United States Government Accountability Office

GAO

Report to the Chairman, Committee on Ways and Means, House of Representatives

April 2006

GENERAL HOSPITALS

Operational and Clinical Changes Largely Unaffected by Presence of Competing Specialty Hospitals

GAO-06-520

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GAO Accountability · Integrity · Reliability

Highlights

Highlights of GAO-06-520, a report to the Chairman, Committee on Ways and Means, House of Representatives

Why GAO Did This Study

There has been much debate about specialty hospitals—short-term acute care hospitals with physician owners or investors that primarily treat patients who have specific medical conditions or need surgical procedures—and the competitive effects they may have on general hospitals.

Advocates of specialty hospitals contend that competition from these physician-owned facilities can prompt general hospitals to implement efficiency, quality, and amenity improvements, thus favorably affecting the overall health care delivery system. Critics of specialty hospitals are concerned that general hospitals may respond to such competition by making changes that do not necessarily increase efficiency or benefit patients or communities, for example, by adding services already available in the community. The appropriateness of physicians' financial interests in specialty hospitals has also been questioned.

GAO was asked to provide information on the competitive response of general hospitals to specialty hospitals. GAO surveyed approximately 600 general hospitals in markets with and without specialty hospitals to provide information on the extent to which these two groups of general hospitals reported implementing operational and clinical service changes to remain competitive. GAO received responses from 401 general hospitals.

www.gao.gov/cgi-bin/getrpt?GAO-06-520.

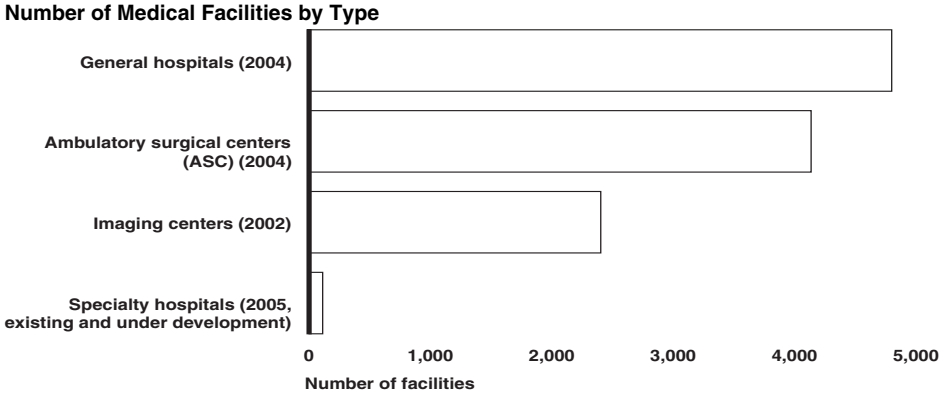
To view the full product, including the scope and methodology, click on the link above. For more information, contact A. Bruce Steinwald at (202) 512-7101 or steinwalda@gao.gov.

What GAO Found

Nearly all general hospitals responding to GAO's survey reported making operational and clinical service changes to remain competitive in what they viewed as increasingly competitive healthcare markets; however, there was little evidence to suggest that general hospitals made substantially more or fewer changes or different types of changes if some of their competition came from a specialty hospital. While the majority of survey respondents indicated that competition from other general hospitals had increased, a larger proportion of respondents—91 percent of urban general hospitals and 74 percent of rural general hospitals—reported increases in competition from limited service facilities, a category that includes approximately 100 specialty hospitals across the nation and thousands of ambulatory surgical centers and imaging centers. To enhance their ability to compete, general hospitals reported making an average of 22 operational changes, such as introducing a formal process for evaluating efforts to improve quality and reduce costs, and 8 clinical service changes, such as adding or expanding cardiology services, from 2000 through 2005. Although specialty hospital advocates have hypothesized that the entrance of a specialty hospital into a market encourages the area's existing general hospitals to adopt changes that make them more efficient and better able to compete, the survey responses largely did not support this view. There were no substantial differences in the average number of operational and clinical service changes made by general hospitals in markets with and without specialty hospitals and, for the vast majority of the potential changes included on GAO's survey, there was no statistical difference between the two groups of hospitals in terms of the specific changes they reported implementing.

GAO received comments on a draft of this report from the Centers for Medicare & Medicaid Services (CMS). In its comments, CMS stated that GAO's study, by providing quantitative data on the market effect of specialty hospitals, was extremely helpful.

Number of Medical Facilities by Type



Sources: American Hospital Association, GAO, and Medicare Payment Advisory Commission.

Note: Data include the most recently available count for each type of medical facility. Count of ASCs includes only those facilities that are Medicare certified.

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Abbreviations

AHA	American Hospital Association
ASC	ambulatory surgical center
CMS	Centers for Medicare & Medicaid Services
CON	certificate of need
DAP	Dartmouth Atlas Project
DOJ	Department of Justice
DRA	Deficit Reduction Act of 2005
FAH	Federation of American Hospitals
FTC	Federal Trade Commission
HCIS	Health Care Information System
HRR	hospital referral region
HSA	hospital service area
IT	information technology
MedPAC	Medicare Payment Advisory Commission
MMA	Medicare Prescription Drug, Improvement, and Modernization Act of 2003
MSA	metropolitan statistical area
OMB	Office of Management and Budget
POS	Provider of Service

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United States Government Accountability Office
Washington, DC 20548

April 7, 2006

The Honorable William M. Thomas
Chairman
Committee on Ways and Means
House of Representatives

Dear Mr. Chairman:

The approximately 4,800 general hospitals in the nation face competition from a variety of sources,[1] including, in some markets, specialty hospitals whose owners or investors include physicians who admit patients to the facility. Specialty hospitals are distinguished from other short-term acute care hospitals in that the former primarily treat patients who have specific medical conditions or need surgical procedures. Specialty hospitals that have opened in recent years typically provide cardiac or orthopedic care or specialize in surgical procedures. In 2005, there were approximately 100 such specialty hospitals in operation or under development that had physician owners or investors.

Although there are relatively few physician-owned specialty hospitals, their potential effect on general hospitals and hospital markets has become a subject of debate. Advocates for specialty hospitals have stated that competition from these facilities favorably affects the overall health care delivery system for hospital services.[2] According to advocates, this result occurs both because specialty hospitals' focused missions enable them to provide high-quality care efficiently and because competition from specialty hospitals creates incentives for general hospitals to implement quality, efficiency, and amenity improvements. In contrast, critics of specialty hospitals have stated that these facilities, in part because of their focused missions, have an unfair competitive advantage relative to general hospitals, which have broad missions to serve all of a community's health care needs, including the provision of emergency care. These critics are

[1]For the purposes of this report we define general hospitals as nongovernmental, short-term acute care hospitals that treat a broad range of medical conditions.

[2]Unless otherwise specified, in this report the term specialty hospital refers to cardiac, orthopedic, and surgical specialty hospitals whose owners or investors include physicians who admit patients to the facility.

also concerned that physicians' ownership or investment interests in specialty hospitals create financial incentives that could inappropriately affect physicians' clinical and referral behavior. Moreover, this view holds, the competitive behaviors that specialty hospitals elicit from general hospitals may not all be socially desirable. For example, in their quest to compete, general hospitals could add services that duplicate those already available in a community, enter into exclusive contracts with health plans, or make changes to discourage physicians from opening rival specialty hospitals. We and other federal agencies have studied various issues related to hospital market competition and specialty hospitals.[3] To date, however, the evidence of how general hospitals' competitive actions have been influenced by the presence of specialty hospitals has largely been anecdotal.

Provisions in the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA) had the effect, in general, of establishing an 18-month moratorium on the development of new specialty hospitals.[4] Although the moratorium expired in June 2005, the recently enacted Deficit Reduction Act of 2005 (DRA) has the effect of extending the moratorium until the date the Secretary of Health and Human Services issues a final report to appropriate committees of jurisdiction of Congress on a plan that addresses issues concerning physician investment in specialty hospitals or up to 8 months after the enactment date of DRA, whichever is earlier.[5]

Because the issue of specialty hospitals remains controversial, you expressed interest in knowing more about the competitive response of general hospitals to specialty hospitals. In this report, we provide information on the extent to which general hospitals in markets with specialty hospitals and general hospitals in markets without specialty hospitals reported implementing operational and clinical service changes to remain competitive.

To conduct our analysis, we surveyed a sample of general hospitals in regional markets with at least one specialty hospital that had opened since

[3]See the end of this report for a list of GAO reports on this topic.

[4]For a discussion of MMA's provisions related to specialty hospitals, see GAO, *Specialty Hospitals: Information on Potential New Facilities*, GAO-05-647R (Washington, D.C.: May 19, 2005).

