

Specialty Heart Hospitals: Highlights of the Emerging Literature

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Congressional Staff Briefing: Weighing the Benefits of
Specialty Hospitals

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Presentation Purpose and Outline

Purpose: To highlight findings from the emerging specialty hospital literature

Outline:

1. The Lewin Group's analyses of MedCath Heart Hospitals
2. MedPAC's "Report to the Congress: Physician-Owned Specialty Hospitals"
3. CMS' "Study of Physician-Owned Specialty Hospitals"
4. The New England Journal of Medicine's "Cardiac Revascularization in Specialty and General Hospitals"
5. Georgetown Public Policy Institute's "Effects of Physician-Owned Limited Service Hospitals"
6. Government studies' payment implications

The Lewin Group's Results

MedCath Heart Hospitals compared to Peer Community Hospitals: Case Mix

- ◆ MedCath's aggregate severity-adjusted cardiac case mix index is 20% higher than peer hospitals
 - MedCath's service complexity is 27% higher than peer community hospitals across APR-DRG
 - More procedures
 - More interventional cath
 - MedCath's patient severity within APR-DRG is about 5% lower than peer community hospitals
 - Local community physician non-owner referral patterns likely send sicker patients to community hospitals

The Lewin Group's Results

MedCath Heart Hospitals compared to Peer Community Hospitals: Quality

- ◆ MedCath heart hospitals were found to:
 - have a statistically significant 23% shorter average length of stay for cardiac cases than peer community hospitals after adjusting for severity;
 - on average exhibit statistically significant lower in-hospital mortality rates for Medicare cardiac cases after adjusting for risk of mortality;
 - have a higher proportion of patients discharged to their home which ultimately saves Medicare treatment dollars; and
 - have fewer complications (based on ICD-9 diagnoses).

Results are highly consistent across 4 years of Lewin studies

The Lewin Group's Results

MedCath Heart Hospitals compared to Peer Community Hospitals: Community Service

- ◆ Emergency rooms open 24 hours a day 7 days a week
- ◆ MedCath hospitals ranked near the middle of area hospitals in the volume of cardiac care provided to indigent patients¹
- ◆ Medicaid patients are under represented, but this is not unexpected given Medicaid patients' demographics
 - Over 40% of Medicaid discharges are from MDC 14 and 15, regarding pregnancy and newborn care
 - Many states use managed care organizations which often exclude coverage for MedCath hospital services

¹ The volume of Medicaid and uncompensated care has been used by a variety of researchers for defining safety net hospitals. In this analysis we used patient level discharge data and identified Medicaid patients based on the expected payer source. Uninsured patients were identified by a payer type for self-pay, charity, or free care.

The Lewin Group's Results

MedCath Heart Hospitals compared to Peer Community Hospitals: Cost Comparisons

- ◆ Unadjusted results show higher cost
- ◆ Adjusted results vary
 - Adjustments for wage index CMI result in lower cost
 - Adjustments for teaching and DSH result in higher cost
 - Adjustments for taxes, insurance, interest, or other capital result in lower cost
- ◆ Our analyses are consistent with MedPAC when comparable adjustments are made
- ◆ Fully adjusting for capital cost yields a different result

Medicare Cost per Inpatient Discharge Ratio of Medcath Cost to Comparison Hospital Costs ²					
Impact of Adjustments	MedCath	Peer Hospitals	Competitor Hospitals	Community Hospitals	
Medicare unadjusted cost/case (operating + capital)	n/a	1.04	1.32	1.46	
Adjust for wage index	n/a	1.10	1.32	1.45	
Adjust for case mix (not APR-DRG severity adjusted)	n/a	0.99	0.94	0.95	
Adjust for teaching	n/a	1.07	0.99	0.98	
Adjust for disproportionate share	n/a	1.12	1.05	1.04	← MedPAC
Adjust for taxes and insurance costs	n/a	1.11	1.04	1.03	
Adjust for interest expense	n/a	1.04	0.97	0.96	
Adjust for other capital costs (depreciation & lease)	n/a	1.00	0.94	0.93	← Lewin

Source: Lewin Group analysis using Medicare Hospital Cost Report data for 2002 and Medicare Impact File for FY 2002.

² Indices greater than one show MedCath's cost greater than comparator hospitals. Indices less than one show MedCath costs less than comparator hospitals.

The Lewin Group's Results

MedCath Heart Hospitals compared to Peer Community Hospitals: Cost Comparisons

- ◆ MedCath hospitals had higher depreciation costs and capital costs than peer community hospitals.
- ◆ The impact of the start-up nature of MedCath hospitals is reflected below.

