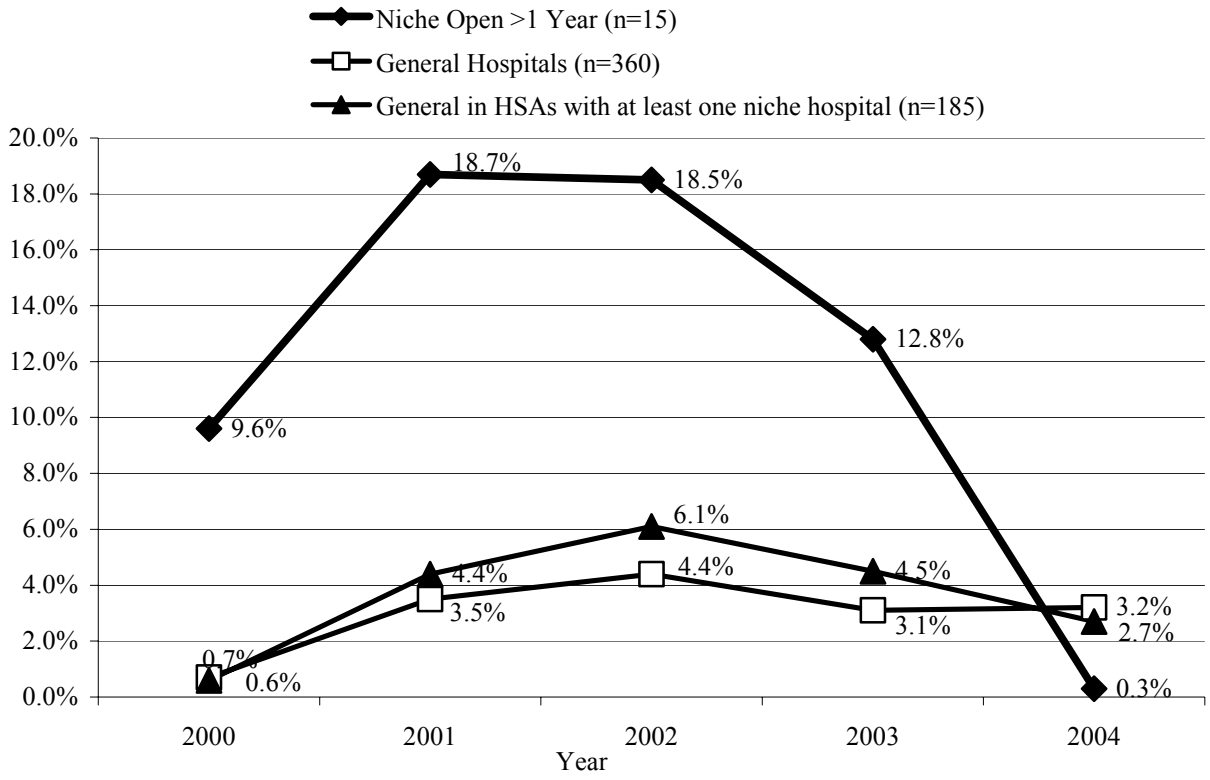
[11] The diminished fiscal condition of general hospitals in Texas in 2000 may have been the result of the Balanced Budget Act of 1997, which significantly reduced Medicare reimbursements to hospitals. (AHA, 2006)

investments, as well as operating revenues and costs. In 2004, the average total margin among niche hospitals dropped to just 0.3 percent—approximately break-even for these hospitals.

In contrast, general hospitals in Texas that in general are older facilities than niche hospitals, reported generally much lower and more stable total margins as a percent of revenue from 2000 to 2004, ending the period with an average total margin of about three percent. Reflecting their lower operating margin in 2004 than general hospitals overall, general hospitals in HSAs with at least one niche hospital reported a lower average total margin that year—approximately 2.2 percent (Figure I.10).

FIGURE I.10

MEAN TOTAL MARGIN AS A PERCENT OF REVENUE, 2000-2004



Source: MPR analysis of AHA Survey Data, 2000-2004.

E. ANALYSIS OF GENERAL HOSPITAL MARGINS

This analysis identifies the impacts on general hospitals' operating or total margins that are attributable specifically to the presence of one or more niche hospitals in the community, controlling for the potential effects of other factors that may also drive differences in hospital margins. We analyzed three outcome measures: (1) general hospital operating margins, (2) general hospital total margins, and (3) uncompensated care as a percent of revenues in general hospitals. Each analysis controlled for the presence of one or more niche hospitals in the market. These were measured alternatively as: (1) the presence of one or more niche hospitals in the

general hospital's HSA, (2) the number of admissions to niche hospitals as a percent of admissions to either niche or general hospitals in the HSA, and (3) the total number of surgeries performed in niche hospitals as a percent of total surgeries performed in either niche or general hospitals in the HSA. Additional control variables included:

- ***The General Hospitals' Own Characteristics.*** For-profit status; teaching status; number of beds; payer mix; location; volume of outpatient visits, ER visits, and admissions; average length of stay, occupancy rate; and system or network affiliation
- ***Local Population Characteristics.*** HSA population level and growth; the racial, gender, and age composition of the population; and average educational attainment and per capita income
- ***Local Market Characteristics.*** The number of hospitals in the HSA, physicians per thousand population in the HSA, and the number of ambulatory surgery centers in the HSA

In each of the analyses, the general hospital was the unit of observation, and effects were estimated over five years (2000-2004).[12] Coefficient estimates with a two-tailed p-value of less than five percent—indicating at least a 95 percent chance that the relationship was nonzero—were accepted as statistically significant.

Controlling for other factors that affect hospital margins and uncompensated care, we found no evidence that the presence of a niche hospital, per se, affected the financial performance of general hospitals in the same market area.[13] That is, neither the presence of a niche hospital nor the volume of admissions or surgeries affected (1) general hospitals' total or operating margins, or (2) the level of uncompensated care they experienced. It is possible that no effect would be discernable if, as suggested in other studies, general hospitals adjusted their business practices during the course of a reporting year to offset perceived or real declines in margins.[14] However, we also were unable to find any impact on the general hospitals' levels of uncompensated care associated with the presence of a niche hospital.

While the presence of a niche hospital seems to have had no discernable effect on general hospitals' margins or levels of uncompensated care, the general hospital's for-profit tax status was a very important predictor of these outcomes. That is, controlling for all other factors, nonprofit general hospitals reported an average operating margin that was 8.5 percentage points lower than that reported by for-profit general hospitals, and an average total margin that was 7.7

[12] The multivariate regression model is a pooled cross-section of hospital-year observations. Standard errors were clustered in the model to account for the presence of the same hospital in multiple years of the dataset.

[13] All models and estimates produced for this analysis are reported in Appendix C.

[14] For example, surveys of hospital executives and physicians also have found that the development of ambulatory surgery centers and specialty/niche hospitals had not (to date) affected general hospital margins, because general hospitals had managed to raise prices for profitable service lines in order to recoup revenue losses from "out-migrated" services (MedPAC 2006).

percentage points lower. Their uncompensated care load, as a percent of revenues and holding all else equal, was 2 percentage points greater than that of for-profit hospitals.[15]

Other characteristics of general hospitals also contributed to differences in their operating and/or total margins relative to niche hospitals—although none so strongly as for-profit status. Specifically, all else being equal, larger hospitals reported higher operating margins, pointing to the importance of economies of scale for larger general hospitals. In addition, higher emergency room volume was significantly associated with greater uncompensated care—suggesting that niche hospitals may indeed benefit from limiting their emergency room capacity. We estimate that, all else being equal, an increase of 10,000 visits to the emergency room would drive a one-point increase in uncompensated care as a percent of patient revenues. Finally, general hospitals with higher occupancy rates sustained less uncompensated care as a percent of revenues; conversely, hospitals with a greater proportion of empty beds appeared more likely to admit patients who cannot pay for care.

Some aspects of the local population and local market area also affected the margins of hospitals. For example, variables that measure socioeconomic and insurance status (such as the gender composition of the area and the proportion of the population that had completed high school) affected hospital margins. Finally, Medicare as a share of patient admissions did not appear to drive low margins in general hospitals. However, operating and total margins for general hospitals were slightly higher in HSAs where a greater proportion of the population was age 65 or older.

To test the sensitivity of these findings to Texas's definition of a niche hospital, we repeated the analysis using the list of niche hospitals developed by the CMS for its August 2006 report; these additional results are reported in Appendix D. Using the CMS definition entailed adding some hospitals to the niche category (as defined by CMS) and removing them from general hospital status (as defined in Texas). Conversely, some hospitals that were niche hospitals under the Texas definition were moved to general hospital status under the CMS definition.[16] Thus, use of either definition equated to significant heterogeneity among general hospitals; some hospitals considered niche under the CMS definition did not even approach niche under the Texas definition. As a result, the findings of the analysis with respect to the impact on general hospitals' total and operating margins did not change: we found no evidence that the presence of a niche hospital affected general hospitals' total or operating margins, but consistent evidence that the for-profit status of the general hospital was the most significant predictor of relatively high margins.

[15] This gap in financial performance between for-profit and nonprofit hospitals is consistent with prior analyses that examined differences in the prior decade (e.g., Thorpe et al. 2000).

[16] In addition, not all hospitals on the CMS list appeared in the AHA data, largely because they had not been in operation a full calendar year. Therefore, while CMS identified 31 niche hospitals in Texas in 2004, just 21 appeared in the AHA data and were included in this analysis. Review of the niche hospitals that did not report indicated that dropping them from the analysis did not change the essential results with respect to impact on general hospital margins.

F. LIMITATIONS OF THE ANALYSIS

The design of this study reflects the constraints of the study's legislative mandate as well as the resources and timeline permitted. These constraints may affect the study results in a number of important ways and also suggest avenues for additional study that may be of value to policy makers in Texas and elsewhere.

First, we defined a general hospital's market to be its health service area (HSA), a definition based on the geographic use patterns of Medicare patients. Alternative definitions of service areas—specifically, counties and trauma service areas—were tested, but neither produced sensible results. While additional investigation of meaningful service areas in Texas is beyond the scope of this study, further analysis of hospital market areas to confirm our findings may be important.

Second, variables of potential importance were omitted. While our estimates explain more than the usual proportion of variation in the outcome variables, more than half of the total variation in each specification remained unexplained. Among the omitted variables that might have explained significant variation would be case-mix measures and measures of patient acuity. While the high proportion of outpatient surgeries at niche hospitals suggests that they have a lower average patient acuity relative to general hospitals, the AHA survey does not provide this information, and our ability to match case mix and patient acuity to the survey data was limited by the timeline and data available for the study. By necessity, we assume that such unobserved variables are uncorrelated at the hospital level with the observed variables, so that excluding them did not bias the results of the analysis.

Third, despite the relative concentration of niche hospitals in Texas, there are still very few niche hospitals compared with all hospitals or even multi-service general hospitals in the state. Because niche hospitals account for relatively few hospitals or admissions, they are unlikely to have systematic effects on general hospitals as a group. Even so, if general hospitals adapted quickly to the financial effects of niche hospitals in their service areas, it is possible that an analysis of this type would not have discerned significant effects that might have occurred. For example, general hospitals could have increased the prices of services for which they had no competitors, thereby offsetting the effects of niche hospitals and obscuring observable effects. While an analysis of such responses was beyond the timeline and resources available for this study, it also would have addressed a different question: how service prices and total cost may change in response to the entry of a niche hospital. An analysis of such potential effects on the larger health care system could be a valuable adjunct to this study.

Finally, the for-profit status of hospitals in Texas accounted for most of the explained variation in hospital operating margins. In 2004, all niche hospitals in Texas were for-profit, but most community hospitals were not. This finding—that for-profit hospital margins significantly exceed not-for-profit hospital margins is consistent with findings in the research literature, especially in the southern and western states.[17] The literature does not offer a particularly

[17] In a comprehensive review and meta-analysis of studies that used multivariate analysis techniques, Eggleston et al. (2005) found consistent evidence that for-profit hospitals earned higher margins than nonprofits, although the magnitude of difference varied between studies. Studies using data within a single state, especially in the South and West, tend to find larger differences in margins between for-profit and nonprofit hospitals, compared to national studies.

satisfactory explanation of this finding, beyond noting the much lower burden of uncompensated care that for-profit characteristically provide.[18] In Texas, the distribution of uncompensated care may also explain the substantial difference between for-profit niche hospitals and general hospitals, of which most are not-for-profit. Whether the difference in uncompensated care may be a result of physician referral patterns is explored in the chapter that follows.

G. SUMMARY AND CONCLUSIONS

From 2000 to 2004, the number of niche hospitals in Texas increased sharply, but they still represent just six percent of all licensed hospitals in Texas. About half of the general, multi-service hospitals in Texas operated in health service areas (HSA) where a niche hospital also operated. While all of the niche hospitals in Texas are for-profit facilities, 35 percent of general hospitals that competed in the same HSA with niche hospitals in 2004 were for-profit.

The average capacity of niche hospitals in Texas is much smaller than that of general hospitals. General hospitals in HSAs that included a niche hospital were nearly ten times as large as the niche hospitals in those HSAs and averaged more than six times the number of admissions as niche hospitals in 2004. The emergency volume in general hospitals was more than 30 times that of niche hospitals in 2004.

From 2000 to 2004, we observed trends in hospital admissions and utilization that suggested a significant realignment of hospital activity and profitability. Specifically:

- Admissions to both niche and general hospitals increased from 2000 to 2004, but niche hospitals saw an average increase in admissions that was twice that of all general hospitals (12.7 percent versus 6.0 percent). In HSAs with at least one niche hospital, admissions to general hospitals actually declined by 3.4 percent.
- For both niche and general hospitals in the same HSAs, the average number of outpatient visits per hospital declined, but the rate of decline was faster among the general hospitals (-6.6 percent) than among niche hospitals (-4.5 percent).
- Niche hospitals reported a much higher percentage of private-pay patients than did general hospitals and remarkably few Medicaid patients (two to three percent). From 2000 to 2004, the proportion of patients in niche hospitals that were private-pay dropped from 62 percent to 54 percent, while the proportion that were Medicare patients increased. General hospitals in HSAs with at least one niche hospital reported a similar decline in the proportion of private-pay patients but a smaller increase in the proportion of Medicare patients, while the proportion of Medicaid patients rose.

[18] GAO (2005) reported that for-profit hospitals in Texas had only 4.8 percent of their patient operating expenses devoted to uncompensated care in 2003, compared with 6.7 percent of nonprofit hospitals—although both types of hospitals provided less uncompensated care than government-owned, public hospitals (18.0 percent of operating expenses). A small number of nonprofit hospitals accounted for most uncompensated care delivered by nonprofit hospitals in the state.

- Although niche hospitals had less than 20 percent of the bed capacity of general hospitals in 2004, they averaged more than 67 percent of the operating room capacity of general hospitals in their market areas. From 2000 to 2004, the average number of inpatient surgeries performed in niche hospitals grew three times as fast (11.6 percent) as that in general hospitals (less than four percent). Among general hospitals in HSAs with at least one niche hospital, the average number of inpatient surgeries dropped 7.7 percent.

From 2002 to 2004, the operating margins of general hospitals declined. In 2004—when the number of niche hospitals reached an historic high—the operating margins of general hospitals in HSAs with a niche hospital dropped below the average of all general hospitals in Texas. Nevertheless, controlling for the potential effects of many factors that may affect hospital margins, we did not find that the presence of niche hospitals or their volume of admissions had an adverse net impact of the operating margin, total margin, or uncompensated care as a percent of revenues of general hospitals.

Instead, the most important predictor of general hospitals' financial performance was its status as a profit-profit or nonprofit facility. For-profit general hospitals systematically had much higher operating margins than nonprofit general hospitals and slightly lower amounts of uncompensated care.

