Assessing the Financial Condition of Provider-Sponsored Health Plans

Michael J. McCue, DBA

ABSTRACT

Purpose: The aim of this study was to assess the performance of health plans sponsored by provider organizations, with respect to plans generating strong positive cash flow relative to plans generating weaker cash flow. A secondary aim was to assess their capital adequacy.

Design: The study identified 24 provider-sponsored health plans (PSHPs) with an average positive cash flow margin from 2011 through 2013 at or above the top 75th percentile, defined as "strong cash flow PSHPs." This group was compared with 72 PSHPs below the 75th percentile, defined as "weak cash flow PSHPs."

Methodology: Atlantic Information Services Directory of Health Plans was used to identify the PSHPs. Financial ratios were computed from 2013 National Association of Insurance Commissioners Financial Filings. The study conducted a *t* test mean comparison between strong and weak cash flow PSHPs across an array of financial performance and capital adequacy measures.

Results: In 2013, the strong cash flow PSHPs averaged a cash-flow margin ratio of 6.6%. Weak cash flow PSHPs averaged a cash-flow margin of –0.4%. The net worth capital position of both groups was more than 4.5 times authorized capital.

Conclusion: The operational analysis shows that strong cash-flow margin PSHPs are managing their medical costs to achieve this position. Although their medical loss ratio increased by almost 300 basis points from 2011 to 2013, it was still statistically significantly lower than the weaker cash flow PSHP group ($P<.001$). In terms of capital adequacy, both strong and weak cash-flow margin PSHP groups possessed sufficient capital to ensure the viability of these plans.

INTRODUCTION

The onset of managed care across both commercial and government payers in the early 1990s led to a surge in the number of hospitals and health systems sponsoring health plans, referred to as provider-sponsored health plans (PSHPs). By 1995, the number of hospitals with some form of sponsorship arrangement (eg, full ownership, system affiliation, network alliance, joint venture) with a health plan totaled 737 (McCue 2000). However, by 1998, growing financial losses from the health plans, eroding capital base of hospitals to fund the plans, and lower Medicare reimbursement from the Balanced Budget Act of 1997 resulted in closures or sale of 80 health plans by hospitals (Rauber 1999). In 2011, 640 hospitals had an affiliated arrangement with a health plan (Myers 2013).

Three underlying forces are expected to create another upward trend in the membership growth of existing provider plans as well as the development of new ones. First, the passage of the Affordable Care Act (ACA) in 2010 contained provisions intended to expand commercial and Medicaid health insurance coverage to under- and uninsured populations. The second force is the advent of value-based payment systems, which reimburse through fixed fees to coordinate patient care for a set of services as long as quality standards are met. Third, the movement by employers to give their employees defined dollar amounts to buy coverage and select a health plan will create a competitive consumer-focused insurance market. Under this type of market, local health care systems may be appealing to consumers because of their brand name, lower premiums, and access to a network of providers.

As a result of these forces, more health care systems are expected to acquire or form a health plan or, in the case of existing PSHPs, expand into the commercial or Medicaid markets. A recent analysis of PSHPs from 2011 through 2013 indicates that 10 health care systems have either started a new plan or have acquired an existing one (Myers 2013). Given this changing environment for existing and start-up PSHPs, health care providers and policy makers would want to gain insight into how well these health plans are performing financially. The aim of this study is to assess the financial performance of health plans owned, affiliated with, or sponsored by providers. Providers include hospitals, health systems, and physician groups.

Given the expansion of commercial products on both public and private exchanges and the competition from national publicly traded health insurers, such as Aetna, Cigna, UnitedHealthcare Group, and Anthem and Blue Cross Blue Shield plans, the study focuses on the financial performance and capital adequacy of provider-sponsored organizations (PSOs)

offering a commercial product. This study identifies PSHPs that are participating in commercial insurance markets and are generating high positive cash flow from operations relative to those with weaker cash flows. Secondarily, this study seeks to assess the capital adequacy of PSOs with high cash flows. Capital adequacy is critical in financing the expansion of commercial health insurance markets as well as expanding into government markets.

A study of this nature will also identify the financial and operational drivers of PSHPs that are financially strong. In turn, financially weaker PSHPs can utilize these findings to turn around their performance. More importantly, providers either starting or launching a new PSHP can evaluate these performance indicators to gain an understanding of the underlying factors for financial success.

METHODS

To identify the population of health plans sponsored or affiliated with providers (both hospitals and physician groups), the study references the AIS (Atlantic Information Services) Directory of Health Plans for 2014, which samples 2013 plan data. This database listed 71 PSOs that offered a commercial product. The AIS Directory also included 5 PSHPs in California that do not report their financial filings to the National Association of Insurance Commissioners (NAIC).

