Financial Performance of Health Plans in Medicaid Managed Care

Mike McCue
Virginia Commonwealth University—Department of Health Administration

Objective: This study assesses the financial performance of health plans that enroll Medicaid members across the key plan traits, specifically Medicaid dominant, publicly traded, and provider-sponsored.

Data and Methods: National Association of Insurance Commissioners (NAIC) financial data, coupled with selected state financial data, were analyzed for 170 Medicaid health plans for 2009. A mean test compared the mean values for medical loss, administrative cost, and operating margin ratios across these plan traits. Medicaid dominant plans are plans with 75 percent of their total enrollment in the Medicaid line of business.

Findings: Plans that are Medicaid dominant and publicly traded incurred a lower medical loss ratio and higher administrative cost ratio than multi-product and non-publicly traded plans. Medicaid dominant plans also earned a higher operating profit margin. Plans offering commercial and Medicare products are operating at a loss for their Medicaid line of business.

Policy Implications: Health plans that do not specialize in Medicaid are losing money. Higher medical cost rather than administrative cost is the underlying reason for this financial loss. Since Medicaid enrollees do not account for their primary book of business, these plans may not have invested in the medical management programs to reduce inappropriate emergency room use and avoid costly hospitalization.

Keywords: Publicly traded health plans, Medicaid dominant health plans, financial performance, medical loss ratio
doi: http://dx.doi.org/10.5600/mmrr.002.02.a07
Introduction

Over the past 10 years, total Medicaid enrollment grew by 50 percent to 54-million members in 2010 from 36-million members in 2001 (CMS, 2010). Given this expanding Medicaid population, states are covering a greater percentage of these beneficiaries in comprehensive managed care programs, by either contracting with risk-based managed care plans or operating a primary care case management program (KFF, 2011). In 2010, more than two-thirds of the Medicaid members were enrolled in one of two types of comprehensive managed care program (KFF, 2011). Providing better access, improving quality of care, and controlling costs are the underlying forces why states are utilizing these managed care programs for their Medicaid beneficiaries.

For most of the Medicaid members, states are enrolling them in risk-based managed care plans. In 2010, almost 47 percent of the members were in risk-based comprehensive managed care plans, compared to only 15 percent in 1995. (KFF, 2012; MACPAC, 2011). As states increase their contracting with health plans, a significant percentage of these plans are owned by publicly traded companies. In 2004, a study found that the total Medicaid members enrolled in comprehensive health plans owned by publicly traded companies was 5.6 million or 32 percent of the total Medicaid population (Hurley, McCue, Dyer, & Bailit, 2006). By 2009, a similar follow-up study found that publicly traded plans expanded their Medicaid enrollment to 9.8-million members or 41 percent of the total Medicaid members (McCue & Bailit, 2011).

The aim of this study is to conduct a descriptive analysis of the financial performance of these Medicaid managed care plans that are owned by publicly traded companies as well as across competing plans sponsored by health care providers. In addition, over 60 percent of these Medicaid plans have primarily one line of business, specifically managing the Medicaid population (McCue & Bailit 2011) as opposed to plans that offer other insurance products such as Commercial and Medicare. Therefore, a second aim of the study is to assess the financial performance of plans that manage predominantly Medicaid members in comparison to plans that offer coverage not only in Medicaid, but other insurance products such as Commercial and Medicare. Financial data of these plans are accessed from 2009 financial statements from the National Association of Insurance Commissioners (NAIC) as well as health plan financial filings from state insurance commissioners. Health plan financial performance is measured by operating a profit margin ratio as well as medical loss and administrative cost ratios across specific traits of the plans (Medicaid dominant, publicly traded, and provider-sponsored). In terms of research questions, the study will address whether Medicaid plans with certain traits performed well financially. More detailed questions include: Do Medicaid dominant plans that are sponsored by healthcare providers perform well financially? Are the profit maximization pressures of stockholders associated with the financial performance of Medicaid dominant, publicly traded plans?
Methodology