[5]DRA was enacted on February 8, 2006. Pub. L. No. 109-171, § 5006, 120 Stat. 4, 33-34.

the beginning of 1998.[6] We also surveyed a comparison sample of general hospitals in regional markets where there were no specialty hospitals. General hospitals in both groups were asked to describe the extent of competition within their markets in 2005, and to indicate the operational changes and clinical service changes they made from 2000 through 2005 to remain competitive in their markets. (See app. II for a copy of the survey.) The 72 potential operational changes listed in the survey included, for example, increasing income guarantees to recruit physicians. The 34 potential clinical services listed in the survey that hospitals could have reported adding, expanding, reducing, or eliminating included services such as cardiac care. We analyzed the survey responses to determine whether there were significant differences between the two groups of hospitals in terms of the total number and types of changes made. This comparison was made separately for urban general hospitals, defined as those hospitals located in a metropolitan statistical area (MSA), and rural general hospitals, defined as those hospitals located outside of an MSA, because the extent of changes made by general hospitals in response to the presence of a specialty hospital could be different in the two environments.[7]

Our analysis accounted for the possibility that the presence of a specialty hospital might be more likely to elicit competitive responses from general hospitals that are reasonably close by. In constructing our sample of general hospitals in regional markets with specialty hospitals, we excluded urban general hospitals that were 90 miles or more from the nearest specialty hospital and rural general hospitals that were 120 miles or more from the nearest specialty hospital. We further explored this possibility by analyzing the responses of a subset of urban general hospitals—those that were in the same local market as a specialty hospital.[8] Urban general

[6]Major teaching hospitals were excluded from this study. See app. I for a discussion of the sample selection. We used the Dartmouth Atlas Project's (DAP) hospital referral regions (HRR) as the basis for our regional health care markets. The 306 HRRs in the United States each contain at least one hospital that performs major cardiovascular procedures and have a minimum population of 120,000.

[7]In 2005, the Office of Management and Budget (OMB) defined an MSA as having at least one urbanized area of 50,000 or more population, plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties.

[8]We used the DAP's hospital service areas (HSA) as the basis for our local health care markets. An HSA is a collection of zip codes where residents receive most of their hospitalizations from hospitals in that area. In all but two cases, two or more HSAs constitute an HRR. Because only eight rural general hospitals had a specialty hospital in their local health care market, we did not analyze this group separately.

hospitals in this local subset may be more likely than other general hospitals in the same regions to be affected by the presence of a specialty hospital and thus may be more likely to have implemented operational or clinical service changes in response. Therefore, we compared the responses from this subset with the responses from urban hospitals in regions without specialty hospitals.[9]

We selected specific regional markets for our hospital comparison groups by identifying areas that were similar to one another on several different dimensions, including, for example, the number of Medicare beneficiaries in each regional market. All of the regional markets were located in states that did not have laws requiring hospitals to obtain state approval before adding inpatient beds or building new inpatient facilities.[10]

We surveyed 603 general hospitals during August and September of 2005, and received responses from 401 facilities (67 percent response rate). (See app. I for more detail regarding our scope and methodology.) We took several steps to ensure that the data used to produce this report were sufficiently reliable. For example, we checked each survey response for internal consistency and contacted hospitals to clarify their responses when necessary. We ensured the reliability of the hospital and market-related data sets used in this report by verifying that they were widely used for similar research purposes and by performing appropriate electronic data checks. We conducted our work from July 2005 through March 2006 in accordance with generally accepted government auditing standards.

Results in Brief

Nearly all general hospitals responding to our survey reported making operational and clinical service changes to remain competitive in what they viewed as increasingly competitive healthcare markets; however, there was little evidence to suggest that general hospitals made substantially more or fewer changes or different types of changes if some of their competition came from a specialty hospital. While the majority of

[9]By definition, if there are no specialty hospitals in a regional market, there are no specialty hospitals in any of the local markets that constitute the regional market.

[10]These laws are referred to as certificate of need (CON) laws. For more information on the relationship between CON laws and the location of specialty hospitals, see GAO, *Specialty Hospitals: Geographic Location, Services Provided, and Financial Performance*, GAO-04-167 (Washington, D.C.: Oct. 22, 2003).

survey respondents indicated that competition from other general hospitals had increased, a larger proportion of respondents—91 percent of urban general hospitals and 74 percent of rural general hospitals—reported increases in competition from limited service facilities, a category that includes specialty hospitals, but also many other types of facilities, such as ambulatory surgical centers (ASC), imaging centers, urgent care centers, and gastroenterology centers.[11] General hospitals reported making an average of 22 operational changes, such as introducing a formal process for evaluating efforts to improve quality and reduce costs, and 8 clinical service changes, such as adding or expanding cardiology services, from 2000 through 2005. Overall, 100 percent of general hospitals we surveyed reported implementing at least 1 operational change, while 97 percent reported adding at least 1 new clinical service or expanding an existing one and 32 percent reported eliminating at least 1 clinical service or devoting fewer resources to it. Although specialty hospital advocates have hypothesized that the entrance of a specialty hospital into a market encourages the area's existing general hospitals to adopt changes that make them more efficient and better able to compete, the survey responses largely did not support this view. There were no substantial differences in the average number of operational and clinical service changes made by general hospitals in markets with and without specialty hospitals and, for the vast majority of the potential changes included on our survey, there was no statistical difference between the two groups of hospitals in terms of the specific changes they reported implementing.

In comments on a draft of this report, CMS stated that our study, by providing quantitative data on the market effect of specialty hospitals, was extremely helpful and that CMS would use the information as the agency developed its DRA-mandated report on physician investment in specialty hospitals. We also received comments from the American Hospital Association (AHA) and the Federation of American Hospitals (FAH). Both organizations stated that their concerns regarding specialty hospitals were specific to those facilities that have physician owners or investors. AHA

[11]Ambulatory surgical centers (ASC) are facilities where surgeries that do not require hospital admission are performed. Imaging centers are facilities, independent of hospitals and physicians' offices, that provide diagnostic services. Urgent care centers are facilities that specialize in providing ambulatory medical care without scheduled appointments to patients with acute illnesses or injuries. Gastroenterology centers are facilities that specialize in the evaluation and treatment of gastrointestinal and liver diseases.

and FAH suggested text changes to emphasize that our report is focused on the effect of these types of specialty hospitals on general hospitals.

Background

General hospitals face competition from a variety of sources, including the approximately 100 specialty hospitals in operation or under development in some markets in 2005. Despite the relatively small number of specialty hospitals, the issue of how general hospitals have responded to the competition from specialty hospitals has been a subject of debate. Federal agencies have broadly addressed how general hospitals' competitive actions have been influenced by the presence of specialty hospitals; however, to date, the evidence has been largely anecdotal.

Specialty Hospitals Represent a Small Share of Competition Facing General Hospitals

Specialty hospitals represent a small share of the national health care market and the competition that general hospitals face from other general hospitals, ASCs, imaging centers, and other types of facilities. In 2005, we identified 66 existing specialty hospitals and an additional 46 that were under development.[12] In contrast, there were an estimated 4,800 general hospitals,[13] 4,100 Medicare certified ASCs, and 2,400 imaging centers.[14] (See fig. 1.) Another methodology for assessing the relative magnitude of specialty hospitals is through Medicare inpatient spending. In prior work pertaining to specialty hospitals of various types and ownership structures, we found that specialty hospitals accounted for a low share of Medicare spending for inpatient services relative even to their low share of the hospital market.[15] Specifically, in April 2003 we reported that specialty

[12]The number of specialty hospitals in existence and under development is based on information collected for our previous reports on specialty hospitals (GAO, *Specialty Hospitals: Information on National Market Share, Physician Ownership, and Patients Served*, GAO-03-683R [Washington, D.C.: Apr. 18, 2003]; GAO-04-167; and GAO-05-647R) and from information obtained from the Medicare Payment Advisory Commission (MedPAC).

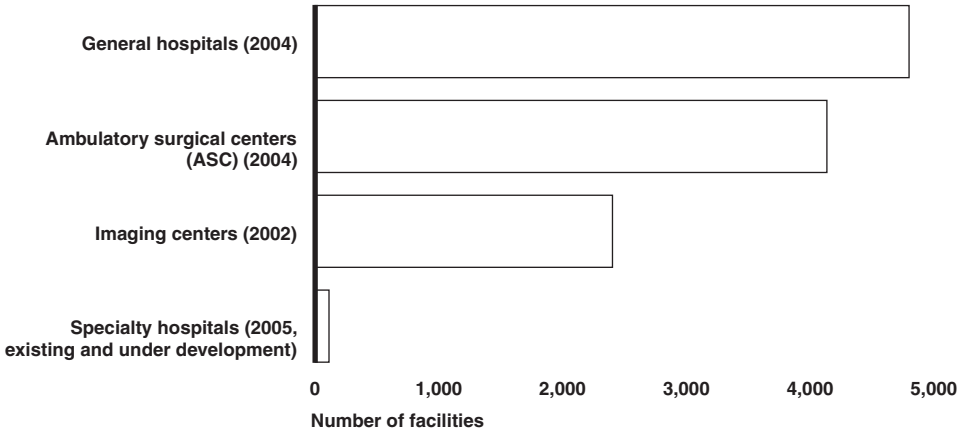
[13]The estimate of the general hospitals reflects the difference between the American Hospital Association's count of 4,919 community hospitals in 2004, which includes specialty hospitals of various types, and our estimate of the number of specialty hospitals.

[14]MedPAC reported in its June 2004 report, *A Data Book: Healthcare Spending and the Medicare Program* (Washington, D.C.: June 2004), that there were 2,403 imaging centers in existence in 2002. In its June 2005 report, *A Data Book: Healthcare Spending and the Medicare Program* (Washington, D.C.: June 2005), MedPAC reported that there were 4,136 Medicare-certified ASCs in existence in 2004.

[15]In our April 2003 report, GAO-03-683R, we used a broader definition of specialty hospitals that included physician- and non-physician-owned hospitals that focused on cardiac, orthopedic, surgical, and women's services and procedures that opened in 2003 or earlier.

hospitals in existence accounted for about 2 percent of existing hospitals, but 1 percent of total Medicare inpatient spending.

Figure 1: Number of Medical Facilities by Type



Sources: American Hospital Association, GAO, and Medicare Payment Advisory Commission.