Funding source: None
Disclosures: None

Corresponding author:
Michael J. McCue, DBA
R. Timothy Stack Professor
Department of Health Administration
PO Box 980203
Virginia Commonwealth University
Richmond, VA 23298-0203
Telephone: (804) 828-1893
Fax: (804) 828-1894
E-mail: mccue@vcu.edu

KEY POINTS

- In health plans with strong cash flows, lower medical loss ratios appear to be the underlying reason for healthy cash flow, although medical loss ratios have increased (from 83.5% in 2011 to 86.4% in 2013).
- The profit margin ratio of provider-sponsored health plans with strong cash flows declined from 2.5% in 2011 to 0.4% in 2013. Rising medical loss ratios may be the reason for the decline.
- In 2013, the average risk-based capital (RBC) ratio for the strong cash flow group was significantly higher (5.75 vs 4.68) than it was for the weak cash flow group in 2013. The RBC ratio for both groups was well above the insurance regulator threshold of 1.5.
- It appears that provider-sponsored health plans have the capital necessary to finance expansion into commercial markets and government programs.

California's Department of Managed Health Care does not required managed care plans to submit financial filings to NAIC. Excluding the 5 PSHPs from California resulted in a total of 66 PSHPs. Within the NAIC data, state regulations for PPO and HMO products may require a health system to have separate legal entities and financial filings for health systems offering a HMO and PPO product. As a result, this study identified from the NAIC filings 104 PSHPs in 2013 and 19 health care providers sponsoring more than 1 plan.

Because state and federal regulators view health plans with >1000 members as credible plans, the study excluded 6 PSO plans with less than 1000 members in 2011. In addition, the study excluded 2 plans with missing financial data from 2012 and 2011, resulting in a final sample of 96 plans.

Risk-based capital (RBC) ratio is the primary ratio analyzed by state insurance examiners to assess solvency and is defined as the health plan's total adjusted capital divided by its authorized control capital or minimum capital level. Total adjusted capital reflects a health plan's state-authorized control capital plus its surplus or net worth capital. However, state examiners, as well as credit rating companies such as A.M. Best (2014), also assess performance ratios of health insurers. Cash flow margin ratio is a key ratio because changes in cash flow can increase or decrease the health insurer's capital position (DHCFP 2010). Cash flow margin ratio is defined as cash flow from operations as a percentage

GLOSSARY

Administrative cost ratio
Percentage of premium dollars spent on administrative expenses.

Cash-flow margin ratio
Cash flow from operations as a percentage of total revenues.

Medical loss ratio
Percentage of premium dollars spent on medical expenses.

Profit margin ratio
Profit (total revenues minus medical and administrative costs) as a percentage of total revenues.

Risk-based capital ratio
Total capital (as determined by a formula) divided by the capital adjusted for risk (also determined by a formula).

Strong cash flow PSHPs
Provider-sponsored health plans with an average cash flow margin in the top 25th percentile.

Weak cash flow PSHPs
Provider-sponsored health plans with an average cash flow margin in the bottom 25th percentile.

of total revenues. A.M. Best considers an array of other performance ratios and capital-adequacy ratios in assigning a rating to a health insurer. These ratios include the medical loss ratio, which measures percentage of premium dollars spent on medical expenses, and the administrative cost ratio, which measures the percentage of premium dollars spent on administrative expenses. Finally, for the profit margin ratio, profits are defined as total revenues minus medical costs and administrative costs and were measured as percentage of total revenues (A.M. Best 2014).

In addition, the credit rating agency measures capital adequacy measures. As previously mentioned, RBC is one measure. This study included 2 other adequacy ratios, total liabilities to total assets and capital and surplus per member per month (PMPM). The total liabilities to total asset ratio measures what percentage of its liabilities can be paid off by selling its assets, and it is viewed as a liquidity measure because the majority of health insurers' assets is invested in securities. The capital/surplus PMPM (capital PMPM) assesses how much capital is accounted for by its membership base.