The financial prospects for both general and niche hospitals in Texas are fundamentally linked to their payer mix. In Texas, niche hospitals have a higher proportion of private pay patients than general hospitals, but the privately insured proportion of their patients has decreased over time as the proportion enrolled in Medicare has increased. In contrast, general hospitals saw an increase in both the proportion of Medicare and Medicaid admissions. Greater dependence on Medicare as a payer may drive significant change in the prospects for niche hospitals and on competition for patients in coming years, as Medicare's payment policies increasingly emphasize greater efficiency and lower hospital cost.

CMS is poised to change reimbursement for the major services that niche hospitals in Texas provide; payment for selected cardiac services is scheduled to change in 2007. CMS will review payment for surgical and orthopedic services in 2007, and may change those as well in 2008 (CMS 2006). It seems likely that reduced Medicare payments for these services will encourage niche hospitals to market more aggressively to commercially insured patients—possibly forcing insurers to admit niche hospitals into their networks—and also increase physician-owners' financial incentives to selectively refer high-margin patients. In turn, general hospitals may respond to preserve their margins by increasing the price or volume of services for which they do not compete with niche hospitals—and increasing total health care costs in the state.

Such effects in Texas would be important to monitor. However, the difference between the CMS and Texas definitions of a niche hospital will make it difficult to monitor the effects on either total health care costs or general hospital margins. A more comprehensive definition of a niche hospital—incorporating the CMS definition into Texas's current statutory definition, as well as improvements in reporting by hospitals and ambulatory surgical centers in the state, could greatly improve the ability of the state to understand the impacts of a growing niche hospital sector. Improved reporting would include obtaining more accurate inpatient hospital discharge information, information on the outpatient revenues and costs of hospitals and

ambulatory surgery centers for outpatient discharges and visits, and more accurate (and updated) information on hospital ownership in Texas.

II. REFERRAL PATTERNS OF PHYSICIAN OWNERS AND NON-OWNERS

A. INTRODUCTION

A number of studies have noted that physicians with an ownership interest in a niche hospital have a financial incentive to refer their patients to that hospital (GAO 2003; CMS 2005; MedPAC 2005). Indeed, recognition of the financial incentive for self-referral to physician-owned hospitals has fed mounting concerns about unfair competition, bias in the professional judgment of physician owners, and the potential overuse of health care services.

Over the past 35 years, Congress has enacted two laws to counter inappropriate self-referral patterns: the federal anti-kickback statute (enacted in 1972), and the Ethics in Patient Referrals Act (also known as the Stark Law, enacted in 1989 and expanded in 1993). However, neither law prohibits physicians who have an investment in the whole hospital (versus a hospital division or unit) from referring patients to that hospital. Both laws reflect the belief that referrals from a physician owner would have little impact on overall hospital profits, given the wide array of services that hospitals generally provide. However, it is the "whole hospital" exception that has created the regulatory-sanctioned opportunity for physicians to gain financially from self-referral to a hospital (such as a niche hospital) that specializes in a narrow set of services.

Despite the obvious financial incentive to self-refer, it is only one of several factors that may drive differences in the patient mix of niche versus general hospitals (Greenwald et al. 2006). These factors may include whether a hospital is in the network of the patient's insurance plan; the size, visibility, and capacity of the hospital's emergency department; patients' preferences for (and ability to afford) the convenience and amenities of newer and smaller hospitals; and physicians' preferences about staffing, scheduling, and other dimensions of their work environment.

This chapter explores the question of whether physician ownership, versus other factors unrelated to the financial incentives of ownership, drives the differences in the patient mix of niche versus general hospitals. Specifically, we look at the referral patterns of physician owners relative to those of non-owners with respect to three measures of potential bias:

- Patients admitted by physician owners as a percent of all patients discharged from physician-owned niche hospitals
- Patients admitted by physician owners to the niche hospitals they own as a percent of all patients that physician owners refer to any hospital
- The relative profitability (payer type and severity of illness) of patients admitted by physicians to a niche hospital in which they have an ownership interest

B. DATA AND METHODS

The analysis in this chapter is based on analysis of the Quarterly Texas Hospital Inpatient Discharge Public Use Data Files for 2000 through 2004, obtained from the DSHS Center for

Health Statistics. For each patient discharged from a Texas hospital, these data identify the hospital of discharge and the patient's attending physician, who (based on the discharge coding instructions) is likely also to be the admitting physician.[19, 20] We grouped discharges by the attending physician's status as an owner or non-owner.

We combined the data from each quarter in each year to create annual discharge data files. The annual discharge data were then matched to data from applications for hospital licenses and from the 2000-2004 AHA Annual Survey of Hospitals and Hospital Tracking Database to identify whether a hospital was physician-owned and to ensure that hospitals were identified consistently from year to year, as some had changed their name and ownership. Physician owners were identified from the licensure information.

In examining the merged files, we observed that physician-owners of niche hospitals admitted patients to only one niche hospital in any year. We inferred that their ownership interest was in that hospital and flagged these physicians in the discharge database to support an analysis of their admitting patterns. In 2004, we identified 15 hospitals—one cardiac, seven orthopedic, and seven surgical hospitals—that could be associated with specific physician owners; 148 physician owners and 154 physician non-owners admitted patients to these hospitals (Table II.1).[21]

To identify differences in the referral behaviors of physician owners versus non-owners, we first developed bivariate statistics to describe the number and characteristics of discharges for the major diagnosis categories (MDCs) used to define niche hospitals.[22] Discharge characteristics

[19] The physician identification number in the discharge data is ATTENDING_PHYSICIAN_UNIF_ID, which is a "unique identifier assigned to the licensed physician expected to certify medical necessity of services rendered, with primary responsibility for the patient's medical care and treatment. Physician is an individual licensed to practice medicine under the Medical Practice Act" and "can include an individual other than a physician who *admits* patients to hospitals or who provides diagnostic or therapeutic procedures to inpatients, including psychologists, chiropractors, dentists, nurse practitioners, nurse midwives, and podiatrists authorized by the hospital to *admit or treat* patients." [Italics inserted for emphasis.] In practice, the unique physician ID used to identify the attending physician from the discharge data could only be the physician who treated the patient—not a physician who only referred the patient.

[20] The reader should note that ambiguity in the identified physician's role is likely to produce random and unbiased error in the analysis, artificially reducing the statistical significance of any differences in referral patterns between owners and non-owners. A finding of significant difference, therefore, is probably conservative. That is, clarification of the variable would increase the likelihood of finding statistically significant differences.

[21] We identified one physician-owned women's hospital in the discharge data, but were unable to identify the specific physician owners and, therefore, omitted this hospital from the analysis.

[22] MDC 5 (diseases and disorders of the circulatory system) was used for cardiac hospitals; MDC 8 (diseases and disorders of the musculoskeletal system) was used for orthopedic hospital; and MDC 13 (diseases of the female reproductive system) was used for women's hospital. MDCs for surgical hospitals varied across hospitals and reflected the two most common MDCs. In addition to the above MDCs, they generally included MDC 1 (diseases and disorders of the nervous system), MDC 4 (diseases and disorders of the respiratory system), MDC 6 (diseases and disorders of the digestive system), MDC 9 (diseases and disorders of the skin and breast), MDC 10 (endocrine diseases and disorders), and MDC 11 (diseases and disorders of the kidney and urinary tract).

included the primary payer, the severity of illness, and the risk of mortality.[23] We then analyzed the volume and characteristics of discharges by physician (comparing owners to non-owners) and by hospital (comparing niche hospitals to general hospitals). For each comparison, we used a t-test to assess whether the mean of one group was significantly different from the mean of the other group, in light of the variation that occurs within groups.

TABLE II.1

NICHE HOSPITALS WITH IDENTIFIED PHYSICIAN OWNERS AND ATTENDING PHYSICIAN OWNERS AND NON-OWNERS, 2004

Hospital Specialty	Number of Niche Hospitals with Identified Physician Owners	Number of Physicians with Discharges from Niche Hospitals with Identified Physician Owners	
		Physician Owners	Physician Non-Owners
Total	15	148	154[a]
Cardiac	1	23	34
Orthopedic	7	76	58
Surgical	7	49	97

Source: Analysis of the 2000-2004 Texas Hospital Inpatient Discharge Public Use Data Files.

Note: The number of unique physician owners identified may be less than the total number of physicians with ownership in the niche hospital in cases where we were unable to identify the physician owners from the hospital licensing application or to uniquely identify the physician owner in the discharge data that hospitals reported.

[a]Detail does not add to the total because physician non-owners may have admitting privileges in more than one type of niche hospital.

The definition of niche hospitals and general hospitals used in this chapter is the same as that used in Chapter I and described in Appendix A. More detailed documentation of the data development steps undertaken for the analysis in this chapter is provided in Appendix E.

C. DISCHARGES FROM NICHE VERSUS GENERAL HOSPITALS

From 2000 to 2004, more than two million patients per year were discharged from hospitals licensed in Texas (Table II.2). The vast majority of patients (99 percent) were discharged from general hospitals. Niche hospitals accounted for just 0.4 percent of all discharges in 2000 and 1.1 percent in 2004; most of these niche hospitals were physician-owned.

[23] The severity of illness recorded on the discharge record is a standard score from the 3M's All Patient Refined Diagnosis Related Group (APR-DRG) grouper that indicates the discharging physician's assessment of the extent of physiologic decomposition or organ-system loss of function. Similarly, the risk of mortality is a standard score from the APR-DRG grouper that indicates the likelihood of death at admission.

TABLE II.2

TOTAL DISCHARGES AND DISCHARGES BY HOSPITAL TYPE AND OWNERSHIP, 2000-2004

	2000	2001	2002	2003	2004	All Years
Total discharges	2,266,049	2,359,705	2,405,822	2,476,946	2,488,389	11,996,911
General hospitals						
Total general hospital discharges	2,257,143	2,348,550	2,392,906	2,458,242	2,459,943	11,916,784
Percent of total discharges	99.6%	99.5%	99.5%	99.2%	98.9%	99.3%
Niche hospitals						
Total niche hospital discharges	8,906	11,155	12,916	18,704	28,446	80,127
Corporate-owned niche hospitals	50	751	945	966	575	8,085
Percent of niche hospital discharges	0.6%	6.7%	7.3%	5.2%	2.0%	10.1%
Physician-owned niche hospitals						
Owners identified	4,058	4,610	5,843	10,530	15,497	40,538
Percent of niche hospital discharges	45.6%	41.3%	45.2%	56.3%	54.5%	50.6%
Owners not identified	4,798	5,794	6,128	7,208	12,374	31,504
Percent of niche hospital discharges	53.9%	51.9%	47.4%	38.5%	43.5%	39.3%

Source: Analysis of the 2000-2004 Texas Hospital Inpatient Discharge Public Use Data Files.

We were able to associate about half of all niche hospital discharges with hospitals for which we could identify the specific physician owners (although many additional discharges were associated with physician-owned niche hospitals for which we could not identify specific physician owners). Niche hospitals for which we could identify the specific physician owners accounted for 4,000 discharges in 2000 and more than 15,000 discharges in 2004. From 2000 to 2004, self-referrals by physician owners accounted for about one-third of all discharges from hospitals that they owned, rising from 17 percent of discharges in 2000 to 38 percent in 2004 (Table II.3).

TABLE II.3

DISCHARGES FROM NICHE HOSPITALS WITH IDENTIFIED PHYSICIAN OWNERS, TOTAL AND BY PHYSICIAN OWNERSHIP, 2000-2004

	2000	2001	2002	2003	2004	All Years
Total Number of Discharges	4,058	4,610	5,843	10,530	15,497	40,538
Discharges by owners	695	978	1,325	3,894	5,892	12,784
Percent of total	17.1%	21.2%	22.7%	37.0%	38.0%	31.5%
Discharges by non-owners	3,363	3,632	4,518	6,636	9,605	27,754
Percent of total	82.9%	78.8%	77.3%	63.0%	62.0%	68.5%

Source: Analysis of the 2000-2004 Texas Hospital Inpatient Discharge Public Use Data Files.

D. PHYSICIAN ADMITTING PATTERNS

1. Exclusive Admission

From 2000 to 2004, more than half of all physicians in Texas—regardless of their ownership status—admitted all of their patients to the same hospital in any given year (Table II.4). This practice of exclusive admissions became more prevalent over time: by 2004, nearly 55 percent of physicians admitted patients to just one hospital, 28 percent of physicians admitted patients to two hospitals, and 17 percent admitted patients to three hospitals or more.

TABLE II.4

NUMBER OF PHYSICIANS AND PERCENT WITH ADMISSIONS TO MULTIPLE HOSPITALS, 2000-2004

	2000	2001	2002	2003	2004
Total Number of Physicians	20,747	20,627	20,713	20,995	21,425
Percent with admissions to:					
1 hospital	52.8	52.7	54.0	53.8	54.9
2 hospitals	28.5	28.0	28.4	28.2	28.2
3 or more hospitals	18.7	19.3	17.6	18.0	16.9
Number of physician owners of niche hospitals	759	757	776	769	763[a]
Percent with admissions to:					
1 general hospital	35.1	32.9	34.8	34.1	40.0
2 general hospitals	30.4	32.6	33.9	36.6	33.4
3 or more general hospitals	34.5	34.5	31.3	29.3	26.6

Source: Analysis of the 2000-2004 Texas Hospital Inpatient Discharge Public Use Data Files.

[a]The number of physician owners is not the same as reported in Table II.1 because physicians may be uniquely identified in discharges from general hospitals but not in discharges from niche hospitals that they may own.

These patterns suggest that, even if physician owners admitted patients only to the hospital in which they had an ownership interest, it might be consistent with the pattern of exclusive admissions observed among physicians generally. But in addition to admitting patients to their own niche hospitals,[24] all 763 physician owners identified in 2004 admitted at least one patient to a general hospital in that year (Table II.4). Consistent with the changes in physician practice that generally took place in the state from 2000 through 2004, physician owners were more likely to admit patients to the same general hospital (versus two or more) in 2004 than in 2000.

2. Admissions by Physician Owners

In 2004, more than half of all discharges from niche hospitals—regardless of specialty—were associated with physician owners (Table II.5). That year, the rate of self-referrals to orthopedic hospitals (64 percent) and surgical hospitals (59 percent) exceeded the rate of self-referral to cardiac hospitals (51 percent)—reflecting fast growth in the rate of self-referral to orthopedic and surgical hospitals, in particular, since 2000. Among all of the niche hospitals with identified physician owners, self-referrals increased from 23 percent of discharges in 2000 to 61 percent in 2004.

TABLE II.5

PATIENTS ADMITTED BY PHYSICIAN OWNERS AS A PERCENT OF ALL PATIENTS DISCHARGED FROM PHYSICIAN-OWNED NICHE HOSPITALS, BY HOSPITAL SPECIALTY, 2000-2004

Hospital Specialty	2000	2001	2002	2003	2004
Total	23.2 %	25.6 %	33. %	54.8 %	61.1 %
Cardiac	na[a]	na[a]	55.1	58.3	51.2
Orthopedic	38.1	37.9	40.1	61.4	64.3
Surgical	8.3	1.0	12.4	45.6	59.3

Source: Analysis of 2000-2004 Texas Hospital Inpatient Discharge Public Use Data Files.

Note: Discharges from cardiac, orthopedic, and surgical hospitals were restricted to the major diagnostic categories (MDCs) that were used, respectively, to define the niche hospitals: MDC 5, MDC 8, and the most frequent two surgical MDCs. Percents were calculated for each niche hospital and averaged (unweighted) across hospitals.

[a]There were no cardiac hospitals with identified physician owners in 2000 and 2001.

