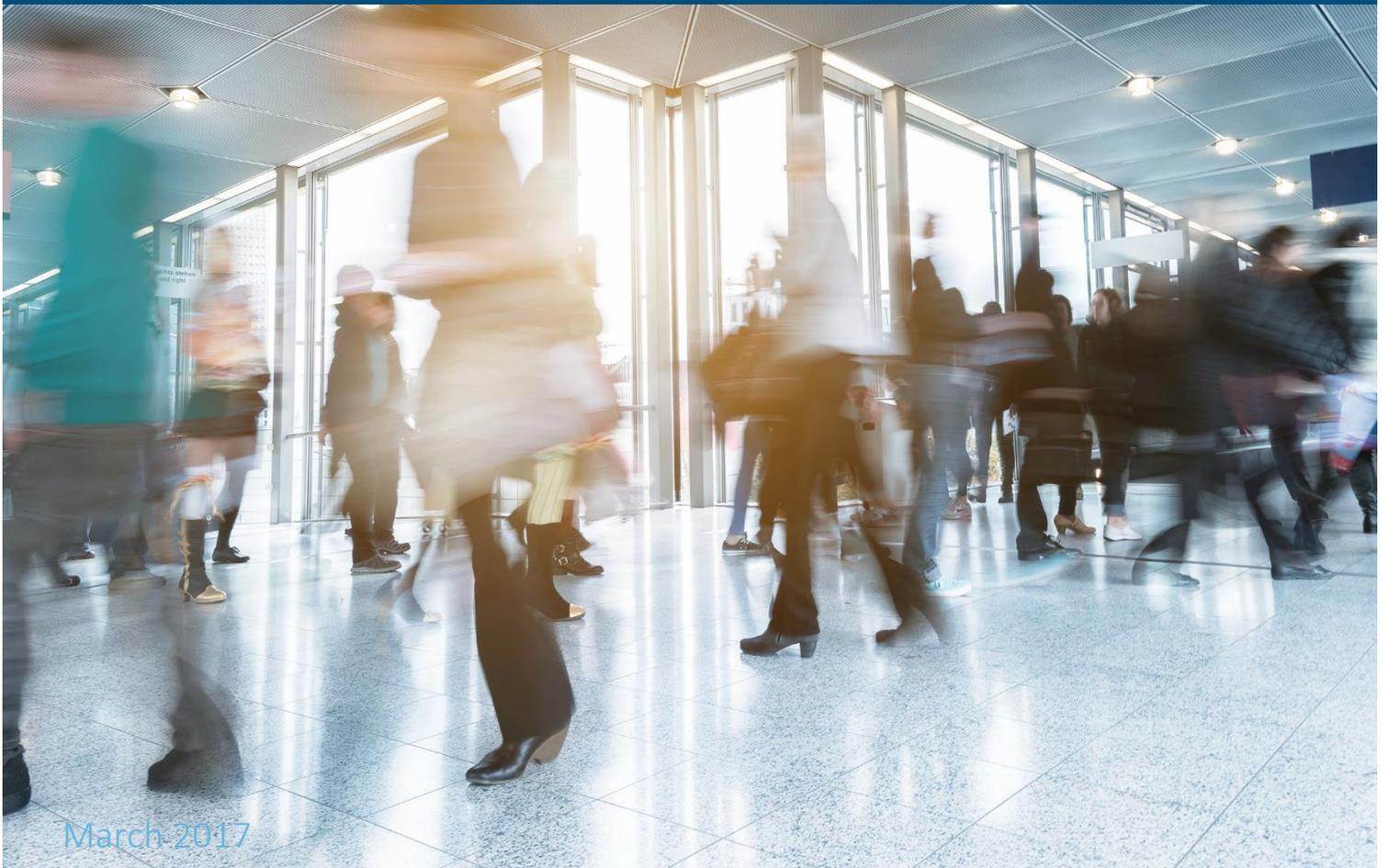


Medicaid Managed Care Organizations: Considerations in Calculating Margin in Rate Setting



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CONTENTS

Section 1: Acknowledgments	4
Section 2: Executive Summary	5
Section 3: Introduction	9
3.1 Background	9
3.2 Defining Margin	11
3.2.1 Generally accepted components of margin for insurance organizations	12
3.2.2 Why is margin so important?	13
3.3 The Current Medicaid Managed Care Landscape	14
3.3.1 MCO business models	14
3.3.2 State capitation rate calculation	16
3.3.3 Regulation	18
Section 4: Observations	22
4.1 Overview	22
4.2 State Financial Management (Revenue)	25
4.3 Health Care Costs (Expense)	27
4.3.1 Pharmacy costs	27
4.3.2 Medical costs	28
4.3.3 Expansion population	28
4.4 Risk Mitigation	29
4.4.1 Value-based payment	31
4.5 Administrative Expenses	31
4.6 Contribution to Capital and Investment	33
4.7 MCO Characteristics	34
4.7.1 Financial metrics and margin calculation	34
4.7.2 Size	35
4.7.3 For-profit versus nonprofit	39
4.7.4 Provider-owned versus insurer owned	41
4.7.5 Maturity	42
4.7.6 Financial summary chart	42
4.8 Conclusion: Evolution of Managed Medicaid	47
Section 5: Scope, Data, Methodology and Assumptions	49
5.1 Research Scope	49
5.2 Data and Methodology	49
5.3 Limitations	50
Appendixes	51
Appendix 1: Summary of Financial Results for 2013, 2014 and 2015	51
Appendix 2: Detailed Financial Data Tables	53
Appendix 3: Summary of States' Provision of Margin, Administrative Expense and Risk Adjustment, from Recent Actuarial Ratebooks	54
Appendix 3 (continued)	55
About The Society of Actuaries	56

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Section 1: Acknowledgments

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Section 2: Executive Summary

Most states now delegate the management of some or most Medicaid beneficiaries to managed care organizations (MCOs), and the number of beneficiaries under managed care is growing each year. The Centers for Medicare and Medicaid Services (CMS) Medicaid and Children’s Health Insurance Program (CHIP) Managed Care final rule issued in the spring of 2016 provided additional regulation around MCO quality, network adequacy and financial performance; yet there remains little guidance around the margins required to run a Medicaid MCO and the specific considerations for determining margin assumptions built into capitation rates.

For this report, margin is defined as the amount included in revenue to cover insurance risk, contributions to risk-based capital, income taxes, investment expenses, and profit. It may be explicit, as in amounts built into Medicaid managed care capitation rates calculated by the states; or it may be implicit, as amounts remaining in revenue after covering expenses and investments in the business of the MCO.

Most states’ capitation rates (payments to MCOs) include an explicit provision for margin, and in recent periods these range from 0.5% to 2.5%. Most for-profit MCOs target margin higher than 2.0%; most nonprofit MCOs target margin of around 2.0%. Actual performance over the past few years has varied widely among MCOs and states, but the average margin¹ in 2015 was 1.8% for for-profits and 1.5% for nonprofits, according to financial database results described later in the report.

The main part of our research consisted of interviews with MCO executives (chief financial officers [CFOs] and actuaries) that resulted in qualitative findings related to components of margin and drivers of margin. The qualitative responses are discussed in detail later in this report, but are summarized in Table 1.

During our research, we attempted to find information that defined how margins should be developed for a particular industry, but there is no predetermined formula for developing margin. The general consensus is that organizations set their margins based on their internal needs and expectations, in alignment with their business strategies. Given this lack of a defined formula, actuaries and others must use their own knowledge and judgment to develop margin in Medicaid capitation rates. This report is intended to provide an understanding of the components of margin and how margin is used to support MCOs’ businesses.

¹ Average margin is calculated only for MCOs for which Medicaid represents more than 90% of revenue, i.e., the dominant line of business. It is the straight average across all MCOs in the financial results database, described later in this report.

Table 1

SUMMARY OF THE COMPONENTS OF MARGIN AND KEY CONSIDERATIONS

Component of Margin	Considerations for Margin Assumptions in Rate Setting	Examples of Impacts on Margin
<p>Insurance risk: Unanticipated deviation in health care delivery costs</p>	<ul style="list-style-type: none"> • What level of margin is needed to cover the expected risk within the program? • What is the probability that actual costs will be above or below projected costs? • Do the assumptions used in rate development include any implicit margin? • Will new populations, services, benefits or regulatory requirements be added to, or removed from, the current program that will increase or decrease uncertainty? • Is there more uncertainty in future trends than in past years, due to new treatments, emerging conditions, or blockbuster drugs? • Are risk adjustment or other risk mitigation mechanisms (e.g., reinsurance, risk sharing) effectively employed to reduce uncertainty and risk? • Will value-based payment models or subcapitation shift a portion of claim volatility to providers? 	<ul style="list-style-type: none"> • States had difficulty in setting accurate capitation rates for the Affordable Care Act (ACA) expansion population, which was unfavorable to some MCOs but favorable to most in year 1. • New blockbuster specialty pharmacy treatments for hepatitis C and other conditions caused actual costs to exceed expected costs, unless the risk was mitigated. • Risk adjustment and other risk mitigation approaches alleviated some of the burden of unexpected claim volatility, but they were not used in all states or for all populations and benefits. And, even when used, they did not eliminate the full impact of claim volatility, both positively and negatively.

SUMMARY OF THE COMPONENTS OF MARGIN AND KEY CONSIDERATIONS (continued)

Component of Margin	Considerations for Margin Assumptions in Rate Setting	Examples of Impacts on Margin
Contribution to risk-based capital (RBC) and other capital needs	<ul style="list-style-type: none"> • How much margin is needed to cover the cost of capital and RBC requirements? • Is revenue expected to increase (e.g., due to new or growing populations) or decrease (e.g., due to carving out benefits) in the future? • Will a significant portion of risk be shifted to providers through subcapitation or other value-based arrangements? 	<ul style="list-style-type: none"> • Contribution to capital has been as high as 1% of revenue, thus a significant portion of margin. • Rapid growth in membership or financial losses has increased funding needed for RBC.
Income Taxes	<ul style="list-style-type: none"> • What is the expected tax level to be paid by for-profit MCOs in the market? 	<ul style="list-style-type: none"> • Income taxes have reduced net margin for for-profit MCOs. • Historically, capitation rate margin provisions are the same regardless of tax status.
Investment in IT infrastructure	<ul style="list-style-type: none"> • Does the allowance for administrative costs consider all projected IT infrastructure including provision for unanticipated development? • Will enhancements to existing systems, above and beyond normal improvements, be needed for new programs and processes? 	<ul style="list-style-type: none"> • Although routine IT maintenance is generally factored into administrative costs, margin has been strained by IT investments such as: <ul style="list-style-type: none"> ○ Encounter data submission processes ○ Value-based payment models ○ ICD-10, electronic medical records and other claim system upgrades

SUMMARY OF THE COMPONENTS OF MARGIN AND KEY CONSIDERATIONS (continued)

Component of Margin	Considerations for Margin Assumptions in Rate Setting	Examples of Impacts on Margin
Investment in care management infrastructure	<ul style="list-style-type: none"> • Are care management programs evolving or expanding into more complex patient populations, requiring up-front investment in new care models? • Are care models mature and running efficiently, enabling lower margin? • Will new programs create cash timing issues, such that revenue lags investment? 	<ul style="list-style-type: none"> • Care management has varied significantly from population to population, and has caused a strain on margins when more resources were needed than anticipated. • New populations require additional resources, investment, and training, and positive margin is typically not seen for two or more years.
Contribution to owners/shareholders for MCOs that are for-profit	<ul style="list-style-type: none"> • Is there an appropriate level of profit included in the margin? • Will Minimum Loss Ratio (MLR) guarantee requirements reduce the net contribution to owners/shareholders? • Will MCOs in multiple states or with multiple lines of business be precluded from cross-subsidizing for purposes of margin? 	<ul style="list-style-type: none"> • Owners/shareholders receive a contribution only after other margin components are satisfied. • When margin is negative and RBC required additional funding, a call for capital from the parent/owner was required. • MLR requirements have effectively capped the margin that limited the profit that was gained, but without similar downside protection.

Table 1 outlines the key components of margin and the critical considerations. Additional components and considerations are described in detail throughout this report.