These financial ratios were computed from 2013 NAIC financial filings, which list key financial accounts from 2011 through 2013 from a statement called the "Five-Year Historical Data." For the performance ratios, the form includes only total revenue and not premium revenue; therefore, this value may be slightly overvalued be-

Strong vs weak

Average risk-based capital (RBC) ratios of strong cash flow health plans vs weak cash flow plans

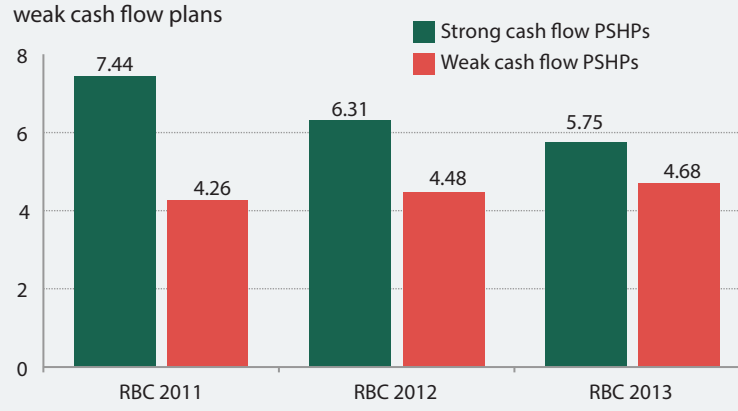

TABLE 1
Mean and standard deviation for financial performance ratios of strong cash flow margin PSHPs vs weak cash flow margin PSHPs, 2011–2013

	Strong cash flow PSHPs (n=24)		Weak cash flow PSHPs (n=72)		
	Mean	**SD**	**Mean**	**SD**	***P* value**
2013 plans					
Medical loss ratio	86.4%	4.85%	90.3%	5.85%	<.001
Administrative costs ratio	13.1%	6.38%	12.2%	4.75%	.52
Profit margin ratio	0.4%	6.46%	–2.5%	6.48%	.04
Cash flow margin ratio	6.6%	6.4%	–0.4%	5.20 %	<.001
2012 plans					
Medical loss ratio	83.5%	7.28%	90.8%	7.58%	<.001
Administrative costs ratio	14.1%	6.72%	11.7%	3.90%	.03
Profit margin ratio	2.3%	7.80%	–2.6%	7.30%	.01
Cash flow margin ratio	5.9%	6.90%	–1.6%	6.20%	<.001
2011 plans					
Medical loss ratio	83.5%	5.28%	89.1%	5.79%	<.001
Administrative costs ratio	13.9%	6.98%	11.5%	4.18%	.04
Profit margin ratio	2.5%	7.63%	–0.6%	5.79%	.03
Cash flow margin ratio	6.5%	5.40%	0.1%	3.90%	<.001

SD=standard deviation.

cause it includes other minor accounts such as premium reserves and other nonhealth revenues.

To assess PSHPs generating high cash flow, the study first measured their cash flow margin ratio from 2011 through 2013, which was defined as cash flow from operations divided by total revenue, and computed its average value for each health plan. Because the aim of the study was to identify PSHPs that were performing well financially, the study classified PSHPs with an average cash flow margin in the top 25th percentile, which was 3.9%, and defined them as strong cash flow PSHPs. The study identified 24 high cash flow margin PSHPs. The comparison group was identified as PSHPs with an average cash flow margin in the bottom 25th percentile and included 72 PSHPs that were defined as weak cash flow margin PSHPs. The high cash flow margin group each year had PSHPs with outlier values for cash flow margin, which increased variation of this measure. The study adjusted these outlier values to the top 99th percentile and bottom first percentile values.

The statistical analysis was conducted using *t* test mean comparison between strong cash flow PSHPs and weak cash flow PSHPs for an array of financial performance and capital adequacy measures. The average membership over the 3-year period for the group with cash flow margin above the 75th percentile was 150,710, which was higher than the average membership of 113,400 for the comparison PSHP group. Thus, high cash flow margin PSHPs were larger in size than weak cash flow margin PSHPs. To identify the health insurance markets in which PSHPs offered products, as well as the membership in these markets, the study collected 2013 health insurers' data. In 2013, the percentage of total membership in Medicare, Medicaid, and commercial markets for the strong cash flow PSHPs was 10% for Medicare, 27% for Medicaid, and 63% for commercial. The comparison group market percentages were 11% for Medicare, 14% for Medicaid, and 75% for commercial. Thus, the strong cash flow PSHPs insured a higher percentage of Medicaid members and a lesser percentage of commercial members than the comparison group.

RESULTS

Table 1 (page 41) shows the findings from 2011 through 2013 for the performance measures. For the PSHPs generating strong cash flow, the cash flow margin ratio was 6.5% in 2011 but declined slightly to 5.9% in 2012. In 2013, however, the ratio increased to 6.6%. For PSHPs generating weak cash flow (PSHPs below the 75th percentile), cash flow was 0.09% in 2011 but declined to a cash flow operating loss of –1.6% in 2012. In 2013, these plans reduced their cash flow operating loss and generated a cash flow margin of –0.4%. For all 3 years, as expected, the 75th percentile PSHPs generated a significantly higher cash flow margin ($P<.01$).