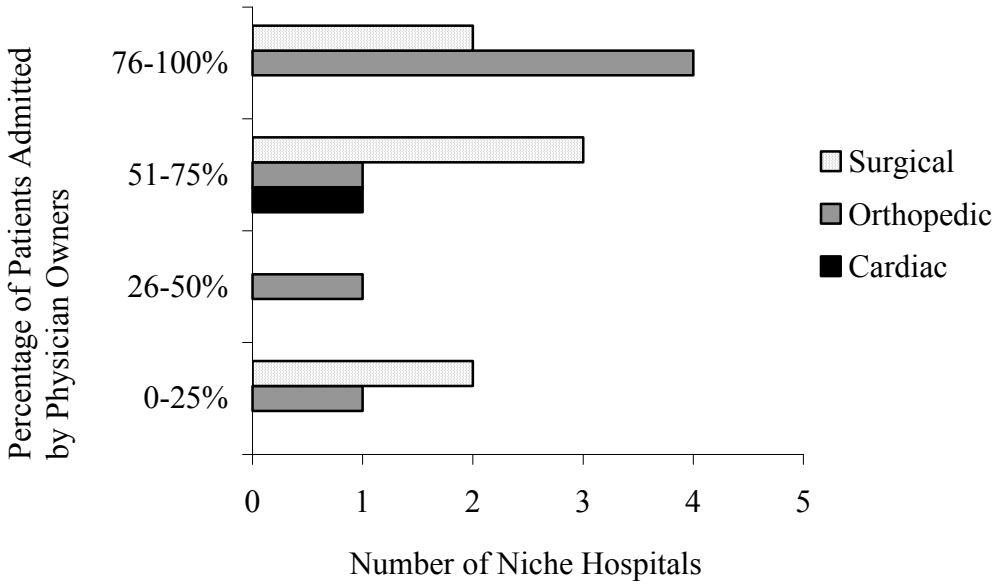
From the perspective of the hospital, admissions by physician owners represented an important source of their business. In 2004, physician owners admitted more than half of all patients who were discharged from five of the seven surgical hospitals with identified physician owners, and more than three-quarters of patients discharged from four of the seven orthopedic

[24] We were unable to identify referrals to niche hospitals for a large number of these physician owners, because they were not uniquely identified in the discharge data niche hospitals reported.

hospitals with identified physician owners (Figure II.1). Physician owners also admitted more than half of all patients who were discharged from the one cardiac hospital with identified physician owners.

FIGURE II.1

NUMBER OF NICHE HOSPITALS WITH IDENTIFIED PHYSICIAN OWNERS, BY THE PERCENT OF PATIENTS ADMITTED BY PHYSICIAN OWNERS, 2004



Source: Analysis of the 2004 Texas Hospital Inpatient Discharge Public Use Data File.

3. The Probability of Self-Referral

Niche hospitals—whether physician-owned or not—treat patients within a relatively narrow range of health care needs. Consequently, to understand the prevalence of self-referral from the physician's perspective, it is necessary to distinguish between patients with a diagnosis that might be appropriately treated at a niche hospital versus those with diagnoses that would not reasonably be treated there.

Differentiating patients by the their diagnoses, we found that the physician owners of niche hospitals were more likely to admit specialty-appropriate patients to the niche hospital than to a general hospital, compared with non-owners who had admitting privileges to the same niche hospital (Table II.6). In 2000, physician owners admitted more than 55 percent of specialty-appropriate cases to niche hospitals in which they had an ownership interest, twice the rate at which non-owners admitted such cases. In 2004, the difference between owners and non-owners was smaller but nonetheless statistically significant: physician owners admitted 43 percent of specialty-appropriate cases to the niche hospital, while non-owners admitted 30 percent of such cases.

TABLE II.6

PATIENTS ADMITTED TO NICHE AND GENERAL HOSPITALS AS A PERCENT OF ALL PATIENTS REFERRED BY A PHYSICIAN TO ANY HOSPITAL, BY HOSPITAL SPECIALTY, 2000 AND 2004

	2000		2004	
Hospital Specialty	Niche Hospitals with Identified Physician Owners	General Hospitals	Niche Hospitals with Identified Physician Owners	General Hospitals
Total, All Specialties				
Owners	55.7*	44.3*	42.8*	57.2*
Non-owners	26.3	73.7	29.6	70.2
Cardiac[a]				
Owners	na	na	11.4	88.6
Non-owners	na	na	17.0	83.0
Orthopedic				
Owners	60.1*	39.9*	65.0*	35.0*
Non-owners	34.4	65.6	58.2	41.8
Surgical				
Owners	9.2	90.8	24.2	75.8
Non-owners	17.0	83.0	26.1	73.9

Source: Analysis of 2000 and 2004 Texas Hospital Inpatient Discharge Public Use Data Files

Note: Discharges from cardiac, orthopedic, and surgical hospitals were restricted to the major diagnostic categories (MDCs) that were used, respectively, to define the niche hospitals: MDC 5, MDC 8, and the most frequent two surgical MDCs. Percents were calculated for each physician and averaged (unweighted) across physicians with the same ownership status by type of hospital. Percent distributions (rows) may not add to 100 within a given year because of rounding. "Na" indicates that the column head is not applicable.

[a] There were no cardiac hospitals with identified physician owners in 2000.

*The difference in the referral patterns of physician owners and non-owners was statistically significant at the 95 percent confidence level.

The difference between the admitting patterns of owners and non-owners was most apparent in orthopedic hospitals. Both owners and non-owners admitted more than half of their orthopedic patients to niche hospitals. However, physician owners of orthopedic hospitals admitted an average of 65 percent of orthopedic patients to their own hospital, while non-owners with admitting privileges referred an average of 58 percent of orthopedic patients to the niche hospital. This difference was statistically significant.

In contrast, owners' and non-owners' admission patterns to cardiac and surgical hospitals in 2004 were statistically the same: both owners and non-owners were more likely to admit

specialty-appropriate patients to general hospitals. On average, the physician owners of cardiac hospitals admitted nearly 90 percent of cardiac cases to general hospitals in 2004, while physician owners of surgical hospitals admitted more than 75 percent of surgical cases to general hospitals. Differences in admission patterns between physician owners and non-owners of these hospitals were small and not statistically significant.

4. Payer Type and the Severity of Illness

Admissions to niche versus general hospitals by physician owners and non-owners alike differed systematically by payer type and by their patients' severity of illness. Specifically, across all types of niche hospitals, the mix of patients admitted to the niche hospital included relatively few self-pay/charity patients, relatively few Medicaid patients, and relatively more privately insured patients. In 2004, just 3.7 percent of the specialty-appropriate patients that owners self-referred were either self-pay/charity (2.9 percent) or Medicaid (1.8 percent), compared with 12.5 percent of the patients that they admitted to general hospitals (Table II.7).[25] However, we did not find any statistically significant difference in payer or case mix between admissions by owners versus non-owners: non-owners also admitted a significantly heavier mix of self-pay/charity and Medicaid patients to general hospitals—13.6 percent, compared with 5.8 percent of patients admitted to niche hospitals.

Conversely, privately insured patients constituted a larger share of the patients that both owners and non-owners admitted to niche hospitals, and a significantly smaller share of those admitted to general hospitals. In 2004, half of self-referrals to niche hospitals were privately insured, compared with just 40 percent of admissions to general hospitals.

In addition, both owners and non-owners admitted their most severely ill patients to general hospitals rather than to niche hospitals. In 2004, 18 percent of admissions to general hospitals by niche-hospital owners and 17 percent of admissions by non-owners were extremely ill, compared with just six percent of their admissions to niche hospitals. Similarly, just two percent of patients admitted by physician owners to niche hospitals were at major or extreme risk of mortality, compared with seven percent of their admissions to general hospitals.

[25] An identical analysis of patient selection using the discharge data in 2000 produced essentially the same results.

TABLE II.7

PAYER TYPE AND SEVERITY OF ILLNESS OF PATIENTS ADMITTED TO NICHE AND GENERAL HOSPITALS, BY OWNERSHIP STATUS OF THE ADMITTING PHYSICIAN, 2004

	Percent of Discharges			
	Physician Owners		Physician Non-owners	
	Niche Hosp	General Hosp	Niche Hosp	General Hosp
Payer				
Self-pay/charity	2.9*	6.1	2.0*	5.9
Medicare	38.9	41.6	33.1	38.0
Medicaid	1.8*	6.4	3.8*	7.7
Private insurer	50.1*	39.7	52.4*	43.3
Other	6.3	4.9	8.7*	4.1
Severity of Illness				
Minor	64.6*	41.5	67.3*	44.5
Moderate	29.3*	40.5	26.8*	38.6
Major/ Extreme	6.1*	18.0	5.9*	17.0
Risk of Mortality				
Minor	88.6*	72.3	84.8*	70.6
Moderate	9.6*	20.4	12.3*	20.4
Major/ Extreme	1.8*	7.3	2.9*	8.9

Source: Analysis of the 2004 Texas Hospital Inpatient Discharge Public Use Data File.

Note: Discharges from cardiac, orthopedic, and surgical hospitals were restricted to the specific major diagnostic categories (MDCs) that were used, respectively, to define the niche hospitals: MDC 5, MDC 8, and the most frequent two surgical MDCs. Percents were calculated for each physician and averaged (unweighted) across physicians with the same ownership status by type of hospital. Percent distributions (columns) may not add to 100 within a given category because of rounding.

*The difference in the payer or case mix of niche hospitals and general hospitals was statistically significant at the 95 percent level. We also conducted statistical test comparing owners and non-owners, and found none of the difference between owners and non-owners in the payer or case mix of their admissions to niche or general hospitals was statistically significant at the 95 percent confidence level.

Finally, the payer type and severity illness of admissions to niche versus general hospitals sometimes differed by the niche hospital's specialty (Table II.8). Specifically:

- ***Self-pay/charity care patients****:* The mix of cardiac patients admitted by either owners or non-owners to the one cardiac hospital we observed included a very low rate of self-pay/charity patients—0.5 to 1.3 percent, compared with 12 to 14 percent among cardiac patients that these physicians admitted to general hospitals. Similarly, although the caseloads of surgical physicians included low percentages of self-pay/charity patients overall, physician-owned surgical hospitals also included a

TABLE II.8

PAYER TYPE AND SEVERITY OF ILLNESS OF PATIENTS ADMITTED TO NICHE AND GENERAL HOSPITALS, BY OWNERSHIP STATUS OF THE ADMITTING PHYSICIAN AND HOSPITAL SPECIALTY, 2004

	Percent of Cardiac Discharges				Percent of Orthopedic Discharges:				Percent of Surgical Discharges			
	MD Owners		MD Non-owners		MD Owners		MD Non-owners		MD Owners		MD Non-owners	
	Niche Hosp	General Hosp	Niche Hosp	General Hosp	Niche Hosp	General Hosp	Niche Hosp	General Hosp	Niche Hosp	General Hosp	Niche Hosp	General Hosp
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Payer Type												
Self-pay/charity	1.3*	13.8	0.5*	12.3	4.9	3.9	2.3*	6.9	0.7*	5.3	1.6*	5.0
Medicare	45.9	54.0	37.9	48.2	32.8*	43.1	31.9*	43.7	45.1	33.6	34.0	32.2
Medicaid	0.7*	2.8	2.4	3.2	2.6*	5.5	4.2	4.8	1.1*	9.1	3.5*	10.4
Private insurer	51.9*	28.3	59.3*	35.9	49.5	41.6	48.4*	39.2	50.2	42.7	56.1	47.4
Other	0.1	0.1	0.0*	0.3	10.3	5.8	13.3*	5.4	2.9	6.8	4.8	2.7
Severity of Illness												
Minor	54.2*	30.4	50.6*	30.2	66.3*	38.5	66.8*	38.8	66.9*	50.6	68.2*	50.2
Moderate	36.8	39.9	37.9	37.9	29.4*	42.7	28.0*	40.3	25.7*	38.1	25.4*	36.7
Major/ extreme	9.1*	29.7	11.5*	31.9	4.3*	18.8	5.2*	20.9	7.4	11.3	6.4*	13.2
Risk of Mortality												
Minor	68.8*	44.3	63.4*	44.2	95.6*	75.3	84.4*	63.8	87.1	81.7	85.3*	77.2
Moderate	28.1*	36.1	28.5	34.0	4.2*	19.7	12.5*	24.3	9.3	13.8	12.0	16.6
Major/extreme	3.2*	19.5	8.1*	21.8	0.2*	4.9	3.1*	11.8	3.6	4.5	2.7*	6.1

Source: Analysis of 2004 Texas Hospital Inpatient Discharge Public Use Data Files.

Note: Discharges from cardiac, orthopedic, and surgical hospitals were restricted to the major diagnostic categories (MDCs) that were used, respectively, to define the niche hospitals: MDC 5, MDC 8, and the most frequent two surgical MDCs. Percents were calculated for each physician and averaged (unweighted) across physicians with the same ownership status by type of hospital. Percent distributions (columns) may not add to 100 within a given category because of rounding.

*Difference in the payer or case mix of niche hospitals and general hospitals was statistically significant at the 95 percent confidence level.

significantly lower rate of self-pay/charity patients (0.7 to 1.6 percent, versus about 5 percent among admissions to general hospitals).

- ***Medicare patients**:* Admissions to the orthopedic hospitals—by owners and non-owners alike—included relatively few Medicare patients. Just 32 to 46 percent of orthopedic admissions to these hospitals (by owners or non-owners, respectively) were Medicare patients, versus 43 to 54 percent of orthopedic admissions to general hospitals.

- ***Privately insured patients**:* Only in the case of the one cardiac hospital did owners' self-referrals to the niche hospital include a significantly higher rate of privately insured patients. Owners, in particular, admitted about twice the rate of privately insured patients (52 percent) to the cardiac hospital as to general hospitals (28 percent). Non-owners also admitted a significantly heavier mix of privately insured patients to the niche hospital (59 percent, versus 36 percent of cardiac admissions to general hospitals), but it was not as skewed toward privately insured patients as the mix that owners self-referred.

The one consistent picture that emerged across all types of niche hospitals was the relatively low incidence of Medicaid patients in the caseloads of physicians affiliated with these hospitals and the high propensity of physician owners, in particular, to refer Medicaid patients to general hospitals. For example, orthopedic admissions to general hospitals included twice the rate of Medicaid patients (5.5 percent) as self-referrals to these hospitals (2.6 percent). Surgical admissions to general hospitals included 8 times the rate of Medicaid patients (9.1 percent), as self-referrals to surgical hospitals (1.1 percent). Non-owners affiliated with surgical hospitals also admitted a relatively Medicaid-heavy mix of surgical patients to general hospitals (10.4 percent versus 3.5 percent among admissions to the surgical hospital), but not so much as owners.

Similarly, across all types of niche hospitals, both owners and non-owners admitted a mix of patients to niche hospitals that included significantly higher rates of patients with minor illnesses and minor risk of mortality. Conversely, the mix of patients admitted by either owners or non-owners to the cardiac hospital and the orthopedic hospitals included low rates of extremely ill patients or patients with the highest risk of mortality, compared with the mix of patients they sent to general hospitals. Owners of the cardiac hospital and the orthopedic niche hospitals, in particular, admitted three to five times the rate of severely ill patients to general hospitals (19 to 29 percent) as to the niche hospital that they owned (4 to 9 percent), and 6 to 25 times the rate of patients at the highest risk of mortality (5 to 20 percent, versus 0.2 to 3 percent).