Note: This figure includes the most recently available count for each type of medical facility. The estimate of the general hospitals reflects the difference between the American Hospital Association's count of 4,919 community hospitals in 2004, which includes specialty hospitals of various types, and the number of specialty hospitals we identified in our 2003 and 2005 reports. This figure includes a count of only Medicare-certified ASCs, a group that makes up an estimated 85 percent of all ASCs.

Competitive Effect of Specialty Hospitals on General Hospitals Is Controversial

The overall competitive effect of specialty hospitals on general hospitals continues to be the subject of debate. Advocates of specialty hospitals contend that the focused mission and dedicated resources of specialty hospitals enable them to offer reduced treatment costs, improved care quality, and enhanced amenities for patients compared with what general hospitals are able to provide. Moreover, some advocates maintain that competition from specialty hospitals can prompt general hospitals to implement efficiency, quality, and amenity improvements, thus favorably affecting the overall health care delivery system.

However, critics are concerned that general hospitals may be adversely affected by specialty hospitals. In 2003, using a broader definition of specialty hospitals that included facilities with and without physician owners or investors, we reported that specialty hospitals tended to treat less-severely-ill patients, served proportionately fewer Medicaid patients,

and were less likely to have emergency rooms.[16] We also reported that physicians were owners or investors in the majority of specialty hospitals we identified. These findings were consistent with critics' concerns that specialty hospitals tend to concentrate on the most profitable procedures and serve patients with the fewest complications. According to such critics, specialty hospitals draw financial resources away from general hospitals and leave those hospitals with the responsibility of caring for the sickest patients and fulfilling their broad missions to provide charity care, emergency services, and standby capacity to respond to communitywide disasters. Critics are also concerned that physician ownership of specialty hospitals creates financial incentives that could inappropriately affect physicians' clinical behavior and their decisions to refer patients to specific facilities.

Evidence of General Hospital Response to Specialty Hospitals Is Largely Anecdotal

To date, there have been only anecdotal reports of how general hospitals have competitively responded to specialty hospitals. Two reports—one jointly issued by the Federal Trade Commission (FTC) and the Department of Justice (DOJ), and another issued by MedPAC—discussed general hospitals' responses to specialty hospitals.[17] The FTC/DOJ report was based primarily on written submissions and testimony provided by health care experts at the agencies' 2002 workshops and 2003 hearings. The information contained in MedPAC's report was gathered through site visits and interviews with representatives of specialty and general hospitals in selected markets where specialty hospitals existed and interviews with others in the health care community. Collectively, the reports identified several actions general hospitals took in response to the entry, or the anticipation of entry, of specialty hospitals into the marketplace, including: improving operating room scheduling, extending service hours, building a single-specialty wing to discourage the establishment of competing facilities, partnering with physicians on their medical staff to open a specialty hospital, signing exclusive contracts with private payers to preclude specialty hospitals or the physicians who invest in them from

[16]In our April and October 2003 reports, GAO-03-683R and GAO-04-167, we included physician- and non-physician-owned hospitals that focused on cardiac, orthopedic, surgical, and women's services and procedures.

[17]Federal Trade Commission and Department of Justice, *Improving Health Care: A Dose of Competition* (July 2004); Medicare Payment Advisory Commission, *Report to the Congress: Physician-Owned Specialty Hospitals* (Washington, D.C.: March 2005).

contracting with those payers, and revoking the admitting privileges of physicians involved with a competing specialty hospital.

Presence of Specialty Hospitals Had Little Effect on the Number or Type of Operational and Clinical Service Changes Reported by General Hospitals

Nearly all general hospitals responding to our survey reported making operational and clinical service changes to remain competitive in markets they viewed as increasingly competitive; however, there was little evidence to suggest that the absence or presence of specialty hospitals had much of an effect on the number or types of changes general hospitals reported implementing between 2000 and 2005. General hospitals responding to our survey reported facing increasing competition both from other general hospitals and from limited-service facilities—a category that includes specialty hospitals, ambulatory surgical centers, and imaging centers. The general hospitals that responded to our survey reported implementing a variety of operational and clinical service changes. However, we found little evidence associating specific changes made by general hospitals with the presence or absence of a nearby specialty hospital. That is, with few exceptions, general hospitals did not report implementing a substantially different number of changes or different types of changes just because there was a specialty hospital in their market.

General Hospitals Perceived an Increase in Competition from Both Other General Hospitals and Limited-service Facilities

Nearly all general hospitals that responded to our survey described their market environments as ranging from somewhat competitive to extremely competitive. Only one hospital described its market as not competitive. Urban general hospitals were much more likely than rural general hospitals to describe their market as either very or extremely competitive. (See table 1.)

Table 1: Hospitals' Reported Perceptions of the Level of Competition in Their Market Environment, by Geographic Type, 2005

Percentage		
	General hospitals	
Perceived competition	Urban[a]	Rural
Very or extremely competitive	77	35
Somewhat competitive or competitive	22	65
Not competitive	0	0

Source: GAO.

[a]Because of rounding, the urban general hospital column does not add to 100 percent.

A larger percentage of general hospitals that responded to our survey—both urban and rural—reported increased competition from limited-service facilities relative to those that reported increased competition from other general hospitals. More than 90 percent of urban general hospitals indicated that competition from limited-service facilities had either increased or greatly increased in their markets, while 75 percent of urban general hospitals indicated that competition from other general hospitals had either increased or greatly increased. (See table 2.) Similarly, 74 percent of rural general hospitals indicated that competition from limited-service facilities had either increased or greatly increased, while 53 percent of rural general hospitals indicated that competition from other general hospitals had either increased or greatly increased. (See table 3.)

Table 2: Urban General Hospitals' Reported Perceptions of the Change in Competition from Other General Hospitals and Limited-service Facilities, 2005

Percentage		
	Source of competition	
Perceived change in competition	Other general hospitals	Limited-service facilities
Increased or greatly increased	75	91
Remained the same	24	8
Decreased or greatly decreased	1	1

Source: GAO.

Table 3: Rural General Hospitals' Reported Perceptions of the Change in Competition from Other General Hospitals and Limited-service Facilities, 2005

Percentage		
	Source of competition	
Perceived change in competition	Other general hospitals	Limited-service facilities
Increased or greatly increased	53	74
Remained the same	43	24
Decreased or greatly decreased	3	1

Source: GAO.

Note: Because of rounding, columns do not add up to 100 percent.

General Hospitals Reported Implementing a Variety of Operational and Clinical Service Changes from 2000 through 2005

Among the 72 potential operational changes survey respondents could have indicated that they made and the 34 potential clinical services respondents could have indicated that they added, expanded, reduced, or eliminated on our survey, general hospitals reported implementing an average of 30 changes (22 operational changes and 8 clinical service changes) from 2000 through 2005. Overall, general hospitals that responded to our survey had reported implementing between 3 and 66 separate changes.

Overall, 100 percent of general hospitals we surveyed reported implementing at least 1 operational change. There were 18 specific operational changes that at least half of the general hospitals that responded to our survey reported implementing. (See table 4.) Four of the 6 most commonly reported operational changes involved increasing wages and benefits for nurses and offering more flexible working schedules in an effort to improve nursing staff retention or recruitment. In addition, 4 of the 18 most commonly reported operational changes related to physicians. These changes involved increasing the physicians' role in hospital governance, increasing physician income guarantees, hiring new physicians, and beginning a hospitalist program.[18]

[18]Hospitalists are physicians whose primary professional focus is the general medical care of hospitalized patients and the management of inpatient services.

Table 4: Operational Changes Reported by a Majority of General Hospitals, 2000 through 2005

Operational change	Percentage of general hospitals
Increased nursing wages	86
Committed additional resources to marketing and community outreach efforts	74
Introduced, increased, or improved upon bonuses for nursing staff	72
Introduced, increased, or improved upon tuition support for nursing staff	71
Focused on reducing the average turnover time between operations in their operating rooms	70
Introduced or increased work schedule flexibility for nursing staff	70
Implemented a formal process for evaluating efforts to improve quality and reduce costs	69
Incorporated critical pathways for case management[a]	65
Decreased patient wait times to attract new patients	65
Increased physicians' roles in hospital governance	60
Expanded emergency department capacity	59
Standardized operating room supplies	56
Increased communication with families during inpatient stays	55
Increased income guarantees to recruit physicians	55
Instituted a sliding fee scale for self-pay patients	54
Hired additional physicians	54
Implemented wireless technology	52
Started a hospitalist program[b]	51

Source: GAO.

Notes: Survey results were weighted for differences in response rate between rural and urban hospitals.

[a]Critical pathways refer to management plans that establish goals for patients and provide the sequence and timing of actions necessary to achieve these goals efficiently.

[b]Hospitalists are physicians whose primary professional focus is the general medical care of hospitalized patients and the management of inpatient services.

Nearly all general hospitals that responded to our survey reported implementing clinical service changes. Overall, 97 percent of the hospitals added or expanded at least one type of clinical service. The majority of hospitals added or expanded imaging/radiology services (73 percent) and cardiology services (57 percent). Other types of clinical services were added or expanded by a minority of hospitals, such as outpatient surgical services (37 percent) and orthopedic services (31 percent). Nearly one-third of hospitals (33 percent) reduced or eliminated at least one type of clinical service. The most commonly reported clinical services to be reduced or eliminated were inpatient/outpatient psychiatric services (7 percent).

