Home Health Agency (HHA)
Medicare Margins: 2007 to 2011
Issue Brief
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Dobson DaVanzo & Associates, LLC (www.dobsondavanzo.com) was commissioned by the LHC Group to conduct a margin study for the Home Health Agency (HHA) industry for the years 2007 to 2011. The purpose of this study is to determine how financial risk is distributed across HHAs under existing Medicare payments as of 2007, as well as if and how the Medicare Payment Advisory Committee (MedPAC) March 2009 HHA payment recommendations would exacerbate this risk as of 2010 and 2011. President Obama's budget incorporates all of MedPAC's recommendations and this is the basis for the cost savings attributed to the home health industry in pending House and Senate legislation.

The motivation for this study is the observation that HHAs are being asked, under this pending House and Senate legislation, to produce savings to support health care reform that are disproportionately high relative to those being asked of other providers. This issue brief suggests an alternative set of savings proposals for HHAs that are more in line with the savings expected of other industries as health care reform moves forward.

HHAs could play an important role as policymakers restructure the health care delivery system. Such restructuring would be required if the rate of increase in health care expenditures is to be limited to the overall growth rate of the U.S. economy. This would suggest that HHA financing should be considered from a broader strategic vantage point rather than the more narrow MedPAC view of removing all financial margins from the HHA industry. The current MedPAC recommended approach to HHA financing could be detrimental to health care reform.

Methods

We created a set of HHA Medicare margins for the years 2008 to 2011, with 2007 as the index year. (The MedPAC recommendations are based primarily on 2007 MedPAC Medicare margin estimates for freestanding agencies.) The margins for 2010 and 2011 reflect the March 2009 MedPAC *Report to the Congress* recommendations.

Exhibit 1 below contains the calculation assumptions we used for our analyses. These assumptions should be considered in light of market basket[1] (MB) increases as projected by Global Insight, Inc. We calculate margins, as do MedPAC and CMS, as total revenues less total costs divided by total revenues for a given set of HHAs. Over the years this has become known as a "case weighted" margin.

[1] The market basket (MB) is a fixed weight index that indicates how much it would cost to purchase the same mix of goods and services that were purchased in a base period. That is, the MB measures price changes for a fixed market basket of goods and services.

Exhibit 1
Dobson | DaVanzo Interpretation of MedPAC Recommendations

Year	2008	2009	2010	2011
MB Increases	1.030	1.029	1.023	1.027
Net Rate of Revenue Increase Adjusting For MedPAC Recommendations	1.0025	1.0015	0.9464[2]	Revenues set to expected 2011 costs based on 2007 data
Cost Increases at MB rate	1.029	1.029	1.023	1.027

Source: Dobson | DaVanzo interpretation of MedPAC March 2009 HHA payment recommendations and CMS publication of Global Insight, Inc. data

We calculated Medicare margins for overall, freestanding, and facility-based HHAs in order to better understand the implications of the MedPAC 2009 recommendations. We also provide breakout analyses for urban-rural, states, and 25th, 50th, and 75th percentile distributions. The purpose of these distributional analyses is to determine how financial risk is distributed across the industry as indicated through Medicare margins.

Data

We used a series of files provided to us by National Association of Home Care & Hospice (NAHC). These files contain abstracts of 2006 and 2007 HHA cost reports. We inflated the 2006 cost report data to 2007 price levels, using the 2007 MB. The cost report data abstract provided to us contained all the variables required to calculate Medicare margins by HHA category (e.g. urban-rural).

Data were provided for 7,651 HHAs. After our benchmarking calibration, 7,430 facilities remained. These facilities represent about 79 percent of the total 9,404 facilities in the industry as of 2007. These data are broadly representative of the universe of HHAs. To assure comparability to the MedPAC results we trimmed the data to match the MedPAC 2007 freestanding Medicare margin of 16.6 percent and the hospital-based Medicare margin of -6.2 percent.

Findings

We present margins for each year for Medicare overall and by freestanding and facility-based HHAs. MedPAC indicated that facility-based HHA margins are affected by cost allocations, distorting these margins. When prospective payment was put in place for skilled nursing facilities (SNFs), policymakers made comparable arguments for facility-based SNF margin distortion. These arguments ultimately resulted in the closure of many of facility-based SNFs. With this history in mind, we think that overall Medicare margins in the HHA industry cannot be ignored, and declines in facility-based HHAs Medicare margins could have an impact on 20 percent of the industry.