Medicare Capital Related Costs per Discharge for 2002				
Ratio of Medcath Adjusted Capital-Related Cost to Comparison Hospital Costs				
Impact of Adjustments	MedCath	Peer Hospitals	Competitor Hospitals	Community Hospitals
Medicare adjusted cost/case	n/a	2.57	2.39	2.27
Depreciation & lease expenses	n/a	1.58	1.41	1.38
Interest Expenses	n/a	7.79	8.35	6.61
Taxes, insurance & other expenses	n/a	6.93	11.18	10.50

Source: Lewin Group analysis using Medicare Hospital Cost Report data for 2002.

The MedPAC Report's Key Findings:

- ◆ Physician-owned specialty hospitals:
 - do not have lower costs for Medicare patients than community hospitals (when adjusted for numerous variables but not capital expenditures), although their patients have shorter lengths of stay (see Slide 5 for alternative interpretation);
 - treat patients who are generally less severe (and hence expected to be relatively more profitable than the average) and concentrate on particular diagnosis-related groups (DRGs), some of which are relatively more profitable (see Slides 2 and 11 for interpretive information); and
 - tend to have lower shares of Medicaid patients other than community hospitals (see Slide 4 for explanation).
- ◆ The financial impact on community hospitals in the markets in which physician-owned specialty hospitals are located has been limited, thus far. Those community hospitals competing with specialty hospitals have demonstrated financial performance comparable to other community hospitals.
- ◆ Many of the differences in profitability across and within DRGs that create financial incentives for patient selection can be reduced by improving Medicare's inpatient prospective payment system for acute care hospitals (see Slides 14 and 15 for elaboration).

Quality of Care, Patient Satisfaction, and Uncompensated Care in the 2005 CMS Report

- ◆ Findings for cardiac specialty hospitals are similar to The Lewin Groups results for MedCath Heart Hospitals in terms of cardiac versus the community hospital

CMS Report: Quality of Care and Patient Satisfaction

“The cardiac hospitals delivered high quality of care that was as good or better than their competitor hospitals”

◆ Quality of Care

- Risk adjusted mortality rates were lower
- Heart hospitals were found to have lower rates of complications based on AHRQ measures
- Identified higher readmission rate at cardiac hospitals

◆ Patient Satisfaction

- Cardiac specialty hospitals “provide high patient satisfaction”
 - Large patient rooms, quiet surroundings, easy parking, good food, and adjacent sleeping rooms for family members, if needed
- Greater predictability in scheduling and service
- High quality of nursing care

CMS Report: Uncompensated Care and Tax Benefits

“...the total proportion of net revenue that specialty hospitals devoted to uncompensated care and taxes combined exceeded the proportion of net revenues that community hospitals devoted to uncompensated care”

CMS Report: Referral Patterns

- ◆ The CMS report was “unable to conclude that referrals were driven primarily based on incentives for financial gain.” “It is clear that owners, and all physicians in general, are constrained in where they refer patients by several factors including:
 - Patient preferences;
 - Managed Care networks;
 - Specialty hospital location; and
 - Taking ER “calls” in local competitor market.”
- ◆ Referral patterns were comparable for owners and non-owners
- ◆ Transfers out comparable in proportion and severity to community hospitals
- ◆ Lower Medicaid utilization
- ◆ EDs as a source of patients does not bias severity

NEJM's "Cardiac Revascularization in Specialty and General Hospitals" employed methods similar to those of The Lewin Group

- ◆ Study focused on two primary issues;
 - Severity: This analysis found that patients treated at specialty hospitals were less likely to have co-existing conditions or an acute myocardial infarction
 - The Lewin Group and MedPAC agree that specialty hospitals typically attract more severity level 1 and 2 patients compared to general hospitals
 - Mortality: This analysis found that comparing specialty hospitals to general hospitals with similar patient volumes, difference in mortality were not significant
 - The Lewin Group duplicated the analysis and found comparable mortality results for PCI and CABG
 - The Lewin Group further explored the entire primary line of services provided by MedCath hospitals and found statistically significant and lower severity adjusted mortality rates for MedCath hospitals compared to hospitals within their market areas, consistent with the 2005 CMS report
- ◆ **The Lewin Group did not adjust for patient volume as to adjust for volume is to adjust out the very rationale for specialization**

The ownership assumptions in Georgetown's "Effects of Physician-Owned Limited-Service Hospital" question study validity

