

Restrictions on Physician-Owned Hospital Growth: Comparing Medicare Expenditures on POHs and Non-POHs

SUMMARY

The health reform bill which has passed in the U.S. House and is currently being debated by the U.S. Senate includes language that places limits on the growth of physician-owned hospitals (POHs).¹ CBO analyses of the various health reform proposals have assumed that these limitations will result in overall Medicare expenditure savings over a 10-year period.

In this *Issue Brief* we argue that the estimated savings from limiting POH growth are overstated because the costs of providing care in POHs is less than the costs of providing care in non-POHs. The study reaches the following conclusions:

- ◆ For the same types of inpatient cases receiving the same treatment, a patient treated in a POH will cost the Medicare program on average \$734 (4.6%) less than a similar patient receiving the same treatment in a non-POH.
- ◆ For a subset of high-volume cardiac and orthopedic procedures performed at POHs and non-POHs in the same community, allowed Medicare charges for POHs were 6% less than allowed charges for nearby non-POHs.

BACKGROUND

In an earlier study we have shown that Medicare expenditures do not vary according to whether a

community has a POH.² The study examined the effect of POHs on Medicare per enrollee expenditures at the metropolitan area (MSA) level nationwide, spanning the eight-year time period from 1998 to 2005. The study used fixed-effects panel data estimation with instrumental variables to account for the bias introduced by endogenous POH market entry (i.e., POHs may be more likely to open in high-growth / high-demand markets with high levels of Medicare per enrollee expenditures).

After controlling for other variables that are likely to affect expenditures (especially the age and sex distribution of the MSA), we find no association between POH presence and Medicare expenditures per enrollee at the MSA level. The results are robust to changes in model specification, estimation technique and definition of geographic market. These findings suggest that the “demand inducement” aspects of physician ownership of acute care hospitals (if any) has no meaningful impact on market-level Medicare expenditures per enrollee. We argued based on these findings that current policies based on an assumption that POHs are associated with significant increases in total expenditures may need to be reassessed.

Based on these statistical findings, it seems unlikely that restrictions on POHs have the ability to generate Medicare savings. Underlying these findings, an important question is whether adjusted DRG payment rates are higher or lower for POHs relative to their non-POH counterparts. Given the

¹ Refer to TITLE IV—TRANSPARENCY AND PROGRAM INTEGRITY Subtitle A—Limitation on Medicare Exception to the Prohibition on Certain Physician Referrals for Hospitals

² J.E. Schneider et al., "The Effects of Physician-Owned Hospitals on Medicare Expenditures Per Capita: An Instrumental Variable Approach to Endogenous Market Entry," *Contemporary Economic Policy* In Press (2009).

structure of the current Medicare inpatient prospective payment system, the main ways in which DRG per-case net payments vary are by the relative magnitude of the adjustments.³

For example, the typical urban teaching hospital receives upward price adjustments for indirect medical education (IME), Medicaid disproportionate share status (DSH), and “outlier” cases (i.e., cases that are exceptionally complex and have a large number of comorbid conditions).⁴ Medicare’s rate setting process is described in the Appendix. In the current study, we analyze a small number of high-volume DRGs common to POHs and non-POHs. We calculate mean allowed severity-adjusted Medicare charges for POHs and non-POHs in the same metropolitan area. Our results confirm the expected finding that mean allowed charges by POHs are consistently lower than allowed charges of non-POHs in the same community.

METHODS

There are two parts to the analysis. In Part I, we calculate the median difference between all MS-DRGs⁵ that we were performed in POHs and non-

³ Payment levels are also adjusted for local wages (via the wage index) and overall patient acuity (via the case-mix index). For the purposes of this simple model, we ignore these because they are based on normalized indices as opposed to “add ons.”

⁴ There are a number of studies that have documented these differences. See generally GAO, “Comparative Analyses of Payments for Selected Hospital Services,” in *Report to the Subcommittee on Health, Committee on Ways and Means, House of Representatives* (Washington, DC: U.S. General Accounting Office, 1990), S. Nicholson, “The Effects of Medicare Payment Subsidies to Teaching Hospitals,” *Leonard Davis Institute of Health Economics Issue Brief* 7, no. 4 (2002).

⁵ According to CMS, “Patients that have similar clinical characteristics and similar costs are assigned to an MS-DRG. The MS-DRG will be associated with a fixed payment amount based on the average cost of patients in the group. Patients are assigned to a MS-DRG based on

POHs in the same metropolitan area. There were 67 MS-DRGs that met these criteria.

In Part II, we selected six relatively high-volume MS-DRGs representing cardiac and orthopedic care--services that are common to POHs and non-POHs. These focal MS-DRGs are shown in Table 1.