The study identified 225 comprehensive, full-service, at-risk Medicaid health plans with more than 5,000 enrollees from the 2009 CMS Medicaid Managed Care Enrollment Report.¹ Financial data for the Medicaid product line were accessed from the National Association of Insurance Commissioners (NAIC). Two states, Arizona and California, report their financial filings to state agencies and not NAIC. Their financial data were collected from the state’s Medicaid agency, in the case of Arizona, and from the Department of Managed Care, in the case of California. The study was only able to collect financial data from 170 Medicaid health care plans.²

Health plan organizational and enrollment data were utilized to identify the plan traits. The primary plan traits were Medicaid dominant status, publicly traded status, and provider-sponsored status. Using the prior studies of Felt-Lisk and Yang (1997) and Hurley et al., (2006), Medicaid dominant status was defined as plans with 75 percent or more of their total membership in Medicaid. Conversely, plans that offered the Medicaid product as well as other commercial or Medicare products were categorized as multi-product plans.

With respect to publicly traded status, plans that were owned and operated as a subsidiary of a publicly traded managed care company were defined as publicly traded plans. Conversely, plans that were not publicly traded were defined as non-publicly traded plans. With respect to provider-sponsored status, plans that were sponsored, affiliated, or owned by hospitals, health care systems, or medical clinics were defined as provider-sponsored plans. All other plans that did not meet this definition were defined as non-provider-sponsored plans. The first set of statistical analyses tests the mean differences of these financial ratios by Medicaid dominant status, publicly traded status, and provider-sponsored status.

Because these traits were not mutually exclusive, for example, Medicaid dominant plans could also be owned by a publicly traded company, the study attempted to control for Medicaid dominant status by analyzing within the category of Medicaid dominant plans and Multi-product plans. Therefore, the third analysis examined across the two ownership traits of publicly traded status and provider-sponsored status for all plans defined as Medicaid dominant plans. The fourth analysis examined across the two ownership traits of publicly traded status and provider-sponsored status for all plans defined as multi-product plans.

¹Prior work by Hurley et al. 2006 sampled only plans with more than 5,000 Medicaid members because of greater volatility based on their smaller membership pool, which may result in an unreliable MLR. Therefore, to compare with the prior work, this study only sampled plans with more than 5,000 Medicaid.
²Comparing the 170 health plans with financial data to the 225 sampled plans, certain plans traits were underrepresented, including provider-sponsored ownership (25% vs. 27%) and Medicaid dominant (55% vs. 60%). Conversely, the following plan trait was overrepresented with publicly traded plans (44% vs. 36%).
Three financial ratios are computed to assess the financial health of the Medicaid product line: the medical loss ratio, the administrative cost ratio, and the operating margin ratio. These ratios were computed for the Medicaid line of business and were assessed by plan traits of Medicaid dominant status, publicly traded status, and provider-sponsored status. Mean values were computed for each financial measure. Outlier values occurred for the medical loss ratio and operating margin ratios; therefore, these ratio values were adjusted to their respective 95th percentile and 5th percentile values. The study conducted a t-test to assess mean differences among plan characteristics. Medicaid’s operating margin ratio is defined as the percentage of operating income earned from its Medicaid revenue. This ratio measures how well a health plan manages its medical and administrative expenses for its Medicaid product. The Medicaid operating income or loss is defined as Medicaid premium revenue minus its Medicaid medical and administrative costs.

The administrative cost ratio measures the percentage of Medicaid premium revenue dollars expended for Medicaid administrative expenses. This ratio is defined by dividing Medicaid administrative and claims adjustment costs by Medicaid premium revenue. The medical loss ratio measures the percentage of Medicaid premium revenue dollars expended for Medicaid medical expenses.