E. LIMITATIONS OF THE ANALYSIS

The limitations of the analysis presented in this chapter are a reflection of the limitations inherent in the data. First, the data are incomplete in that discharges from physician-owned niche hospitals for which we could not identify owners were omitted from the analysis. In addition, because the most recent discharge data available are for 2004, hospitals that opened in

2005 or 2006 were also omitted, as were hospitals that do not report discharge data[26] and hospitals that had fewer than 50 discharges in the quarter and, therefore, were not uniquely identified. In some cases, the reporting hospital did not identify the attending physician of a patient; so discharges associated with the same physician may be included for one hospital but not for another.

Second, the determination of physician ownership was based on licensing information that was available only for each hospital's most recent application. As a result, the analysis assumes that hospital owners in 2004 were the owners in earlier years also. Because hospitals are not required to report ownership information in their licensing applications, the physician-owned niche hospitals we identified may be a subset of all hospitals that are physician-owned.

Although in all respects our findings are consistent with those of national studies, these data issues may affect the extent to which our findings should be generalized to all niche hospitals and their physician owners in Texas. Our results with respect to cardiac hospitals in particular should be interpreted cautiously, as the analysis is based on just one cardiac hospital for which the physician owners were identified.

Finally, the analysis would have benefited from at least two investigations that were impossible within the scope and timeline of the study. First, the extent of a physician's ownership interest in a hospital may affect their referral patterns, but we were unable to observe this factor and could identify only whether the physician was an owner or not. Second, as noted in Chapter I, niche hospitals in Texas typically provide more outpatient care than inpatient care. Because we did not consider outpatient records in this analysis, it does not capture potential differences in referral patterns or patient selection for a very large and growing share of the care provided by all hospitals in Texas.

F. SUMMARY AND CONCLUSIONS

While physicians in Texas characteristically admitted patients to both niche and general hospitals, self-referrals to physician-owned niche hospitals accounted for more than half of all discharges from these hospitals in 2004. Compared to non-owners with admitting privileges to physician-owned niche hospitals, the admissions patterns of physician owners were different. In 2004, physician owners admitted 42 percent of specialty-appropriate cases to their own niche hospital, while non-owners admitted just 30 percent of such patients. This difference across all physician-owned niche hospitals was driven largely by the high rate of self-referrals to orthopedic hospitals. Physician owners of orthopedic hospitals self-referred 65 percent of all patients that they hospitalized in 2004; non-owners with admitting privileges to physician-owned orthopedic hospitals admitted just 34 percent of their patients to these hospitals.

[26] Hospitals located in a county with a population less than 35,000, or those located in a county with a population more than 35,000 and with fewer than 100 licensed hospital beds and not located in an area that is delineated as an urbanized area by the Census Bureau are exempt from the HDD reporting requirement. Exempt hospitals also include hospitals that do not seek insurance payment or government reimbursement (Texas DSHS 2004).

The mix of patients admitted to physician-owned niche hospitals also differed from that among patients admitted to general hospitals. In 2004, admissions to physician-owned niche hospitals were more likely to be privately insured and less likely to be self-pay/charity or Medicaid patients. In addition, they were much less likely to be severely ill or at the highest risk of mortality. These admission patterns were consistent across types of niche hospital (categorized by specialty), and also largely the same for owners and non-owners. Only with respect to the one cardiac hospital that we observed did owners refer a relatively high rate of Medicaid patients to general hospitals, while non-owners referred about the same rate of Medicaid patients to either.

We infer from these findings that financial incentives probably drive the significantly higher rates of self-referral to physician-owned niche hospitals in Texas. Such financial incentives may include any scheduling preferences that physician owners enjoy, as well as the income and capital gains they may derive from ownership of a profitable hospital. Other factors that may affect admission patterns—including insurance networks and patient preferences—are unlikely to differ so systematically between owners and non-owners as to drive the significant differences in admission patterns that we observed.

In addition, it seems reasonable to infer that the high rate of self-referral to physician owned niche hospitals in Texas exacerbates the effects of biased admission to general hospitals that we observed. That is, while physician owners are significantly more likely to admit patients to their own facilities, a higher percentage of those patients are privately insured and/or low-severity. The admission patterns of non-owners similarly were biased toward admitting privately insured and low-severity patients to the niche hospital. While we found no systematic effect on the margins of general hospitals associated with the presence of niche hospitals (see Chapter I), many general hospitals clearly struggle with relatively high rates of Medicaid and self-pay admissions, as well as a relatively heavy load of high-severity patients associated with payers—such as Medicaid and Medicare—that may not reimburse full cost. Biased admissions by physicians who are affiliated with physician-owned niche hospitals would inevitably magnify the problems of these hospitals.

III. STAKEHOLDER PERCEPTIONS AND RECOMMENDATIONS

A. INTRODUCTION

In this chapter, we report the results of a series of interviews with stakeholders in selected areas of the state in order to build an understanding of how stakeholders perceive the impacts of niche hospitals in their communities. Stakeholders were selected in five areas of the state: Dallas, Houston, Tyler, Lubbock, and the Valley (referring to the four counties in Rio Grande Valley: Starr, Hidalgo, Willacy, and Cameron). They included representatives from general and niche hospitals, other physician-owned hospitals, emergency medical services, local health departments, health insurers, and specialty physician groups. The interviews were guided by semi-structured protocols that included open-ended questions about stakeholders' perceptions in a number of areas, including:

- the nature of the niche hospitals in their community
- factors that contributed to the development of niche hospitals
- the impact of niche hospitals on the overall competition among hospitals to provide specialty services
- the financial impact of niche hospitals on general hospitals
- impacts on quality and patient satisfaction in the community
- impacts on access to care in the community
- impacts on the cost of care.

This chapter presents the stakeholders' views on each of these topics.

The definition of "niche hospital" established in Senate Bill 872 is narrower than the definition used by the stakeholders we interviewed and, therefore, narrower than the definition implicit in their comments. The stakeholders universally categorized niche hospitals as facilities that both focus on a narrow set of medical services and self-identify as a niche hospital—for example, an inpatient cardiac, surgical or orthopedic facility. Stakeholders were especially likely to define niche hospitals as any hospital that identified a particular specialty service in its name. Some stakeholders also considered physician-owned hospitals as niche hospitals, while others (representatives of physician-owned hospitals in particular) emphasized that physician-owned hospitals often provided a full range of services—not just cardiology, orthopedics, or surgery.[27]

[27] The way in which hospitals are licensed in Texas complicated the stakeholders' sense of whether a hospital is a niche hospital. Licensing practices do not distinguish between hospitals with that focus on a specific type of service and those that provide a range of services. Any facility with an emergency room and an operating room is licensed as a general hospital. Therefore, many physician-owned and niche hospitals are licensed as general acute care hospitals. Hospitals licensed as specialty hospitals focus on rehabilitation, children's services, or psychiatry.

While many stakeholders understood the technical definition of a niche hospital, most raised issues related to a broader range of facilities.[28] To fully capture the interview dynamics and the topics raised by stakeholders, we report their perceptions of the impacts of both niche hospitals (as defined in Senate Bill 872) and physician-owned hospitals that provide a wider range of services. These hospitals ranged from facilities that self-identify as a single-service niche hospital to those that are physician-owned but provide a full range of medical services. While all hospitals in Texas must have an emergency room as a condition of licensure, their capacity with respect to emergency care as well as other services varied significantly. For example, most of the physician-owned hospitals in the five communities did not provide obstetric (OB) services (though at least one planned to do so in 2007).

The niche hospitals in the five communities also represented a wide range of ownership arrangements. Some were the result of a joint venture between a group of physicians and a general hospital system in the area; others were jointly owned by physicians and corporations or other investors; still others had no physician owners. Among those that were partly physician-owned, the physician owners typically controlled just less than half of the enterprise. Some hospitals also limited the ownership interest of any individual physician to, for example, two percent of the enterprise or less.

B. THE IMPETUS FOR NICHE HOSPITALS

While some niche hospitals in Texas date to the 1970s, most opened in the late 1990s to early 2000s, and some opened in just the past few years. Although the factors prompting the opening of each hospital are unique in their nuances, the following motivating factors were similar across hospitals:

- ***Physician Dissatisfaction.*** The most common impetus for the formation of the physician-owned hospitals was physician dissatisfaction with the existing hospitals in the community. Representatives of physician-owned hospitals often reported "strained relationships" between themselves and hospitals that were "irreversible"—that physicians "didn't see eye to eye with the CEO at the time." This dissatisfaction often stemmed from the fact that physicians were not included in the management and/or decision-making process at the hospital(s) in their community. For example, one CEO of a physician-owned facility noted that physicians were "fed up with feeling like their concerns and their requests directed at improving patient care were ignored." Some had more specific complaints—for example, that the hospital did not provide the technology, equipment, or staffing needed by physicians.
- ***Quality.*** Several representatives of physician-owned hospitals commented that physicians were displeased with a range of quality-related issues at the community

[28] As one stakeholder said, "…there really is a lot more going on than niche [hospitals]." For example, stakeholders in all communities mentioned the proliferation of outpatient niche facilities, including ambulatory surgery centers, and diagnostic and imaging centers.

hospitals, including hospital-acquired infections, problematic patient outcomes and types of care, and length of stay. Nevertheless, nearly all hospital representatives, regardless of the hospital's ownership or specialty status, mentioned quality as a prominent aspect of their mission.

- ***Overall Efficiency.*** The belief that specialization leads to efficiency, cost-savings, and improved quality was a major motivator for developing a niche hospital. Most representatives of niche hospitals talked at length about efficiency, often as related to quality. As one physician-investor noted, "If a facility concentrates on any particular service line—and this is true in any industry—its level of expertise and overall efficiency increases and outcomes get better." Representatives of niche hospitals and physicians who admitted patients to these facilities indicated that, in general, their operating room turnover is quicker and surgery times are shorter than in a community hospital.

- ***Convenience and Efficiency for Physicians.*** Several stakeholders noted physicians' discontent with inefficiencies in the community hospitals. Specifically, physicians reportedly were unhappy about working into the evening, having to wait until late in the afternoon to get an operating room appointment, slower operating room turnaround and delays that affected surgical schedules. In contrast, they said, niche and/or physician-owned hospitals tend to keep to the surgery schedule and accommodate morning surgeries. In addition, several stakeholders not associated with niche or physician-owned hospitals (for example, those at large community hospitals or local health departments) mentioned that physicians associated with niche hospitals are motivated by a desire to avoid taking call for emergency cases that they see as peripheral to their practice. As one stakeholder noted, "For so many clinicians, it's a choice between option A: do what we're doing with trauma call; and option B: do what we're doing without trauma call." These stakeholders noted that because niche and/or physician-owned hospitals often provide primarily elective procedures and do not play a significant role in emergency care, their schedules were rarely disrupted.

- ***Financial Gain.*** Stakeholders associated with physician-owned hospitals attributed the opening of these facilities to financial gain only as a secondary factor. However, other stakeholders (including some specialty physicians) viewed personal financial gain as the primary motivation for the development of niche hospitals with physician owners. They noted the ability of physician owners to capture ancillary revenue and facility fees in the face of falling professional fees from public and private payers.

Finally, the Medicare Modernization Act of 2003 (MMA) Moratorium on federal program reimbursement to new physician-owned cardiac, orthopedic, and surgical niche hospitals affected the development of such facilities across the state. CMS suspended Medicare and Medicaid payment to new specialty hospitals until February 2006, and the Deficit Reduction Act further extended the moratorium by another six months. The moratorium expired on August 8, 2006.

A few stakeholders reported that the impact of the moratorium had been minimal: a number of physician-owned niche hospitals were either built or approved before the moratorium went into effect. However, most stakeholders believe that, if not for the moratorium, many more

physician-owned niche hospitals would have opened. They knew of specific plans that stalled because of the moratorium, and most of them expected that substantial new construction would occur if and when the moratorium was lifted.

Several stakeholders noted that the moratorium changed the nature of the hospitals that developed, though it did not prevent the development of physician-owned hospitals. Instead of concentrating on a single specialty, physician-owned facilities opened as full-service, general hospitals. One administrator of a physician-owned hospital candidly explained, "Yes, [the moratorium] had an impact. We're not a niche hospital, but we would have been because our mission is to provide surgical services. We had to add ED services, but we wouldn't have provided that otherwise."

Most stakeholders who commented on the growth in physician-owned non-niche hospitals despite the moratorium were associated with large, long-standing general hospitals or health systems. The representative of one nonprofit hospital system mentioned that the market has "moved around the moratorium"—away from niche hospitals to smaller, physician-owned general hospitals that qualify under the whole-hospital exception of the Stark rules.[29] This stakeholder and others observed that physician-owned hospitals, whether niche or otherwise, had done what was necessary to be licensed as a general hospital under the moratorium but were "as close to a niche hospital-type facility as they can be while avoiding designation as a niche." Specifically, these facilities typically "don't provide most services, but they have a broad enough array of diagnostic-related groups (DRGs) to get licensed as general acute care [hospitals]." The biggest criticism lodged by many stakeholders was that niche and other physician-owned hospitals provide emergency services to a much lesser degree, compared with community hospitals.

Conversely, a stakeholder from a physician-owned hospital pointed out that one large nonprofit health system began construction on a new niche hospital, but because of the moratorium had proceeded without the physician ownership it had initially envisioned. The system's revised plans appeared to include marketing "niche departments" rather marketing itself as a niche hospital, per se.

C. IMPACTS ON COMPETITION

The stakeholders reported that the development of niche and other physician-owned hospitals in the five communities had a significant impact on the overall competition among hospitals to provide specialty services. We looked closely into impacts related to two factors in particular: hospitals' relationships with physicians and their relationships with insurers.

[29] The Stark Law, passed in 1989 by Congress, prohibits physician referrals to clinical laboratories owned by the physician. This law was expanded to include referrals to physician-owned facilities in 10 treatment categories. Yet the "whole hospital exception" permits physicians to refer patients to a hospital in which she or he has ownership interest in the entire hospital, not in just one specialized area. Also exempt are referrals to physician-owned facilities for cases in which the referring physician provides the services him- or herself.

1. Relationships with Physicians

As noted, many physician-owned hospitals had their origins in physician dissatisfaction with general hospitals. But in many cases, the resulting decision made by physicians to develop their own hospitals had tarnished the long-standing (albeit sometimes strained) relationship between general hospitals and physicians, forcing the former to compete for the allegiance of physicians. This could be difficult when physician-owned hospitals offered physicians a significant role in management and decision-making, and when facilities were developed specifically to meet physicians' needs. As general hospitals developed strategies to compete, it became increasingly clear that their relationship with physicians was a potentially defining factor in their survival and success. With that relationship in mind, general hospitals have used at least three strategies to level the playing field between themselves and physician-owned and/or niche hospitals:

- ***Repairing Strained Relationships.*** Several general hospitals saw repairing a strained relationship or maintaining an amiable relationship with physicians who had opened their own facilities as critical to retaining physician referrals and remaining competitive. General hospitals admitted that it was "tough when [a physician was] an admitting doctor for a certain time and then a competitor at other times," but that it was necessary to work with all physicians in the community in order to ensure access and quality. Although concerned that physician owners may self-refer more straightforward cases and send the complex or nonpaying cases to a general hospital, a general hospital representative acknowledged that it was best not to "bite the hand that feeds you." Repairing these relationships often took time: some hospital leaders indicated that relationships with physicians were strained after the opening of a niche hospital but that they improved over time.

- ***Finding and Retaining Physicians.*** For hospitals that had lost core physician groups to physician-owned or niche hospitals, recruiting replacements was a high priority. Many hospitals had attempted to recruit specialists from other communities. For example, one general hospital affected by the opening of an orthopedic hospital reported recruiting several orthopedic surgeons from outside the area. Other hospitals had pursued a staff-physician model—in the case of one large nonprofit health system, strengthening the system's primary care physician network to secure its members' affiliation with the hospital. Some hospitals had recruited specialists away from other facilities in the community. In at least one community, this triggered a "price war" for physician resources: the leader of one safety net hospital reported that a local hospital hired away one of the safety net hospital's surgeons at three times his current salary. Finally, some hospitals made procedural and staffing changes to attract and retain physicians. As one representative of a general hospital advised, "If you provide efficiency for your surgeons—you don't waste their time—their desire to go elsewhere is minimized."

