



**American Hospital  
Association**

## Self-referral to Physician-owned Hospitals:

# What the Research Says

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A critical mass of research has now emerged documenting the harmful effects of self-referral to physician-owned hospitals on patients, communities, and the health care system as a whole. This research has focused on physician-owned hospitals that have chosen to focus on a limited scope of profitable services. These hospitals:

- Lessen patient access to emergency and trauma care.
- Damage the financial health of full-service hospitals and lead to cutbacks in services.
- Reduce efficiency of full-service hospitals that must maintain stand-by capacity for emergencies even as elective cases are lost.
- Increase utilization and costs.
- Are not more efficient than full-service community hospitals.
- Provide no better quality than full-service community hospitals.
- Use physician-owners to steer patients.
- Cherry-pick the most profitable patients by:
  - Avoiding low-income populations.
  - Offering the most profitable services.
  - Serving less sick patients within case types.
- Provide limited or no emergency services.
- Raise patient safety concerns regarding the ability to respond to the emergency needs of patients that may arise during the routine course of care.
- Make exceptionally high profits.

Table 1 provides a summary of the studies that support each of these key research findings, and the following pages provide more detail on each of these studies.

Table 1: Key Research Findings by Study: Physician-owned Hospitals

Physician-owned, Limited-service Hospitals:														
	MedPAC	McManis: Black Hills, SD Case Study	McManis: Lincoln, NE Case Study	McManis: Oklahoma, OK Case Study	McManis: Wichita, KS Case Study	TrendWatch	Government Accountability Office	Mitchell: Oklahoma City	Mitchell: Arizona	NEJM: Cram et al	CMS	JAMA: Nallamothu et al	Office of the Inspector General	
Lessen patient access to emergency and trauma care.		✓		✓		✓								
Damage the financial health of full-service hospitals leading to cutbacks in services.	*	✓	✓	✓	✓	✓								
Reduce efficiency of full-service hospitals that must maintain stand-by capacity for emergencies even as elective cases are lost.		✓	✓	✓	✓	✓								
Increase utilization and costs.	✓	✓	✓	✓	✓	✓		✓	✓			✓		
Are not more efficient.	✓													
Provide no better quality.										✓	***			✓
Use physician-owners to steer patients.		✓	✓	✓	✓	✓		✓	✓	✓	✓			
Cherry-pick the most profitable patients by:	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
- Avoiding low-income populations	✓	✓	✓	✓	✓	✓	✓		✓					
- Offering the most profitable services	✓	✓	✓	✓	✓	✓		✓	✓					
- Serving less sick patients within case types	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓			
Provide limited or no emergency services.	✓	✓	✓	✓	✓	✓	✓				✓			✓
Raise patient safety concerns with respect to responding to the emergency needs of patients under their care.														✓
Make exceptionally high profits.		✓	✓	✓	✓	✓	✓							

\* They have had little impact on community hospitals *thus far*.

\*\*\* Quality results were mixed.

Not specifically addressed in study.

**Physician-owned Specialty Hospitals**  
***The Medicare Payment Advisory Commission***  
***March 2005 Report to Congress***

**Key Findings**

- Physician-owned specialty hospitals do not have lower Medicare costs per case.
- They tend to treat lower shares of Medicaid patients.
- They serve a more profitable patient mix because:
  - They concentrate on certain DRGs.
  - They treat relatively low-severity patients within these DRGs.
- They have had little impact on community hospitals, *thus far*.
- Physician-owned heart hospitals were more likely to transfer patients out when they had high expected costs or were severely ill.
- Improving Medicare's payment system can reduce incentives for patient selection.

**Study Details**

- MedPAC staff conducted site visits to three specialty hospital markets: Austin, TX; Wichita and Manhattan, KS; and Sioux Falls, SD.
- MedPAC staff conducted extensive analysis of 2002 claims data for 48 identified specialty hospitals, "peer hospitals" (non-physician-owned specialty hospitals), competitor hospitals (same community as specialty hospitals and provide some of the same services), and all community hospitals.

**Reference**

The Medicare Payment Advisory Commission, *Report to Congress: Physician-owned Specialty Hospitals*, March 2005.