Few Operational and Clinical Service Change Differences Observed between General Hospitals in Markets with and without Specialty Hospitals

Overall, the operational and clinical service changes reported by general hospitals that responded to our survey appeared largely unaffected by the presence or absence of specialty hospitals in their markets. On average, rural general hospitals with a specialty hospital in their regional market made a few more operational service changes than rural general hospitals in markets without specialty hospitals, but made a similar number of clinical service changes. More specifically, rural general hospitals in markets with specialty hospitals made an average of 21 operational changes, 7 clinical service additions or expansions, and 1 clinical service reduction or elimination. Rural general hospitals in markets without specialty hospitals made an average of 18 operational changes,[19] 6 clinical service additions or expansions, and no clinical service reductions or eliminations. (See table 5.) Urban general hospitals in regional and local markets with specialty hospitals made similar numbers of operational and clinical service changes as general hospitals in markets without specialty hospitals.[20]

[19]The difference between the average number of reported operational changes implemented by rural general hospitals in markets with and without specialty hospitals was statistically significant.

[20]See app. III for additional information on the average number of operational and clinical service changes reported by urban and rural general hospitals.

Table 5: Average Number of Operational and Clinical Service Changes Reported by General Hospitals with and without Specialty Hospitals in Their Markets from 2000 through 2005, by Type of Change Implemented

Urban/rural status of general hospitals being compared	Presence of specialty hospitals	Average number of reported operational changes (maximum = 72)	Average number of reported clinical services added or expanded (maximum = 34)	Average number of reported clinical services reduced or eliminated (maximum = 34)
Rural	Regional market[a]	21[b]	7	1
Rural	None	18[b]	6	0
Urban	Regional market[a]	23	7	1
Urban	Local market	24	7	1
Urban	None	24	8	1

Source: GAO.

[a]A general hospital located in a regional market with a specialty hospital is also in a local market that may or may not contain a specialty hospital.

[b]The difference between the average number of reported operational changes implemented by rural general hospitals in markets with and without specialty hospitals was statistically significant at the 0.05 level.

For most of the 72 potential operational changes and 34 potential clinical service changes listed on our survey, the percentage of general hospitals that had reported implementing each change did not systematically vary with the presence or absence of a specialty hospital in the market. For example, 12 percent of urban general hospitals in regional markets with specialty hospitals and 13 percent of urban general hospitals in regional markets without specialty hospitals opened a new hospital wing specializing in one type of medicine between 2000 and 2005. However, for a few of the potential changes listed on our survey, there was a relationship between the percentage of general hospitals that had reported implementing the change and the presence of a specialty hospital in the market.[21] For example, there were 6 operational changes and 3 clinical service changes (including clinical services that were added, expanded, reduced, or eliminated) for which the percentage of rural general hospitals implementing the change significantly differed depending on whether or not a specialty hospital existed in the regional market. (See table 6.) The greatest number of differences (11 operational change differences and 5 clinical service change differences) was observed between the group of urban general hospitals in local markets with specialty hospitals and the

[21]All changes described as significantly different between general hospitals in markets with and without specialty hospitals were statistically significant at the 0.05 level.

group of urban general hospitals where there were no specialty hospitals in either the local or regional markets.

Table 6: Number of Reported Operational and Clinical Service Changes That Significantly Differed between General Hospitals with and without Specialty Hospitals in Their Markets from 2000 through 2005, by Type of Change Implemented

Urban/rural status of general hospitals being compared	Market levels being compared	Number of operational changes where the percentage of implementing hospitals differed (maximum = 72)	Number of clinical services added or expanded where the percentage of implementing hospitals differed (maximum = 34)	Number of clinical services reduced or eliminated where the percentage of implementing hospitals differed (maximum = 34)
Rural	Regional markets with and without specialty hospitals	6	2	1
Urban	Regional markets with and without specialty hospitals	7	0	1
Urban	Local markets with specialty hospitals and regional markets without specialty hospitals	11	3	2

Source: GAO.

Note: Table includes the number of specific operational or clinical service changes for which the percentage of general hospitals that reported implementing the change differed significantly (at the 0.05 level of significance) between the group of general hospitals in markets with specialty hospitals and the group of general hospitals in markets without specialty hospitals.

Rural general hospitals in markets with specialty hospitals were more likely to have reported implementing six operational changes and two clinical service changes relative to rural general hospitals in markets without specialty hospitals. (See table 7.) For only one clinical service—adding or expanding sleep laboratory services—rural general hospitals in markets with specialty hospitals were less likely to have reported implementing a clinical service change.

Table 7: Percentage of Rural General Hospitals Reporting Operational and Clinical Service Changes in Regional Markets with and without Specialty Hospitals from 2000 through 2005

	Percentage of rural general hospitals making changes in	
Reported changes	**regional markets with a specialty hospital**	**regional markets without a specialty hospital**
Operational changes		
Increased marketing or community outreach efforts	82	57
Increased income guarantees to attract physicians	70	53
Offered bonuses to hire or retain nursing staff	70	48
Increased physicians' roles in hospital governance	69	53
Added wireless technology	55	39
Negotiated larger discounts with private insurers relative to the guaranteed volume increases	27	9
Clinical service changes		
Added or expanded cardiology services	60	42
Reduced or eliminated inpatient and outpatient psychiatric services	9	1
Added or expanded sleep laboratory services	41	58

Source: GAO.

Note: Table includes only those operational and clinical service changes where there was a statistical difference, at the 0.05 level, between the percentage of each of the two sample groups that reported implementing a change.

If there was a specialty hospital in its regional market, an urban general hospital was more likely to have reported making three of the seven operational changes that significantly differed between general hospitals in markets with and without specialty hospitals.[22] Urban hospitals in regional markets with specialty hospitals were less likely to have made four operational changes and one clinical service change. (See table 8.)

[22]In the sample group—that is, general hospitals in regional markets with specialty hospitals—about 5 percent of the urban general hospitals reported opening a specialty hospital or opening a specialty hospital in partnership with physicians. None of the urban general hospitals in the comparison group had opened a specialty hospital because, by design, the comparison sample consisted only of general hospitals in regional markets without specialty hospitals.

Table 8: Percentage of Urban General Hospitals Reporting Operational and Clinical Service Changes in Regional Markets with and without Specialty Hospitals from 2000 through 2005

Reported changes	Percentage of urban general hospitals making changes in regional markets with a specialty hospital	Percentage of urban general hospitals making changes in regional markets without a specialty hospital
Operational changes		
Added an operating room	49	33
Opened a specialty hospital	5	0[a]
Partnered with physicians to open[a] specialty hospital	5	0[a]
Opened an ambulatory surgical center	14	26
Subsidized physicians' malpractice insurance costs	7	21
Made a change other than those specifically listed on the survey to the management or operation of its operating room[b]	8	18
Opened a limited service facility other than those specifically listed on the survey[c]	7	16
Clinical service changes		
Reduced or eliminated pain management services	1	5

Source: GAO.

Notes: Table includes only those operational and clinical service changes where there was a statistical difference, at the 0.05 level, between the percentage of each of the two sample groups that reported implementing a change.

[a]None of the urban general hospitals in the comparison group had opened a specialty hospital because, by design, the comparison sample consisted only of general hospitals in regional markets without specialty hospitals.

[b]Respondents reported hiring operating room staff, offering a retention bonus to operating room staff, improving electronic documentation, reducing or closing operating room services, and improving anesthesia services.

[c]Respondents reported opening physical therapy/rehabilitation centers, oncology centers, pain management centers, and a hospice house.

Urban hospitals in local markets with specialty hospitals were more likely to have made six operational changes and three clinical service changes and less likely to have made five operational changes and two clinical service changes relative to general hospitals in regional markets without specialty hospitals.[23] (See table 9.)

[23]In the sample group—that is, general hospitals in regional markets with specialty hospitals—about 7 percent of the urban general hospitals reported opening a specialty hospital or opening a specialty hospital in partnership with physicians. None of the urban general hospitals in the comparison group had opened a specialty hospital because, by design, the comparison sample consisted only of general hospitals in regional markets without specialty hospitals.

Table 9: Percentage of Urban General Hospitals Reporting Operational and Clinical Service Changes in Local Markets with Specialty Hospitals and Regional Markets without Specialty Hospitals from 2000 through 2005

	Percentage of urban general hospitals making changes in	
Reported changes	**local markets with a specialty hospital in close proximity**	**regional markets without a specialty hospital**
Operational changes		
Increased physician on-call payments	70	52
Added a disease management program	51	37
Added operating room	49	33
Increased, instituted, or improved upon paid leave for nursing staff	23	12
Opened a specialty hospital	7	0[a]
Partnered with physicians to open a specialty hospital	7	0[a]
Opened an ambulatory surgery center	12	26
Partnered with physicians to open an imaging center	10	21
Subsidized physicians' malpractice insurance costs	9	21
Made a change other than those specifically listed on the survey to the management or operation of operating room[b]	8	18
Opened a limited-service facility other than those specifically listed on the survey[c]	7	16
Clinical service changes		
Added or expanded bariatric services[d]	50	36
Reduced or eliminated sleep lab services	8	1
Reduced or eliminated women's health services	4	0
Added or expanded primary care services	19	35
Added or expanded physical rehabilitation services	17	30

Source: GAO.

Notes: Table includes only those operational and clinical service changes where there was a statistical difference, at the 0.05 level, between the percentage of each of the two sample groups that reported implementing a change.

[a]None of the urban general hospitals in the comparison group had opened a specialty hospital because, by design, the comparison sample consisted only of general hospitals in regional markets without specialty hospitals.

[b]Respondents reported hiring operating room staff, offering a retention bonus to operating room staff, improving electronic documentation, reducing or closing operating room services, and improving anesthesia services.