- ***Forming Joint Ventures.*** Some general hospitals developed joint ventures with physicians to neutralize incentives for physicians to develop their own hospitals. A stakeholder at one hospital (that has not pursued joint ventures) explained, "Many nonprofits are deciding that the only way to compete is to joint venture—half a loaf is better than no loaf." Another stakeholder (from a not-for-profit hospital that had

pursued joint ventures) summarized that hospital's philosophy as: "It's always better to try to partner with physicians than to compete with them….In the end, you may end up with higher quality and patient satisfaction when you align physicians through ownership." However, other stakeholders were not comfortable with the concept of joint ventures, particularly for not-for-profit entities with tax-exempt status. Finally, several stakeholders observed that joint ventures were feasible only for large, financially strong hospitals, particularly those in larger markets that also have separate safety net hospitals. In a smaller market, joint venturing may take a large share of a general hospital's core business, reducing its capacity to also be the core provider for the community's uninsured population.

2. Relationships with Insurers

The nature and dynamics of health plan contracting varied across markets, payers, and hospitals in Texas. With the exception of facilities affiliated with large health systems or that have been in the market for a long time, niche and physician-owned hospitals generally did not contract with most large insurers or had only recently started to do so.

The health plans we interviewed did not have a "hard and fast" rule about contracting with niche or physician-owned hospitals but instead make decisions on a market-by-market basis. They looked at each new facility, regardless of ownership or specialty, and considered a number of factors before determining whether to include it in their networks:

- ***Existing Contracts with Hospitals***. Most of the health plans gave priority to their existing contracts with general acute care hospitals. The contracts assumed a certain level of volume from the health plan, which could be diluted via the addition of a new hospital. As one health plan representative noted, in deciding whether to include a new hospital in its network, "It would weigh heavily if adding a niche hospital would negatively affect our rates or subject us to a termination with other hospitals."

- ***Ownership***. Health plans were inclined to contract with new facilities that were associated with existing hospital systems, often adding them automatically to the contract. For their part, large hospital systems "usually take an all-or-nothing approach to contracting in a particular market," according to a health plan representative. One health plan representative noted that, in the case of a new hospital owned by a hospital corporation, experience with the hospital's corporate ownership in other communities might affect the decision to contract with that hospital. Similarly, health plans faced pressures in markets in which a large portion of physicians in a particular specialty had invested in a niche hospital. One plan noted that this situation would "bring them to the table quicker" to contract with that hospital so that plan members would not be subject to high out-of-network charges. Another plan indicated that it might not contract with the hospital but would attempt to hold members harmless for any out-of-network expenses.

- ***Rates Offered by New Providers.*** The willingness of health plans to contract with new niche or physician-owned hospitals also depended on these hospitals' willingness

to negotiate. Health plans were unlikely to add them to their networks if the hospitals' rate demands were unusual or did not make good business sense.

- ***Consumer Interest.*** Health plan representatives reported that employers were concerned about consistency in the health care providers that serve their employees. In practice, this meant that employers would not want a relationship with an acute care hospital to be jeopardized for the sake of a niche hospital, and including or excluding a niche hospital would not affect the plans' membership levels or growth. Reportedly, employers had not taken a strong position regarding the inclusion or exclusion of niche hospitals in health plan networks, although one health plan representative reported that some employers asked for a certain niche or physician-owned hospital to be added when there was "an investment relationship or some personal relationship with someone who runs the group." Another plan representative mentioned that niche and physician-owned hospitals had engaged employers in their efforts to gain inclusion in health plan networks.

Some general hospital representatives commented that niche and physician-owned facilities might intentionally remain outside a health plan's networks. Although the plans reimbursed a lower percentage of the charges from out-of-network hospitals, the hospitals potentially could make a greater profit by billing higher charges.

However, the niche and physician-owned hospital were eager to contract with health plans and noted that being excluded from health plan networks had been a disadvantage. Rather than choosing to remain out of network, the newer niche and physician-owned hospitals (with the exception of those affiliated with a larger health system) reported being excluded from health plan networks as a result of efforts by general hospitals to keep them out.

For example, one plan representative reported that "general hospitals do a good job in almost every market to schedule meetings with us to discuss the potential impact of niche hospitals on them," explaining that the only option open to general hospitals was "to increase rates for all other services or go out of business" if niche hospitals drew profitable services away. As noted by a representative of one general hospital, "We are trying to affect purchasing contracts where we legally can" as a strategy to deal with the challenges presented by niche hospitals. The representative of another hospital mentioned presenting information on billing and utilization rates to dissuade plans from including niche hospitals in their networks.

Most of the niche and physician-owned hospital representatives reported that the experience of pursuing health plan contracts is generally difficult. Many criticized general hospitals' "strong-arm tactics"—including lobbying policymakers—to keep niche and physician-owned hospitals out of health plan networks. Nevertheless, niche and physician-owned hospitals continued to reach out to health plans, and some have succeeded in contracting with them or believe that they ultimately will. Others have attempted to counter the effects of remaining out of network by, for example, pursuing direct contracts with employers or marketing to workers' compensation beneficiaries. At least one physician-owned hospital was considering forming and marketing its own insurance product. Several reported that their hospitals focus on quality, hoping to attract patients who are willing to go out of network for the promise of better care.

3. Financial Impact of Niche and Physician-Owned Hospitals on General Hospitals

All hospital representatives, regardless of their hospitals' ownership or specialty, were asked about a range of financial indicators for their facility, including changes in their bottom lines, payer mix, and uncompensated care. Before the topic of niche hospitals was raised, all were asked to discuss the major challenges they faced and their responses to those challenges.

A wide range of pressures affected the financial status of almost all hospitals in Texas. Many of these were similar across niche, physician-owned, and general hospitals and mirrored the challenges faced by hospitals nationwide. The most significant pressures included declining reimbursement, nursing shortages, the rising cost of technology, physicians' expectations, keeping up with demand for services, and remaining competitive.

Despite these similarities, the financial pressures facing physician-owned and general hospitals in Texas typically differed in two ways. Representatives from physician-owned hospitals often placed health plan contracting and exclusion from networks among their most significant financial challenges, while general hospital representatives were more concerned about rising numbers of uninsured and underinsured patients.

a. "Cherry Picking"

Representatives of general hospitals reported that niche and physician-owned hospitals attempted to attract insured patients for services and diagnostic-related groups (DRGs) that were associated with relatively high reimbursement such as orthopedics and cardiovascular care, avoiding uninsured patients and less profitable services such as obstetrics and emergency care. Reportedly niche and physician-owned hospitals also were able to select more profitable patients—sometimes called "cherry picking"—via physician referral of patients to facilities in which the physician has an ownership interest (called "self-referral").

In addition, because most niche and physician-owned hospitals do not have significant emergency capacity, they largely avoided expensive trauma and other emergency cases as well as the uninsured patients who present at the emergency department for routine care. Niche and other physician-owned hospitals reported that charity or uncompensated care accounted for a small proportion of their payer mix (approximately five percent or less), whereas general hospitals and safety net hospitals had higher proportions of uncompensated care. Some general hospitals reported that uncompensated care had increased as a percentage of their total business in the last few years.

While many niche and physician-owned hospital representatives readily admitted that their facilities do not treat large numbers of uninsured patients, they also disputed claims that they actively avoid treating them. Representatives from some niche or physician-owned hospitals reported providing elective procedures for some patients who could not pay; one attributed an increase in that hospital's charity care to growth in emergency department volume.

The representatives of general hospitals typically reported that niche and other physician-owned hospitals were similar in terms of their impact on general hospitals: both, they claimed, cherry-pick patients. Several physician-owned hospital representatives, however, were adamant

that their hospitals did not operate like niche hospitals—stressing that they provided a broader array of services (including less profitable ones) and that their financial margins had been relatively low in the first few years of operation, especially.

In particular, physician-owned hospitals that self-identified as general or community hospitals emphasized that part of their mission was to provide uncompensated care and offer a range of services that respond to community needs. One physician-owned hospital planned to expand emergency department capacity and also add obstetric services.[30] Another small physician-owned hospital had pared back some specialty service lines, noting that its mission was to return to being a community hospital.

Nevertheless, a number of general hospitals reported declines in service volume that they attributed directly to the entry of a niche or physician-owned hospital into the community. For example, a nonprofit hospital reported that it had lost 2,000 inpatient admissions over the past three years—close to half of its overall volume for that service line—to a niche hospital in its market. Another nonprofit hospital calculated the negative effect of a niche hospital on its bottom line at $10 million per year. Based on just the first few months of experience, another community hospital estimated that it would lose 20 percent of its general surgery volume to a new physician-owned hospital in its market.

While several stakeholders attributed losses to the opening of certain hospitals, many also cited the development of other physician-owned facilities—such ambulatory surgery, imaging, and diagnostic centers—as problematic. For instance, one hospital estimated that it had lost 80 percent of its endoscopy cases to a new gastrointestinal center in its market.

Representatives from general hospital reported that the cases lost within specialty areas tended to be lower-acuity, elective, and relatively profitable patients—leaving the more complex cases to the general hospitals. Most stakeholders, including those affiliated with niche hospitals, acknowledged that more acute and complex patients were better served in a general hospital setting. Indeed, most of the representatives from general hospitals reported higher overall patient acuity levels or case mix indices in the past one to two years, but they were unable to attribute the rise directly to the presence of niche hospitals.

General hospitals predicted that the loss of profitable services would reduce their financial ability to subsidize less profitable services and uninsured patients, forcing the general hospitals either to limit these services or to find other sources of funding to maintain them. However, none of the hospitals reported significant cutbacks to date. Other community stakeholders—including representatives of local health departments, large specialty groups, emergency medical services, health plans, and some specialty physicians—reported similar concerns, having observed cherry picking in their communities.

[30] As a representative from this hospital noted, "We get accused of cream skimming, but it's just not true; our doctors want to do everything in this hospital! They want to expand."

b. Market Variation

Although many stakeholders perceived that niche and physician-owned hospitals exerted significant and negative financial pressure on general hospitals, the impact may vary both within and across communities, altered by a number of variables at any point in time:

- ***The Degree of Competition in the Market.*** The degree of hospital competition in a market—measured by hospital concentration, the array of services that each facility provides, and the relationships between hospitals and physicians—may alter how the entrance of a niche or other physician-owned hospital affects the general hospital in that market. For example, one general hospital lost a substantial volume of patients after a niche hospital opened and its physician owners migrated from the general hospital. On the other hand, another general hospital experienced no financial impact associated with the opening of a niche hospital in its market because the niche hospital did not focus on a service line that was important to the general hospital; instead, it weakened the general hospital's main competitor (notably, another general hospital). In yet another community, the entrance of a niche hospital reportedly affected all of the general hospitals in the market negatively.

- ***Capacity to Compete.*** Representatives of general and even existing niche hospitals had various concerns about the potential impact of a new niche facility on their ability to compete in a given specialty area. Some believed that their services were highly regarded in the community and that a new facility could not compete, but others felt more vulnerable. Some hospitals had focused directly on regaining lost service volume: for instance, one hospital had recruited several new surgeons and opened an ambulatory surgery center to recover its losses.

  The representatives of niche and other physician-owned hospitals often noted that the very general hospitals that complain about the negative financial impacts of niche facilities appeared to be thriving financially, pointing to the new construction and other expansions they were pursuing. However, some of the general hospital representatives reported taking on debt in order to complete such expansions in specialty areas and/or less profitable service areas. As a representative from one general hospital system explained, "Even though we are growing, our margins on that business are decreasing."

- ***Size of the Niche or Physician-Owned Hospital.*** Many physician-owned facilities were small relative to other hospitals in their markets. Such facilities contended that their volume was not large enough to affect other hospitals significantly. As one niche hospital representative explained, "We operate on such a small magnitude; I don't think we've changed the landscape." However, in other markets, the volume of services provided by the niche and other physician-owned facilities was more significant to the general hospitals.

- ***Community Size and Population Growth.*** In markets with a rapidly growing population, the additional capacity that niche hospitals represent appeared commensurate with the growing demand for care. In contrast, in smaller markets with fewer hospitals and slower growing population, niche hospitals may have a

greater impact on the general hospitals. A stakeholder in one such community speculated that the development of a new niche hospital in that market would be "like a nuclear bomb exploding here."

c. Safety Net Hospitals

In larger communities, the development of a niche hospital may, for two related reasons, have less of an effect on public hospitals that have a particular mission to treat uninsured and low-income patients than on general hospitals that serve a broader population. First, because a relatively high percentage of patients in safety net hospitals are low-income and uninsured, these hospitals have faced little competition from other hospitals for patients. Second, other general and niche hospitals have had an interest in both the viability and capacity of public hospitals: a healthy safety net hospital has allowed the others to have more control over the amount of uncompensated care they provide. As a representative of one large public hospital remarked, "Many hospitals want us to do well financially: every time we hiccup, they feel the pain."

Nevertheless, physician-owned and niche hospitals can affect safety net hospitals in important ways. Tougher competition for physicians has had (as one safety net hospital representative put it) a "destabilizing effect" on both private and public general hospitals. For instance, one safety net hospital representative reported losing several of its best surgeons because a competitor was able to triple their earnings without requiring on call service in the emergency department. Even as general hospitals have responded by paying physicians to serve on call, it has been an increasing financial burden for them to do so. Moreover, it has become increasingly difficult to retain some types of specialists (such as neurosurgeons) even with the promise of payment.

Second, safety net hospitals were concerned about "patient dumping"—that is, hospitals sending low-income, uninsured patients to the safety net hospital. Safety net hospital representatives reported that niche and other physician-owned hospitals, after stabilizing emergency patients after an inpatient or outpatient procedure, have transferred or referred those patients to the safety net hospital for follow-up. As one public hospital representative remarked, its relationship with physician-owned facilities was generally "cordial and usually productive until we see attempts to dump—patients referred to us by hospitals that could do the work but, financially and otherwise, think we should do it." A representative of one niche hospital opined that, as a for-profit entity, his hospital offered the city a significant tax base to help reimburse uncompensated care at other hospitals.

D. IMPACTS ON THE COST OF HEALTH CARE

Most community stakeholders detected no significant differences in prices or costs between general hospitals and niche hospitals, but contended that physician-owned and niche hospitals contributed to the overall rising cost of health care. General hospital representatives and other stakeholders expressed concern that niche hospitals have contributed to the rising cost of recruiting and retaining nurses and physicians, accelerating the costs associated with attracting professionals in short supply. In communities where the opportunity to work in niche and other physician-owned hospitals with limited emergency department capacity has given physicians

bargaining power, many general hospital representatives reported that the cost of on-call service was high and growing. In addition, niche and other physician-owned hospitals were typically able to offer nurses better schedules and higher pay, driving up the wages general hospitals must pay to recruit them.

Health plans too had a number of concerns about the upward cost pressure coming from niche and physician-owned hospitals. Although the unit costs of procedures sometimes were lower than in general hospitals when the niche hospital first enters the market, the health plans reported that these early savings did not persist, for three primary reasons:

- ***Renegotiations with General Hospitals.*** When a niche hospital entered a market and contracted with a health plan, the general hospitals in the plan network have wanted to renegotiate all rates, expecting a new competitor to reduce its volume of business from the plan. For example, if a cardiac hospital enters the market, the general hospital may negotiate higher rates for obstetric services to offset its anticipated loss of cardiac volume.