[2] Equals elimination of the 1.023 MB, years 3 and 4 of case mix creep of 2.75 percent and 2.71 percent respectively.

We assume that rebasing revenues to match costs in the year 2011 is industry-wide and not for freestanding HHAs only. This means that revenues are reduced proportionately for all facilities. As shown below in ***Exhibit 2***, the net result is an overall Medicare margin of 0.00 for all HHAs in 2011. Freestanding HHA margins would be at 4.1 percent and facility-based Medicare margins would be -22.1 percent. This latter result is plausible, given the wide range of Medicare margins between freestanding and facility-based HHAs. Reducing the freestanding HHA margins by 12.5 percentage points and the facility-based margins by 15.9 percentage points between 2007 and 2011 is extreme, as compared to what is being asked of other industries over the same time frame.

Exhibit 2
Aggregate Medicare margins by Year – Overall, Freestanding, and Facility-Based

	2007	2008	2009	2010	2011
Medicare margin					
Overall	**13.0%**	**10.8%**	**8.3%**	**0.90%**	**0.0%**
Freestanding	**16.6%**	**14.4%**	**12.1%**	**5.0%**	**4.1%**
Facility-based	**-6.2%**	**-9.0%**	**-12.0%**	**-21.0%**	**-22.1%**

Source: Dobson | DaVanzo analysis of Medicare cost report data from 2006 and 2007

Exhibit 3 below contains the findings for Medicare urban-rural margins. As can be seen, overall Medicare rural margins are -6.2 percent in 2011, down from 7.6 percent in 2007. The 2011 overall rural -6.2 percent margin is driven by the 2011 facility-based -22.12 rural margin. The facility-based overhead accounting argument would seem to lose credibility with -22.0 percent Medicare margins. A nearly 14 percentage point swing in rural margins between 2007 and 2011 seems inappropriate as a matter of public policy. Some degree of predictability is required by HHA managers to successfully operate their facilities.

Given these findings, CMS might consider reinstatement of the 5 percent add-on payment for HHAs in rural areas. This add-on would permit development of targeted adjustments to recognize the importance of maintaining, if not expanding, HHA capacity in rural areas.

Exhibit 3
Medicare Margins – Urban-rural

	2007	2008	2009	2010	2011
Medicare Margins					
Overall	13.03%	10.73%	8.28%	0.86%	0.00%
Urban	13.94%	11.67%	9.24%	1.90%	1.05%
Rural	7.62%	5.18%	2.57%	-5.31%	-6.22%
Free Standing	16.60%	14.40%	12.05%	4.93%	4.11%
Urban	16.93%	14.74%	12.39%	5.31%	4.49%
Rural	14.12%	11.85%	9.42%	2.10%	1.25%
Facility Based	-6.19%	-9.01%	-11.99%	-21.05%	-22.10%
Urban	-6.18%	-8.99%	-11.98%	-21.05%	-22.09%
Rural	-6.21%	-9.01%	-12.01%	-21.07%	-22.12%

Source: Dobson | DaVanzo analysis of Medicare cost report data from 2006 and 2007

Exhibit 4 contains the results of the Dobson | DaVanzo state level margin analysis for the years 2007 to 2011. The state-level distributions for facility-based margins show over half of the states with less than minus 20 percent facility-based margins; no surprise given an overall average of minus 22.1 percent. The freestanding state margins show 20 states with less than 0.0 percent margin. The overall Medicare margins reflect 34 states with less than a 0.0 percent margin. While the largely negative facility-based HHA margins make this result inevitable, it is still noteworthy. At a certain level of losses, the supply of HHAs could contract substantially.