Section 3: Introduction

3.1 Background

Medicaid—often called different names in different states—provides health coverage for more than 72 million Americans and is the largest payer of birth costs, mental health services and long-term care in America. The program is jointly funded by federal and state governments, but administered by states under broad federal standards. As a result, each state operates differently with unique financing arrangements.²

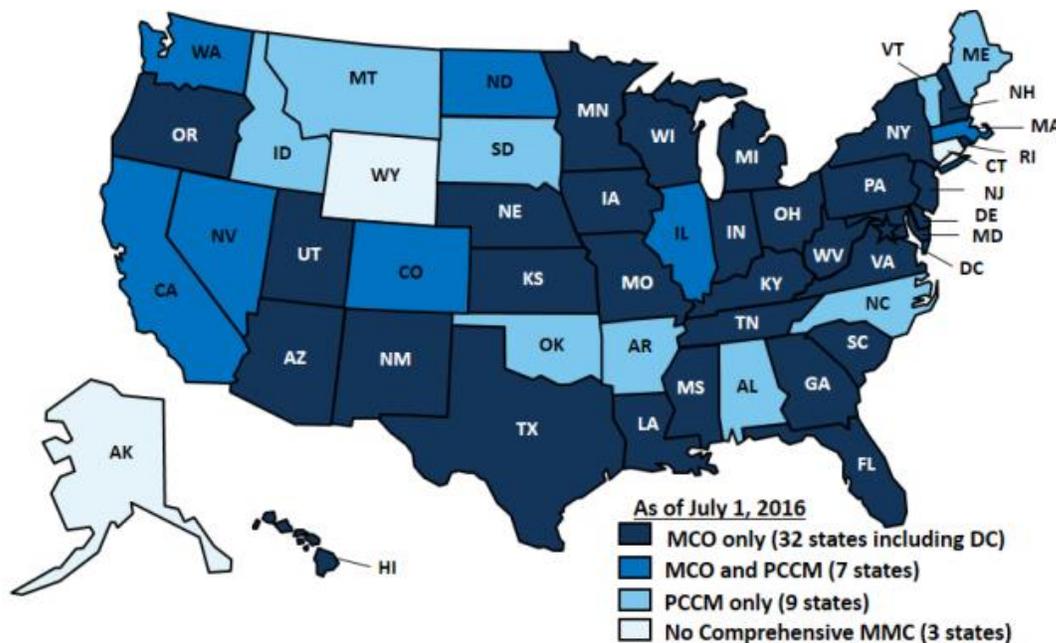
Managed care has become the primary payment mechanism for Medicaid beneficiaries, as more than half of Medicaid beneficiaries now receive all or most of their care from MCOs. As of July 2016, 39 states used managed care programs for at least a portion of their Medicaid populations, and since then additional states have announced plans to move some or all of their Medicaid enrollees to managed care. State budget challenges and increased Medicaid enrollment have put additional financial pressure on already-stretched state Medicaid programs, even with increased federal funding for Medicaid expansion.

Figure 1, from Kaiser Family Foundation’s report *Implementing Coverage and Payment Initiatives: Results from a 50-State Medicaid Budget Survey for State Fiscal Years 2016 and 2017*, shows the prevalence of managed care programs across the country.³ Only three states had no managed care programs as of July 2016. In addition, 28 states with Medicaid MCOs reported at least 75 percent of all Medicaid beneficiaries were enrolled in MCOs.

² From the website of the National Association of Medicaid Directors (NAMD) <http://medicaiddirectors.org/about/>

³ <http://kff.org/report-section/implementing-coverage-and-payment-initiatives-managed-care-initiatives/>

Figure 1
KAISER FAMILY FOUNDATION SUMMARY OF MCOS BY STATE



NOTES: ID’s MMCP program, a dual eligible only limited plan, has been re-categorized by CMS from a PAHP to an MCO; in this survey it is not counted as an MCO. CA has a small PCCM program operating in LA county for those with HIV. Three states (SC, TX and WY) use PCCM authority to operate specialized care management programs or to make PMPM payments in a Patient Centered Medical Home program; these three are not counted here as a PCCM.

SOURCE: KCMU survey of Medicaid officials in 50 states and DC conducted by Health Management Associates, October 2016.



The primary objective of this study is to describe the considerations for estimating margins for Medicaid MCOs. More information about the study’s goals and specific objectives are outlined in Section 5.1. We have attempted to address the goals through both quantitative and qualitative methods. For the first (quantitative) phase, we used publicly available financial data, from the following sources:

- Annual statements filed with state insurance departments;
- State actuarial ratebooks;
- State Medicaid department websites; and
- Other public sources, such as the Centers for Medicare and Medicaid Services (CMS).

Data from all these sources is also discussed in Section 5.2. They have been combined in a master database, which is available in Appendix 2 of this report and available separately on the SOA website.

The second phase of the project was focused on gathering qualitative information. We interviewed key financial executives—primarily CFOs and chief actuaries—of Medicaid MCOs, to understand components of margin that may not be apparent in the analysis of financial data. The interviews were with 26 different organizations, representing 90 MCOs in 35 states. We estimate that the MCOs that participated in the interviews cover about half of all Medicaid MCO enrollees in the country. These interviews focused on qualitative questions related to the MCOs' margin for Medicaid business.

We hope that actuaries, financial executives and others working for both the states and MCOs will find this report useful. In addition we hope it is helpful to state and federal regulators and policymakers.

3.2 Defining Margin

Margin, in its most basic form, is defined as the difference between revenue and expense, usually expressed as a percent of revenue. For example, if in a given period an MCO's revenue was \$1,000,000 and total expenses were \$980,000, the difference (also called net income or profit) is \$20,000. \$20,000 is 2% of \$1,000,000 and so in this example, margin is 2%.

Many Medicaid MCOs are nonprofit organizations, in which all net income is reinvested in the company or members, or is provided for community benefit purposes. Conversely, for-profit companies are usually expected to provide some return to the owners, shareholders or other stakeholders. Even nonprofits require some margin to cover risk or provide support for capital costs, financial reserves and reinvestment for business operations.

For a Medicaid MCO, the revenue side of the calculation described above includes, but is not limited to, the following:

- Premiums paid by state Medicaid departments,
- Bonuses and/or withhold amounts, and
- Revenue shared between the MCO and the state through risk-sharing arrangements.

The expense side is comprised of the costs of health care (medical, pharmacy or other services); the administrative costs to deliver that care and run a health plan; and the maintenance of adequate reserves as determined by the state. Various characteristics of a given MCO also have a strong bearing on the level and applicability of individual margin components. These characteristics will be discussed in more detail throughout this report.

Principles of insurer profit in the United States have a legal basis that can be traced back to court cases involving insurance organizations as well as other regulated industries such as public

utilities.⁴ These court cases support the acceptability of an insurance organization earning a fair and reasonable return to cover its cost of capital, including the service of debt, dividends to shareholders and allowance for risk. In addition, case law indicates the return on equity should be comparable to other enterprises with similar risks.

However, the law does not guarantee the earning of profit, but rather the *opportunity* to earn a fair and reasonable rate of return and a positive operating return. Although the definition of “fair and reasonable” has been debated, cases have concluded that break-even operating return is not sufficient to guarantee a fair and reasonable rate of return. Insurance cases have also held that excessive past profits do not justify a lower rate of return in the current period. Similarly, losses in prior years do not justify setting premium rates to target a higher rate of return in the current year. These principles are reflected in recent attention to actuarial soundness addressed in Federal Rule 42 CFR 438.4, discussed in detail in Section 3.3.3 of this report.

3.2.1 Generally accepted components of margin for insurance organizations

In health insurance, margin must fund several generally accepted components of an insurer’s operations and liabilities. Note that these components must be funded after taxes have been paid (for entities that must pay income and premium taxes).

- *Cost of risk in the form of risk-based capital funding.* Insurers require significant amounts of capital to operate. Capital must be available to cover variability in costs, which is generally referred to as insurance risk. Since most Medicaid MCOs are regulated by state insurance departments, they must adhere to state regulations and standards for risk-based capital (RBC). RBC is described in more detail in Section 4.6.
- *Cost of investment in existing infrastructure.* All businesses must continually reinvest in their own operations to remain competitive, and health plans are no exception. Arguably the most significant of these investments for Medicaid MCOs is information technology systems. Health care claims processing is complex and dynamic, and requires a large investment just to stay current, and even more to meet changing demands for state reporting, provider payment agreements and member care delivery. Other infrastructure investments include (but are not limited to) human capital; buildings; customer service systems such as phone and online service; and provider communications and reporting.
- *Cost of investment in new enterprises.* Best practices in health care management and delivery are constantly evolving, and MCOs must adapt to survive. Much of the expansion that Medicaid MCOs have experienced recently has come from new Medicaid

⁴ Van Slyke, Oakley E. 1999. *Actuarial Considerations Regarding Risk and Return in Property-Casualty Insurance Pricing*. <http://www.casact.org/pubs/vfac/1999may.pdf>

populations, such as those needing long-term care or support services and medically complex children. As a result, MCOs must manage their care in new and increasingly sophisticated ways. MCOs are also adding more value-based contracts with providers, which require investment to develop, implement, monitor and maintain.

- *Return to owners/shareholders.* For-profit MCOs are owned by shareholders in some form or another and these shareholders have invested in the business in order to receive a return on that investment in the form of a share of the profit.
- *Contribution to community benefit.* Both nonprofit and for-profit MCOs may have strategic directives to provide benefit to their member populations or to the communities in which they serve. Examples include funding counseling centers for community members and farmers' markets. For some nonprofits, community benefit may impact tax status, in that a threshold percentage of total revenue, from all lines of business, must go toward community benefit in order to maintain tax-exempt status. In some cases, particularly for nonprofit MCOs that are part of nonprofit health systems, this may even result in negative margin goals or tolerance for lack of margin, so long as the plan meets or exceeds community benefit thresholds.

3.2.2 Why is margin so important?

With the rapid expansion of managed care across nearly every state, the fundamental delivery system of Medicaid has shifted from state-based risk under a fee-for-service payment model to risk delegated to managed care organizations. The underlying premise behind the growth of managed care programs is that MCOs have a greater ability to achieve efficiently contracted provider rates, control administrative costs and manage care better than state-run programs. While these efficiencies often require greater resource investment by MCOs, the MCOs operate under the assumption that the gain in efficiencies is still greater than the costs incurred to achieve them. MCOs are paid on a capitated basis, per member per month, and the financial risk effectively shifts from the state to the MCO.

In order to be attracted to participate in a state's managed Medicaid program, the MCO, whether for-profit or not-for-profit, must project that the revenues received from the state will cover the costs of care, cover the costs of administration of the MCO, add required amounts to statutory reserves and produce a margin that can be reinvested into the organization and/or shared with a parent organization or shareholders. Without providing an opportunity for sustainable margins, states would not attract and retain MCOs in their programs and would be forced to forgo the economies that the model promises to deliver. There will always be variation between actual and expected claim costs. Adequate margins provide the resources for MCOs to remain in business, and therefore the sustainability of a state's managed Medicaid program.

MCO revenues are paid by state Medicaid departments, but in most states MCOs must also be licensed insurers, regulated by state insurance departments. As such, MCOs are subject to the same regulations as other insurers. In addition to state insurance regulation, Medicaid MCOs are subject to federal regulation, and new requirements have been added in the new federal regulation from the recent Medicaid and CHIP Managed Care Final Rule issued by the Centers for Medicare and Medicaid Services (CMS) on April 25, 2016 (referred to in this report as the rule).

3.3 The Current Medicaid Managed Care Landscape

The findings from our research are best understood by first reviewing the landscape of managed Medicaid, including the structure of MCOs' business models, the calculation of capitation rates and the current regulatory environment. Readers familiar with these areas may wish to skip over this section.

3.3.1 MCO business models

MCOs across the country employ a wide range of business models, with varying margin targets and requirements.

- *Multistate versus local*: Some MCOs are part of large multistate corporations, while others are owned and operated locally.
- *Ownership and for-profit versus nonprofit*: Some MCOs are part of publicly financed companies with accountability to shareholders; others are owned and operated as nonprofit charity organizations; and others are privately owned, for-profit companies.
- *Medicaid only versus multiple lines of business (LOBs)*: Some serve Medicaid-eligible members only while others serve a broader range of members. This broader range of members can include commercial, Medicare, or other types of insurance such as life or property/casualty insurance.
- *Range of benefits and populations*: Some MCOs offer a full range of medical services, some cover limited benefits (e.g., behavioral health, dental or long-term services and supports), and others cover all these services.⁵
- *Provider-owned versus insurance entity-owned*: Some are insurance companies only, while others are owned by or closely aligned with health care delivery organizations (called provider-owned MCOs in this report).

Tables 2 and 3 summarize MCOs across the United States, based on annual statement data collected for this study. In those tables, "Multi-LOB" refers to organizations that operate lines

⁵ The vast majority of MCOs and respective revenue cover comprehensive benefits, so margin results should be assumed to be representative of coverage of comprehensive benefits.

of business (described above) such as commercial or Medicare. These are differentiated from Medicaid-dominant organizations for which 90% or more of their revenues are from Medicaid business.

Table 2

SUMMARY OF 2015 MCOs REPORTING ANNUAL STATEMENT FINANCIALS BY NUMBER OF MCOS

Number of MCOs

	For-Profit	Nonprofit	Total
Multi-LOB, Non-Provider owned	50	25	75
Multi-LOB, Provider owned	11	24	35
Medicaid Dominant, Non-Provider owned	50	13	63
Medicaid Dominant, Provider owned	3	19	22
Total	114	81	195

Table 3

SUMMARY OF 2015 MCOs REPORTING ANNUAL STATEMENT FINANCIALS BY MEMBERSHIP

2015 MCO Membership

	For-Profit	Nonprofit	Total
Multi-LOB, Non-Provider owned	11,068,468	3,882,062	14,950,530
Multi-LOB, Provider owned	704,747	2,842,215	3,546,962
Medicaid Dominant, Non-Provider owned	9,093,012	3,644,082	12,737,094
Medicaid Dominant, Provider owned	253,661	3,382,049	3,635,710
Total	21,119,888	13,750,408	34,870,296

It was clear from the interviews with MCOs that achieving a sufficient margin is critical to these MCOs in order to sustain operations, invest in infrastructure, and maintain regulatory reserves. However, requirements for margins varied significantly depending on the type organization. For example:

- For-profit organizations tended to seek higher margins and had a lower tolerance for underperformance;
- Nonprofit organizations tended to seek lower margins, closer to the margins built into state capitation rates;
- Multistate organizations had greater tolerance for margin fluctuation in some of their states, so long as the overall portfolio performed at or near targets;
- Multiproduct organizations could tolerate underperforming lines of business, so long as the overall portfolio of products met performance expectations over time; and

- MCOs owned by provider delivery systems, such as hospitals or physician groups, often measure their success by overall system-wide performance instead of performance between the MCO and the parent company. In these cases, the MCO-reported margin may not provide an accurate indicator of the overall margin attained by the parent company.