- ***Out-of-Network Costs.*** Health plans were particularly concerned about the cost impact of out-of-network referrals for both the plan and their members. They indicated that their members often go to a facility on the advice of their physician, but if the facility is out of network, they face higher copayments and deductibles. In some cases, the plans covered some of these additional costs to help protect their members and counter the premium escalation that could erode their market share. Even so, plans reported that their members had started to ask more questions about networks to avoid out-of-pocket costs. On their part, the health plans were trying to be more open about their prices. One plan representative noted that rising competition from niche hospitals (and, sometimes, better efficiency) has pressured general hospitals to be more conservative about pricing some procedures and services.

- ***Increased Utilization***. The health plan representatives also were concerned that physician ownership could lead to higher use of services. One plan detected a slight increase in hospital use when physicians have an ownership interest in a niche hospital. Other plans speculated that this had occurred in their own experience, although they did not have the data to document it. Conversely, a few physicians remarked that physician ownership had increased hospital utilization, but argued that the increase may be appropriate: physician owners have a stronger incentive to ensure that their patients receive the full course of treatment according to clinical protocols.

E. IMPACTS ON HEALTH CARE QUALITY

Virtually all stakeholders reported that hospitals in the five markets—including general, niche, and other physician-owned hospitals—provide high-quality care. Leaders of general and niche hospitals alike said that quality was the cornerstone of their mission, vision, or focus. All the hospitals participated in quality-reporting initiatives beyond what the Center for Medicare and Medicaid Services (CMS) and the Joint Commission on Accreditation of Healthcare

Organizations (JCAHO) require. Virtually all hospital representatives also reported that the quality of their care was high, above average, and improving. Many reported receiving high HealthGrades or Solucient rankings for overall performance or in some specialty areas, and many also reported that they were targeting certain areas for improvement.

Most stakeholders perceived no difference in quality between general and niche facilities. Some reported that, while there may be variation in quality across hospitals, it was not attributable to niche status or physician ownership.[31]

Some representatives affiliated with niche hospitals or physician-owned hospitals reported that the quality of care in their hospitals was higher—as evidenced by lower infection rates and fewer complications in particular. Stakeholders across the board considered infection rates to be the most important measure of quality for niche hospitals, and most niche hospitals reported that their infection rates were lower than average.

Some stakeholders pointed to a number of factors that potentially contributed to the quality of care in niche and other physician-owned hospitals. Some had higher nurse-to-patient ratios than their competitors. Some referring physicians noted that the niche hospital staff members were more highly trained and skilled than the staff in general hospitals. For example, one niche hospital used physician anesthetists in lieu of certified registered nurse anesthetists. One health plan representative commented that niche hospitals were at an advantage with respect to some quality indicators, as they generally serve a lower-risk population and usually for elective procedures. Many stakeholders related greater efficiency in niche hospital and physician-owned hospitals to quality, noting that shorter operating room times for a given procedure are safer for patients. Most stakeholders acknowledged that niche hospitals offered more "niceties" and "bells and whistles," such as private rooms, more attractive facilities, and more appealing food.

F. IMPACTS ON PATIENT SATISFACTION

Both general and niche hospitals have devoted considerable effort to improving patient satisfaction. Virtually all of the hospitals we interviewed were tracking patient satisfaction, primarily through independent vendors such as Press Ganey or Gallup. Most noted that they had improved their scores, although the target was moving as every hospital improved.

Executives at niche hospitals reported not only high patient satisfaction scores (often above the 90th percentile) but also large percentages of patients who said they would refer friends and family to the facility. Some mentioned receiving many letters of praise from their patients. A few niche hospital executives noted that the volume of patients that seek care at their hospital connotes high patient satisfaction, especially when the patient's health plan does not contract with the hospital. As one executive noted, "The only way we can counter the fact that we are out of network for every insurer in the market is to offer what no one else offers."

[31] In fact, for the hospitals we interviewed, the most recent (September 2005) data from CMS's Hospital Compare program did not suggest that niche or physician-owned facilities as a group had a quality advantage over general hospitals—though data were not available for all hospitals [http://www.hospitalcompare.hhs.gov/].

Some general hospital and other community stakeholders commented that a positive effect of competition from niche hospitals was the pressure on general hospitals to be more customer-service oriented. As one general hospital executive conceded, "Specialty hospitals have made everybody better; competition focuses hospitals on the patient, which is always a good thing."

G. IMPACTS ON ACCESS TO CARE

Many communities in Texas—including Dallas, Houston, and the Valley—are growing rapidly, creating increased demand for access to health care services. In these communities, stakeholders were not generally concerned that the niche and physician-owned hospitals built to date represented excess capacity. Many hospital representatives noted that they could not grow fast enough to keep pace with demand, and some general hospitals and community stakeholders voiced concern about inadequate supply of specialty services. One general hospital representative reported long queues for specialty procedures that delayed care (for example, a six- to nine-month wait for a hernia repair), potentially affecting clinical outcomes.

A range of stakeholders reported that niche and physician-owned hospitals often improved access for the patients they serve. Niche and physician-owned hospitals often are located in less congested parts of the city or in suburban areas, have convenient and free parking, and are smaller—reportedly making it easier for patients to find where they needed to go. The representatives of niche hospitals stressed the importance of these conveniences for patients who are older, less mobile, and have heart problems. They also noted that patients could schedule elective procedures sooner at a niche hospital, that the admissions process was faster, and that the procedure may be more likely to occur when scheduled when the hospital does not provide the trauma or other emergency cases that sometimes displace elective cases.

However, many stakeholders were concerned about access to care for low-income people (those who are uninsured or have Medicaid coverage) in general. They observed that niche and physician-owned hospitals directly or indirectly intensified this issue—or at the very least, they did not address it. In 2004, Texas had the highest rate of uninsured people of any state, with approximately 25 percent of the population under age 65 uninsured.[32] Many stakeholders stressed the additional problem of growing under-insurance, as many insured residents faced high deductibles and other cost-sharing requirements. In all communities, the general hospital representatives reported that emergency department volume was growing because low-income people in the community lacked affordable primary or specialty care.

Many general hospital representatives reported that they have responded to problems of access in the community by trying to increase primary and specialty capacity. For example, some general hospitals have supported the development of federally qualified health centers, placed family-practice residents in the community, expanded their networks of primary care physicians, or worked with programs for specialists to donate services. Indeed, some safety net

[32] DeNavas-Walt, C., B.D. Proctor and Hill Lee, C., U.S. Census Bureau, Current Population Reports, P60-229, *Income, Poverty, and Health Insurance Coverage in the United States: 2004,* U.S. Government Printing Office, Washington, DC, 2005. In a 3-year average over 2002-2004, Texas had a 25.1% uninsurance rate.

hospital representatives reported that expansions in community services such as these have helped control their emergency department volume.

In contrast, many stakeholders contended that niche and other physician-owned hospitals have done little to address the need for additional capacity, particularly in the following areas:

- ***Access to Emergency Services.*** Many stakeholders remarked that niche and physician-owned hospitals do not have "true" emergency departments. Instead, they are typically small, not easily identified facilities that were neither equipped nor staffed for all types of emergencies. Often, the hospital has no intensive care unit.

  Representatives from niche and physician-owned hospitals countered that they do offer emergency services: it is a requirement of licensure and they do not turn anyone away. Representatives from several physician-owned hospitals said that they functioned as general hospitals, pointing out their hospitals' emergency service capacity as well as recent or planned expansions to the emergency departments.

  Representatives of yet other niche and physician-owned hospitals acknowledged that they offered limited emergency services—one hospital's emergency room was "more like an acute care center" in that "ambulances don't bring major cases here because we don't have an ICU."[33] Others noted that they had the capacity to stabilize any patient, but EMS might then need to transfer more critical patients to a full-service hospital. Several EMS representatives observed that the patient ultimately determined where he or she is taken; some patients are brought to a physician-owned or niche hospital at their own request.

- ***Access for Uninsured and Other Low-Income Patients.*** Some stakeholders claimed that emergency departments in niche and physician-owned hospitals are "not welcoming" to uninsured and other low-income patients. They reported that niche and physician-owned hospitals have asked the EMS team to bring them paying patients or, when nonpaying patients presented in their emergency department, the hospital has transferred them to a general facility, reportedly because the appropriate specialist was not on call to handle the case. Representatives from local health departments, EMS, and others in the community acknowledged that niche and physician-owned hospitals treated some uninsured patients, but there was the perception that it took longer for uninsured patients to gain admission to these hospitals. One stakeholder noted that these hospitals "would rather not take them" and only did so because they "probably can't get around it." Stakeholders reported that general hospitals were "more forgiving" when a patient did not have resources to pay for care, while niche facilities were more likely to require payment before treatment.

[33] At least one Trauma Regional Advisory Council has created strict guidelines explicitly outlining the scope of emergency services that a hospital must offer in order to receive patients via ambulance.

Again, both niche and physician-owned hospitals denied that they turned away patients. At least one niche hospital reported following charity-care guidelines that are similar to those at many general hospitals—providing free care to people under 200 percent of the federal poverty level and charging others on a sliding scale relative to income. However, niche and physician-owned hospitals generally reported that they served relatively few charity care patients.

H. EXPECTATIONS ABOUT THE FUTURE

Over the next few years, stakeholders generally expected hospital construction to continue throughout the state and competition for more profitable services to intensify as physicians continued to develop, when possible, their own hospitals and outpatient ambulatory surgical centers. They also anticipated that patient demand for convenience would continue to increase and that health care markets would evolve to meet that demand.

Some general hospital representatives and other stakeholders expected to see additional effects from the niche and physician-owned hospitals that opened in 2005. They anticipated that the threat of competition would force some general hospitals to pursue joint ventures, developing niche hospitals and ambulatory surgical centers to maintain at least a portion of the profitable services that help support other services. Many expected "cherry picking" to continue, while the pressure increased for general hospitals to serve larger numbers of uninsured patients. Some general hospital representatives were concerned that continued competition would preclude them from expanding general services and force them to make cutbacks in services such as obstetrics, emergency, and trauma.

Stakeholders observed that a number of additional niche hospitals had been proposed, only to stall during the MMA moratorium and the state's debate over the issue. Some of these proposed facilities were expected to skirt the moratorium by opening as full-service hospitals. One stakeholder in Houston reported that the development of approximately 20 hospitals had been discussed, though most probably would not move forward. Other stakeholders said they were not aware that any niche hospitals in particular were planned in their markets, and they anticipated little activity until the moratorium expired and the issues surrounding niche hospitals and physician-ownership also were resolved at the state level. A number of stakeholders expected that CMS's planned 2007 adjustments to Medicare DRG payment for selected services would make the development of niche hospitals less likely—but some were concerned that the changes in Medicare reimbursement could hurt general hospitals as well.

A few stakeholders predicted that the lifespan of many niche and small physician-owned hospitals would be short and that they would either merge with general hospitals or become more like community hospitals—particularly in light of changes in Medicare payment and the possibility the health plan networks would continue to exclude them. Some physician-owned hospitals reported being "out-niched" as other niche hospitals and ambulatory surgical centers had cut into their more profitable services.

While the small physician-owned hospitals considered their size to be attractive to physicians and patients, many had added services to address community need and to generate higher patient volume. Some hospitals were expanding or were considering expanding into other

specialty areas related to their initial focus—for example adding pulmonary and gastrointestinal specialty services to a cardiac service line—and others were expanding less profitable services such as obstetrics, emergency, and intensive care.

Stakeholders expected not only a surge in the general population—especially in Dallas, Houston, and the Valley—but also continued growth in the uninsured population over the next few years. All predicted a need for additional capacity in various areas; some niche hospital representatives contended that there was "enough business for everybody." Some stakeholders believed that niche hospitals represented additional beds that could be useful in the event of a public health emergency like another major hurricane. Others were concerned about redundant services and over-capacity in specialty areas, particularly if those services remained largely unavailable to the low-income and uninsured populations.

I. RECOMMENDATIONS FOR POLICY CHANGE

Representatives from general, physician-owned and niche hospitals alike wanted to "level the playing field" in terms of their ability to sustain their hospitals and care for patients. Along these lines, recommendations from the various stakeholders included the following:

- General hospital and community stakeholders proposed more restrictions on niche and physician-owned hospitals. They would require niche and physician-owned hospitals to contribute to the safety net.
- Representatives from physician-owned hospitals wanted a generally "laissez-faire" environment but the same rules for all competitors.
- Niche hospital stakeholders generally did not see the need for any policy or regulations beyond allowing them greater access to health plan networks.

Few stakeholders suggested that Texas re-introduce certificate-of-need (CON) laws. Most pointed to the expanding population in some communities and the aging of the population as signaling the need for additional beds. In general, they preferred common rules for all hospitals and competing facilities to constraints on new development. Many stakeholders recommended policies that would preserve or enhance care for the uninsured, including:

- Requiring niche and physician-owned hospitals to provide at least a minimum level of uncompensated care.
- Developing a "pay or play" system in which all hospitals provide a minimum level of uncompensated care or contribute financially to safety net providers in the community.
- Financing safety net services by allocating some portion of the taxes paid by for-profit entities or implementing a dedicated tax.

- Reconsidering whether not-for-profit hospitals with for-profit joint ventures should receive ongoing tax relief.

In addition to these recommendations, general hospital representatives and other community stakeholders suggested that physician-owned and niche hospitals should offer emergency services, if physician ownership remains unrestricted. Specifically, they offered the following ideas:

- All trauma-related specialists could be required to provide a certain level of on-call coverage at a trauma center in their community.
- As a condition of credentialing, physicians could be required to take call until they reach a certain age (such as age 55 or 60).
- The expectations about services provided by niche hospitals could be clarified and expanded—for example, hospitals might be required to have a full-service emergency department with the number of beds in specific proportion to the number of licensed hospital beds.
- All hospitals might be required to staff their emergency departments with board-certified emergency medicine physicians rather than relying on on-premises specialists to handle each emergency, which can delay proper care. A related suggestion was to reconsider EMTALA and transfer regulations with an eye toward making changes that would not allow niche hospitals to avoid treating uninsured patients on the grounds that an appropriate specialist is unavailable.

A few stakeholders were concerned that requiring all hospitals to have a full-service emergency department of a particular size was not the best solution from the perspective of either quality or cost. They observed that the quality of emergency care in a hospital that specialized in only one or a few types of procedures would not be equal to the emergency care offered in a general hospital, and that such a requirement could result in an excess of emergency beds.

Many stakeholders discussed the need for more openness in the process by which physicians self-refer patients, as well as better enforcement of the requirements that underpin this goal. They variously recommended:

- Requiring that physicians give patients a standardized disclosure statement with clear and prominent language about physician ownership in a hospital.
- Re-evaluating whether self-referral is appropriate. There were mixed views about whether physician ownership was inappropriate outright or whether ownership and referral should be limited. Some advised restricting ownership to facilities outside a physician's market.
- Limiting the prices that out-of-network hospitals may charge.

Not surprisingly, the representatives of niche hospitals and some general hospitals with joint ventures did not typically see a need for any policy or regulatory changes. In their view, free markets promoted both healthy competition and patient choice.

At the same time, some other stakeholders were concerned that statewide changes could have unintended and damaging consequences, such as prompting a physician exodus from the state. Instead, they saw a need for a nuanced policy response, attuned to differences between small and large communities and the specific impacts of physician-owned and niche hospitals in each community.

J. SUMMARY AND CONCLUSIONS

Physician dissatisfaction with existing general hospitals reportedly has triggered much of the development of niche and physician-owned hospitals in Texas. Physician-owned hospital representatives, in particular, rarely identified financial motivations. Instead, many hospital representatives cited insufficient physician involvement in hospital decisions, concerns about quality of care, and inefficiencies for physicians and patients as the catalysts for the development of niche hospitals. In turn, the development of these hospitals prompted the general hospitals to attempt to repair strained relationships with physicians that have built their own facilities; replace physicians who have left general hospital practice; and invest with physicians on joint ventures to retain a proportion of business that might otherwise go to the new facilities.