[c]Respondents reported opening physical therapy/rehabilitation centers, oncology centers, pain management centers, and a hospice house.

[d]Bariatrics is the field of medicine pertaining to weight loss.

Concluding Observations

Overall, the general hospitals that responded to our survey reported making a variety of operational and clinical service changes to better compete in their markets. Some advocates of specialty hospitals have stated that the presence of one or more of these facilities in a market may prompt general hospitals to improve the quality of the care they deliver or increase the efficiency with which they deliver their services. However, our survey results found relatively few differences, in terms of operational and clinical service changes reported, between general hospitals in markets with and without specialty hospitals. That is, on average, general hospitals in markets with specialty hospitals did not make a substantially different number of changes or different types of changes relative to general hospitals in markets without specialty hospitals. These results held for both rural and urban general hospitals. Our survey results did show that general hospitals reported facing a competitive market for their services. However, general hospitals face competition from many types of facilities, not just specialty hospitals. Competing facilities, including other general hospitals in the market, ASCs, and imaging centers, far outnumber the relatively few specialty hospitals in existence or under development. The predominance of other types of competitors may help explain the lack of a uniquely competitive response of the general hospitals in our study to the existence of specialty hospitals.

Agency Comments and Comments from Organizations Representing General Hospitals

We obtained comments from CMS and representatives of AHA—a group representing hospitals, health care systems, networks, and other providers of care—and FAH—a group representing investor-owned and investor-managed hospitals and health systems. Their comments are summarized below.

In written comments on a draft of this report, CMS stated that our study, by providing quantitative data on the market effect of specialty hospitals, was extremely helpful and that CMS would use the information as the agency developed its DRA-mandated report on physician investment in specialty hospitals. (CMS's comments are reprinted in app. IV.) CMS also provided technical comments, which we incorporated where appropriate.

AHA and FAH stated that their concerns regarding specialty hospitals were specific to those facilities that have physician owners or investors. Both organizations suggested text changes to emphasize that our report is focused on the effect of these types of specialty hospitals on general hospitals, which we incorporated where appropriate. In addition, representatives of AHA stated that general hospitals may make operational and clinical service changes for a variety of reasons, regardless of the

degree of competition in their market. While we recognize that general hospitals may make changes for a variety of reasons, that fact does not detract from our finding that general hospitals largely did not make a different number of changes, or different types of changes, in response to competition from specialty hospitals.

As agreed with your office, unless you publicly announce the contents of this report earlier, we plan no further distribution of this report until 30 days after its date. At that time, we will send copies of this report to appropriate congressional committees and other interested parties. We will also make copies available to others upon request. This report will be available at no charge on GAO's Web site at http://www.gao.gov.

If you or your staff have any questions, please contact me at (202) 512-7101 or steinwalda@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made major contributions to this report are listed in app. V.

Sincerely yours,

Bruce Steinwald
Director, Health Care

Appendix I: Scope and Methodology

This appendix provides information on the key aspects of our analysis of the competitive response of general hospitals to specialty hospitals. First, it describes the sample selection process. Second, it discusses the survey used to collect data from a sample of general hospitals and the process of fielding the survey. Third, it explains the differences between local and regional markets. Fourth, it describes the methodology used to analyze survey data. Finally, it addresses issues related to data reliability and limitations.

Sample Selection

We selected two groups of general hospitals for this analysis—the sample and a comparison sample. The sample consisted of general hospitals in hospital referral regions (HRR)—which we refer to in this report as regional health care markets—with a specialty hospital that opened since the start of 1998.[1] The comparison sample consisted of general hospitals in regional health care markets without any specialty hospitals. In constructing the comparison sample, we also excluded regional health care markets with specialty hospitals that did not have physician owners or investors.

Regional markets capable of meeting the criteria for the sample were identified by compiling a current list of specialty hospitals that opened from 1998 through 2005.[2] We excluded markets in states where certificate of need (CON) laws existed,[3] because specialty hospitals are located primarily in non-CON states.[4] We identified 32 unique regional markets containing 53 specialty hospitals that met these criteria. (See table 10.)

[1]For the purposes of this analysis we defined markets using HRRs. Researchers at the Dartmouth Atlas Project (DAP) defined HRRs as health care markets for tertiary medical care where there was at least one hospital that performed major cardiovascular procedures and neurosurgery. Each of the 306 HRRs in the nation has a minimum population of 120,000. For the purposes of defining the sample group, we utilized the methodology for identifying specialty hospitals from our May 2005 report, GAO-05-647R.

[2]We compiled a list of specialty hospitals in existence based on information collected for previous GAO reports (GAO-03-683R, GAO-04-167, and GAO-05-647R) and from information obtained from the Medicare Payment Advisory Commission (MedPAC).

[3]CON laws require hospitals to obtain state approval before taking actions to change their facility services or size, such as by constructing, modifying, or closing a health care facility, acquiring major new medical equipment, offering a new health care service, or discontinuing an existing one.

[4]We obtained data on which states have CON laws from the American Health Planning Association (2002).

Table 10: Criteria for Selecting Regional Markets

Sample markets	Comparison markets
From 306 regional markets in the United States, we included • markets that contained one or more specialty hospitals that opened during the period from 1998 through 2005. We excluded • markets in states with certificate of need (CON) laws. *N = 32 regional markets*	From 306 regional markets in the United States, we excluded • markets that contained a specialty hospital, regardless of ownership or opening date; • markets in states with CON laws; and • markets if any one of seven market characteristics did not fall between the minimum and maximum values for the 32 markets in the core sample. *N = 78 regional markets*

Source: GAO.

We selected markets for the comparison sample on the basis of their similarity to the markets used for the sample, except for the presence of a specialty hospital. We excluded markets from the comparison sample if they contained a specialty hospital, regardless of ownership or date of opening.[5] We used data from DAP pertaining to market characteristics to ensure that markets included in the comparison sample were similar to markets in the sample. We excluded markets from the comparison sample if any one of their values for seven market characteristics—overall population, Medicare population, average number of inpatient beds, population to beds ratio, physician specialists to total physicians ratio, average number of surgical discharges, and the Herfindahl-Hirschman Index[6]—fell outside the range of values for markets in the sample. The application of these criteria resulted in a sample that consisted of 78 unique regional markets.

[5]We identified a total of 92 physician- and non-physician-owned specialty hospitals that opened in 2005 or earlier. We excluded markets from the comparison sample if they contained 1 or more of these 92 facilities. To isolate the effect of specialty hospitals on general hospitals we excluded markets that contained a specialty hospital, regardless of the extent to which physicians had an ownership stake in the specialty hospitals or when the specialty hospital opened.

[6]The Herfindahl-Hirschman Index is a measure of market competition based on the market shares of all of the hospitals in the geographic area. Higher values indicate less concentrated, and potentially less competitive, markets.

The Centers for Medicare & Medicaid Services' (CMS) 2005 Provider of Services (POS) file was used to identify general hospitals located in the markets selected for the sample and the comparison sample, and these hospitals were subject to several exclusions. General hospitals that were major teaching hospitals or had fewer than five cardiac, orthopedic, or surgical discharges in 2004,[7] were excluded from both samples because the presence of a specialty hospital may not affect these hospitals in the same manner it would affect other types of general hospitals. In addition, we considered urban general hospitals to be in a regional market with a specialty hospital only if it was also less than 90 miles away from a specialty hospital. We considered rural general hospitals to be in a regional market with a specialty hospital only if it was also less than 120 miles away from a specialty hospital. Information on these hospital characteristics were obtained from CMS's 2005 POS file, 2002/2003 Cost Report file, and 2004 Health Care Information System (HCIS) file, and Census 2000 US Gazetteer files. The sample included 326 general hospitals and the comparison sample included 294 general hospitals. (See table 11.)

Table 11: Criteria for Selecting General Hospitals Included in the Sample and Comparison Sample

Sample hospitals	Comparison hospitals
From the list of general hospitals located in the 32 sample markets, we excluded • major teaching hospitals; • hospitals that had fewer than five cardiac, orthopedic, or surgical discharges in 2004; • rural hospitals located 120 miles or more from the nearest specialty hospital; and • urban hospitals located 90 miles or more from the nearest specialty hospital. *N = 326 general hospitals*	From the list of general hospitals located in the 78 comparison sample markets, we excluded • major teaching hospitals and • hospitals that had fewer that five cardiac, orthopedic, or surgical discharges in 2004. *N = 294 general hospitals*

Source: GAO.

Survey of General Hospitals

The survey questionnaire had two sections. (See app. II.) First, it obtained respondents' perceptions of competition in their health care markets. Second, it asked respondents to provide information on the operational

[7]Major teaching hospitals are defined as hospitals that have a ratio of interns and residents to beds of 0.25 or greater.

and clinical service changes that the respondents' hospitals had made from 2000 through 2005 to remain competitive in their markets. The questionnaire included 72 potential operational changes and 34 potential clinical service changes.[8] The specific operational and clinical service change questions included in the survey were identified through a review of articles in academic journals, industry reports, periodicals, a joint study by the Federal Trade Commission and the Department of Justice, and studies by CMS and the Medicare Payment Advisory Commission (MedPAC).

We tested our survey questionnaire with external experts, including one MedPAC analyst and seven hospital administrators from four general hospitals and one hospital system.

In August and September of 2005, survey questionnaires were distributed to 603 of the 620 hospitals in our sample—315 general hospitals in the sample and 288 general hospitals in the comparison sample.[9] Sixty-seven percent of general hospitals that received our survey questionnaire responded—401 general hospitals. Seventy percent of the sample and 63 percent of the comparison sample responded to our survey questionnaire.