[http://www.medpac.gov/publications/congressional\\_reports/Mar05\\_SpecHospitals.pdf](http://www.medpac.gov/publications/congressional_reports/Mar05_SpecHospitals.pdf)

## **Physician-owned Specialty Hospitals Revisited *The Medicare Payment Advisory Commission* March 2005**

MedPAC updated its earlier study using 2004 data including 43 additional physician-owned limited-service hospitals. The findings of this study confirmed the original findings and were in most cases statistically significant.

### **Key Findings**

- Between 2002 and 2004, the number of physician-owned limited service hospitals nearly doubled from 46 to 89.
- Physician-owned orthopedic and surgical hospitals have costs per case that are 20 to 30 percent higher than competing community hospitals. These differences are statistically significant. Physician-owned heart hospitals have about the same cost per case.
- Physician-owned limited-service hospitals tend to treat lower shares of Medicaid patients.
- The entrance of physician-owned heart hospitals was associated with increased utilization for cardiac surgeries – about six percent higher market utilization for a heart hospital with the median market share (26 percent). These findings are statistically significant.
- Utilization rates for more profitable cardiac surgeries did not show significantly higher growth than less profitable ones.
- The total margins of competing community hospitals were not affected by the entrance of physician-owned limited service hospitals. Despite a decline in Medicare revenue, community hospitals were able to recover. MedPAC did not analyze the specific actions taken to recover or the impact of these actions on the health care delivery system and/or the community at large.

### **Study Details**

- MedPAC staff repeated earlier analyses of cost per case, Medicaid share, market utilization impact, and affect on competing community hospitals on 2004 claims data for 89 specialty hospitals, “peer hospitals” (non-physician-owned specialty hospitals), competitor hospitals (same community as specialty hospitals and provide some of the same services), and all community hospitals.

### **Reference**

The Medicare Payment Advisory Commission, *Physician-owned specialty hospitals revisited*, August 2006.

[http://www.medpac.gov/publications/congressional\\_reports/Aug06\\_specialtyhospital\\_mandated\\_report.pdf](http://www.medpac.gov/publications/congressional_reports/Aug06_specialtyhospital_mandated_report.pdf)

## **The Impact of Physician-owned Limited-service Hospitals** ***McManis Consulting***

### **Key Findings**

Case studies of four communities with physician-owned limited-service hospitals found:

- Physician-owners demonstrated an ability to move patients from one hospital to another at will.
- Physician-owners steered selected patients to their hospitals (better reimbursed services and payer groups, elective cases, lower acuity cases).
- This led to high profits for physician investors.
  - With a guaranteed flow of patients, facilities were often profitable in the first year.
  - Operating margins were up to 10 times higher than the national average for all community hospitals.
  - Profits per physician were as much as \$700,000 per year.
- The four communities studied experienced:
  - Higher use rates for the services provided by the limited-service hospitals.
  - A decline in the financial health of full-service hospitals.
  - Cutbacks in other, less well-reimbursed health care services at the full-service hospitals.
  - Access problems for emergency and trauma care as physician-owners reduced or eliminated their participation in emergency call at community hospitals and failed to offer emergency access their own facilities.

### **Study Details**

- Based on site visits to four communities (see below) including interviews, data acquisition and analysis.

### **References**

McManis Consulting, *The Impact of Physician-owned Limited-service Hospitals:*

- *Black Hills, SD Case Study*, November 18, 2004.
- *Lincoln Case, NE Study*, February 16, 2005.
- *Oklahoma, OK Case Study*, February 16, 2005.
- *Wichita, KS Case Study*, February 16, 2005.

<http://www.aha.org/aha/issues/LSP/caseex.html>

## **TrendWatch: Impact of Limited-service Providers on Communities and Full-service Hospitals**

### ***The Lewin Group***

#### **Key Findings**

- The number of limited-service providers is growing rapidly.
- Newer limited-service hospitals are focusing on cardiac, orthopedic, and surgical care with the greatest proliferation in states having no certificate of need regulations.
- Physician ownership of limited-service providers is substantial despite various efforts to regulate physician self-referral.
- Physician ownership influences where physicians direct referrals and the amount of care they provide.
- Limited-service hospitals typically do not have emergency departments, affording them more control over their payer mix.
- These facilities deliver a lesser proportion of their care to low-income patients and serve a lower acuity patient population compared to full-service hospitals.
- When physician-owners focus on well-paying services, full-service hospitals are less able to support essential but money-losing care as they lose higher paying patients to limited-service hospitals.
- These practices contribute to limited-service hospitals' higher profitability.