TABLE 1 – MS-DRGs Selected for Analysis

MS-DRG	Description
291	Heart failure & shock w/ MCC
292	Heart failure & shock w/ CC
293	Heart failure & shock w/o CC
460	Spinal fusion except cervical w/o MCC
470	Major joint replacement, lower ext. w/o CC
491	Back & neck proc w/o spinal fusion w/o MCC

For both parts, data on median allowed Medicare charges were retrieved from the dataset version of CMS’s *Hospital Compare* data.⁶ The use of MS-DRGs helps reduce the effects of case mix severity, which can impact the cost of hospital care. These data were retrieved for all hospitals in markets (defined as metropolitan statistical areas, or MSAs) with at least one POH. This enabled the direct comparison of allowed charges between POHs and non-POHs in the same market.

RESULTS

The results of Part I were that, for the 67 MS-DRGs, the *median difference* in allowed Medicare charges was \$734.19 lower. Put differently, the “typical”

diagnosis, surgical procedures, age and other information. Medicare uses this information that is provided by hospitals on their bill to decide how much they should be paid.”

⁶ Median Medicare payments for the same MS-DRG refers to the midpoint of all payments to the hospital for a particular MS-DRG (that is, half the payments were lower and half the payments were higher than the median payment).

patient treated in a POH will have allowed charges \$734.19 *lower* than the same case treated in a non-POH.⁷ This represents a 4.6% difference between POHs and non-POHs.

The results of Part II, which focuses on the six MS-DRGs, show similar differences between POHs and non-POHs. For all six MS-DRGs, median allowed charges for POHs were significantly less than median allowed charges by non-POHs in the same MSA. The magnitude of the significant differences ranged from 3.6% to 11.1% (Table 2). These differences were statistically significant for four of the six MS-DRGs (one of the cardiac codes and all three orthopedic codes).

TABLE 2 – Differences in Medicare Allowed Charges, POH v. Non-POH

MS-DRG	Non-POH	POH	Diff.	% Diff.
291	\$7,875	\$7,716	-\$159	-2.0%
292	\$6,148	\$5,926	-\$222	-3.6%*
293	\$5,209	\$5,193	-\$16	-0.3%
460	\$21,162	\$18,892	-\$2,270	-10.7%*
470	\$11,751	\$10,730	-\$1,021	-8.7%*
491	\$6,098	\$5,424	-\$674	-11.1%*

Note: * = difference is statistically significant at p = .05

These results confirm that on a per-case basis, adjusted for severity, the Medicare program pays less for care provided in POHs as compared to payments to non-POHs in the same community. The average difference, across all six MS-DRGs, is approximately 6%.

This analysis is consistent with our earlier econometric study, and serves to further illustrate the importance of non-trivial differences in per-case allowed charges. Multiplied over the total national number of cases in each of these MS-DRGs, the cost

implications of moving POH cases to non-POH settings would be substantial.

CONCLUSION

In this *Issue Brief* we argue that the estimated savings from limiting POH growth are overstated because the costs of providing care in POHs is less than the costs of providing care in non-POHs. The study reaches two conclusions. First, for the same types of inpatient cases receiving the same treatment, a patient treated in a POH will cost the Medicare program on average \$734 (4.6%) *less than a similar patient receiving the same treatment in a non-POH*. Second, for a subset of high-volume cardiac and orthopedic procedures performed at POHs and non-POHs in the same community, *allowed Medicare charges for POHs were 6% less than allowed charges for nearby non-POHs* ♦

⁷ Calculation of median differences is weighted by caseload volume within MS-DRG. Differences are significant at $p \leq 0.05$

APPENDIX

Summary of Medicare Rate Setting Process⁸

Step 1 - Hospitals submit a bill for each Medicare patient they treat to their Medicare fiscal intermediary (a private insurance company that contracts with Medicare to carry out the operational functions of the Medicare program). Based on the information provided on the bill, the case is categorized into a Medicare Severity Diagnosis Related Group (MS-DRG), which determines how much payment the hospital receives.

Step 2 - The base payment rate is comprised of a standardized amount, which is divided into a labor-related and non-labor share. The labor-related share is adjusted by the wage index applicable to the area where the hospital is located and if the hospital is located in Alaska or Hawaii, the non-labor share is adjusted by a cost of living adjustment factor. This base payment rate is multiplied by the MS-DRG relative weight.

Step 3- If the hospital is recognized as serving a disproportionate share of low-income patients (DSH), it receives a percentage add-on for each case paid through the PPS. This percentage varies depending on several factors, including the percentage of low-income patients served. It is applied to the MS-DRG-adjusted base payment rate, plus any outlier payments received.

Step 4- If the hospital is an approved teaching hospital it receives a percentage add-on payment for indirect medical education (IME) for each case paid through the PPS. This percentage varies depending on the ratio of residents-to-beds.

Step 5- A hospital can receive an additional payment for those cases that include technologies that meet the new technology add-on payment criteria.

Steps 6- Next, the costs incurred by the hospital for the case are evaluated to determine whether it is eligible for an additional payment as an outlier case. This additional payment is designed to protect the hospital from large financial losses due to unusually expensive cases. Any outlier payment due is added onto the MS-DRG-adjusted base payment rate.

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⁸ Adapted from
www.cms.hhs.gov/acuteinpatientpps/02_stepspps.asp