Of course, many of the MCOs interviewed for this study fell into more than one of the preceding categories. Actuaries and CFOs must consider several strategic and corporate objectives when determining individual requirements for revenue and margin. These strategies and objectives may include, but are not limited to, paying for covered benefits, investing in quality infrastructure and care management programs, and maintaining reserves, and the objectives may change year by year.

3.3.2 State capitation rate calculation

As mentioned in the overview earlier, each state operates a unique Medicaid program, but in all states, MCOs receive their revenue from the states. The vast majority of payments from states to MCOs are paid in the form of capitated premium rates, which are paid for each Medicaid member enrolled in an MCO. These rates are typically based on prior experience, which is adjusted for program changes, expected cost and utilization trends. They are usually effective for the entire contract period, usually a year. CMS must approve the capitation rates and requires transparency into the rates paid to the MCOs. CMS will accept a state's rates only if they are found to be actuarially sound.

To understand margin requirements, it is important to understand how capitation rates are calculated. The magnitude of Medicaid MCO capitation rates is highly variable and depends on the beneficiary category, benefits covered (or carved out), demographic rate categories and the underlying historical costs of a given geographic area. Capitation rates are usually calculated using the steps outlined in Table 4.

Table 4
OVERVIEW OF STEPS TO CALCULATE STATE CAPITATION RATES

1. Data Collection	Claims and eligibility data are collected by the state. The source of these data is either (a) encounter data periodically submitted by the MCOs, for populations that have experience in managed care plans; or (b) data representing fee-for-service claims paid by the state, for populations that have no or limited experience in managed care. These data cover a recent period (typically one or two fiscal years)
2. Summarization of experience data	Data are organized by category of aid (e.g., TANF (Temporary Assistance for Needy Families) or ABD ⁶), by rate category (e.g., age and sex categories), and by detailed service category (e.g., inpatient surgical, outpatient therapies or pharmacy). Utilization per 1,000, cost per service and per-member-per-month (PMPM) costs are calculated for each “cell” (or combination of population, rate category and service category).
3. Adjustment from experience period to rating period	<p>The utilization per 1,000, cost per service or PMPM amounts are adjusted for differences in the coverage period compared to the past period. These adjustments generally include (but are not necessarily limited to) the following:</p> <ul style="list-style-type: none"> • changes in expected utilization; • changes in expected cost per service or change in the mix of services; • changes in benefits, including benefit carve-outs or benefits newly added in; • differences in the population due to enrollment or eligibility changes; • net impact of reinsurance programs (removal of reinsured claims and addition of reinsurance charges), if applicable; or • other adjustments as applicable.
4. Summation of adjusted PMPMs	Adjusted PMPMs are summed into total claim rates for each combination of population and rate category.
5. Addition of administrative costs	The PMPMs are adjusted upward for administrative costs, by adding either administrative costs PMPM, a percentage load for administrative costs, or both. In states that set capitation rates (vs. states where MCOs bid on Medicaid business), the administrative assumption is usually the same for all MCOs, regardless of differences in the MCOs’ actual administrative costs.
6. Addition of margin	The PMPMs are adjusted upward for margin. The margin may also be built into the administrative cost load.

⁶ Temporary Aid for Needy Families (TANF) programs provide temporary financial assistance for pregnant women and families with children. They make up the largest portion of Medicaid membership in most MCOs. Aged, Blind and Disabled (ABD) programs cover beneficiaries covered by Social Security, including disabled people and adults over age 65. Medicaid generally covers services not covered by Medicare.

Capitation rates frequently include a specific provision for margin (as outlined in step 6), which in recent years has ranged from 0.5% to 2.5%. Some states do not make an explicit provision, and margin is assumed to be included in the provision for administrative expenses. In either case, ASOP 49 (described in Section 3.3.3) and CMS regulations require the rates to include a provision for margin in the capitation rate development.

Capitation rates are usually recalculated each year and frequently follow the state’s fiscal year. This annual “rebasings” of rates helps keep the rates current, by reflecting more current cost and utilization patterns. However, annual rebasing of rates can also make it more difficult for MCOs to achieve positive margin. MCOs succeed in Medicaid programs when they are able to deliver care more efficiently than anticipated by the capitation rates. But this more efficient claims experience is used to calculate future years’ capitation rates, and therefore each year, the MCOs must find additional efficiencies to continue operating at margins greater than the margin in the rates. Several MCO executives interviewed expressed concern about the rebasing issue. We heard from many of the MCOs interviewed that investments in care management that successfully lowered utilization had only short-term financial benefit to the MCO, because the lower utilization became part of the baseline for a future year rate development, as described earlier. MCOs still invested in improving care and quality but had low expectations on bottom-line impact and struggled to find additional savings every year in order to produce margins at the levels assumed in capitation rates.

Appendix 3 shows a summary of data collected from ratebooks, outlining the percentage amounts built into the capitation rates for margin and administrative expense. Margins included in recent state rates are also summarized in Figure 3 in Section 4 of this report.

3.3.3 Regulation

Revisions to Federal Rule 42 CFR Parts 431, 433, 438, 440, 457 and 495, known as the CMS Medicaid and CHIP Managed Care Final Rule (referred to in this report as the rule), issued in the spring of 2016, is a long-awaited codification and expansion to the broad guidelines that guided Medicaid managed care plans in the past. The overarching intent of the rule is to bring greater alignment between Medicaid and CHIP⁷ and other managed health programs; improve member protections; increase transparency and actuarial soundness of state payment mechanisms; increase focus on quality of care; and support state efforts to improve the delivery of care. Some key areas of focus in the rule include:

- New requirements for beneficiary support and information, including provider directories;

⁷ The Children’s Health Insurance Program (CHIP) provides health coverage to eligible children, typically for children in families with income higher than Medicaid-eligible levels.

- Protections for enrollees who are auto-assigned to an MCO and want to change plans within 90 days;
- Increased network adequacy standards and provisions for continuity of care;
- New provisions for Managed Long-Term Services and Supports (MLTSS);
- Establishment of a minimum MLR guideline of 85%;
- Clarification of state authority to mandate thresholds for value-based contracting and other delivery system reforms;
- Requirement that states have a written quality strategy with specific performance measures and improvement initiatives; and
- Actuarial soundness.

While all of the preceding can impact operations and possibly margin, the discussion that follows outlines several of these key provisions that are of primary importance to Medicaid MCOs when estimating their margin requirements. These include the new Medical Loss Ratio (MLR) guidance, value-based payment model requirements, network adequacy standards and actuarial soundness.

MLR guidance

An MLR is the portion of premium spent on medical costs, as opposed to administrative or overhead costs. In general terms, an 85% MLR requirement, for example, means that at least 85 cents of every premium dollar must be spent on direct medical costs. Many states already have in place some form of MLR requirement, but the new federal rule requires all states to use historical program MLRs as a comparison point in setting rates to avoid excessive rates or underfunding. MLRs below 85% may indicate excessive margins (or higher levels of non-benefit costs), and high MLRs may indicate underfunded programs; either may indicate a lack of actuarial soundness in the rates. There is no penalty or payback required in the federal rule, but states may require that MCOs rebate premium dollars to the state until an 85% or higher ratio is met.

The MLR provision could put additional pressure on MCOs' margins, since some states may not allow MCOs to keep net income from costs below the 85% threshold, and the provision requires greater two-way transparency between states and MCOs.

Value-based payment model requirements

As MCOs enter into value based contracting arrangements with providers, the benefit from reducing the cost trend shifts to the risk-taking entity. These programs are becoming more common and can range from pay-for-quality and payment bundles to shared savings, partial capitation and full capitation. Some states currently encourage or require that a portion of costs be paid to providers through value-based contracts. The federal rule clarifies states' ability to require MCOs to engage in value-based contracting.

Under any of these value-based programs, some portion of risk is shifted from the MCO to the provider. Providers are financially incented to leverage care management tools and protocols to reduce utilization of expensive services and maintain or improve quality simultaneously. If these programs are successful, the provider (not the MCO) receives all or some of the savings through the contracted payment methodology. In addition, because the risk is shifted, theoretically, a lower MCO margin is required to cover adverse deviation.

Network adequacy

Network adequacy has been under scrutiny for some time as all types of MCOs (commercial, Medicare Advantage, and Medicaid MCOs) have leveraged smaller provider networks featuring improved care management, higher patient volume, and/or deeper service discounts, to reduce the overall cost of care. While the rule does not go very far in mandating specific network standards, such as distance, drive time, or specific provider counts by type, these rules and future rules may require MCOs to expand their provider networks with the possibility that new providers will be higher cost or not as integrated into preferred referral or care management programs (or both).

Wider networks may drive up the overall cost of care while creating greater patient access, and if capitation rates do not consider the potential for higher cost of care because of required wider networks, network adequacy could have a downward effect on margins over time. It appears unlikely that the rule will have a profound impact on MCO margins, but it is something for actuaries and CFOs to monitor going forward.

Actuarial soundness

The new rule places greater burden on states to ensure that MCOs receive rates that are actuarially sound. CMS rate review is not new, but the rule includes additional requirements made of both the MCO actuary and the state to ensure a more detailed review by the agency. CMS will apply these new rules in its review and approval of rates in most states beginning in 2016. Specifically, the concept of actuarial soundness prevents states from assuming cross-subsidization of certain populations by ensuring that rates are adequate in each rating cell, and that overall capitation to MCOs is adequate to reasonably cover costs and meet member access and service levels. Actuaries must certify to CMS that the calculation of rates meets the new rate setting guidance. Furthermore, MCOs have been required to submit considerable reporting to states already, but with the new rule, MCOs and other plan types are required to submit additional data to CMS to support rate development, calculate the MLR and show that the MCO meets network access standards.

These rules should help ensure that MCOs are compensated adequately to cover administrative and health care claim costs, maintain adequate reserves and attain state-defined margin targets. At a minimum, MCOs and CMS will gain greater insight into state rate-setting calculations, and states and CMS will gain greater insight into MCO costs and margins.

Additional guidance

Another important body of guidance is Actuarial Standard of Practice (ASOP) No. 49, *Medicaid Managed Care Capitation Rate Development and Certification*, issued in March of 2015.⁸ ASOP 49 outlines recommended practices for the assumptions and methodologies used in the calculation of Medicaid managed care capitation rates.

Both ASOP 49 and CMS regulations require MCO capitation rates to include a provision for margin. They each have similar requirements as shown in the following:

- *ASOP 49*: “The actuary should include a provision for underwriting gain, which is typically expressed as a percentage of the premium rate, to provide for the cost of capital and a margin for risk or contingency.”
- *CMS regulations*: “The development of the non-benefit component of the rate must include reasonable, appropriate, and attainable expense related to MCO, PIHP, or PAHP administration, taxes, licensing and regulatory fees, contribution to reserves, risk margin, cost of capital and other operational costs associated with the provision of services identified in §438.3(2)(1)(ii) to the populations covered under the contract.”