**Results**

<table>
<thead>
<tr>
<th>Plan Traits (sample size)</th>
<th>Medical Loss Ratio</th>
<th>Administrative Cost Ratio</th>
<th>Operating Margin Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicaid Dominant Status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medicaid Dominant</td>
<td>94</td>
<td>87.7*</td>
<td>11.6</td>
</tr>
<tr>
<td></td>
<td>(6.6)</td>
<td>(3.2)</td>
<td>(4.2)</td>
</tr>
<tr>
<td>Multi-Product</td>
<td>76</td>
<td>90.6</td>
<td>10.8</td>
</tr>
<tr>
<td></td>
<td>(5.7)</td>
<td>(4.6)</td>
<td>(5.0)</td>
</tr>
<tr>
<td>Publicly Traded Status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Publicly Traded</td>
<td>75</td>
<td>87.4*</td>
<td>12.7**</td>
</tr>
<tr>
<td></td>
<td>(5.8)</td>
<td>(3.3)</td>
<td>(4.8)</td>
</tr>
<tr>
<td>Non-Publicly Traded</td>
<td>95</td>
<td>90.1</td>
<td>10.1</td>
</tr>
<tr>
<td></td>
<td>(6.5)</td>
<td>(4.6)</td>
<td>(4.5)</td>
</tr>
<tr>
<td>Provider-Sponsored Status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provider-Sponsored</td>
<td>43</td>
<td>90.6*</td>
<td>8.9**</td>
</tr>
<tr>
<td></td>
<td>(7.5)</td>
<td>(2.7)</td>
<td>(4.8)</td>
</tr>
<tr>
<td>Non-Provider-Sponsored</td>
<td>127</td>
<td>88.4</td>
<td>11.9</td>
</tr>
<tr>
<td></td>
<td>(5.8)</td>
<td>(3.9)</td>
<td>(4.6)</td>
</tr>
</tbody>
</table>
### Exhibit 1 (cont.)

<table>
<thead>
<tr>
<th>Plan Traits (sample size)</th>
<th>Sample Size</th>
<th>Medical Loss Ratio</th>
<th>Administrative Cost Ratio</th>
<th>Operating Margin Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicaid Dominant &amp; Provider Sponsored</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provider-Sponsored</td>
<td>20</td>
<td>88.5</td>
<td>9.5 *</td>
<td>2.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(5.3)</td>
<td>(2.5)</td>
<td>(4.7)</td>
</tr>
<tr>
<td>Non-Provider-Sponsored</td>
<td>74</td>
<td>87.1</td>
<td>12.1</td>
<td>1.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(5.7)</td>
<td>(3.2)</td>
<td>(4.1)</td>
</tr>
<tr>
<td>Publicly Traded</td>
<td>50</td>
<td>86.2**</td>
<td>13.3*</td>
<td>0.6**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(5.5)</td>
<td>(2.5)</td>
<td>(4.5)</td>
</tr>
<tr>
<td>Non-Publicly Traded</td>
<td>44</td>
<td>88.6</td>
<td>9.6</td>
<td>2.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(5.4)</td>
<td>(2.8)</td>
<td>(3.7)</td>
</tr>
<tr>
<td>Multi-Product &amp; Provider Sponsored</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provider-Sponsored</td>
<td>22</td>
<td>91.6</td>
<td>8.4 *</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(5.9)</td>
<td>(2.9)</td>
<td>(4.8)</td>
</tr>
<tr>
<td>Non-Provider-Sponsored</td>
<td>54</td>
<td>90.1</td>
<td>11.8</td>
<td>-1.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(5.6)</td>
<td>(4.8)</td>
<td>(5.1)</td>
</tr>
<tr>
<td>Multi-Product &amp; Publicly Traded</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Publicly Traded</td>
<td>25</td>
<td>89.6</td>
<td>11.5</td>
<td>-1.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(5.7)</td>
<td>(4.3)</td>
<td>(5.4)</td>
</tr>
<tr>
<td>Non-Publicly Traded</td>
<td>51</td>
<td>91.0</td>
<td>10.5</td>
<td>-1.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(5.7)</td>
<td>(4.8)</td>
<td>(4.8)</td>
</tr>
</tbody>
</table>

SOURCE: NAIC data 2009 and Arizona and California state data 2009 (Standard Deviation in parentheses)

** significant at .01 level

* significant at .05 level

Exhibit 1 lists the percentages of plans across the three main plan traits. For Medicaid dominant status, 55 percent of the 170 plans were categorized as Medicaid dominant plans while 45 percent were multi-product plans. For publicly traded status, 44 percent of the 170 plans were publicly traded and 56 percent were non-publicly traded plans. For provider-sponsored status, 25 percent of the 170 plans were provider-sponsored plans and 75 percent were non-provider-sponsored plans.³