#### **Study Details**

- Based on analysis of survey and Medicare cost report data as well as a review of the published literature and reports from government and private entities.

#### **Reference**

The American Hospital Association and the Lewin Group, *TrendWatch: Impact of Limited-service Providers on Communities and Full-service Hospitals*, Sept. 2004, Vol.6, No. 2.

[http://www.aha.org/aha/trendwatch/2004/040924\\_twvol6no2limitedserv.pdf](http://www.aha.org/aha/trendwatch/2004/040924_twvol6no2limitedserv.pdf)

## **Multiple Studies on Physician Self-referral and Specialty Hospitals Government Accountability Office (GAO)**

### **Recent Findings on Physician-owned Limited-service Hospitals**

- Specialty hospitals are geographically concentrated in areas where state policy facilitates hospital growth (e.g., no certificate of need). Two-thirds of the 100 specialty hospitals are located in seven states.
- Compared to general hospitals specialty hospitals were:
  - Much less likely to have emergency departments;
  - Treated smaller percentages of Medicaid patients; and
  - Derived a smaller share of their revenues from inpatient services.
- Specialty hospitals had higher margins than general hospitals when the costs of all lines of business and the revenues from all payers were considered.
- About 70 percent of specialty hospitals in existence or under development had some physician owners. Among these hospitals, total physician ownership averaged slightly more than 50 percent.
- Patients treated at specialty hospitals tend to be less sick than patients with the same diagnoses treated at general hospitals.

### **Prior Findings on Physician Self-referral**

- Florida physicians with a financial interest in joint-venture imaging centers had higher referral rates for almost all types of imaging services than other Florida physicians.
- Medicare costs in Florida would have been about \$10 million less in 1990 if physicians with a financial interest in joint-venture imaging centers ordered imaging services at the same rates as other Florida physicians practicing in the same specialties.

### **References**

The Government Accountability Office, *Specialty Hospitals: Geographic Location, Services Provided, and Financial Performance*, GAO-04-167, October, 2003.

<http://www.gao.gov/new.items/d04167.pdf>

The Government Accountability Office, *Specialty Hospitals: Information on National Market Share, Physician Ownership, and Patients Served*, GAO-03-683R Specialty Hospitals, April 2003.

<http://www.gao.gov/new.items/d03683r.pdf>

The Government Accountability Office, *Medicare referrals to physician-owned imaging facilities warrant HCFA's Scrutiny*, GAO/HEHS-95-2, October, 1994.

<http://archive.gao.gov/f0902b/152922.pdf>

## Utilization Changes Following Market Entry by Physician-owned Specialty Hospitals

*Jean Mitchell, Ph.D., Georgetown University*

### Key Findings

- Physician self-referral results in higher utilization, driving up health insurance costs.
- Volume and utilization of orthopedic procedures rose significantly in both Tulsa and Oklahoma City for the study population following the opening of physician-owned orthopedic hospitals.
  - The number of complex spinal fusion procedures performed per 1000 workers compensation cases in treatment rose by 121% in Oklahoma City and by 2439% in Tulsa following the entry of physician-owned orthopedic hospitals. In both communities, by 2004 these hospitals accounted for over 90% of procedures performed in these two communities.
- An analysis of Medicare claims data for states with and without a high concentration of physician-owned orthopedic hospitals showed striking differences.
  - The number of complex spinal fusions per 1000 Medicare beneficiaries grew markedly faster in states with physician-owned orthopedic hospitals than those without.
  - By 2004 the utilization rate for complex spinal fusion was 4.3 times higher in Oklahoma, 3.2 times higher in Kansas, and 11.4 times higher in South Dakota – all states with multiple physician-owned orthopedic hospitals – than in the Northeast states – a region with no physician-owned hospitals.
- Findings suggest the financial incentives linked to physician-ownership led physicians to change their practice patterns.

### Study Details

- Findings are based on:
  - Analysis of claims data from the largest workers compensation insurer in Oklahoma. Over 250,000 claims were analyzed for the study covering the time period spanned by the opening of the physician-owned spine and orthopedic hospitals (1999-2004).
  - Analysis of Medicare claims data from 2000 to 2004.