Relationship between Regional and Local Health Care Markets

We created a subsample to analyze the competive response of general hospitals to specialty hospitals that were in close proximity. The subsample consisted of general hospitals in hospital service areas (HSA)—which we refer to in this report as local health care markets—with a specialty hospital that opened from 1998 through 2005.[10] Groups of local health care markets form a regional health care market. (See fig. 2.) On average, general hospitals in local health care markets with a specialty hospital were in closer proximity to a specialty hospital than were general

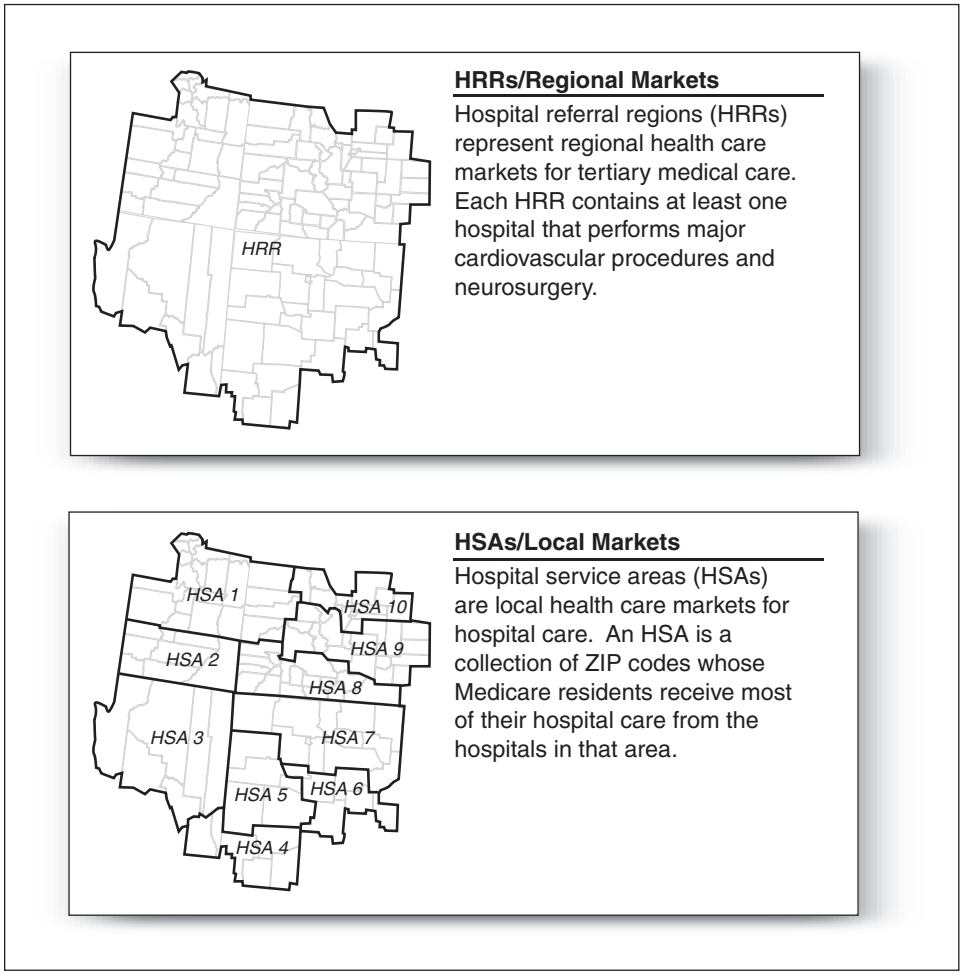
[8]One of the potential operational changes listed on the survey was a change in nonclinical amenities, such as the addition of valet parking or gourmet meals.

[9]We were unable to obtain contact information for 13 of the 17 hospitals that did not receive a survey; the remaining 4 were identified as either being closed or no longer general hospitals.

[10]As defined by researchers at DAP, HSAs represent local health care markets for hospital care. DAP defined HSAs by assigning ZIP codes to the hospital areas where the greatest proportion of their Medicare residents were hospitalized. Most of the 3,436 HSAs contain only one hospital.

hospitals in regional health care markets with a specialty hospital. Among the 315 general hospitals in the sample, 152 resided in the same local health care market as a specialty hospital. Sixty-four percent of general hospitals in the local health care market subsample responded to our survey.

Figure 2: Illustration of the Relationship between Regional and Local Health Care Markets



Source: GAO.

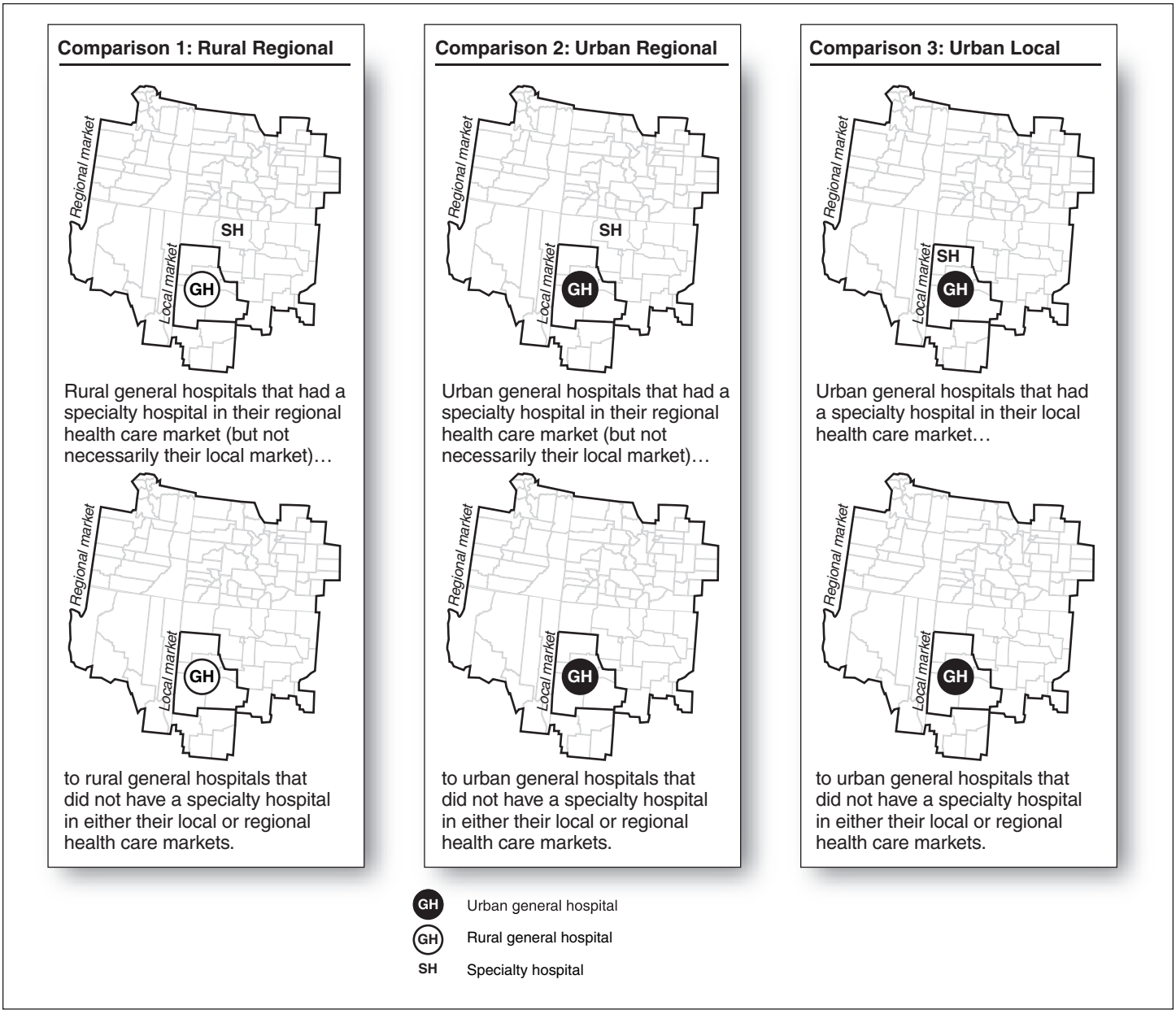
Survey Data Analysis

From the survey responses, we determined the percentage of general hospitals that reported making each of the potential operational and clinical changes and then compared those percentages for three paired sets of general hospitals. First, we compared rural general hospitals in regional markets with specialty hospitals to rural general hospitals in regional markets without specialty hospitals. (See fig. 3.) Second, we compared urban general hospitals in regional markets with specialty hospitals to urban general hospitals in regional markets without specialty hospitals. Third, we compared urban general hospitals that had a specialty hospital in their local markets to urban general hospitals that did not have a specialty hospital in either their local or regional markets. The third comparison was conducted to explore the possibility that specialty hospitals are more likely to elicit a competitive response from general hospitals that are closest to them.[11] As a part of each comparison we conducted a statistical test, the Pearson chi-square, in order to test the statistical significance of the percentages for each of the three paired sets of general hospitals.[12] This test enabled us to determine if differences between the paired sets of general hospitals were statistically significant.

[11]Because only eight rural general hospitals that responded to our survey had a specialty hospital in their local hospital market, we did not analyze this group separately.

[12]V.K. Rohatgi, *An Introduction to Probability Theory and Mathematical Statistics* (New York, N.Y.: John Wiley & Sons, Inc., 1976), 444–45.