⁸ http://www.actuarialstandardsboard.org/wp-content/uploads/2015/03/asop049_179.pdf

Section 4: Observations

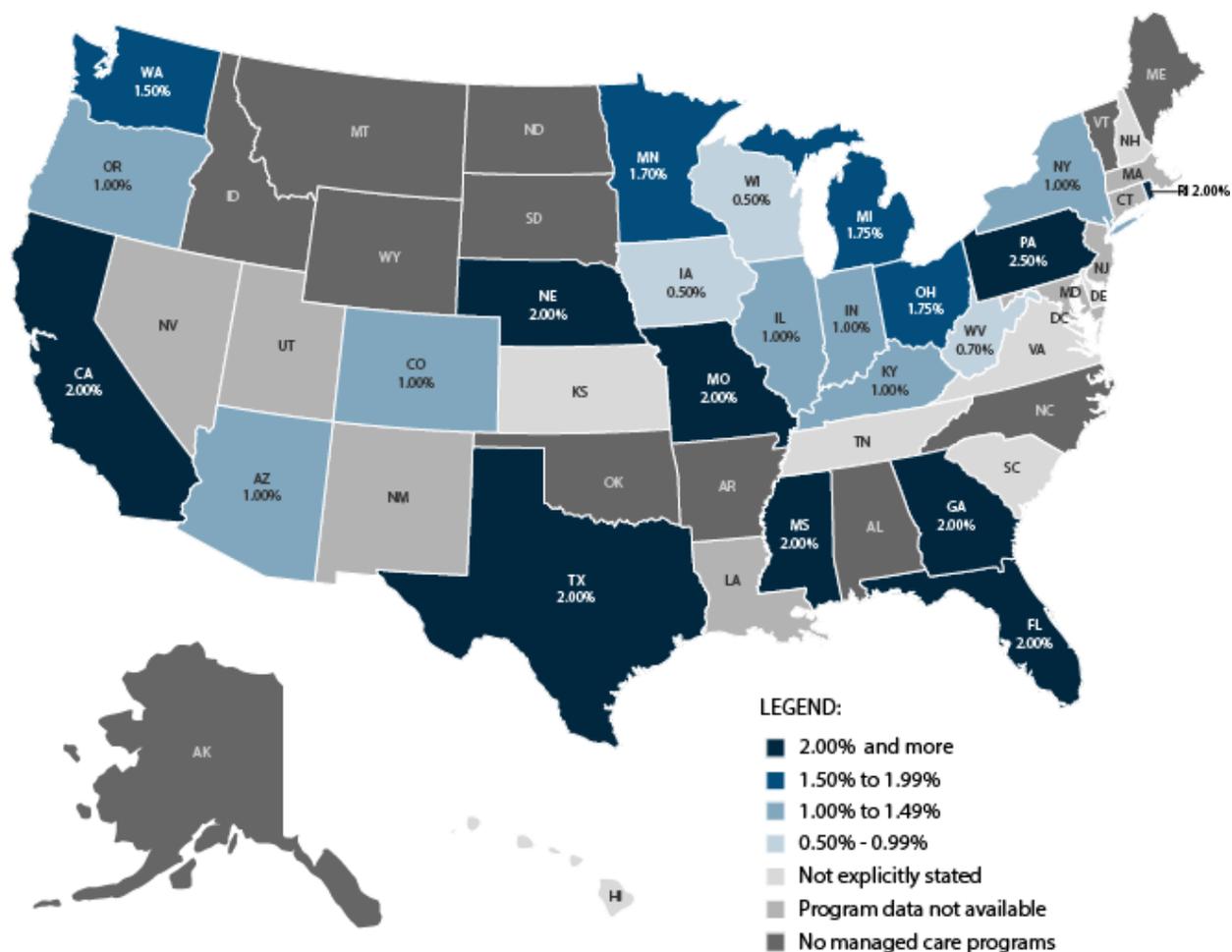
4.1 Overview

Margin, as presented in this study, is not simply contribution to profit. Based on interviews conducted, margin must cover several essential elements that support the solvency (and not just earnings) of an MCO. These elements will be discussed in detail in the sections that follow.

In recent capitation rates, states generally included margin percentages of 2.0% or below (some as low as 0.5%), yet MCOs often target higher percentages in their budgets and forecasts. Figure 2 shows the margin provision built into state capitation rates, by state.

Figure 2

PROVISION FOR MARGIN BUILT INTO CAPITATION RATES, BASED ON EACH STATE'S MOST RECENT AVAILABLE RATEBOOK⁹



In general the executives interviewed said that MCOs incorporate into budgets and forecasts margin amounts at or above the amounts allowed in the state capitation rates (shown in Figure 3), which would imply that they are finding additional savings either through administration or care delivery efficiencies. MCOs are concerned that, due to many forces affecting both revenue

⁹ See Appendix 3 for a summary of ratebooks collected and reviewed.

and cost, they may be challenged in the future to sustain their levels of margins. These forces are discussed in greater detail, later in this report.

Almost all executives interviewed mentioned that it can take two and sometimes three years before MCOs can achieve positive margin as a startup or when expanding to a new population or geographic area. This is due to several factors. First, if a population is new to Medicaid, such as the ACA expansion adult population (described later in Section 4.3.3), capitation rates are difficult to calculate because very little is known about the new population and insufficient data are available to set accurate capitation rates. MCOs in expansion states often reported this as a challenge. Second, it takes time to appropriately assess and manage a population that was previously unmanaged and had delayed or avoided care due to cost and/or lack of coverage. Third, it can take time for an MCO to develop and implement appropriate care models specific to a new population. For example, caring for adult males requires different networks, care protocols, and resources than populations previously dominated by children and pregnant women. Finally, the MCO must invest and hire in advance of enrollment of a new population, which can cause a lag in revenue versus expense.

Conversely, an MCO operating in a mature managed care environment may find it difficult to continually reduce health care utilization each year. Care management programs can be effective, but once savings are achieved and new patterns of care established, claim costs still increase each year through inflation and other factors. If capitation rates continue to assume additional care management savings year after year, margin may be affected.

Unpredictable costs for new treatments such as medications, medical devices, care protocols, and technology innovations can significantly affect margins if they are not sufficiently factored in capitation rates. Many MCOs reported a sharp rise in pharmaceutical costs due to the sudden increase in price or volume of particular drugs, especially those used to treat hepatitis C. At the same time, it is also possible that capitation rates could overestimate the cost impact of new treatments and the potential for cost savings. To ensure solvency among their MCOs, many states created benefit carve-outs or high-risk pools to compensate MCOs for costs that were not anticipated during the rate-setting period. This approach to highly uncertain new benefits has proved to be a viable alternative to increased risk margins.

States are constantly making changes to their Medicaid programs, such as shifting new populations to managed care, or carving in and carving out benefits from capitation coverage. Changes add to uncertainty in projection of costs (and revenues) and can make it difficult to assess trends and project future costs. The TANF population is generally the population with the lowest and most predictable costs, as well as most commonly covered by Medicaid managed care plans. As states seek to reduce costs and make them more predictable, they are transitioning other populations with highly volatile costs to managed care, such as adults who are disabled and children with medical complexity. This volatility increases the need for margins

earned by MCOs. At any given time realized margin might be reflective simply of cost volatility and not necessarily of gains or losses from effective care management or ongoing business. Therefore, margins must be sufficient to cover not only an expected gain, but also any increases in capital required to cover the volatility in costs and investment in the resources necessary to manage new populations, even if the return on that investment will not be fully realized for several years.

The subsections that follow outline the considerations and drivers of margin in more detail.

4.2 State Financial Management (Revenue)

Capitation revenue is the primary source of revenue for MCOs. An overview of capitation rates and how they are calculated was provided in Section 3.3.2. To the extent that capitation rates accurately represent the cost of the covered population, an MCO's budgeted margin targets may be more easily met. MCO revenue is also affected by other factors, as outlined in this subsection.

Aside from the capitation rates paid by the state, a number of other state financing mechanisms and programs can affect the revenue paid to MCOs. The interviews with MCO executives identified the following factors:

- *State programs to mitigate risk.* Most states use risk adjustment to redistribute payments among MCOs based on the risk profile of each MCO. Some states also use risk corridors to limit losses (or gains) for particular populations or conditions (such as hepatitis C). These risk mitigation mechanisms and their impacts on margin are discussed in more detail in Section 4.4.
- *Medical Loss Ratio (MLR) provisions or other profit corridors.* As mentioned in Section 3.3.3, several states already have MLR requirements, but the new federal rule places some MLR reporting requirements on MCOs in all states beginning in 2019. MLR requirements cap positive margin but do not provide similar protection on the downside. Other states also cap margins with other mechanisms, such as profit corridors, in which the MCO is allowed margin up to a certain threshold, but must pay back a portion of margin beyond the threshold. For MCOs that take a longer-term approach to margin, where losses in one year may be offset by gains in the next year, limits on the margin in favorable years may make it more difficult to sustain operations over time. In addition, such limits on margin may adversely affect multistate or multiline of business (LOB) MCOs, in which cross-subsidization between states (or LOBs) has, in the past, enabled gains in one state to offset losses in another. It is important to note that actuarial soundness in rates set by a given state should not presume that operations in another state, or another line of business would contribute to the margin of a Medicaid MCO.

- Cost variability.* In the past, as managed care programs became more prevalent in Medicaid, states contracted with MCOs for the larger and more predictable populations such as the TANF population. In recent years, states have continually sought ways to make costs lower and/or more predictable, and have expanded managed Medicaid to populations with more cost variability such as people who are disabled and children with medical complexity, including those with long-term care needs. The year-to-year variability of costs for these populations can cause capitation rates to be overstated or insufficient for a given year's experience, which can lead to excessive or insufficient margin.
- Quality programs.* Most states have a program to encourage quality in managed Medicaid plans and are adding more quality programs each year. States generally view the lack of quality as a penalty, and these programs typically withhold a portion of the capitation payments up front, paying out the withheld amounts once quality targets are met. Other states simply assess penalty payments if some quality targets are not met. If MCOs do not earn these quality withholds, the revenue loss is a direct hit to margin. The new federal rule requires the net rate paid to MCOs be actuarially sound considering the portion of withhold expected to be earned, so the impact to margin is limited for an MCO that is reasonably achieving its quality targets.
- Pass-through payments.* Some states provide payments to the MCO for various programs or populations not covered within the MCO's contracted services, which are in turn paid by the MCO to a third party. These so-called pass-through payments can be significant—sometimes as much as 30% of revenue—and may include items such as certain legislated payments to providers. The treatment of these payments on MCO financial statements can vary, but based on the interviews, they generally do not distort bottom line financial results or margin. In some cases, states provide an additional amount of 1%–2% of the payments to administer them. The new rule phases out pass-through hospital payments over a 10-year period, and pass-through physician and nursing facility payments over a 5-year period.
- Capitation versus bid states.* Some states require MCOs to bid on capitation rates, and the state can choose whether to accept the MCOs' rates. MCOs may bid rates with low or even negative margins to increase the competitiveness of their bid, and although this is the choice of the MCO, it has a direct effect on realized margin. Other states calculate a range of capitation rates, based on a range of assumptions provided by their actuaries; in many cases the state will pay the capitation rates at the low end of that range. The new rule clarifies that assumptions used to develop the capitation rates must be documented and actuarially sound for the rates paid to the MCOs, which significantly limits the use of ranges. Actuaries may instead develop several sets of rates with differing assumptions for the state to pick from; however, the more probable result is that actuaries will produce one set of rates for the state. For those states that historically paid rates based on a rate

range, the impact of the change to non-range-developed rates, including margin requirements, is yet to be seen.

- *Timing of payment.* Some states don't publish new capitation rates until after the beginning of the rate period. For example, rates effective January 1, 2016, may not be released until July of 2016. This timing lag can make it difficult for MCOs to make decisions around managing expenses, since the revenue is unknown. This impacts the MCOs' ability to manage margin and increases the need for margin. In addition, state fee schedules, which are typically the basis for MCOs to reimburse providers, may not be released until after they take effect. Making retroactive adjustments payments to providers because of the changes in the fee schedules adds administrative complexity and expense above the normal course of business, which may reduce margin. In some cases, states simply fall behind in their payments to the MCOs, and the MCOs are subject to carrying costs that can affect margins.
- *Reporting requirements.* Most states with managed care programs require MCOs to periodically submit detailed claims data, also called encounter data. These data are used to calculate future capitation rates and risk adjustment transfer payments, and to analyze activity and trends among the managed Medicaid population. MCOs who do not submit timely or accurate encounter data can be assessed liquidated damages, or financial penalties, which are paid from the MCO's margin. Additionally, states and CMS are increasing MCO reporting requirements for operational and quality metrics. Implementing these requirements is sometimes costly and not always included in the administration costs of the rates. This reduces margin as the margin is used to fund implementation of the new reporting requirements.

4.3 Health Care Costs (Expense)

The main component of the expense side of the margin equation is the cost of health care to the millions of Medicaid beneficiaries covered by MCOs. Nearly every MCO interviewed identified health care delivery costs as the primary reason for not meeting—or in some cases exceeding—margin targets. Variation is introduced with new populations (e.g., ACA expansion adults) or with unexpected costs (e.g., new treatments for hepatitis C), as shown in the following discussion.

4.3.1 Pharmacy costs

Most MCOs interviewed for this study cover pharmacy costs, and without exception, every one of these MCOs expressed concern with the recent increases in the cost of pharmacy benefits. There was particular concern around high-cost pharmaceuticals and therapies and the cost of patients diagnosed with hepatitis C. Specialty drugs in general are trending higher than in the past, and they drive the overall pharmacy trend. In addition, new non-specialty drugs, including

several blockbuster drugs¹⁰ expected over the next few years, can cause pharmacy costs in a Medicaid population to be higher than expected.

While state actuaries generally anticipated an increase in specialty drug trend in calculating capitation rates, they did not anticipate the significant magnitude of utilization of certain new specialty drugs. Utilization of new medications such as those used to treat hepatitis C has grown very quickly and unpredictably. Sovaldi was introduced in late 2013, and Harvoni in late 2014, and some estimates show spending on these drugs increased fivefold from 2013 to 2014, with growth moderating in 2015.¹¹ Capitation rates calculated for 2014 or 2015, using 2013 data that did not anticipate such growth in spending likely resulted in rates that were insufficient to cover the costs of these members, which lowered MCO margin. Although growth may moderate in the future, spending is expected to increase again in 2017.