### Reference

Mitchell JM, *Utilization Changes Following Market Entry by Physician-owned Specialty Hospitals*. Medical Care Research and Review 2007; 64; 395.

## **Effects of Physician-owned Limited-service Hospitals: Evidence from the Market for Cardiac Inpatient Care in Arizona**

*Jean Mitchell, Ph.D., Georgetown University*

### **Key Findings**

- Compared to non-owner physicians practicing at competing full-service hospitals, physician owners of cardiac hospitals treat:
  - Higher volumes of profitable cardiac surgical DRGs.
  - Higher percentages of low-severity cases.
  - Lower percentages of patients with multiple comorbidities.
  - Higher percentages of cases with generous insurance.

### **Study Details**

- Study compares the practice patterns of physician owners of limited service cardiac hospitals and physician non-owners who treat cardiac patients at competing facilities. Analysis based on six years of Arizona inpatient discharge data.

### **Reference**

Mitchell JM, *Effects of Physician-owned Limited-service Hospitals: Evidence from the Market for Cardiac Inpatient Care in Arizona*. Health Affairs Web Exclusive, October 25, 2005.

## **Cardiac Revascularization in Specialty and General Hospitals** *Peter Cram et al, New England Journal of Medicine*

### **Key Findings**

- Patients undergoing selected procedures in specialty hospitals were healthier than patients undergoing the same procedures in general hospitals.
  - They were less likely to have coexisting conditions.
  - They were less likely to have had a heart attack prior to surgery.
- After adjusting for the different patient characteristics of specialty and general hospitals, differences in mortality were not significant for hospitals with similar volumes.

### **Study Details**

- Researchers studied the claims of 42,737 Medicare beneficiaries who underwent percutaneous coronary intervention and 26,274 who underwent coronary artery bypass grafting in specialty cardiac hospitals and general hospitals in the same markets. Administrative data were used to compare patients' characteristics, hospital procedural volumes, and patient outcomes.

### **Reference**

Cram P, Rosenthal G and Vaughan-Sarrazin M. Cardiac Revascularization in Specialty and General Hospitals. *NEJM*, April 7, 2005, 352(14): pp 1454-1462.

## **CMS Study of Physician-owned Specialty Hospitals Required in Section 507(c)(2) of the MMA**

### **Key Findings**

- Compared to surgical and orthopedic hospitals, physician-owned cardiac hospitals have a higher than average percent volume of Medicare patients, a smaller aggregate share of physician ownership, and a greater focus on inpatient care. They often have emergency departments.
- Surgical and orthopedic hospitals resemble ambulatory surgical centers, lack active emergency departments, focus on outpatient care, and have a much lower share of Medicare patients.
- Medicare referrals to physician-owned limited service hospitals came primarily from physician-owners. In two of the three cardiac facilities, owners had a clear preference for referring inpatients to their owned facility. In contrast, physician-owners of surgical and orthopedic hospitals referred most of their inpatients to the community hospital (consistent with an outpatient focus). CMS did not look at referral patterns for outpatient care.
- Physician-owned facilities in all but one case (of 11) had a lower severity of illness.
- Physician-owned facilities had proportionately fewer admissions through the ED.
- CMS did not find a difference in transfer patterns for physician-owned cardiac hospitals, but had insufficient data to look at this issue for the surgical and orthopedic hospitals.
- Quality comparisons were mixed for physician-owned cardiac hospitals vs. their full-service competitors. Readmission rates were higher for physician-owned hospitals while mortality rates were lower. Quality was not assessed for orthopedic and surgical hospitals due to low volumes.
- Physician-owned limited service hospitals provided very little uncompensated care. The report found that the total proportion of net revenue these hospitals devoted to taxes and uncompensated care exceeded the proportion of net revenues that community hospitals devoted to uncompensated care (adjusted downward for DSH payments). The report did not compare community benefits provided, subsidies for unprofitable services, or losses for care provided to Medicaid patients.

