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Analyzing Medicare Margins

By Scott Houk

Data reveal hospital characteristics that affect margins.

The Medicare Payment Advisory Commission's (MedPAC) March 2016 *Medicare Payment Policy Report* states that "Medicare margins are negative on average and about breakeven for efficient providers." MedPAC also projects that hospitals' 2016 aggregate Medicare margins will be approximately -9 percent, a similar projected loss to 2015. With Medicare serving as the largest payer for most hospitals and providing negative margins on average, we thought it would be interesting to compare some key indicators of hospitals that are the most profitable under Medicare to those that are least profitable.

For this study, we analyzed inpatient and outpatient margins separately due to the differences in payment methodology. For example, the Inpatient Prospective Payment System (IPPS) provides a number of add-on payments such as those to disproportionate share hospitals (DSHs) and for indirect medical education (IME) that are not available in the Outpatient Prospective Payment System (OPPS).

We divided hospitals into four quartiles based on actual inpatient margins and compared the most profitable quartile to the least profitable. We performed the same exercise based on expected outpatient margins. Therefore, a hospital could fall in the most profitable quartile on inpatient margin but could appear in a different quartile on outpatient profitability. The data used included all available Medicare claims data and cost report data for 2014 for acute care hospitals paid under the prospective payment system.

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Market Factors Between High Medicare Margin and Low Medicare Margin Hospitals: Inpatient Services

High inpatient margin hospitals tend to have approximately 70 percent higher volumes, and the two-year change in equivalent discharges shows that these hospitals are growing volumes at a much higher rate than low inpatient margin hospitals.

Data Element	High Medicare Inpatient Margin	Low Medicare Inpatient Margin
Profit on DRGs %	20.6	–31.9
Inpatient Revenue %	49.3	42.5
Surgical Cases %	22.2	24.5
Medicaid Days %	23.8	13.3
Medicare Days %	48.8	55.7
Disproportionate Share Payment per Discharge	$352	$143
Indirect Medical Education Payment per Discharge	$505	$83
Equivalent Discharges*	15,970	9,408
Two-Year Change in Equivalent Discharges	4.5	1.8

*Equivalent Discharge is a volume metric that permits inpatient and outpatient volume to be jointly measured.

Source: Cleverley & Associates, Worthington, Ohio. Used with permission.

Our study focused on analyzing nine market factors, two inpatient and one outpatient coding intensity metrics, and six cost metrics to better understand the differences between high Medicare margin and low Medicare margin hospitals.

Market Factors

Are there differences in market factors between high Medicare margin and low Medicare margin hospitals? The market factors we examined included profit on DRGs, percentage of inpatient revenue, disproportionate share payment per discharge, and others. There are important differences in market factors between the two groups of hospitals (see the exhibit above). We will consider the inpatient services and outpatient services separately.

Inpatient services: Hospitals in the highest quartile are generating a median 20 percent margin on Medicare inpatient services compared to a 32 percent loss in the lowest quartile group. The data also show that the high inpatient margin group tends to have a greater proportion of inpatient revenue, almost 50 percent, but that Medicare makes up a smaller component of that (48.8 percent) when compared to the low-margin group. The low inpatient margin group has an inpatient percentage of only 42.5 percent; however, Medicare days account for 55.7 percent of them.

To gain an understanding of the impact of volumes, we compared equivalent discharges between the groups and found that high inpatient margin hospitals tend to have approximately 70 percent higher volumes and the two-year change in equivalent discharges shows that these hospitals are growing volumes at a much higher rate. Equivalent discharges permit inpatient and outpatient volume to be jointly measured. From these data, we can deduce that larger hospitals in growing markets appear to be in a better position to achieve a profitable outcome under Medicare IPPS.

We also see that DSH payments are quite a bit higher for the high inpatient margin hospitals; these payments help offset likely losses from higher Medicaid days percentages. The IME payments are six

Market Factors Between High Medicare Margin and Low Medicare Margin Hospitals: Outpatient Services

The high-margin group tends to have approximately 2.5 times greater volume and has a two-year change in equivalent discharges that is four times greater than the low margin group.

Data Element	High Medicare Outpatient Margin	Low Medicare Outpatient Margin
Profit on Ambulatory Payment Classifications %	5.1	-56.1
Outpatient Revenue %	50.3	60.7
Surgical Cases %	27.0	20.5
Medicaid Days %	17.8	17.3
Medicare Days %	53.6	53.7
Inpatient Disproportionate Share %	3.0	3.0
Equivalent Discharges*	18,250	7,214
Two-Year Change in Equivalent Discharges	6.0	1.5

*Equivalent Discharge is a volume metric that permits inpatient and outpatient volume to be jointly measured.

Source: Cleverley & Associates, Worthington, Ohio. Used with permission.

Coding Intensity Between High and Low Medicare Margin Hospitals: Inpatient Services

Case mix index and coding of CC/MCCs (complication and comorbidities and major complications and comorbidities) are slightly higher for high Medicare inpatient margin hospitals than for low Medicare inpatient hospitals.

Data Element	High Medicare Inpatient Margin	Low Medicare Inpatient Margin
Medicare Case Mix Index	1.5054	1.4686
CC/MCC Capture Rate	59.59	56.40

Source: Cleverley & Associates, Worthington, Ohio. Used with permission.

times higher on the high inpatient group, indicating that these hospitals are much more likely to be teaching facilities. Overall operating margin for the high inpatient margin group is 3.9 percent, almost twice the 2.1 percent margin for the low inpatient margin group. These add-on payments make a big impact on Medicare and overall margins.