In the strong cash flow margin group, lower medical loss ratios ap-

TABLE 2
Mean and standard deviation for capital adequacy ratios of strong cash flow margin PSHPs vs weak cash flow margin PSHPs, 2011–2013

	Strong cash flow PSHPs (n=24)		Weak cash flow PSHPs (n=72)		
	Mean	**SD**	**Mean**	**SD**	***P* Value**
2013 plans					
Risk-based capital ratio	5.75	2.86	4.68	1.86	.02
Liabilities to total assets	46.2%	19.73%	49.20%	13.28%	.411
Total capital PMPM	$153.30	$357.70	$73.60	$61.50	.03
2012 plans					
Risk-based capital ratio	6.31	2.68	4.48	1.80	<.001
Liabilities to total assets	42.2%	16.08%	49.40%	14.97%	.04
Total capital PMPM	$137.10	$264.40	$68.70	$54.10	.02
2011 plans					
Risk-based capital ratio	7.44	4.29	4.26	1.64	<.001
Liabilities to total assets	38.4%	18.08%	50.50%	14.74%	.01
Total capital PMPM	$109.60	$146.62	$61.10	$41.60	<.001

PMPM=per member per month, SD=standard deviation.

pear to be the underlying reason for higher cash flow. In 2011 and 2012, this group's average medical loss ratio was 83.5%. The average medical loss ratio in weak cash flow groups was 89.1% in 2011 and 90.8% in 2012. In 2013, however, for the strong cash flow group, the medical loss ratio increased by almost 3 percentage points, from 83.5% in 2012 to 86.4% in 2013. Despite this rise, the 2013 medical loss ratio value was still significantly lower than that for the weak cash flow group (90.3%, $P<.01$).

The administrative cost ratio for the strong cash flow PSHP group was significantly higher than the comparison groups for 2011 and 2012 ($P=.03$). In addition, this group's administrative ratio declined from 14.1% in 2012 to 13.1% in 2013. The weak cash flow PSHP group administrative cost ratio rose from 11.5% in 2011 to 12.2% in 2013 and was no longer significantly different from the higher cash flow group ($P=.04$).

In terms of profit margin ratios, the strong cash flow group experienced a decline in the profit margin ratio from 2011 to 2013. The ratio was 2.5% in 2011 and declined to 0.4% in 2013, which may stem from rising medical loss ratio. For the weak cash flow group, the profit margin declined from –0.6% in 2011 to –2.5% and –2.6%, respectively, in 2012 and 2013. For all 3 years, the strong cash flow group had significantly higher profit margin than the comparison group ($P=.03$ [2011], $P=.01$ [2012], $P=.04$ [2013]).

Table 2 presents the findings for the capital adequacy ratios for 2011 through 2013. The RBC ratio declined for the strong cash flow group from 7.44 in 2011 to 5.75 in 2013. The RBC ratio for the weak cash flow group was significantly lower and increased slightly from 4.26 in 2011 to 4.68 in 2013 ($P<.001$, $P=.02$). Although the strong cash flow group generated higher cash flow over the 3 years, the decline in the RBC ratio may stem from an increase in regulated authorized capital (numerator of the RBC ratio) or outflow of capital to the sponsored provider organization (denominator of the RBC ratio).

For the liquidity measure of total liabilities to total assets, the strong cash flow group experienced a rise in liabilities relative to total assets. In 2011, liabilities accounted for 38% of total assets, while in 2013 the percentage of total liabilities covered by total assets increased to 46%. For the weak cash flow group, the percentage of total liabilities covered by total assets was around 50% for all 3 years. The final ratio of total capital PMPM reflects a significantly higher amount of capital covering the insured base for the strong cash flow group relative to the weak cash flow group ($P<.001$ [2011], $P=.02$ [2012], $P=.03$ [2013]). From 2011 to 2013, the strong cash flow PSHP group's total capital PMPM increased by almost $44 PMPM, to $153 PMPM, while the weak cash flow PSHP group's total capital PMPM grew by only $12 PMPM, to $73.60 PMPM.

There were several limitations to this study. First, the study sample excluded 5 PSHPs from California because they were not required to submit their financial data to NAIC. Second, the sample includes only PSHPs that offer a commercial product. Therefore, the sample excludes PSHPs that insure members covered by Medicare, Medicaid, or both. The Medicaid PSHPs typically are affiliated with safety net providers or major academic medical centers.