4.3.2 Medical costs

While pharmacy expense has experienced trends at levels much higher than expected, medical expense trends have been moderate and generally at levels anticipated in the capitation rates. However, the executive interviews identified several factors that can cause actual costs to be higher than anticipated in the calculation of capitation rates. New benefits such as behavioral health or long-term services and support benefits have been, or may in the future be, added to the MCO's coverage. Many states started out in managed care with just the TANF population but are now moving other populations into managed care. These new populations, including adults with disabilities, children with medical complexity (CMC), and long-term services and supports (LTSS) patients, have higher costs (and possibly higher variability), and, according to interviewed executives, in some cases data for these populations are incomplete or unreliable. In addition, these populations have different needs in terms of care management and social supports. If the calculated capitation rates do not accurately capture the future costs of these populations, margin will be affected, since financial results are a blend of all populations covered by the MCO.

4.3.3 Expansion population

The most significant population change in many states had to do with the so-called ACA expansion population. Prior to the Affordable Care Act (ACA), most states did not offer Medicaid coverage to low-income childless adults. The ACA gave states the opportunity to receive federal funding to expand Medicaid coverage to low-income adults. Not all states chose to provide coverage to this expansion population, but many of those who did are now providing Medicaid benefits via the MCOs. Coverage for the expansion population began in 2014 or in some states,

¹⁰ Blockbuster drugs are those drugs that bring in more than \$1 billion in sales every year. <http://fortune.com/2016/03/25/new-blockbuster-drugs-to-watch/>

¹¹ <http://healthaffairs.org/blog/2015/12/07/the-impact-of-new-hepatitis-c-drugs-on-national-health-spending/>

2015, and state actuaries were challenged to set capitation rates for a population for which no prior health care utilization experience was available.

Some states shifted all the risk of the expansion population to MCOs, and in many cases the rates were high enough to allow the MCOs to be profitable, and even highly profitable, for this population. However, according to interviewed executives, in a few other states the rates were not sufficient to cover the costs of high utilization and pent-up demand for expansion adults.

States and their actuaries have mitigated the uncertainty of the expansion population with adjustments to the rates in the second or third years of coverage. This generally resulted in reductions to the rates. Many states have added risk corridors for the expansion population, in which an MCO takes the full risk within a range of costs, but shares the risk if costs exceed or are below certain thresholds. According to some executives interviewed, the expansion population required additional administrative resources, including care management staff and other resources from the MCOs, and in many cases generous capitation rates enabled the MCOs to add these resources. However, these additional resources could not be supported after capitation rate reductions that followed in the second or third years after expansion without causing downward pressure on margins.

Although most of the impact of the expansion population has already been realized in margins, a few lasting effects may continue. First, additional states may still choose to expand Medicaid coverage to the ACA expansion population, and capitation rate calculations may be informed by past experience in other states. Second, under the ACA, the federal match for the expansion population is 100% in 2016 and will phase down to 90% by 2020. If states do not make a specific provision for the resulting reduction in budgets, there may be pressure to reduce capitation rates, which may in turn reduce margins (actuarial soundness notwithstanding). And third, the expansion population can serve as an example of the impact of a new population with little experience data, and states may decide to avoid over- or under-compensation to MCOs by adding risk mitigation strategies (discussed in the next section) for the first one or two years of a new program or population.

4.4 Risk Mitigation

States can provide MCOs some protection from unanticipated risks of high-cost populations or treatments using one of several risk mitigation mechanisms. Risk mitigation mechanisms are intended to reduce unexpected volatility and provide a more stable revenue basis, and can help stabilize an MCO's margin. Risk mitigation helps MCOs maintain needed levels of margin but also introduces additional financial uncertainty that is not resolved until after the plan year is completed. The most common risk mitigation mechanisms follow.

- *Risk adjustment.* Risk adjustment is a statistical method of determining the level of individual or group risk relative to the overall population. Individuals with lower risk

scores are expected to consume fewer resources; individuals with higher risk scores are expected to consume more resources. Risk adjustment is typically applied on a statewide or regional basis, such that MCOs with higher risk members will receive payments from MCOs with lower risk members. Risk adjustment is typically budget neutral and does not impact the overall payments made by the state—it merely redistributes a portion of the dollars to MCOs that are believed to have higher risk members. Risk adjustment methodologies vary by state and differ in their accuracy of risk assessment.¹²

- *Risk corridors.* Risk corridors soften the impact to risk-bearing entities if actual costs are much higher or lower than expected. For example, with a 10% risk corridor, the MCO would absorb all risk below 110% of expected costs, and the state and the MCO would share the risk above 110%. Correspondingly, corridors can be used to limit MCO profitability. In the parallel example, the MCO would keep gains to 90% of expected costs, but would share the gains if costs are below 90% of expected.

Some states have risk corridors on all costs, but it is more common for corridors to apply for the costs of a specific population such as the ACA expansion population or hepatitis C members.

- *Kick payments.* A kick payment is a type of preset payment provided by the state for a given case or member condition, such as pregnancy and delivery. Kick payments remove the risk of incidence of a condition so that the MCO's risk is limited to management of the cost of the case. Similar to capitation rates, kick payments do not protect the MCO from unanticipated costs such as those resulting from high-cost treatments or drugs.
- *Carve-outs.* Some states carve certain benefits or populations out of the MCO capitation. Behavioral health and foster children are examples that are frequently carved out of MCO capitation rates. Carve-outs may shelter MCOs from certain risks, but can also interrupt integrated care management. For this reason, many states are reversing carve-outs and adding services and populations into their MCO programs each year.
- *Reinsurance.* Reinsurance is commonly used for patients with HIV, hepatitis C, transplants, or other high-cost conditions. It is also used for very high-cost claimants regardless of a specific condition. It can be structured in many ways, but generally the state covers either the full cost or a portion of the cost over a certain threshold.

¹² A comprehensive study of risk adjustment methods was published by the Society of Actuaries in October 2016 and can be found at <https://www.soa.org/Research/Research-Projects/Health/2016-accuracy-claims-based-risk-scoring-models.aspx>

The MCO executives interviewed were asked about risk adjustment and risk mitigation programs. The consensus is that, in general, risk adjustment fairly transfers premium amounts for average populations, but is not as fair for the portion of members with very high costs and very low costs. MCOs that are taking risk for LTSS are not satisfied with risk adjustment and agree that there is not a generally accepted, fair model for LTSS costs. If risk adjustment is working correctly, there will be a neutral impact to margin. If it is not working correctly, margin may be unfairly distributed between the MCOs in the program.

4.4.1 Value-based payment

Value-based payment models (VBP) have been growing in terms of their use among contracts between Medicaid MCOs and providers, although the use of VBP varies widely from state to state, and indeed from MCO to MCO within a state. These programs, described briefly in Section 3.3.3, seek to transfer risk from the MCO to a provider or group of providers, and can range from a low transfer of risk (pay-for-quality models) to a total transfer of risk (full capitation) and include all levels of risk in between.

VBP programs can align financial incentives for MCOs and providers and empower providers to manage patients' utilization and quality while sharing in the financial savings that result. To the extent that risk is effectively transferred to providers, VBP models can alleviate some pressure on margins by reducing some cost variability. However, by sharing the financial upside with providers, an MCO may reduce its own margin opportunity.

If an MCO has a significant share of its costs in full-risk VBP models with providers, the transfer of risk can reduce the MCO's required RBC, which can also reduce the margin required to fund RBC. However, MCO executives interviewed expressed concern that these models can require investment in systems and reporting infrastructure, as well as additional contracting resources, which can put pressure on margins. Furthermore, it is possible that an MCO will retain the risk of provider insolvency. If the provider cannot pay claims, the MCO may need to contribute funds to cover some or all of the cost of care. While these models are certainly gaining momentum among MCOs and Medicaid providers, the ultimate effect on margins may take some time to understand.

Many states encourage MCOs to engage in VBP programs, and a few states mandate that a portion of payment, or number of contracts, be in value-based payment models. As mentioned previously, the new rule has clarified that states may mandate VBP contracting by MCOs.

4.5 Administrative Expenses

Another important element of the expense side of the margin calculation is the MCO's administrative costs, which generally include all costs that aren't specifically generated in the delivery of care, and are required to operate the MCO. They include non-direct health care costs,

such as case management, salaries and bonuses, and other operating expenses, such as claims and member services call centers. Under MLR guidelines, maintaining low administrative costs is a key driver of realized margin. Most MCO executives interviewed suggested that administrative expenses have been increasing due to expansions of populations served and new state administrative requirements, but MCOs have been able to manage overall administrative trends by doing more with less. While administrative costs have not been problematic in recent years, many MCOs are concerned that additional regulations and state cutbacks, as new populations are stabilized, will put more pressure on administrative costs in the coming years.

As described in Section 3.3.2, amounts built into capitation rates for administrative costs are usually defined by the state as a percentage or a fixed PMPM or a combination, and these assumptions are developed based on overall administrative costs for all MCOs in the state. To the extent that an MCO's administrative costs are higher or lower than the assumed amounts, that MCO's margin will be affected. Therefore, in terms of operations, administrative efficiency is important. Efficiency is usually generated by scale in terms of membership; larger MCOs have greater efficiency. And, to the extent that MCOs can operate below the administrative assumption allowed for in the capitation rates, this generates additional margin for the MCO.

Some administrative costs can help defray health care costs, as in care management activities—such as case management, utilization management, chronic condition management or other programs—that help patients seek the most efficient place of care and keep them out of the inpatient setting as much as possible. However, according to interviewed executives, in many states, allowances for administrative costs built into the capitation rates have been decreasing over time, reducing resources available to invest in care management and reduce costs. These reductions may be based in part on the data provided by the MCOs, and in part on areas where budget constraints can be reflected in the rates. In addition, when an MCO begins to cover a new population, administrative costs are higher in early years of operations, as the MCO is investing in new systems and care management programs, but interviewed executives are concerned that capitation rates do not adequately cover these early costs.

Administrative costs can vary considerably between populations, due to different needs in terms of care management, utilization of services (number of claims), social services, and other needs. Lower cost populations, such as TANF, have fewer claims to process but also have lower premium amounts; conversely, disabled populations have higher resource demands but also have higher premiums. These elements must be balanced and an appropriate administrative expense percentage set for each population. Most states do use different assumptions for different populations, but interviewed MCO executives did express concern in those instances where states use a constant assumption across all populations, because of the variation in administrative costs among different populations.

As mentioned in Section 4.2, pass-through expenses can generate unanticipated administrative costs. These payments can be significant, but most MCOs were not concerned that pass-through payments are distorting administrative costs or margins, especially since some states provide additional administrative allowance to administer pass-through payments, typically 1%–2% of the payment.

A final type of cost that could be considered administrative is income tax. For-profit MCOs pay income taxes but are subject to the same administrative and margin assumptions as nonprofit MCOs. Therefore, margin for for-profit MCOs must also cover income tax, and, according to interviewed executives, taxes can be a significant impact to margin. For example, an earned margin of 2% actual becomes 1.4% after paying the standard 35% federal corporate tax rate. State taxes can reduce this to an even lower rate.

4.6 Contribution to Capital and Investment

All state insurance departments, and other agencies with oversight of Medicaid MCOs, require insurers to hold a minimum amount of capital (RBC) to provide for solvency in the event of medical cost and administrative expense volatility, and to support business operations in consideration of the insurer's size and risk profile.¹³ As such, some amount of margin is needed to maintain RBC requirements each year. Based on interviews, this amount is between 0.3% and 1% of revenue, which can be a substantial portion of the MCO's margin in a given year. Some states have higher RBC requirements, dictating the higher end of that range. And, in periods of high growth or new markets, more margin is required to sustain RBC requirements. In addition, holding RBC creates an opportunity cost, in that it ties up capital that could be used for investments in other lines of business, programs or infrastructure that could generate additional margin.

MCOs must spend margin to contribute to other investments. Encounter data submission to states and the processes to submit it can require not only a one-time investment to implement, but also substantial resources to process and submit on a regular basis. According to the interviews, submission of encounter data is becoming more complicated over time, and states are assessing higher penalties for noncompliance. However, more accurate encounter data can also drive better risk adjustment coding, which can in turn generate higher risk adjustment payments, improving the MCO's margin and offsetting the costs required to submit accurate encounter data. However, higher risk adjustment payments will only be realized to the extent that a given MCO's risk score is higher than the other MCOs in a given market, further stressing the importance of accurate encounter data.

¹³ The National Association of Insurance Commissioners website has more information on risk-based capital requirements: http://www.naic.org/cipr_topics/topic_risk_based_capital.htm

MCOs periodically need to invest in new information technology systems, care management resources, patient communication systems and other investments. Based on interviews, however, the administrative fee assumptions built into the capitation rates typically don't increase to account for additional resources needed. Instead, these costs are paid from margin.

4.7 MCO Characteristics

The preceding subsections discuss several factors that can impact margins, and that discussion is based on the qualitative findings from the interviews with MCO executives. The discussion switches now to more quantitative findings. Using publicly available annual statement data from Health Management Associates (HMA), we analyzed actual margins across MCOs in most states. These data showed that margins vary significantly across MCOs, with various comparisons based on an MCO's own characteristics, most notably the following:

- MCO size, measured by Medicaid membership;
- For-profit versus nonprofit;
- Provider organization ownership or other ownership; and
- Maturity of the MCO in serving a Medicaid population.

We did not find any characteristic that demonstrated a significant correlation to margin. However, it is still worthwhile to observe margin for different contrasting characteristics. In Sections 4.7.2 through 4.7.5 that follow, margin is presented across these four characteristics to distinguish correlations between them. First, however, we provide a discussion of the metrics presented.