Figure 3: Illustration of the Three Types of Comparisons Performed between General Hospitals in Markets with and without Specialty Hospitals



Source: GAO.

Among the general hospitals that responded to our survey, the comparison of rural general hospitals in regional health care markets included 71 rural general hospitals in regional markets with specialty hospitals and 79 rural general hospitals in regional markets without specialty hospitals. The comparison of urban general hospitals in regional health care markets included 148 urban general hospitals in regional markets with specialty hospitals and 103 urban general hospitals in regional markets without specialty hospitals. The comparison of urban general hospitals in local health care markets with urban general hospitals in regional markets included 90 urban general hospitals in markets with specialty hospitals and 103 urban general hospitals in regional markets without specialty hospitals. Because only 8 rural general hospitals in local markets responded to the survey, we did not conduct a comparison of rural general hospitals in local markets to rural general hospitals in regional markets.

Data Reliability

We used the survey data we collected for this work, three CMS datasets, and four datasets from DAP to produce the results of this report. In each case, we determined that the data were sufficiently reliable to address the reporting objective.

Overall, 67 percent of general hospitals we contacted responded to our 2005 survey, and few respondents failed to complete the questionnaire in full. We identified incomplete and inconsistent survey responses within individual surveys and placed follow-up calls to respondents to complete or verify their responses. We conducted an analysis to identify outliers who made extremely high numbers of service changes. We manually verified 10 percent of all survey responses contained in our aggregated electronic data files, in order to ensure that survey response data were accurately transferred to electronic files for analytical purposes.

We determined the three CMS datasets—2002/2003 Cost Report File, first quarter 2005 POS file, and the 2004 HCIS File—and four DAP datasets—2003 Zip Code Crosswalk File, 1999 Chapter 2 Table File, 2001 selected surgical discharge rates by HRR, and 1999 physician workforce data—were sufficiently reliable for our purposes. The CMS datasets were used to gather descriptive information for hospitals in our sample, to determine general hospital teaching status, and to tie discharge data to individual hospitals. The DAP datasets were used to link the general hospitals in our sample to their corresponding market characteristics. These CMS and DAP files are widely used for similar research purposes.

We identified two potential limitations of our analysis. First, because independent information to verify survey responses was not available, all analyses in this report are based on data that are self-reported and potentially limited by the respondent's ability to report the operational or clinical service changes implemented from 2000 through 2005 for competitive reasons. Second, in response to the threat of future competition, it is possible that general hospitals made changes to their facilities prior to 2000 or that changes made by some general hospitals in anticipation of the new specialty hospitals successfully deterred the entry of that hospital, which our survey did not capture.

Appendix II: Survey Questionnaire

U.S. Government Accountability Office
Survey of General Hospitals and Their Response to Recent Market Competition

Purpose: The U.S Government Accountability Office (GAO) is a federal agency that studies issues for the U.S. Congress. The House Ways and Means Committee has asked GAO to analyze how general hospitals respond to competitive market pressures. In response to the committee's request, we are conducting a survey of general hospitals. We would very much appreciate your cooperation in completing this survey.

The survey asks for (1) basic descriptive information about your hospital and its market environment, and (2) information about specific types of actions your hospital has taken during the last 5 years to remain competitive in its local market. We realize there are many demands on your time, and we have tried to keep the burden of answering this survey to a minimum.

We understand that your responses may contain sensitive information. To protect the identity of your hospital, we will report our findings only in the aggregate; individual hospitals will not be identified in our report. We will notify all participating hospitals when our report is publicly available.

Completion Date: Due to the short time frame of our study, we request your response by August 17 2005.

IMPORTANT:

We have included versions of this survey in both Microsoft Word and Adobe Acrobat (PDF). Please use whichever version is easiest for you.

If you choose to use the PDF version of the survey, please note that the Acrobat Reader program (available for free online at http://www.adobe.com/products/acrobat/readstep2.html) will allow you to view and enter information into this form. However, **you WILL NOT be able to save the completed survey** if you do not have the complete Adobe Acrobat program. If this is the case, once completed, please print the survey and return it to us at one of the two fax numbers listed above.

Reminder: Please complete this section using information from the last 5 years.

Section 1: Descriptive information and market characteristics

1. Is your hospital affiliated with a hospital system, network, or chain? (check only one)

☐ Yes Name of system, network, or chain _____

☐ No (Proceed to question 2)

If your hospital affiliated in the last 5 years, please identify the reason(s) why from the list below.

☐ Improved access to capital funds
☐ Improved access to additional volume
☐ Centralized administrative services
☐ Coordinated clinical services
☐ Improved contracting with private insurers
☐ Improved contracting with vendors
☐ Other (Please specify. Limited to 150 characters, including spaces)
_____

2. How would you describe your hospital's market environment? (check only one)

☐	☐	☐	☐	☐
Extremely Competitive	Very Competitive	Competitive	Somewhat Competitive	Not Competitive

3. How would you describe the following market characteristics? (check one for a and one for b)

a. Competition from general hospitals in the area, has:

☐	☐	☐	☐	☐
Greatly Increased	Increased	Remained the same	Decreased	Greatly Decreased

b. Competition from limited service facilities in your area, such as ambulatory surgical centers, free-standing imaging centers, and specialty hospitals, has:

☐	☐	☐	☐	☐
Greatly Increased	Increased	Remained the same	Decreased	Greatly Decreased

Reminder: Please complete this section using information from the last 5 years.

Section 2: Competitive response to marketplace changes

- **Please complete this section using information from the last 5 years.**
- **Unless otherwise noted, please check all answers that apply for a particular question.**
- **If your hospital has taken an action that does not appear among the listed answers for a particular question, please check the 'other' box and use the space provided to clarify what action was taken.**
- **Please provide at least one answer to all questions.**

4. In which of the following ways did your hospital change its relationship with physicians, in terms of facility management, planning, ownership, or retention?

- ☐ Increased the role of physicians in hospital governance (staffing levels, facility design, equipment and supply restrictions/purchases, etc.)
- ☐ Partnered with physicians to open a specialty hospital
- ☐ Partnered with physicians to open an ambulatory surgical center
- ☐ Partnered with doctors to open an imaging center
- ☐ Purchased a physician practice
- ☐ Hired additional physicians
- ☐ Increased income guarantees to recruit physicians
- ☐ Increased on-call payments to physicians
- ☐ Subsidized physicians' malpractice insurance costs
- ☐ Prohibited physicians with admitting privileges from investing in competing facilities
- ☐ Prohibited physicians with admitting privileges from admitting patients to competing facilities
- ☐ Other (Limited to 150 characters) _____
- ☐ No change in relationship with physicians

5. Which of the following changes did your hospital make to the management or operation of its operating rooms?

- ☐ Expanded central sterilization capacity
- ☐ Added operating rooms
- ☐ Reduced average turnover time between operations
- ☐ Designated specialty-specific operating rooms
- ☐ Standardized operating room supplies
- ☐ Increased specialization of operating room staff
- ☐ Other (Limited to 150 characters) _____
- ☐ No management or operation changes were made to the operating room.

Reminder: Please complete this section using information from the last 5 years.

6. Which of the following changes did your hospital make to the management or operation of its emergency department?

- ☐ Upgraded trauma designation
- ☐ Downgraded trauma designation
- ☐ Expanded emergency department capacity
- ☐ Reduced emergency department capacity
- ☐ Other (Limited to 150 characters) _____
- ☐ No management or operation changes were made to the emergency room

7. Which of the following information technology (IT) changes did your hospital implement?

- ☐ Automated process used by physicians to refer and track referred patients
- ☐ Wireless technology
- ☐ Bar code patient safety solutions
- ☐ Telemedicine technology
- ☐ Electronic health records system
- ☐ Computerized physician order entry system
- ☐ Other (Limited to 150 characters) _____
- ☐ No IT changes were made

8. Which of the following clinical and management changes did your hospital make?

- ☐ Incorporated a medical supply management program
- ☐ Utilized critical pathways for case management (a standardized care plan for a specific condition that describes the sequence and timing of interventions)
- ☐ Added a disease management program (ex. diabetes management program)
- ☐ Started a hospitalist program (a hospitalist is a physician whose primary medical focus is the general medical care of hospitalized patients)
- ☐ Increased usage of intensivists (physicians who specialize in the management of critically ill patients)
- ☐ Leased out your hospital's equipment and technical staff (ex. MRI, Cath. Lab)
- ☐ Implemented a formal process for evaluating efforts to improve quality of care and reduce costs
- ☐ Increased the number of in-house management staff
- ☐ Signed a long-term management contract (contract with management firm that would be responsible for hiring a CFO, CEO, and CNO)
- ☐ Hired a management consulting firm to improve your hospital's ability to compete with other hospitals and facilities in the area
- ☐ Increased number of beds equipped with physiological monitoring capabilities
- ☐ Increased the number of agency nurses employed by your hospital
- ☐ Decreased the number of agency nurses employed by your hospital
- ☐ Other (Limited to 150 characters) _____
- ☐ No change in management

Reminder: Please complete this section using information from the last 5 years.

9. Which of the following clinical services, departments, or units did your hospital **add** (provide a service, department, or unit previously not offered), **expand** (increase the amount of resources dedicated to an existing service, department, or unit), or **contract** (eliminate or decrease the amount of resources dedicated to an existing service, department, or unit)?