Health plans in Texas generally have made case-by-case decisions about including niche or physician-owned hospitals in their networks, considering whether contracting with the niche hospital would disrupt their existing relationships with general hospitals, the proportion of specialists in the community that the new hospital represents, and the rates the new hospital has requested. Currently, many niche and physician-owned hospitals do not have contracts with the health plans in their markets. Although they reported great interest in gaining entrance to the health plan networks, many general hospitals have lobbied the health plans to exclude them.

The impact of niche and physician-owned hospitals on general hospitals varied within and across markets. A number of general hospital representatives reported losses in profitable specialty service volume due to the entry of a niche or physician-owned hospital and were concerned about maintaining their ability to subsidize less profitable services and care for uninsured patients. However, no hospital interviewed for this study reported significant cutbacks to date. Because most of the safety net hospitals' patients were low-income and uninsured, and other hospitals generally did not compete for these patients, large, public safety net hospitals report less effect from niche or other physician-owned hospitals.

Representatives from general hospitals often reported that niche and other physician-owned hospitals treat larger proportions of insured patients and patients with less complicated conditions. They believed that the physician owners of niche and physician-owned hospitals "cherry pick" the patients they refer to their own hospitals. In addition, they believe that, because niche and other physician-owned hospitals typically have limited emergency capacity, they largely avoid the most difficult emergency cases as well as the uninsured patients who present at emergency departments for routine care. Representatives from niche and other

physician-owned hospitals generally conceded that they do not treat many Medicaid or uninsured patients, but said that they did not actively avoid them.

Stakeholders in general were not concerned that, to date, niche and physician-owned hospitals have added unnecessary capacity—largely due to population growth in many communities and the increased demand for health services. Most community stakeholders detected no significant differences in prices or costs between general and niche and physician-owned hospitals, but many were concerned that niche and physician-owned hospitals increase the costs of nurse and physician recruitment and staffing.

Stakeholders typically did not perceive a difference in quality between general and niche facilities. However, many cited a range of benefits associated with niche and physician-owned hospitals including lower infection rates, increased efficiency, and greater patient amenities (such as private rooms and better food). Some general hospital representatives and other community stakeholders acknowledge that increased competition from niche and physician-owned hospitals has forced general hospitals to become more attentive to customer service.

In the absence of policy or regulatory changes, most stakeholders expected the Texas health care market to continue on its current path, with additional hospital construction throughout the state and increased competition for profitable services. Few stakeholders expected retrenchment of physician hospital ownership, although some anticipated that forthcoming changes in Medicare reimbursement might cause some niche hospitals to close or be absorbed by general hospitals over the next few years.

Overall, representatives of all types of hospitals, as well as other community stakeholders, wanted to "level the playing field" in terms of their ability to sustain their facilities and care for their patients. Representatives of niche and other physician-owned hospitals typically recommended no interventions beyond allowing them greater access to health plan networks, contending that free markets promoted healthy competition and provided better patient choice. Few stakeholders favored reintroduction of a certificate-of-need (CON) process to regulate the development of niche hospitals.

However, leaders of general hospitals thought that, if niche and other physician-owned hospitals were to survive and continue to develop, thought they should contribute fairly to emergency services and care for low-income and uninsured people by offering services or providing funding for safety-net providers. Many stakeholders agreed that the state should focus on enacting policies that would at least preserve, but might enhance, the safety net and access to care for the uninsured.

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APPENDIX A

IDENTIFICATION OF NICHE HOSPITALS IN TEXAS

A. DEFINITION OF NICHE HOSPITALS

Senate Bill 872(d) established an explicit definition of niche hospitals in Texas. In statute, a niche hospital is one that meets all of the following conditions:

- It classifies at least two-thirds of its Medicare or all patients (a) in not more than two major diagnosis related categories (MDCs); or (b) in surgical diagnosis-related groups (DRGs)
- It specializes in one or more of the following areas: cardiac care, orthopedics, surgery, or women's health.
- It is not a public hospital; a hospital for which most inpatient claims are for DRGs relating to rehabilitation, psychiatry, alcohol and drug treatment, or children or newborns; or a hospital with fewer than 10 claims per bed

We used the Texas Hospital Discharge Dataset (HDD) to analyze discharge patterns in order to select niche hospital candidates. Frequency counts of discharges with certain DRGs and MDCs were calculated and compared with the total number of discharges at the hospital level for all uniquely identified hospitals in the HDD. From this summary distribution of discharges, we created two "niche indices" to represent a hospital's concentration of special services as listed in the legislation. We identified a hospital as "niche" if either of its two indexes had a value greater than two-thirds and if it met the following criteria:

- ***Niche index #1*** equals the sum of discharges in the top two largest MDCs divided by the sum of total discharges, per hospital, per year. A hospital was classified as a particular type of niche hospital if the niche index was equal to or greater than two-thirds and if at least one of the top two largest MDCs were MDC 5 (cardiac), MDC 8 (orthopedic), or MDC 13 (women's health). If two of these three MDCs both showed up as the top two MDCs in a hospital, the hospital was subsequently classified as a surgical niche hospital.
- ***Niche index #2*** equals the sum of discharges with a surgical DRG (as identified by CMS) divided by the sum of total discharges, per hospital, per year. The first criterion notwithstanding, if two-thirds of all DRGs were designated as surgical, the hospital was classified as a surgical niche hospital.

Because hospitals with fewer than 50 inpatient discharges per quarter do not appear with a unique identification number in the HDD, we used alternative methods to accurately identify these facilities. The Texas Hospital Association (THA) provided a list of hospitals it had identified as physician-owned hospitals. For hospitals not uniquely identified, we used the THA list and in-depth web searches to identify additional niche hospitals.

We also reviewed a number of "borderline" niche hospitals that almost met the threshold or that met the threshold briefly in one year but not in other years. Selection criteria for these

special cases emerged from a case-by-case review. For example, we classified a hospital as "niche" if it barely fell below the threshold in an early or middle year of the observation period (i.e., 2000 or 2001) but was clearly above the threshold in later years (i.e., 2002-2004). Similarly, if a hospital had missing data in some years but otherwise exhibited strong evidence of being a niche hospital, it would fall into the niche category. In addition, hospitals that self-identified as niche through their website or in qualitative information sources were classified as niche.

However, if a hospital was above the threshold in an early year of the period but subsequently exhibited a decreasing trend in its indexes that consistently fell below the threshold, this hospital was not considered "niche" for the years in which the index fell below the threshold. Hospitals with a high index value of surgeries not covered by Medicare (such as bariatric surgery) were not classified as niche; because Medicare does not pay for the DRG, there was no classification of medical or surgical.

After we developed a preliminary list of niche hospitals, the Texas Department of State Health Services (DSHS) released a copy of the facilities' "Application For A State License To Operate A Hospital." This licensing data provided additional information on the services offered by the facilities, on their size, and in some cases, on the ownership structure. From the licensing information, we generated a list of niche hospitals and owners. Officials at DSHS vetted the list for accuracy and to address any distinctive factors in the state.

B. EXCLUDED HOSPITALS

Since the legislation outlined a number of exclusionary criteria, we used the AHA survey question that asked a hospital to indicate "the one category that best describes your hospital or the type of service it provides to the majority of admissions." The set of hospital service codes appearing in question B2 of the survey included a response ("10") for "General medical and surgical," as well as responses for psychiatric, rehabilitation, chronic disease, long-term care, and alcoholism and other chemical dependency. We excluded a hospital from the analysis if it self-identified as psychiatric (22), tuberculosis (33), cancer (41), obstetrics (44), rehabilitation (46), chronic disease (48), other (49) with no text specification, acute long-term care (80, 90), alcoholism (82), or had either a missing or "0" value. We also used question B1 of the survey to identify and remove all government-owned public hospitals from the sample.

C. CLASSIFICATION OF GENERAL HOSPITALS

All remaining hospitals in our database were classified as general hospitals. In effect, general hospitals did not meet the threshold for a niche hospital based on the statutory definition and did not fall into one of the exclusion categories noted above. As a diagnostic check on this method to classify the residual set of hospitals as "general," we used the AHA survey to tabulate responses to Question B2 that asks hospitals to indicate "the one category that best describes your hospital or the type of service it provides to the majority of admissions." All remaining hospitals had a "general medical and surgical" response (10) or in a few cases, an "other" response (49) with text specifying it was an acute care hospital.

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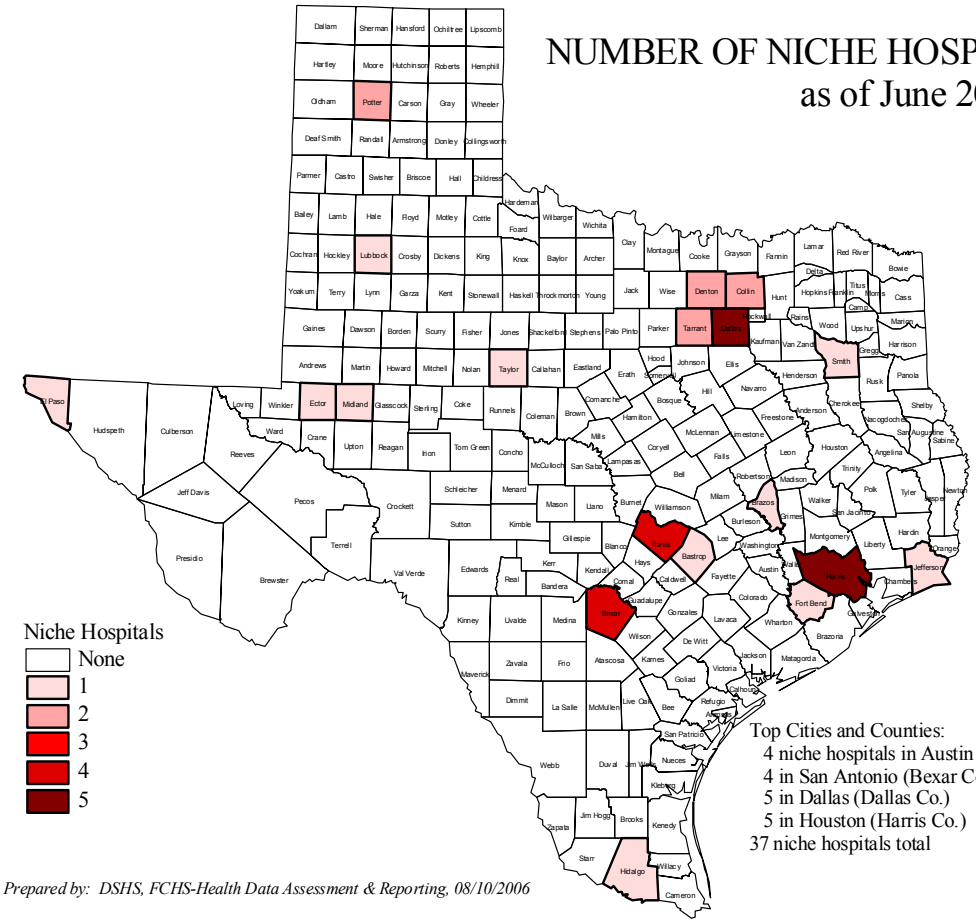
APPENDIX B

NUMBER OF NICHE HOSPITALS IN TEXAS BY COUNTY, 2004

NUMBER OF NICHE HOSPITALS
as of June 2006



Top Cities and Counties:
4 niche hospitals in Austin (Travis Co.)
4 in San Antonio (Bexar Co.)
5 in Dallas (Dallas Co.)
5 in Houston (Harris Co.)
37 niche hospitals total

Prepared by: DSHS, FCHS-Health Data Assessment & Reporting, 08/10/2006

APPENDIX C

GENERAL HOSPITAL MARGINS AND UNCOMPENSATED CARE: MODEL SPECIFICATIONS AND ESTIMATES

The multivariate analysis of general hospitals' total margins, operating margins, and uncompensated care load were based on ordinary least-squares (OLS) regressions using pooled data on all hospitals that reported full-year and (for the purposes of this analysis) complete information in the AHA Annual Survey of Hospitals and Hospital Tracking Database. The data were pooled across five years (2000-2004); the unit of observation was each hospital in each year.

The estimates controlled for the year of observation, with the reference year being 2000. The standard errors were clustered at the hospital level to calculate significance (the P-value in the tables below).

TABLE C.1

Dependent Variable: Total Margin as a Percent of Revenue
Key Explanatory Variable: Niche Admissions as a Percent of Total Admissions per HSA
N = 1,698 R^2 = 0.1225

Variable Name	Estimate of the Coefficient	Standard Error	P-Value
Intercept	5.670	51.650	0.913
Niche Admissions as a Percent of Total Admissions	0.031	0.271	0.910
For-Profit Status	7.644	1.192	<.0001
Teaching Status	-4.232	2.377	0.076
Number of Beds	-0.017	0.009	0.070
Private Admissions as a Percent of Total	0.031	0.061	0.611
Medicare Admissions as a Percent of Total	-0.003	0.667	0.968
Medicaid Admissions as a Percent of Total	-0.109	0.077	0.157
Urban County	-0.007	1.684	0.997
Border County	1.931	2.676	0.471
Outpatient Visits per 1,000 Population	0.002	0.003	0.397
Emergency Room Visits per 1,000 Population	0.026	0.031	0.406
Admissions per 1,000 Population	0.578	0.267	0.031
Average Length of Stay	0.313	0.136	0.023
Occupancy Rate	1.537	3.242	0.636
Log (HSA Population)	-0.746	5.772	0.897
Change in HSA Population	-0.064	0.060	0.289
Percent of HSA Population Black	-0.221	0.145	0.128
Percent of HSA Population Hispanic	-0.073	0.062	0.242
Percent of HSA Population Female	-0.741	0.386	0.055
Percent of HSA Population 65 years or older	0.745	0.326	0.023
Percent of HSA Population with a High School Diploma	-0.442	0.197	0.025
Number of Physicians per 1,000 Population in HSA	0.494	0.789	0.531
Number of Ambulatory Surgery Centers in HSA	0.029	0.085	0.729
Log (Per Capita Income in HSA)	2.257	5.862	0.700
Hospital with System Affiliation	0.741	0.959	0.440
Number of Hospitals in HSA	0.093	0.111	0.402
Number of For-Profit Hospitals in HSA	-0.478	0.248	0.055
Year = 2001	2.558	0.924	0.006
Year = 2002	3.352	1.100	0.002
Year = 2003	2.254	1.313	0.087
Year = 2004	2.378	1.634	0.146

TABLE C.2

Dependent Variable: Operating Margin as a Percent of Revenue
Key Explanatory Variable: Niche Admissions as a Percent of Total Admissions per HSA
N = 1,698 R^2 = 0.1436