Finally, the mean comparison/univariate analysis design does not control for external factors, such as competition from national health insurers, size of commercial insurance market, and type of insurance plan (HMO vs PPO).

Given the descriptive mean difference analysis of the study, it is difficult to tease out other effects related to market and demand factors. An extension of the study would involve a multivariate analysis, which could attempt to control for market effects on the mean values.

DISCUSSION

There are several underlying reasons health care providers are either expanding their existing insurance products or starting a new health insurance entity. The first reason relates to the onset of ACA regulation in offering affordable commercial health insurance plans on public exchanges. These plans are made affordable by offering tax subsidies for low-income enrollees who are uninsured and underinsured on the public health insurance exchange (Claxton 2015).

The second reason stems from insurers' movements toward narrower provider networks and value-based purchasing payment arrangements with providers (Herman 2015). Given this change in the business model of health care, health policy makers, employers, and health care provider systems will have an interest in knowing how health care systems with existing health plans are performing financially.

This study identified a sample of 96 PSHPs in 2013 and computed key financial ratios to measure their financial performance and capital adequacy from 2011 through 2013. The study identified 24 PSHPs that generated an average cash flow margin ratio of 3.9%, which was above the 75th percentile of this ratio.

The analysis shows that strong cash flow margin PSHPs are managing their medical costs to achieve this position. Although their medical loss ratio increased by almost 300 basis points from 2011 to 2013, it was still lower than the weak cash flow PSHP group.

In terms of capital position, both groups had high RBC ratios. State in-

surance regulators assess this ratio to gauge the overall risk of bankruptcy for the health plan. The ratio accounts for a range of risk factors, including risk of default of reinsurers and other creditors, risk of investments, fixed income and equity, and its underwriting risk of its reserves and premiums. Health plans with RBC ratios valued below 1.5 will be required by state insurers to take correction action.

CONCLUSION

This study found the overall capital adequacy of both groups to be financially sound. Although the average RBC ratio for the strong cash flow PSHP group was significantly higher (5.75 vs 4.68) than the weak cash flow PSHP group (*P*=.02), the ratio value for both groups was well above the regulator threshold. The other capital adequacy of total liabilities to total assets was only slightly lower for the strong cash flow PSHP group relative to its comparison group. This finding implies that either group can pay off its liabilities with less than half its assets.

Given this assessment, it appears PSHPs have sufficient capital to finance expansion into the commercial markets as well as government programs. Initially, PSHPs entering these new markets may experience capital shortfalls in cash flow from underpricing products and higher medical costs. However, some of the larger regional health care systems are financially strong with sufficient cash and investments on hand to lend to their health plan (McCue 2010) in case they face financial difficulties.

REFERENCES

A.M. Best Co. Understanding BCAR for U.S. and Canadian life/health insurers. *A.M. Best Methodology: Criteria-Life/Health.* April 2, 2014. www3.ambest.com/ambv/ratingmethodology/OpenPDF.aspx?rc=190754. Accessed May 7, 2015.

DHCFP (Division of Health Care Finance and Policy). Study of the reserves and capital of health insurers in Massachusetts. May 2010. http://archives.lib.state.ma.us/bitstream/handle/2452/201830/ocn824957198.pdf?sequence=2&isAllowed=y. Accessed May 7, 2015.

Claxton G, Cox C, Rae M. The cost of care with marketplace coverage. Henry J. Kaiser Family Foundation. February 11, 2015. http://kff.org/health-reform/issue-brief/the-cost-of-care-with-marketplace-coverage. Accessed May 7, 2015.

Herman B, Evans M. Transformers' push to modify pay must overcome legacy system. *Mod Healthc.* 2015 Feb 2;45(5):8,10.

McCue MJ. What determines hospital sponsorship of an HMO? *Inquiry*. 2000;37(3):268–281.

McCue MJ. A descriptive analysis of the 2008 credit crisis on multistate healthcare systems: what impact did it have on their financial performance? *Hosp Top*. 2010;88(2):53–60.

Myers C, Fleming K, Newell B. Provider-sponsored health plans: past, present and future. *Navigant Pulse.* Aug. 21, 2013. www.navigant.com/insights/library/healthcare/2013/pulse-providers-sponsored-healthplans/?page=2. Accessed May 7, 2015.

NAIC (National Association of Insurance Commissioners). 2014 Quarterly, *Financial Analysis Handbook*, Health Edition. Kansas City, MO: NAIC.

Rauber C. Market deflates for provider-owned HMOs. Survey shows many plans are losing ground to growing national and regional players. *Mod Healthc*. 1999;29(24):34–38,40–44,46.