Exhibit 4
MedPAC Recommendations by State, March 2009

MedPAC	Number of Facilities			2007			2011		
State	Overall	Free-Standing	Facility Based	Overall	Free-Standing	Facility Based	Overall	Free-Standing	Facility Based
AK	17	5	12	-33.6%	-5.5%	-49.8%	-53.6%	-21.3%	-72.3%
AL	101	42	59	11.1%	12.4%	6.9%	-2.2%	-0.7%	-7.0%
AR	116	41	75	3.8%	2.7%	4.8%	-10.6%	-11.8%	-9.5%
AZ	68	53	15	9.9%	17.2%	-23.9%	-3.6%	4.8%	-42.4%
CA	608	490	118	6.3%	12.4%	-22.2%	-7.7%	-0.7%	-40.5%
CO	110	84	26	14.9%	20.3%	-15.1%	2.1%	8.4%	-32.4%
CT	73	67	6	20.0%	22.7%	-6.1%	8.1%	11.2%	-22.0%
DC	14	13	1	8.8%	11.9%	-120.3%	-4.8%	-1.3%	-153.3%
DE	14	10	4	4.4%	11.3%	-13.0%	-10.0%	-2.0%	-30.0%
FL	597	551	46	17.3%	18.7%	-6.9%	4.9%	6.5%	-22.9%
GA	78	48	30	12.5%	18.3%	-3.6%	-0.6%	6.1%	-19.1%
HI	10	5	5	4.0%	6.0%	-0.5%	-10.4%	-8.1%	-15.6%
IA	158	93	65	9.7%	18.4%	-2.0%	-3.8%	6.1%	-17.2%
ID	47	26	21	0.5%	7.8%	-22.8%	-14.4%	-6.0%	-41.1%
IL	382	310	72	16.1%	20.6%	-1.9%	3.5%	8.7%	-17.1%
IN	151	105	46	7.8%	16.1%	-14.8%	-6.1%	3.6%	-32.1%
KS	117	63	54	10.7%	16.7%	-7.9%	-2.6%	4.2%	-24.0%
KY	93	54	39	18.9%	25.7%	6.0%	6.8%	14.6%	-8.1%

Exhibit 4, continued
MedPAC Recommendations by State, March 2009

MedPAC	Number of Facilities			2007			2011		
State	Overall	Free-Standing	Facility Based	Overall	Free-Standing	Facility Based	Overall	Free-Standing	Facility Based
LA	315	291	24	23.2%	23.9%	-17.8%	11.7%	12.5%	-35.4%
MA	112	97	15	15.9%	19.1%	-5.6%	3.3%	7.0%	-21.4%
MD	42	37	5	10.3%	11.8%	-4.3%	-3.2%	-1.5%	-19.9%
ME	28	24	4	8.8%	9.3%	0.2%	-4.9%	-4.3%	-14.8%
MI	322	278	44	13.9%	16.1%	4.7%	1.0%	3.5%	-9.6%
MN	131	70	61	12.5%	22.0%	-17.8%	-0.6%	10.3%	-35.4%
MO	152	99	53	6.6%	11.8%	-11.5%	-7.4%	-1.5%	-28.2%
MS	41	28	13	14.8%	19.4%	-3.2%	2.0%	7.4%	-18.7%
MT	32	10	22	6.1%	12.8%	-6.2%	-8.0%	-0.2%	-22.1%
NC	159	124	35	17.3%	21.5%	3.1%	4.9%	9.8%	-11.4%
ND	20	3	17	-18.8%	0.1%	-22.0%	-36.6%	-14.8%	-40.3%
NE	56	15	41	3.7%	19.3%	-19.3%	-10.7%	7.2%	-37.2%
NH	33	28	5	21.2%	20.9%	23.6%	9.4%	9.0%	12.2%
NJ	44	31	13	9.6%	15.4%	-3.5%	-3.9%	2.7%	-19.0%
NM	58	44	14	8.1%	17.0%	-22.3%	-5.6%	4.5%	-40.6%
NV	55	49	6	14.6%	17.1%	-11.1%	1.8%	4.6%	-27.7%
NY	135	103	32	3.3%	3.7%	1.4%	-11.2%	-10.7%	-13.3%
OH	296	242	54	14.2%	21.1%	-8.1%	1.4%	9.3%	-24.3%
OK	182	128	54	11.1%	13.3%	0.0%	-2.3%	0.3%	-15.0%
OR	54	20	34	-15.3%	9.0%	-26.0%	-32.5%	-4.6%	-44.9%
PA	260	194	66	16.2%	21.6%	-1.4%	3.7%	9.8%	-16.5%
RI	19	17	2	15.0%	13.9%	21.5%	2.3%	1.0%	9.8%
SC	40	24	16	16.4%	21.4%	4.9%	3.9%	9.6%	-9.4%
SD	33	7	26	-7.4%	9.5%	-12.2%	-23.5%	-4.0%	-29.0%
TN	115	82	33	8.5%	10.9%	-2.6%	-5.2%	-2.5%	-18.0%
TX	1507	1408	99	15.0%	16.0%	-12.2%	2.3%	3.5%	-29.0%
UT	58	51	7	8.6%	8.7%	7.6%	-5.1%	-5.0%	-6.3%
VA	143	100	43	7.0%	13.2%	-5.2%	-7.0%	0.2%	-21.0%
VT	12	12	0	12.7%	12.7%	n/a	-0.4%	-0.4%	n/a
WA	53	29	24	6.1%	20.7%	-21.9%	-8.0%	8.9%	-40.1%
WI	93	64	29	1.1%	7.2%	-29.6%	-13.8%	-6.7%	-49.0%
WV	51	28	23	8.3%	16.2%	-6.3%	-5.5%	3.6%	-22.2%
WY	25	13	12	-1.1%	15.4%	-42.7%	-16.3%	2.7%	-64.1%
US Total	**7430**	**5810**	**1620**	**13.0%**	**16.6%**	**-6.2%**	**0.0%**	**4.1%**	**-22.1%**