The financial performance of these three main plan traits is listed in Exhibit 1 as well. Medicaid dominant plans had a significantly lower medical loss ratio (87.7% vs. 90.6%) and a higher operating margin ratio (1.3% vs. -1.0%) than multi-product plans. Publicly traded plans had a significantly lower medical loss ratio (87.4% vs. 90.1%) and incurred a significantly higher administrative cost ratio (12.7% vs. 10.1%). On the other hand, provider-sponsored plans had a

³Comparing the 170 health plans with financial data to the 225 sampled plans, certain plans traits were underrepresented, including provider-sponsored ownership (25% vs. 27%) and Medicaid dominant (55% vs. 60%). Conversely, the following plan trait was overrepresented with publicly traded plans (44% vs. 36%).
significantly higher medical loss ratio (90.6% vs. 88.4%) and incurred a significantly lower administrative cost ratio (8.9% vs. 11.9%) than non-provider-sponsored plans.

Analyzing only Medicaid dominant plans resulted in a sample size of 94 plans. Across the plan trait of provider-sponsored status, 21 percent were provider-sponsored plans compared to 79 percent non-provider-sponsored plans. Across the plan trait of publicly traded status, 53 percent were publicly traded plans compared to 47 percent non-publicly traded plans. In terms of the financial performance measures, Medicaid dominant, provider-sponsored plans had a significantly lower administrative cost ratio (9.5% vs. 12.1%) compared to Medicaid dominant non-provider-sponsored plans. Medicaid dominant publicly traded plans had a significantly lower medical loss ratio and operating margin ratio compared to Medicaid dominant non-publicly traded plans. In addition, Medicaid dominant publicly traded plans had a significantly higher administrative cost ratio.

Analyzing only multi-product plans resulted in a sample size of 76 plans. Across the plan trait of provider-sponsored status, 29 percent were provider-sponsored plans compared to 71 percent for non-provider-sponsored plans. Across the plan trait of publicly traded status, 33 percent were publicly traded plans compared to 67 percent for non-publicly traded plans. In terms of financial performance ratios, the only significant difference occurred in the multi-product provider-sponsored plans for the administrative cost ratio. Provider-sponsored plans had a significantly lower administrative ratio (8.4% vs. 11.8%) than the non-provider-sponsored plans.

**Discussion and Implications**

Assessing the financial performance of health plans within the Medicaid line of business across key plan traits of Medicaid dominant status, publicly traded status, and provider-sponsored status, resulted in several important findings. First, Medicaid dominant plans paid out less of their Medicaid premium revenues in medical expenses. Possible underlying reasons for lower medical costs include a host of factors ranging from delivering utilization to case management, which results in more cost-effective care, enrolling healthier beneficiaries, restricting access to costly medical providers, and negotiating lower rates from contracted providers. Medicaid dominant plans also earned a higher operating profit margin than multi-product plans. Although their average operating profit ratio was 1 percent, it was still significantly higher than the average operating loss ratio of 1 percent for multi-product plans.

Evidently, Medicaid plans that do not specialize in Medicaid are losing money. Higher medical cost rather than administrative cost may be the underlying reason for this financial loss. Since Medicaid enrollees do not account for their primary book of business, these multi-product plans may not have invested in the medical management programs to reduce inappropriate emergency room use and avoid costly hospitalization.
Second, publicly traded plans also paid out less of their Medicaid premium revenues in medical expenses. However they incurred higher administrative costs. A similar outcome occurred for publicly traded plans that were Medicaid dominant. Plans specializing in Medicaid and focusing on delivering care to one line of business, allows them to reduce their medical costs. Higher administrative costs may evolve from expending more for a skilled workforce who knows how to manage the distinct cultural and healthcare needs that the Medicaid population requires. Also, higher administrative costs may stem from implementing and managing programs and information systems that help avoid hospital readmissions and improve patient safety and outcomes.