4.7.1 Financial metrics and margin calculation

The annual statement financial results summarized in Appendix 1 are an aggregate of the MCOs' results by state for all lines of business (LOBs). Also available in the data are Medicaid-specific statistics like membership, revenue and medical expense. However, administrative expense specific to the Medicaid LOB is not available from the annual statement data. Based on the financial data, we have created a statistic that identifies Medicaid dominance: an MCO is Medicaid dominant in a state if its Medicaid revenue represents 90% or more of its overall revenue in that state.

We also created a statistic called Implied Margin, which is intended to estimate Medicaid margin for MCOs with multiple LOBs, and for which Medicaid is not the dominant LOB. Implied margin is calculated as:

$$1 - (\text{MLR for Medicaid}) - [(\text{administrative costs for all LOBs}) / (\text{revenue for all LOBs})]$$

Thus, implied margin assumes that the administrative percentage for Medicaid is the same as the administrative percentage for all LOBs. This is not necessarily an accurate assumption, and the calculation provided some extreme results. Therefore, only Medicaid dominant MCOs are shown in the data in the following subsections.

In Sections 4.7.2 through 4.7.5 that follow, margin is presented across these four characteristics to distinguish differences. The subsections that follow describe the key MCO characteristics that may have an impact on margin, such as: for-profit/nonprofit status; whether the MCO is owned by a health system or other provider; the MCO's size in terms of membership or revenue; and the state of the market in general.

4.7.2 Size

Based on the financial data analyzed, larger MCOs have seen higher margins on average than smaller MCOs in recent years, although 2015 did not follow this pattern. Scale would be expected to contribute to higher margins because a larger population reduces random volatility, and because fixed administrative costs can be spread over a larger number of members.

Figure 3 shows the distribution of margin in 2015 for MCOs with more than or less than 100,000 members for Medicaid-dominant MCOs. It is important to note that MCOs with multiple lines of business (Medicaid plus commercial and/or Medicare) tend to be larger MCOs, but the discussion that follows is limited only to MCOs for which Medicaid is the dominant line of business.

Also shown is the average margin realized in 2015 by Medicaid-dominant MCOs above or below the 100,000 threshold. The average margin is calculated as a straight average for all MCOs and is not weighted by membership or revenue (i.e., all MCOs have equal weight in the average regardless of size).

Figure 3

MARGIN BY SIZE FOR MCOS FOR WHICH MEDICAID IS THE DOMINANT LINE OF BUSINESS: 2015

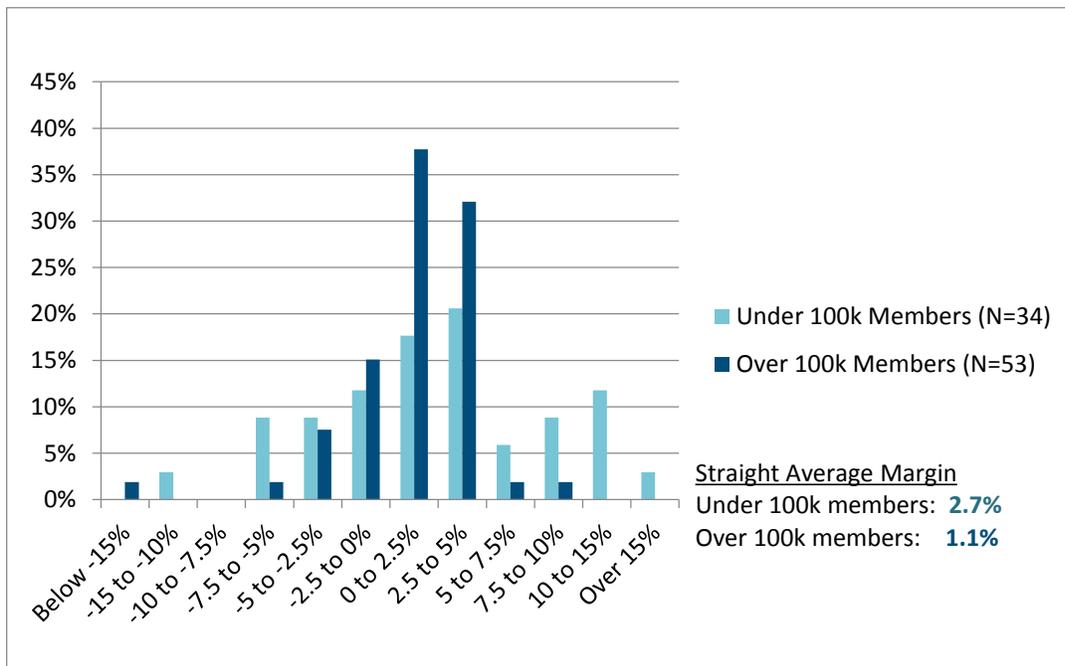


Chart excludes outlier margin amounts greater or less than 50%.

2015 margin was more tightly distributed in large MCOs than small. This difference in distribution was also observed in 2014 (see Figure 4). However, the fact that margin was higher on average in smaller plans is not expected, and 2015 is in fact anomalous. In 2014 and 2013, average margin was higher for larger Medicaid-dominant MCOs than smaller Medicaid-dominant MCOs (see Figures 4 and 5). In 2014, smaller Medicaid-dominant MCOs experienced an average loss of 0.9% and larger MCOs had an average gain of 1.5%. 2014 was the first year that the ACA expansion population was introduced into managed care in many states.

Figure 4

MARGIN BY SIZE FOR MCOS FOR WHICH MEDICAID IS THE DOMINANT LINE OF BUSINESS: 2014

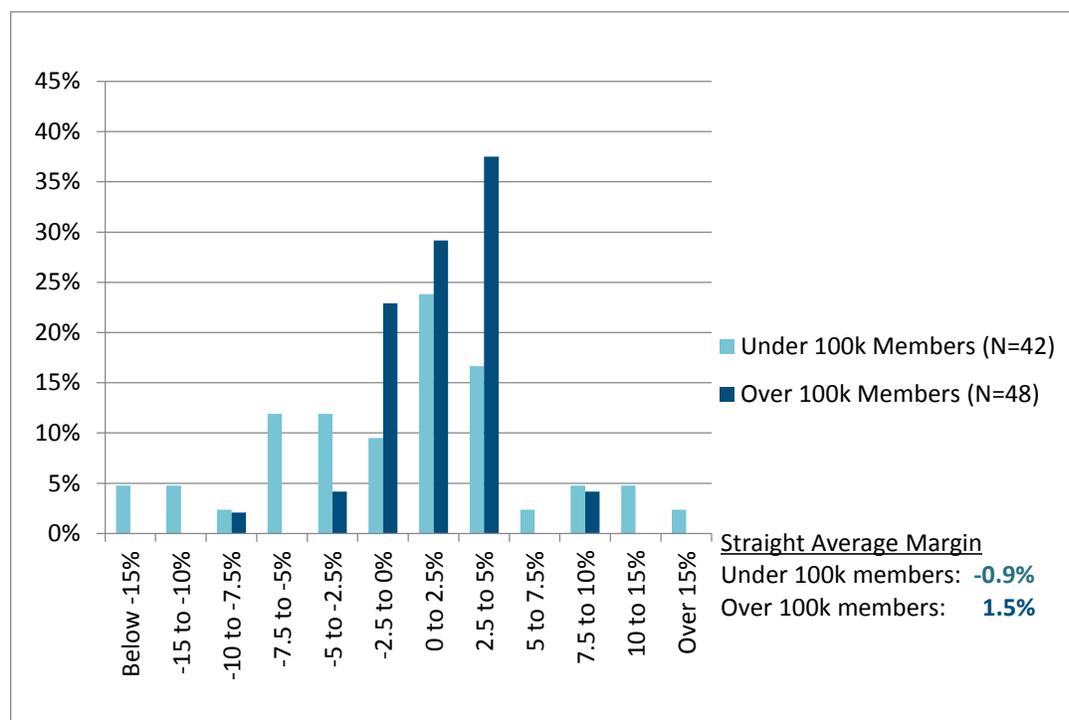


Chart excludes outlier margin amounts greater or less than 50%.

2014 margins showed more variability than 2013 margins, presumably because of the introduction of ACA expansion adults. Small MCOs experienced a loss on average in 2013, while large plans experienced a modest gain, as shown in Figure 5.

Figure 5

MARGIN BY SIZE FOR MCOS FOR WHICH MEDICAID IS THE DOMINANT LINE OF BUSINESS: 2013

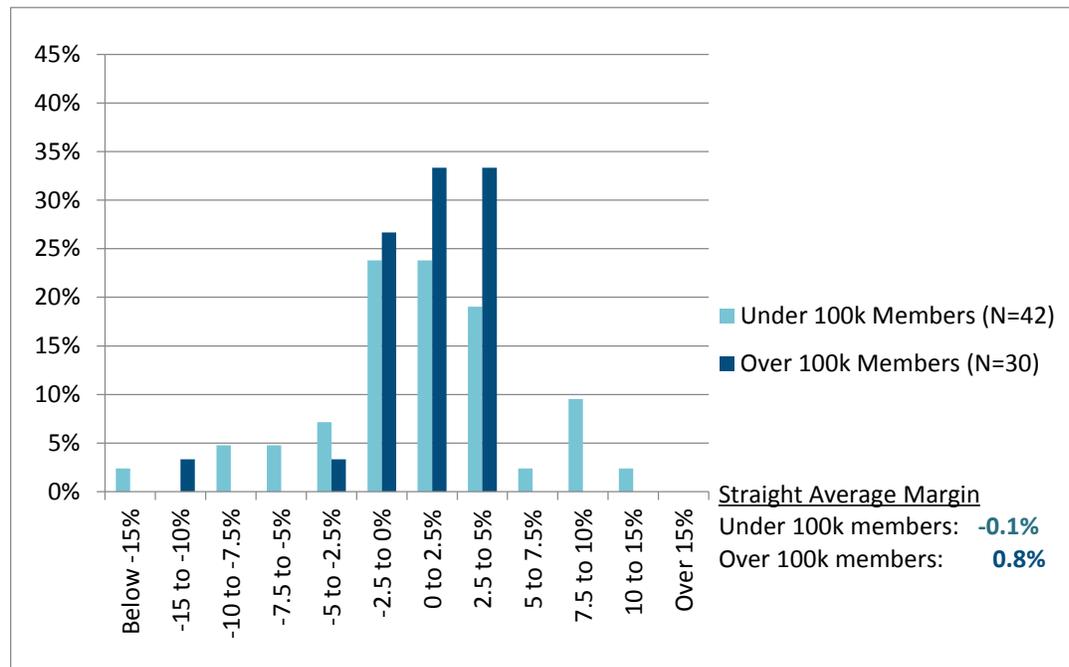


Chart excludes outlier margin amounts greater or less than 50%.

4.7.3 For-profit versus nonprofit

Based on the executive interviews, nonprofit MCOs tend to have lower expectations for margin. Many nonprofit MCOs have a strategic goal to provide some level of community benefit, which, in many cases, enables them to maintain their nonprofit 501(c)(3) status. Community benefit may be built into the MCO’s cost structure, or it may come out of margin at the end of the year, but in either case it reduces the overall margin.

For-profit MCOs tend to have higher expectations for margin, since they are expected to produce a return to their owners or shareholders. However, for-profit MCOs must also pay income tax, which can reduce their margins.

Figure 6 shows the distribution of 2015 margin, comparing for-profit and nonprofit MCOs. Nonprofits show a tighter distribution, with an average margin of 1.5%. Average margin for for-profits was not significantly greater than margin for nonprofits at 1.8%. However, more for-profits had margins above 5%.

Figure 6

MARGIN BY PROFIT/NONPROFIT STATUS FOR MCOS FOR WHICH MEDICAID IS THE DOMINANT LINE OF BUSINESS: 2015

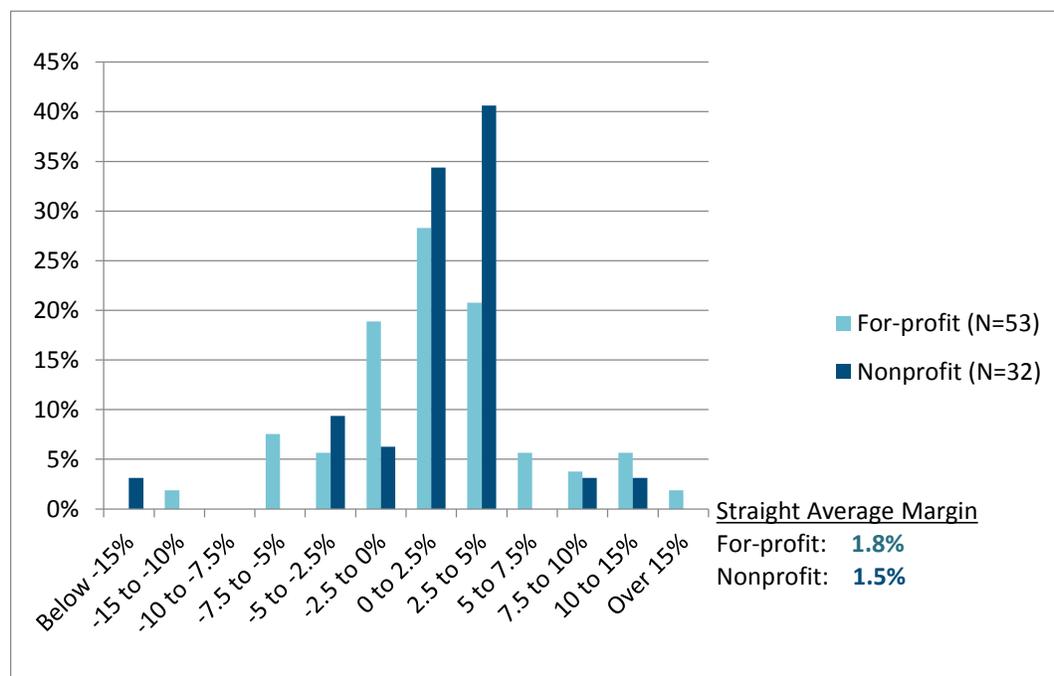


Chart excludes outlier margin amounts greater or less than 50%.