Variable Name	Estimate of the Coefficient	Standard Error	P-Value
Intercept	10.627	51.846	0.838
Niche Admissions as a Percent of Total	0.079	0.275	0.774
For-Profit Status	8.683	1.266	<.0001
Teaching Status	-4.309	2.678	0.108
Number of Beds	-0.016	0.010	0.106
Private Admissions as a Percent of Total	0.036	0.064	0.576
Medicare Admissions as a Percent of Total	0.016	0.070	0.824
Medicaid Admissions as a Percent of Total	-0.114	0.080	0.156
Urban County	0.528	1.692	0.755
Border County	1.945	2.410	0.420
Outpatient Visits per 1,000 Population	0.001	0.003	0.667
Emergency Room Visits per 1,000 Population	0.026	0.031	0.409
Admissions per 1,000 Population	0.539	0.267	0.044
Average Length of Stay	0.271	0.146	0.065
Occupancy Rate	2.493	3.208	0.438
Log (HSA Population)	0.706	5.945	0.906
Change in HSA Population	-0.063	0.062	0.305
Percent of HSA Population Black	-0.242	0.145	0.095
Percent of HSA Population Hispanic	-0.081	0.062	0.196
Percent of HSA Population Female	-0.754	0.394	0.057
Percent of HSA Population 65 years or older	0.754	0.331	0.023
Percent of HSA Population with a High School Diploma	-0.426	0.199	0.033
Number of Physicians per 1,000 Population in HSA	-0.220	0.872	0.801
Number of Ambulatory Surgery Centers in HSA	0.040	0.084	0.639
Log (Per Capita Income in HSA)	1.140	6.002	0.850
Hospital with System Affiliation	1.074	0.985	0.276
Number of Hospitals in HSA	0.115	0.113	0.306
Number of For-Profit Hospitals in HSA	-0.533	0.261	0.042
Year = 2001	2.993	0.938	0.002
Year = 2002	4.225	1.102	0.001
Year = 2003	3.136	1.382	0.024
Year = 2004	3.183	1.649	0.054

TABLE C.3

Dependent Variable: Uncompensated Care as a Percent of Revenue
Key Explanatory Variable: Niche Admissions as a Percent of Total Admissions per HSA
N = 1,698 R^2 = 0.4101

Variable Name	Estimate of the Coefficient	Standard Error	P-Value
Intercept	42.373	32.284	0.190
Niche Admissions as a Percent of Total	0.1554	0.149	0.297
For-Profit Status	-1.920	0.713	0.007
Teaching Status	-0.311	1.431	0.828
Number of Beds	-0.013	0.007	0.044
Private Admissions as a Percent of Total	-0.419	0.105	<.0001
Medicare Admissions as a Percent of Total	-0.341	0.118	0.004
Medicaid Admissions as a Percent of Total	-0.287	0.125	0.022
Urban County	-1.713	0.823	0.038
Border County	3.581	1.960	0.069
Outpatient Visits per 1,000 Population	0.009	0.007	0.194
Emergency Room Visits per 1,000 Population	0.087	0.039	0.028
Admissions per 1,000 Population	0.109	0.170	0.521
Average Length of Stay	-0.004	0.099	0.972
Occupancy Rate	-7.550	2.247	0.001
Log (Population per HSA)	1.654	3.129	0.597
Change in HSA Population	-0.018	0.029	0.543
Percent of HSA Population Black	0.119	0.067	0.074
Percent of HSA Population Hispanic	0.017	0.030	0.565
Percent of HSA Population Female	0.229	0.172	0.183
Percent of HSA Population 65 years or older	-0.150	0.099	0.130
Percent of HSA Population with a High School Diploma	0.149	0.107	0.166
Number of Physicians per 1,000 Population in HSA	-0.293	0.511	0.566
Number of Ambulatory Surgery Centers in HSA	0.039	0.036	0.272
Log (Per Capita Income in HSA)	-1.569	3.092	0.612
Hospital with System Affiliation	-0.664	0.550	0.228
Number of Hospitals in HSA	0.016	0.074	0.830
Number of For-Profit Hospitals in HSA	-0.049	0.183	0.791
Year = 2001	0.202	0.274	0.462
Year = 2002	-0.448	0.480	0.350
Year = 2003	-0.796	0.506	0.117
Year = 2004	-0.431	0.631	0.495

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APPENDIX D

SENSITIVITY ANALYSIS ON THE FINANCIAL STATUS OF NICHE AND GENERAL HOSPITALS IN TEXAS

CMS Definition of Niche Hospitals

This analysis tests the sensitivity of the report findings to an alternative definition of a niche hospital. Instead of using the Texas SB 872 definition, this analysis is based on the list of specialty hospitals in Texas used in the 2006 CMS report (CMS 2006).

The CMS and the Texas SB 872 definitions of a niche hospital differ with respect to the selection criteria and data that are used to identify niche hospitals, and the procedures that are excluded from consideration (Table D.1).

TABLE D.1

KEY DIFFERENCES BETWEEN THE TEXAS SB 872
AND CMS DEFINITIONS OF A NICHE HOSPITAL

	Texas SB 872 Definition	**CMS Definition**
Data Source	Hospital discharge files (2000-2004)	Medicare claims data (2002)
Selection Criteria	1. The hospital classifies at least two-thirds of its Medicare or total patient discharges in one or two MDCs or in surgical DRGs only. 2. The hospital specializes in one or more of the following areas: cardiac care, orthopedics, surgery, or women's health. 3. The hospital had at least 10 discharges per year.	1. At least 45 percent of the hospital's Medicare cases are cardiac, orthopedic, or surgical in nature; or 2. At least 66 percent of the hospital's Medicare cases are in two MDCs, with the primary MDC being cardiac, orthopedic, or surgical. 3. The hospital had a minimum volume of 25 total Medicare discharges during 2002 and submitted Medicare cost reports and claims for 2002.
Excluded Procedures	DRGs related to rehabilitation, psychiatry, alcohol and drug treatment, pediatrics, or newborns.	DRGs related to rehabilitation, psychiatry, alcohol and drug treatment, pediatrics, or newborns. Surgical procedures not covered by Medicare (e.g. bariatric surgery)

The most important differences relate to the focus on Medicare discharges (versus all discharges) and the threshold concentration of MDCs that defines a niche hospital. Specifically:

- SB 872 stipulates that a niche hospital be identified on the basis of discharges of either Medicare or all payers. In contrast, the CMS definition considers only 2002 Medicare cases. Although Medicare is the largest public payer in most hospitals, the CMS focus only on Medicare cases is more restrictive than the SB 872 definition, which considers all cases without reference to payer.

- SB 872 defines a niche hospital as having at least two-thirds of all patient discharges in one or two major diagnostic or surgical categories (either MDCs or DRGs). In contrast, CMS defines a niche hospital at a lower threshold (45 percent) of Medicare discharges that are cardiac, orthopedic, or surgical.

In terms of the number of hospitals ultimately categorized as niche hospitals, the threshold concentration of cases is the most important difference between the SB 872 and CMS definitions. The definitions also vary with respect to the universe of hospitals they consider. The SB 872 definition specifies that hospitals must have had at least 10 total discharges per year across all payers, while the CMS definition considers all hospitals with a minimum volume of 25 Medicare cases per year. As a result, very small hospitals are less likely to appear on the CMS list of niche hospitals.

Finally, the CMS definition excludes certain procedures (such as bariatric surgery) that Medicare does not cover. Thus, a small number of highly specialized facilities (such as bariatric surgical hospitals) may not appear on the CMS list of niche hospitals.[34]

This analysis considers fewer niche hospitals than were identified in the CMS 2006 report. CMS identified 32 niche hospitals in Texas in 2004. Of these hospitals, just 21 reported to the AHA and therefore were included in the data available for this analysis (Table D.2). The hospitals on the CMS list that did not report data into the AHA Annual Survey, and also were considered under the SB 872 definition to be niche hospitals, were excluded from both analyses. Among the hospitals on the CMS list that did not report to the AHA, one had been open less than a full calendar year. Other hospitals on the CMS list that did not report had been open for more than a calendar year, but chose not to report.

Differences between the CMS and SB 872 definitions of a niche hospital produced additions and subtractions from the hospitals classified as niche in this analysis. Specifically:

- Three hospitals (other than that open less than a year) were included in the CMS list, but were not niche hospitals under the SB 872 definition. None of these hospitals met the statute's threshold—that two-thirds of discharges be surgical DRGs or in specific MDCs.
- Six hospitals that were niche hospitals under the SB 872 definition did not appear on the CMS list. These hospitals did not meet CMS's 45-percent threshold—that 45 percent of Medicare claims be cardiac, orthopedic or surgical.

In summary, the CMS definition of niche hospitals excluded some hospitals that Texas considers niche, but included others (based on examination of selected Medicare discharges) that Texas did not consider niche. The CMS definition classified fewer hospitals as niche in 2000

[34] Such hospitals were largely included in our analysis of general hospital margins but may have been excluded the physician referral analysis if their reported DRGs were unclassifiable.

and 2004 than did Texas. Under the CMS definition, there were 6 niche hospitals in 2000 and 21 niche hospitals in 2004 operating in Texas (and also reporting to the AHA)—compared with 9 and 24 hospitals, respectively, using the SB 872 definition.

TABLE D.2

DESCRIPTIVE RESULTS COMPARING TEXAS SB 872 AND CMS DEFINITIONS OF A NICHE HOSPITAL

	Texas SB 872 Definition			CMS Definition		
	2000	2004	Percent Change[a]	2000	2004	Percent Change[a]
Number of Niche Hospitals	9	24	167%	6	21	250%
Hospital Capacity and Volume						
Mean Beds	24	27	13%	31	28	-10%
Mean Admissions	949	1,069	13%	1,315	1,149	-13%
Mean Outpatient Visits	10,314	9,850	-4%	11,544	11,420	-1%
Mean ER Visits	834	683	-18%	811	797	-2%
Mean Total Surgeries	5,334	4,916	-8%	5,891	5,157	-12%
Payer Mix (Percent of Total Admissions)						
Private	62.4%	54.1%	-8.3%	65.5%	62.0%	-3.5%
Medicare	26.0%	33.9%	7.9%	24.7%	28.1%	3.4%
Medicaid	2.4%	2.8%	0.4%	1.4%	3.7%	2.3%
Other	9.2%	9.2%	0.0%	8.5%	6.3%	-2.2%
Financial Measures (Percent of Revenue)						
Uncompensated Care	2.9%	1.4%	-1.5%	2.1%	1.6%	-0.5%
Operating Margin	9.5%	3.7%	-5.8%	7.8%	7.8%	0.0%
Total Margin	9.6%	0.3%	-9.3%	7.8%	3.7%	-4.1%

Source: MPR analysis of AHA Survey Data, 2000-2004.

[a] Calculated as a point change between payer mix and financial measures expressed as a percentage.

Sensitivity of the Descriptive Findings to the Definition of a Niche Hospital

The descriptive results for general hospitals did not change significantly from those based on the SB 872 definition of a niche hospital and, therefore, are not repeated here. However, the descriptive results with respect to niche hospitals did change, as follow:

- Niche hospitals as defined by CMS were, on average, larger than those defined by SB 872. Using the CMS definition, niche hospitals averaged more beds, admissions, and outpatient visits in 2000 and 2004.

- Among niche hospitals as defined by CMS, the mean number of beds and the mean number of admissions in niche hospitals declined from 2000 to 2004. In contrast, using the SB 872 definition, the mean number of beds and hospital admissions among niche hospitals rose among niche hospitals from 2000 to 2004, reflecting the inclusion of smaller hospitals in the SB 872 definition than in the CMS definition.

Both the CMS and SB 872 definitions of a niche hospital produce results that indicate a decline in the number of private-pay patients and an increase in Medicare patients as a proportion of all patients in niche hospitals. However, use of the CMS definition suggests a more moderate trend: private-pay admissions declined just 4 points (from 66 to 62 percent of all admissions) from 2000 to 2004, compared with an eight-point drop using the SB 872 definition of a niche hospital. In turn, the percentage of Medicare admissions increased more modestly using the CMS definition (from 25 to 28 percent) than with the SB 872 definition (from 26 to 34 percent). Use of the CMS definition also suggests that niche hospitals admitted a higher proportion of Medicaid patients between 2000 and 2004, even though they admitted a much lower number of Medicaid patients as a proportion of all patients compared with general hospitals.

Finally, use of the CMS definition changed some measures of financial performance significantly. Using the CMS definition, niche hospitals' average operating margin was the same in 2000 and 2004 (7.8 percent), but it dropped dramatically using the Texas SB 872 definition (9.5 to 3.7 percent). Total margins declined using either definition, but the change was smaller using the CMS definition of a niche hospital (7.8 percent to 3.7 percent) than with the Texas SB 872 definition (9.6 percent to 0.3 percent). Using either definition, uncompensated care as a percent of revenue was very low compared to that provided in general hospitals and declined from 2000 to 2004, but it declined less using the CMS definition of niche hospitals.

Sensitivity of Multivariate Findings to the Definition of a Niche Hospital

As indicated above, the results of the multivariate analyses were not sensitive to the definition of niche hospitals. That is, with respect to each of the three general hospital outcomes that we investigated—their operating margins, total margins, and uncompensated care as a percent of revenues—the coefficient estimates and p-values of the explanatory variables were very similar to the findings reported in Appendix C. Thus, using either definition, we found no evidence that the presence of a niche hospital, per se, affected the financial performance of general hospitals. Instead, after controlling for all other factors, for-profit status remained the dominant predictor of general hospitals' operating margins, total margins, and uncompensated care burden.

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APPENDIX E

IDENTIFICATION OF PHYSICIAN-OWNED NICHE HOSPITALS AND PHYSICIAN OWNERS

We identified niche hospitals as documented in Appendix A, and further identified whether the niche hospitals were physician-owned from the AHA Annual Survey of Hospitals and Hospital Tracking Database.

Based on licensing applications requested of and obtained from the DSHS Facility Licensing Department, we identified 1,006 physicians who potentially had an ownership interest in a niche hospital. The list of licensure numbers for these 1,006 physicians was sent to DSHS to build a "crosswalk" between physician-owners and their identification number in the discharge data, as described further below.

In response, the DSHS Center for Health Statistics provided a list of identification numbers used in the discharge data associated with 946 of the 1,006 physicians (94 percent), but with no a specific match to their licensure numbers.[35] A review of the characteristics of the 60 physicians who did not match suggested that all were either retired, did not have admitting privileges, were associated with hospitals not yet reporting discharge data, or practiced in specialties (such as radiology) such that they were unlikely to admit patients.

In order to link a niche hospital with its physician owner(s) and comply with the Institutional Review Board confidentiality requirements, we explored the distribution of referrals to different numbers of hospitals by physician owners as a group. We found that, without exception, if a physician owner admitted any patients to a niche hospital, all were referred to the same niche hospital. Considering (1) that the physician was identified as an owner and (2) that we also knew the niche hospital receiving all the referrals was physician-owned, we inferred that the physician must have an ownership interest in that one niche hospital.

HOSPITAL CROSSWALK

The steps described above involved assembling information from three data sources—the hospital discharge data, AHA Annual Survey of Hospitals and Hospital Tracking Database and the licensing application. Each had a unique hospital identification system.

We developed a "crosswalk" to identify hospitals that had changed names over time and to merge data from the various sources. The hospital crosswalk was developed by first matching the list of hospitals from the 2000-2004 AHA surveys with a complete list of currently active licensed hospitals based on hospital name and city; and then matching this list with hospitals in the 2000-2004 discharge data based on the hospital name, license number, and THCIC_ID. The Texas DSHS assigns the THCIC_ID in the discharge data based on the license number with slight modifications when hospitals change ownership or hospital name. Hospitals that received a modified THCIC_ID were identified as the same institution for grouping discharges.

[35] The physician identification number in the discharge data refers to ATTENDING_PHYSICIAN_UNIF_ID, which is a unique identifier assigned to the licensed physician expected to certify medical necessity of services rendered, with primary responsibility for the patient's medical care and treatment (usually the physician who admits patients to hospitals).

We were able to successfully crosswalk between the discharge data and the licensing documents for all but 14 hospitals in the discharge data, and crosswalk between discharge data and the AHA survey data for all but 47 hospitals in the discharge data. Using this hospital crosswalk and the physician crosswalk provided by DSHS, we identified niche hospitals and physician owners consistently in the 2000-2004 discharge data.