Outpatient services: Next, we will review similar market factor metrics for high and low Medicare outpatient margin hospitals.

Even the high Medicare outpatient margin hospitals are only achieving a median 5.1 percent margin on Medicare for their outpatient services, compared to a 20 percent margin achieved by the high inpatient margin hospitals for their inpatient services (see the second exhibit on page 2). The percentage of loss by the low outpatient margin hospitals is much worse than that of the low inpatient margin group. We also see a much greater effect on the overall operating margin.

Hospitals with high Medicare outpatient margins have an overall operating margin of 5.5 percent, compared to less than 1 percent for the low outpatient margin group. Using Medicaid days percentage as an indicator of indigent payer mix, no appreciable difference exists. This indicates a unique factor about hospitals that achieve positive margins on outpatient Medicare services.

The high-margin group tends to have approximately 2.5 times greater volume and has a two-year change in equivalent discharges that is four times greater than the low-margin group. Similar to the inpatient services findings, larger hospitals with higher volume growth rates appear to be the most profitable. The volume gap between the two groups is greater than appeared on the inpatient side.

Coding Intensity

Now consider coding intensity for inpatient services and outpatient services separately.

Inpatient services: Case mix index and coding of CC/MCCs (complication and comorbidities and major complications and comorbidities) are slightly higher for high Medicare inpatient margin hospitals (see exhibit above). While not significantly different, better coding may be a factor in the margin differences.

Outpatient services: The average relative weight per visit is about 39 percent higher for the high Medicare outpatient margin group. Hospital clinic visits, which are low relative weight visits, make up about 33 percent of all visits for the low Medicare margin group, compared to only 27 percent for the high-margin group. The high-margin group tends to perform more higher-weighted surgical procedures than the low-margin group. Because outpatient Medicare payments are based on ambulatory payment classification relative weights, higher average relative weight corresponds to higher outpatient payments and appears to impact higher margins (see the exhibit below).

Differences in Costs

Hospitals with high Medicare margins on both inpatient and outpatient services appear to manage costs better than those with low margins. The Hospital Cost Index (HCI) is a measure of cost that relates each hospital's inpatient cost per discharge and outpatient cost per visit to the U.S. median hospital. An index lower than 100 indicates a cost position that is lower than the U.S. median. Cost management has a significant impact on margins for both inpatient and outpatient services, but this is especially the case for high outpatient margin hospitals. The high Medicare outpatient hospitals have an HCI that is 8 percent lower than those with high Medicare inpatient margins (see the exhibit on page 4).

We noted earlier that hospitals have add-on payment opportunities under IPPS that help support better margins. Under OPPS there are no such add-ons, so it is vitally important to manage outpatient costs. This is especially evident in the overhead cost percentage metric. There is little difference in this metric between high and low

Coding Intensity Between High and Low Medicare Margin Hospitals: Outpatient

The average relative weight per outpatient visit is about 39 percent higher for the high Medicare outpatient margin group than for the low Medicare outpatient margin group.

Data Element	High Medicare Outpatient Margin	Low Medicare Outpatient Margin
Average Relative Weight per Outpatient Visit	10.36	7.48

Source: Cleverley & Associates, Worthington, Ohio. Used with permission.

Differences in Costs Between High Medicare Margin and Low Medicare Margin Hospitals

Cost management has a significant impact on margins for both inpatient and outpatient services, but this is especially the case for high outpatient margin hospitals.

Data Element	High Medicare Inpatient Margin	Low Medicare Inpatient Margin	High Medicare Outpatient Margin	Low Medicare Outpatient Margin
Hospital Cost Index	94.0	114.4	86.7	129.1
Average Cost per Medicare Discharge (Case Mix Index = 1.0)	6,365	8,800	6,545	8,687
Average Cost per Visit (Relative Weight = 1.0)	84	98	71	119
Overhead Cost %	34	36	32	37
Man-Hours per Equivalent Discharge*	103.1	106.7	88.1	125.7
Salary per FTE, Wage-Index Adjusted	64,281	65,109	65,255	63,580

*Equivalent Discharge is a volume metric that permits inpatient and outpatient volume to be jointly measured.

Source: Cleverley & Associates, Worthington, Ohio. Used with permission.

Medicare inpatient margin hospitals, but a significant gap exists between high and low Medicare outpatient margin hospitals.

Another telling metric is man-hours per equivalent discharge, which is similar between high and low inpatient margin hospitals, but vastly different on the outpatient side. Man-hours per equivalent discharge are 30 percent lower for high Medicare outpatient margin hospitals than for low Medicare outpatient margin hospitals. This indicates that hospitals with higher Medicare outpatient margins focus heavily on managing labor costs, which is the largest expense for hospitals.

Interestingly, salary per FTE is slightly higher on the high Medicare outpatient margin hospitals, but they use fewer units.

Who Is Making a Margin on Medicare?

Controlling costs appears to be the most significant factor in producing high outpatient margins, but high inpatient margins are impacted by controlling costs and receiving add-on payments such as DSH and IME. In both areas, size matters, too. We see that facilities with larger volumes and higher growth rates have better margins.

On the inpatient side, the best margins are found among larger hospitals with teaching programs and high DSH payments. For outpatient services, larger hospitals that have a higher intensity service mix and tightly manage costs, especially units of labor, are the best candidates to make a profit on Medicare. //

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