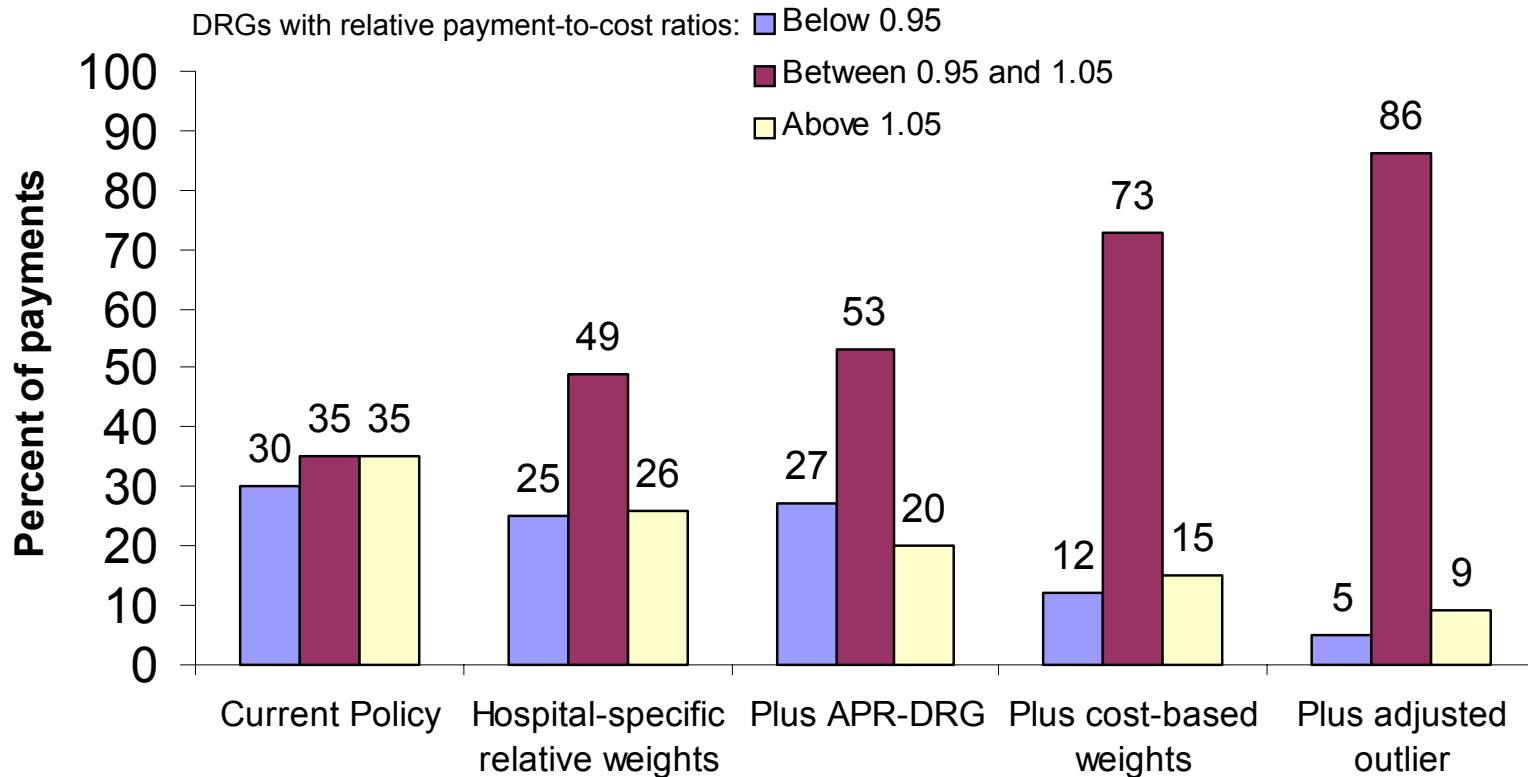
- ◆ The overall study methodology incorrectly assumes the actual ownership in the hospitals making a correlation between patient volume and ownership unreliable.
- ◆ A limitation in the ability to identify owner physicians results in an inability to properly identify patients who are 'self-referred'.
- ◆ This study assumed all DRGs were uniformly profitable whereas, The Lewin Group's analysis of the entire line of primary services shows that cardiac DRGs are not uniformly profitable and, in fact in some cases, the cost of the device used is greater than the Medicare reimbursement received.
 - DRG 111 Endoluminal Thoracic Grafts
 - Biventricular pacemakers

Payment Issues

- ◆ Imperfections in the Medicare payment system
- ◆ Both MedPAC and CMS recommend reforming payment rates for inpatient hospital services through DRG refinements
- ◆ MedPAC provided four options
 - Option 1: Use hospital-specific relative value weights instead of conventional weights based on standardized charges
 - Option 2: Use APR-DRGs instead of DRGs and HRV weights
 - Option 3: Use costs instead of charges, APR-DRGs, and HRV weights
 - Option 4: Change the outlier policy to account for outlier prevalence across APR-DRGs, use costs, APR-DRGs, and HRV weights

According to MedPAC, policy changes would make payments more accurate

Improvement in Payment Accuracy from Policy Changes



Source: MedPAC analysis of Medicare hospital inpatient claims and cost reports from CMS, fiscal year 2000-2002.