Source: Dobson | DaVanzo analyses of Medicare cost report data from 2006 and 2007

Finally, ***Exhibit 5*** contains the distribution of HHA Medicare margins in 2007 and in 2011 under the MedPAC recommendations. This analysis shows that the dispersion increases considerably over time, especially for facility-based HHAs. It is important to note that in 2011, 25 percent of the freestanding facilities would have less than -13.7 percent margin, and 25 percent of the facility-based HHAs would have less than -51.2 percent margin.

Exhibit 5
Distributional Analysis

	2007			2011		
Margins	**Overall**	**Free Standing**	**Facility Based**	**Overall**	**Free Standing**	**Facility Based**
25th	-5.4%	1.1%	-31.5%	-21.2%	-13.7%	-51.2%
50th	10.5%	14.6%	-8.0%	-2.9%	1.8%	-24.1%
75th	24.8%	27.2%	8.0%	13.5%	16.3%	-5.8%

Source: Dobson | DaVanzo analysis of Medicare cost report data from 2006 and 2007

Discussion

The findings tables above show a marked increase in the financial risk under the MedPAC recommendations. This may represent more risk than is warranted as patients demand care in their homes as part of the current movement toward home and community based care.

A system that: 1) holds HHAs to MB minus 1 percentage point, 2) takes only some of the case mix increase out of the annual update factor after 2009, and also 3) recaptures some of the excess profits associated with the existing outlier system would be more equitable.

The HHA industry needs to be considered from a strategic perspective as the nation moves in the direction of health reform. HHA services can be a highly cost-effective alternative to treatment in other post-acute care settings. As health care reform options are considered and accountable care organizations and payment bundle concepts are explored and expanded, it is very likely that HHA capacity will be at a premium. From this vantage point, Medicare may want to preserve the existing HHA capacity, if not expand it.

Our margin analysis suggests that the MedPAC level of recommended cuts could jeopardize large segments of the HHA industry. This could be inconsistent with future health care reform strategies that attempt to reduce the rate of growth of health care expenditures to that experienced by the rest of the economy. The urban-rural margin imbalance in particular indicates that CMS might consider reinstatement of the 5 percent add-on payment for HHAs in rural areas. This add-on would permit development of targeted adjustments to recognize the importance of maintaining, if not expanding, HHA capacity in rural areas.

In summary, the policy implications of the analyses are as follows:

1. Rural agencies need additional support;

2. Hospital based HHAs should be included in policy evaluations; and

3. There should be a smoothing of cuts while working at greater payment system reforms as MedPAC recommendations could negatively impact on access to care.

The desired control of health care expenditures will not be achieved solely by capping provider payments. This approach is as likely to place providers and beneficiaries at risk as it is to reform the health care delivery system. Health care reform will need to transform the very way in which all health care is delivered if savings are to be achieved over the long term. One way to do this is to substitute low cost care for high cost care when it is clinically warranted. HHAs could be a foundation for this longer term national strategy.