### **Study Details**

- 11 physician-owned specialty hospitals (four cardiac, five orthopedic, and two surgical hospitals) in six market areas were selected to address questions on owner vs. non-owner referral patterns, patient satisfaction, uncompensated care, and the relative value of the tax exemption. Patient focus groups from these facilities were used to assess quality and satisfaction as well.
- Medicare claims data from the entire population of physician-owned specialty hospitals were used to assess issues of patient selection and quality of inpatient care using Agency for Healthcare Research and Quality (AHRQ) indicators. Quality analysis was limited to inpatient services at cardiac facilities because of small inpatient volumes at surgical and orthopedic hospitals.

### **Reference**

Centers for Medicare and Medicaid Services, CMS Study of Physician-owned Specialty Hospitals Required in Section 507(c)(2) of the MMA, May 2005.

<http://www.cms.hhs.gov/MLNProducts/Downloads/RTC-StudyofPhysOwnedSpecHosp.pdf>

## **The Opening of Specialty Cardiac Hospitals and Use of Coronary Revascularization in Medicare Beneficiaries** *Brahamajee K. Nallamothu et al, JAMA*

### **Key Findings**

- The opening of a cardiac hospital is associated with a doubling of the rate of increase in population-based levels of coronary revascularization in Medicare beneficiaries.
  - Four years after their opening, the rate of increase of revascularization in Hospital Referral Regions (HRRs, the market comparison groups used by the Dartmouth Atlas) where cardiac hospitals opened was 19.2% compared to 6.5% in HRRs with new cardiac programs at general hospitals and 7.4% in HRRs with no new programs.
  - Differences in the rate of increase in markets with cardiac hospitals were statistically significant.
- For percutaneous coronary intervention (PCI), the results varied when the researchers considered the strength of the clinical indications that surgery was required.
  - Among patients who had an acute myocardial infarction (AMI) – the subset of patients who are most likely to gain clinically from PCI – the rate of increase was not significantly different.
  - The difference in the rate of growth was wholly attributable to greater treatment of patients without AMI – where the benefits of PCI are less clear.
- These findings raise the concern that physician ownership may influence decisions regarding the use of cardiac revascularization.

### **Study Details**

- Researchers calculated annual population-based rates for total revascularization (coronary artery bypass graft [CABG] with PCI, CABG, and PCI) for Medicare beneficiaries from 1995 through 2005.
- Researchers categorized health care markets into those where (1) cardiac hospitals opened, (2) new cardiac programs opened in general hospitals, and (3) no new programs opened.
- Researchers used multivariable linear regression models to assess the statistical significance of differences in the rates of change across the 3 types of HRRs.

### **Reference**

Nallamothu BK, Rogers MAM, Chernen ME, Krumholz HM, Eagle KA, and Birkmeyer JD. Opening of Specialty Cardiac Hospitals and Use of Coronary Revascularization in Medicare Beneficiaries. *JAMA*, March 7 2007, 297(9): pp 962-968.

## **Physician-owned Specialty Hospitals' Ability to Manage Medical Emergencies**

### ***Department of Health and Human Services Office of the Inspector General***

#### **Key Findings**

The Office of the Inspector General's report indicates serious shortcomings in the ability of physician-owned limited-service hospitals to manage medical emergencies arising during the course of care for their patients.

- About half of physician-owned limited-service hospitals have an emergency department, but the majority have only one bed.
- Not all physician-owned limited-service hospitals met the basic staffing requirements of having a registered nurse on duty 24 hours a day, 7 days a week and having a physician on call if not onsite.
- Less than one third of physician-owned limited-service hospitals have physicians onsite at all times.
- Two-thirds of physician-owned specialty hospitals use 9-1-1 as part of their emergency response procedures.
- Almost a quarter of physician-owned limited-service hospitals did not have adequate written policies for managing medical emergencies including types of lifesaving equipment to be used or life-saving protocols to be followed.

#### **Study Details**

- Based on data from 109 physician-owned specialty hospitals identified by CMS. Reviewed hospitals' physician and nurse staffing schedules for 8 days, staffing policies, and policies for managing medical emergencies. Also conducted structured interviews with hospital administrators.

#### **Reference**

Department of Health and Human Services Office of the Inspector General, Physician-owned Specialty Hospitals' Ability to Manage Medical Emergencies, January 2008.

<http://www.oig.hhs.gov/oei/reports/oei-02-06-00310.pdf>