However, for publicly traded plans that are Medicaid dominant plans, higher administrative costs may have contributed to an almost zero profit margin compared to Medicaid dominant non-publicly traded plans, which generated a two-percent margin. Conversely, Medicaid dominant plans that were not a subsidiary of a publicly traded company performed well financially. These plans generated the highest operating margin ratio with a return of over 2 percent. Lower administrative costs appear to be the drive for higher profitability for these types of plans. As previously mentioned the corporate owners of these publicly traded companies may have been investing in management programs and information systems, which resulted in a greater allocation of administrative costs to their individual health plans (Amerigroup Corporation, 2009; Centene Corporation, 2009).

Third, provider-sponsored plans incurred lower administrative costs and paid a greater percentage of their premium dollars in medical expenses. In addition, provider sponsored plans that were either Medicaid dominant or multi-product incurred lower administrative costs. Thus, the administrative expenses to operate health plans owned by health care providers may be lower, because there may be a greater sharing of business operational costs (e.g., marketing, customer service, offices, information systems) within the sponsoring multihospital system, hospital, or clinic.

**Study Limitations**

In sum, this study was just a descriptive, statistical approach of assessing the financial performance measures in isolation with respect to specific Medicaid managed care plan traits. Future studies should consider controlling for market (Medicaid population, number of health plans, geographic regions) and policy factors (Medicaid payment rate, mandatory enrollment) that may be influencing the variation of these measures. Another limitation of this study relates to the validity of the administrative cost data. Health plans in Arizona and California do not follow NAIC statutory financial reporting guidelines, which are typically followed for insurance companies. Instead, they report on the basis of Statement of Financial Accounting Standards (SFAS). The reporting of administrative costs may have been impacted by these different accounting standards as well as the allocation of these costs by plans owned by parent.
companies. Finally, lack of statistical power may have contributed to the lack of significant results when controlling for multi-product plans across the ownership traits of publicly traded and provider sponsored plans.

**Correspondence**
Mike McCue, D.B.A., Virginia Commonwealth University—Department of Health Administration, P.O. Box 980203, 1008 East Clay Street, Room 313, Richmond, Virginia 23298-0203, mccue@vcu.edu, T: (804) 828-1893 F: (804) 828-1894

**Acknowledgment**
Xinliang Liu, doctoral student at Virginia Commonwealth University assisted with collecting, editing, and merging of the CMS and NAIC data.

**Financial Disclosure**
This work was supported by grant 20100486 from the Commonwealth Fund. The funders had no role in the conduct of the research, analysis, or interpretation of the findings nor in the presentation of the results herein.
References


Mission Statement

Medicare & Medicaid Research Review is a peer-reviewed, online journal reporting data and research that informs current and future directions of the Medicare, Medicaid, and Children’s Health Insurance programs. The journal seeks to examine and evaluate health care coverage, quality and access to care for beneficiaries, and payment for health services.

http://www.cms.gov/MMRR/

U.S. Department of Health & Human Services
Kathleen Sebelius
Secretary

Centers for Medicare & Medicaid Services
Marilyn Tavenner
Acting Administrator

Center for Strategic Planning
Anthony D. Rodgers
Deputy Administrator and Director

Editor-in-Chief David M. Bott, Ph.D.
Senior Editor Cynthia Riegler, M.A.

Associate Editors
Jennifer Polinski, Sc.D, M.P.H.
Brigham & Women’s Hospital
Robert Weech-Maldonado, Ph.D.
University of Alabama at Birmingham

Editorial Board
Gerald S. Adler, M.Phil.
CMS/Center for Strategic Planning
Andrew Bindman, M.D.
University of California, San Francisco
William J. Buczko, Ph.D.
CMS/Innovation Center
Todd Caldis, Ph.D., J.D.
CMS/Office of the Actuary
Craig F. Caplan, M.A.
CMS/ Center for Medicare
Melissa A. Evans, Ph.D.
CMS/Center for Program Integrity
Jesse M. Levy, Ph.D.
CMS/ Innovation Center
Isidor R. Strauss, F.S.A.
CMS/Office of the Actuary
Fred G. Thomas, Ph.D., C.P.A.
CMS/ Innovation Center

Contact: mmrr-editors@cms.hhs.gov

Published by the Centers for Medicare & Medicaid Services
All material in the Medicare & Medicaid Research Review is in the public domain and may be duplicated without permission. Citation to source is requested.