In 2014 (see Figure 7), similar to 2015, for-profits had an average margin above, but not significantly above, the average nonprofit margin.

Figure 7

MARGIN BY PROFIT/NONPROFIT STATUS FOR MCOS FOR WHICH MEDICAID IS THE DOMINANT LINE OF BUSINESS: 2014

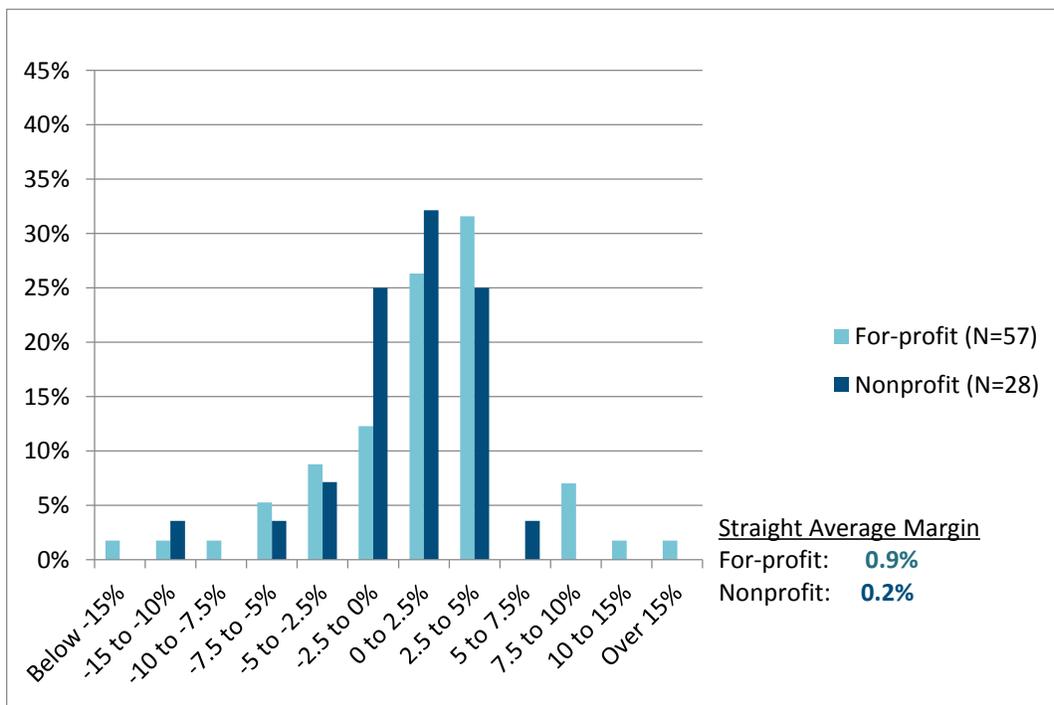


Chart excludes outlier margin amounts greater or less than 50%.

In 2013, the average gain for nonprofits was slightly higher than for for-profits (Figure 8).

Figure 8

MARGIN BY PROFIT/NONPROFIT STATUS FOR MCOS FOR WHICH MEDICAID IS THE DOMINANT LINE OF BUSINESS: 2013

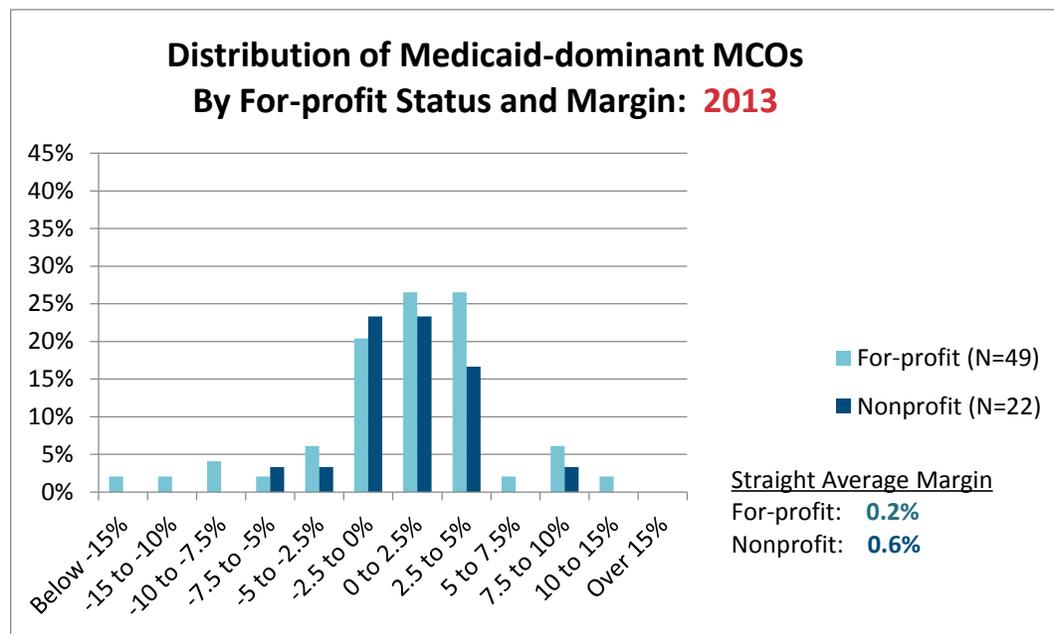


Chart excludes outlier margin amounts greater or less than 50%.

4.7.4 Provider-owned versus insurer owned

Most provider-owned MCOs are also nonprofit, and their results mirror the nonprofit margin results. Financials results for provider-owned plans are outlined in Section 4.7.6 later in this report.

Based on the interviews, many provider-owned MCOs are concerned about adverse selection to their plans, because their health system brand may attract less healthy enrollees, and risk adjustment transfer payments may not fully capture the difference in risk between populations enrolled in their MCOs versus others. Provider-owned MCOs tend to be less sophisticated about insurance functions, such as claims payment, call centers, and risk adjustment analysis and reporting, and often outsource these capabilities. This may lead to less than optimal risk score transfers because the provider organizations have less sophistication and control over the claims and encounter data that is used to calculate risk adjustment scores at the state level. However, according to interviewed executives, the ability of provider-owned MCOs to manage care and refer care into an integrated network may mean that they have lower medical and pharmacy costs for similar risk tiers than their nonprovider counterparts. Their patients may in fact be less healthy, but they believe they do a better job managing these members over time. MCOs that

are not provider owned believe that provider-owned MCOs have a close connection to a high portion of providers, and can therefore encourage greater services and diagnoses that can lead to higher risk adjustment payments.

4.7.5 Maturity

Almost all executives interviewed mentioned that it can take two and sometimes three years before MCOs can achieve positive margin for a new market or population, and this is for several reasons. First, in anticipation of a new population, an MCO must invest in resources to provide the appropriate level of service to that population. In addition to needing a proportionately greater amount of variable administrative services, MCOs may also need to invest in and train new resources for evaluation and care management of a population with different needs than the MCO's existing population. Second, MCOs must increase staff and administrative resources in advance of a new population and the revenue to support the additional resources comes later. That timing difference can put a strain on margins in multiple financial reporting years.

However, a more mature plan may find it difficult to continually reduce health care utilization each year. Care management programs can be effective, but once savings are achieved and new patterns of care established, costs still increase each year.

4.7.6 Financial summary chart

Figures 9 through 12 provide a comparison of all MCOs for which 2015 financial data were available. For non-Medicaid dominant plans, margin is calculated using the implied margin calculation outlined in Section 4.7.1. These charts show a bubble for each MCO, and the size of the bubble represents the number of members in the MCO. Figures 9 and 10 compare nonprofit MCOs, with one chart for provider-owned MCOs and the other showing non-provider-owned MCOs. Figures 11 and 12 are similar but compare for-profit MCOs.

Although there may be an expectation for correlation between larger plans and higher margins, or between higher margin percentages built into state capitation rates and actual margins, no significant conclusions can be drawn from observing the 2015 financial data.