	Added	Expanded	Contracted
Bariatric/Weight Control	☐	☐	☐
Burn Care	☐	☐	☐
Cardiology	☐	☐	☐
Geriatric	☐	☐	☐
Health Education/Info.	☐	☐	☐
HIV/AIDS	☐	☐	☐
Imaging/Radiology	☐	☐	☐
Inpatient/Outpatient Drug Rehab.	☐	☐	☐
Inpatient Medical/Surgical	☐	☐	☐
Inpatient/Outpatient Psychiatric	☐	☐	☐
Long-term acute care	☐	☐	☐
Medical Oncology	☐	☐	☐
Neonatal/Pediatric	☐	☐	☐
Nephrology(Hemodialysis/ESWL[1])	☐	☐	☐
Neurological	☐	☐	☐
Nutrition	☐	☐	☐
Obstetrics	☐	☐	☐
Occupational Health	☐	☐	☐
Orthopedic	☐	☐	☐
Outpatient Surgery	☐	☐	☐
Pain Management	☐	☐	☐
Palliative Care	☐	☐	☐
Physical Rehabilitation	☐	☐	☐
Primary Care	☐	☐	☐
Radiation Oncology	☐	☐	☐
Robotically Evasive Surgery	☐	☐	☐
Sleep Lab	☐	☐	☐
Social Work	☐	☐	☐
Sports Medicine	☐	☐	☐
Trauma	☐	☐	☐
Women's Health	☐	☐	☐
Other _____	☐	☐	☐
Other _____	☐	☐	☐
Other _____	☐	☐	☐

☐ No clinical services were added, expanded, or contracted

[1] Extracorporeal shock-wave lithotripsy

Reminder: Please complete this section using information from the last 5 years.

10. Which of the following types of limited service facilities did your hospital open?

- ☐ Specialty hospital
- ☐ Specialty wing
  If **"specialty wing" is marked**, please indicate types of specialties:_____
- ☐ Ambulatory surgical center
- ☐ Free-standing skilled nursing facility
- ☐ Urgent care center
- ☐ Gastroenterology center
- ☐ Imaging center
- ☐ Ambulatory destination center
- ☐ Other (Limited to 150 characters) _____
- ☐ No additional facilities were opened

11. Which of the following benefits did your hospital increase, institute or improve upon in order to retain or hire general and specialized nursing staff?

- ☐ Work schedule flexibility
- ☐ Advanced clinical education
- ☐ Paid leave
- ☐ Wages
- ☐ Tuition support
- ☐ Bonuses (signing, retention, or referral)
- ☐ Subsidized child care
- ☐ Other (Limited to 150 characters) _____
- ☐ No actions were taken to retain or hire general or specialized nursing staff

12. What actions did your hospital take to attract patients?

- ☐ Committed additional resources to marketing efforts or community outreach to target new patient populations or highlight organizational strengths and services
- ☐ Added non-clinical amenities, such as:
  - ☐ Individual suites or private rooms
  - ☐ free parking
  - ☐ Accommodations for families
  - ☐ Valet parking
  - ☐ Gourmet meals
  - ☐ Other (Limited to 150 characters) _____
- ☐ Extended facility service hours
- ☐ Decreased patient wait time
- ☐ Increased communication with families during inpatient stays
- ☐ Other (Limited to 150 characters) _____
- ☐ No actions taken to attract patients

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Reminder: Please complete this section using information from the last 5 years.

13. Which of the following pricing strategies did your hospital implement?

- ☐ Negotiated larger discounts with private insurers relative to the guaranteed volume increases
- ☐ Scaled back discounts to private insurers relative to the guaranteed volume increase
- ☐ Instituted a sliding fee scale based on ability to pay for self-pay patients
- ☐ Other (Limited to 150 characters) _____
- ☐ No pricing strategies were implemented

Hospital Name, Location, and Medicare ID:

Facility Name: _____

Medicare Provider ID Number: _____

Address: _____

City: _____ State: _____ Zip Code: _____

Contact:

Please complete the following information for the **primary** person with whom GAO should speak in the event we need to clarify any responses.

Name: _____

Title: _____

Email: _____

Telephone: ( ) _____

Please complete the following information for the **secondary** person with whom GAO should speak in the event that the primary person is not available.

Name: _____

Title: _____

Email: _____

Telephone: ( ) _____

Appendix III: Survey Response by Category

Our survey listed 72 potential operational changes and 34 potential clinical service changes that a respondent hospital could have indicated that they had implemented from 2000 through 2005. Within the survey, the potential operational changes were organized into nine separate subject-oriented categories. For each of the clinical service changes, respondents were asked to indicate whether they had added, expanded, eliminated, or decreased the service. For analytical purposes, we grouped together "added" and "expanded" clinical service change responses. Also, we grouped together "eliminated" and "decreased" clinical service change responses. When stratified by urban and rural location there were few differences between general hospitals in markets with and without specialty hospitals, in terms of the average number of changes they reported implementing in each category of operational and clinical service change from 2000 through 2005. (See table 12.)

Table 12: Average Number of Operational and Clinical Service Changes Reported by Urban and Rural General Hospitals from 2000 through 2005, by Category of Potential Change

		Average number of changes			
		Urban general hospitals in		Rural general hospitals in	
Change category	Total number of potential changes	regional market with a specialty hospital	regional market without a specialty hospital	regional market with a specialty hospital	regional market without a specialty hospital
Operational changes					
Made changes in relationship with physicians, in terms of facility management, planning, ownership, or retention	12	3.1	3.5	3.0	2.6
Made changes in management or operation of operating room	7	2.8	2.6	2.2	2.3
Made changes in management or operation of emergency department	5	1.0	1.1	1.0	0.8
Made information technology changes	7	2.4	2.4	2.5	2.0
Opened limited service facilities	9	0.8	1.0	0.7	0.5
Increased, instituted, or improved upon benefits to retain or hire nursing staff	8	3.9	4.1	3.6	3.2
Implemented changes intended to attract patients	6	2.9	2.9	2.6	2.4
Changed existing or implemented new pricing strategies	4	1.0	1.2	1.2[a]	0.8[a]
Made other changes in hospital management	14	5.2	5.3	4.0	3.6
Clinical service changes					
Added or expanded clinical service	34	7.8	7.9	7.1	6.6
Eliminated clinical service or decreased resources dedicated to it	34	0.2	0.2	0.2	0.2

Source: GAO.

[a]The difference between the average number of pricing strategies reported by rural general hospitals in markets with and without specialty hospitals was statistically significant at the 0.05 level.

Appendix IV: CMS Comments

DEPARTMENT OF HEALTH & HUMAN SERVICES

Centers for Medicare & Medicaid Services

200 Independence Avenue SW
Washington, DC 20201

DATE: MAR 23 2006

TO: A. Bruce Steinwald
Director, Health Care
U.S. Government Accountability Office

FROM: Mark B. McClellan, M.D., Ph.D.
Administrator
Centers for Medicare & Medicaid Services

SUBJECT: Government Accountability Office's (GAO) Draft Report: *GENERAL HOSPITALS: Operational and Clinical Changes Largely Unaffected by Presence of Competing Specialty Hospitals* (GAO-06-520)

The Centers for Medicare & Medicaid Services appreciates the opportunity to review and comment on the GAO draft report entitled, "GENERAL HOSPITALS: Operational and Clinical Changes Largely Unaffected by Presence of Competing Specialty Hospitals." The implications of the rapid growth of physician-owned specialty hospitals on the market for hospital services have been the subject of much debate. Opponents of physician-owned specialty hospitals contend that physician owners or investors cherry-pick the easiest cases and provide lower levels of uncompensated care. Advocates of specialty hospitals contend that specialty hospitals have higher rates of patient satisfaction, operate more efficiently, and pay more taxes.

In response to these and other concerns, Congress required that two studies of physician-owned specialty hospitals be conducted as part of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA). Section 507(c) of the MMA required the Medicare Payment Advisory Commission to study financial impacts and payment distributional issues, as well as the Department of Health and Human Services to study referral patterns of physician-owners, quality of care, patient satisfaction, uncompensated care, and the relative value of any tax exemption available to such hospitals. Both studies included recommendations for improving the payment systems, and noted differences in patients served.

This GAO draft report reinforces and builds upon both earlier studies and provides quantitative data in determining the market effect of specialty hospitals. As the report notes, much of the evidence of how general hospitals' competitive actions have been influenced by the presence of specialty hospitals has been anecdotal. We found the GAO study, which was based upon a comparison of general hospitals in regional markets with a specialty hospital, to general hospitals in regional markets where there were no specialty hospitals, to be extremely helpful. The GAO study found that general hospitals face competition from many types of facilities, not just specialty hospitals, and there was no uniquely competitive response of general hospitals to the existence of specialty hospitals.

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We look forward to continuing to work with the GAO to address issues related to specialty hospitals and appreciate the effort that went into this report. We will use this information in developing the strategic and implementing plan required by section 5006 of the Deficit Reduction Act of 2005.

Our technical comments on the report are attached.

Attachment

Appendix V: GAO Contact and Staff Acknowledgments

GAO Contact

A. Bruce Steinwald, (202) 512-7101 or steinwalda@gao.gov

Acknowledgments

Other contributors to this report include James Cosgrove, Assistant Director; Jennie Apter; Zachary Gaumer; Gregory Giusto; Kevin Milne; and Dae Park.

Related GAO Products

Specialty Hospitals: Information on Potential New Facilities. GAO-05-647R. Washington, D.C.: May 19, 2005.

Specialty Hospitals: Geographic Location, Services Provided, and Financial Performance. GAO-04-167. Washington, D.C.: October 22, 2003.

Specialty Hospitals: Information on National Market Share, Physician Ownership, and Patients Served. GAO-03-683R. Washington, D.C.: April 18, 2003.

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