Figure 9

2015 MARGIN PERFORMANCE AND STATE-ALLOWED MARGIN, NONPROFIT NON-PROVIDER-OWNED MCOS

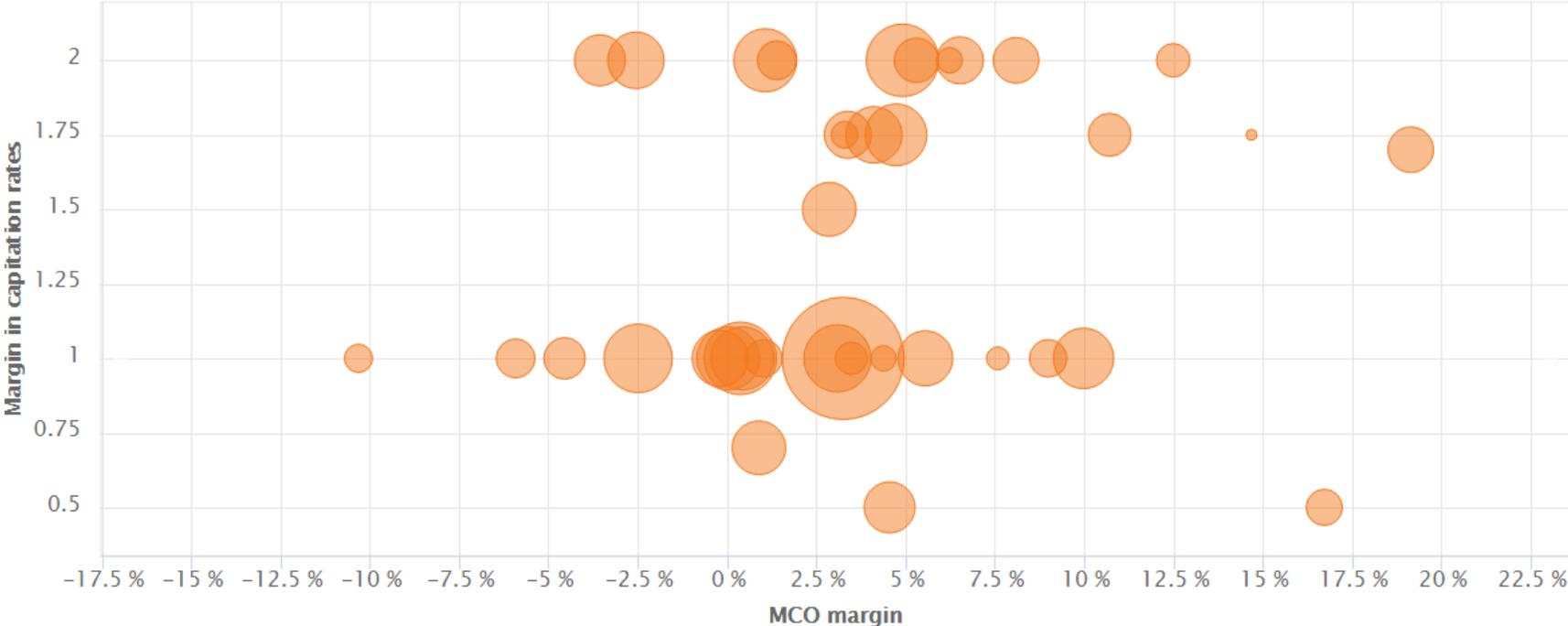


Figure 10

2015 MARGIN PERFORMANCE AND STATE-ALLOWED MARGIN, NONPROFIT-PROVIDER-OWNED MCOS

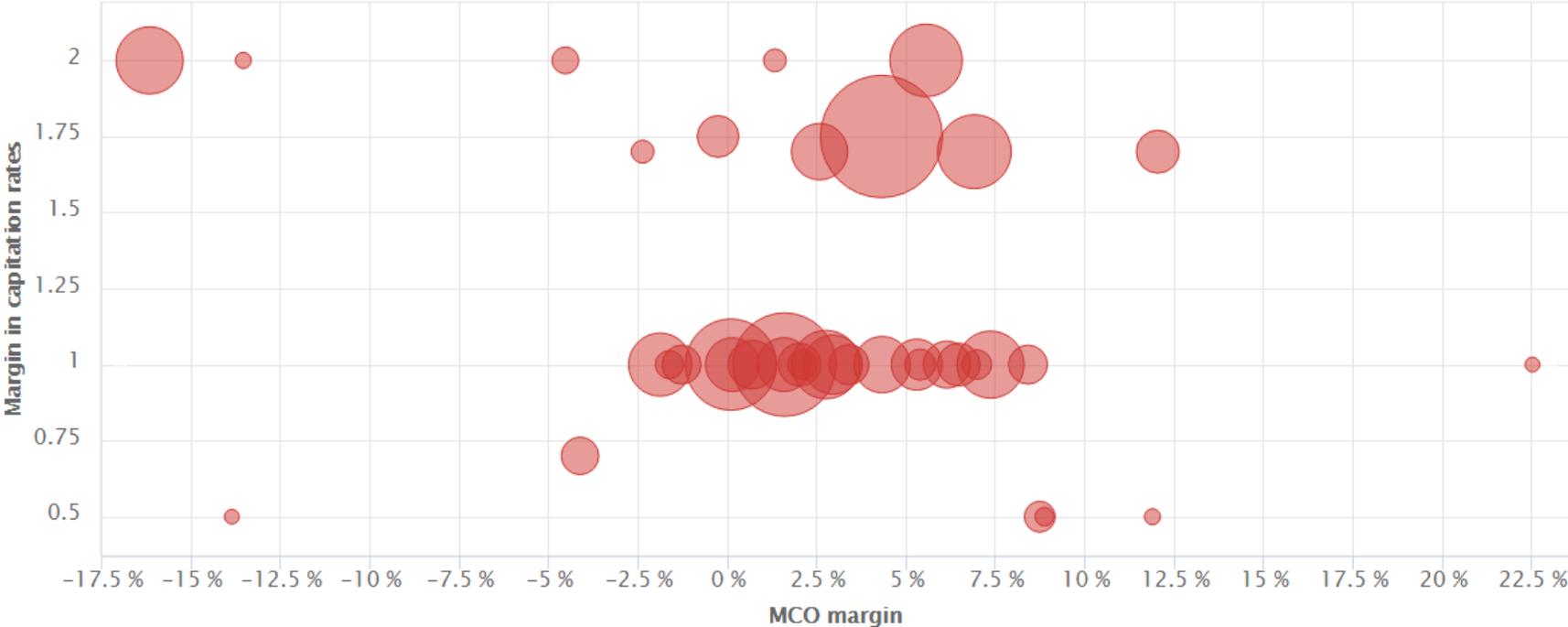


Figure 11

2015 MARGIN PERFORMANCE AND STATE-ALLOWED MARGIN, FOR-PROFIT NON-PROVIDER-OWNED MCOS

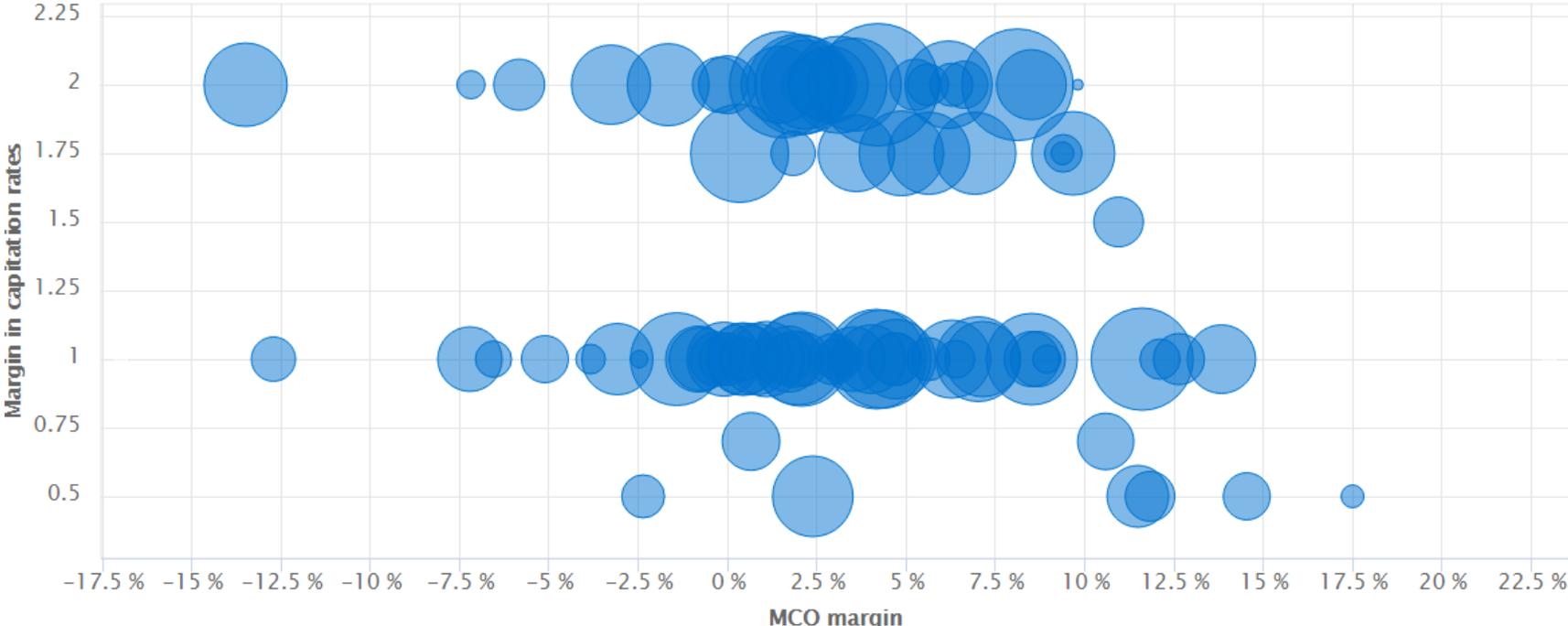
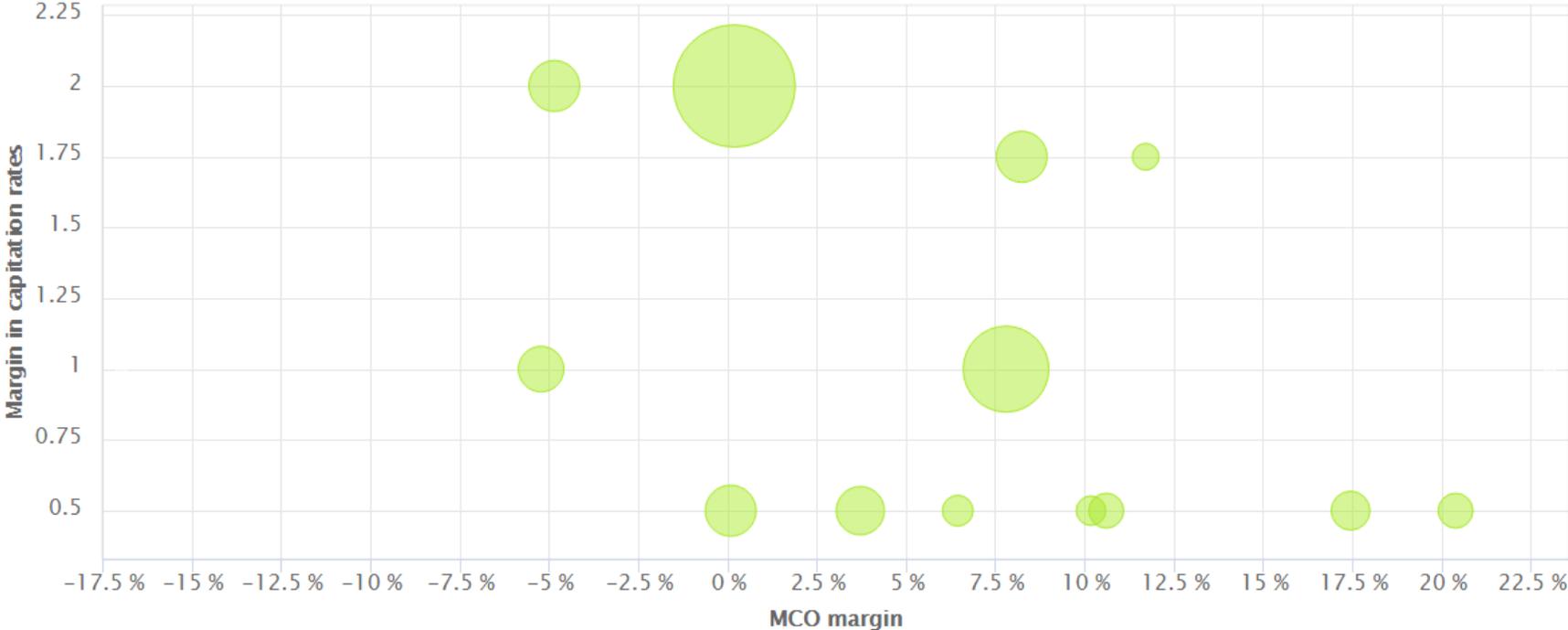


Figure 12

2015 MARGIN PERFORMANCE AND STATE-ALLOWED MARGIN, FOR-PROFIT PROVIDER-OWNED MCOS



4.8 Conclusion: Evolution of Managed Medicaid

It is interesting to review MCO performance over the recent few years, but it is more important to consider how the various factors and considerations discussed in this report may impact margins in the future, as Medicaid managed care continues to evolve.

One element that is certain to affect reimbursement to Medicaid MCOs is the continuing pressure on state budgets. Health care trends are moderating, but health care costs continue to grow at a rate faster than overall inflation. Medicaid is a significant and growing portion of all state budgets, accounting for about 15% of state spending in state fiscal year 2013.¹⁴ States with Medicaid managed care programs are likely to pass along budget reductions to MCOs in the form of reduced capitation rates, which may lead to insufficient margins.

Another evolving area is the expansion of managed care, both into states that are currently covering Medicaid enrollees on a fee-for-service basis, and into new populations for states that currently use managed care. Most states already cover the TANF population through managed care, but other populations have historically been covered by traditional Medicaid (FFS). However, this has been shifting in recent years and MCOs are covering more complex and unpredictable populations via managed care. In addition, the trend across the country is for states to push their managed care programs to expand covered services, reversing many years of carving out populations and services, such as behavioral health and long-term care. These new populations and benefits add uncertainty, and therefore cost volatility and the potential for excess or insufficient margins in the short term. The belief, however, is that integrating benefits and services will lead to more “whole-person” care, better quality, and lower costs in the long run. Populations or benefits coming into managed care programs include (but are not necessarily limited to) the following:

- *Long-term services and supports (LTSS)*: LTSS utilization and costs are less variable than for some other populations, but reliable data may not be as readily available as for other populations, and the data may not match the population that will be covered. Also, risk adjustment is difficult because there is no generally accepted risk adjustment system that has been adopted by states.
- *Children with medical complexity*. The cost of children with medical complexity can be highly variable, and their administrative needs are also very different than other

¹⁴ from state general funds and other nonfederal amounts that are not a part of general funds, such as provider taxes levied for Medicaid purposes
<https://www.macpac.gov/subtopic/medicaids-share-of-state-budgets/>

Medicaid populations. They require more social services and nonmedical costs than other populations.

- *New benefit “carve-ins.”* Some benefits or populations, such as behavioral health and HIV benefits, have commonly been carved out of managed care plans in the past, but states are moving these benefits into managed care programs.

In addition, CMS released comprehensive new rules aimed at aligning Medicaid and CHIP managed care with other insurance programs. CMS’s focus on quality, rate transparency, network adequacy and MCO member experience is likely to continue. In addition, CMS and states continue to expand their support for value-based contracting options and will likely continue to seek greater alignment between providers and MCOs as a tool to increase quality while lowering cost trends. While no one can predict the rate of change across all 50 states, MCOs will want to pay close attention to these changes and work with their states to ensure smooth transitions. As MCO requirements change, margin requirements may need to be reevaluated for appropriateness.

As states and MCOs look to the rapidly changing future, one certainty is that Medicaid programs will continue to evolve and MCOs will continue to play a role in this evolution. Margin is necessary to support unanticipated deviation in costs, capital needs, investments, taxes and contributions to shareholders. However, the appropriate *level* of margin will depend on many factors, including the programs and benefits covered, risk mitigation mechanisms in place, new populations coming under managed care and other factors, many of which have been discussed in this report.

Section 5: Scope, Data, Methodology and Assumptions

5.1 Research Scope

The SOA commissioned this study with the following goals in mind:

- Examine the considerations for estimating adequate margins needed for a Medicaid MCO providing comprehensive benefits.
- Produce objective measures and benchmarks that can be used when estimating required margin.
- Facilitate understanding, quantifying and managing the risks associated with the Medicaid Managed Care rates.
- Provide an analysis of the components of margin for an MCO and how they vary according to the characteristics of the MCO accepting the rates.
- Summarize in a report that would be a comprehensive guide to the factors that contribute to needed margin and include discussion of the nature and extent of any adjustments to these factors.

Other issues intended to be addressed in the report included, but were not limited to:

- How do the characteristics of the covered population change the margin estimate?
- How does the margin vary by type and extent of covered services?
- How does the nature of the delivery system factor in to the calculation of margin?
- How does the maturity of the managed care program impact the estimate?
- How does the presence of risk mitigation provisions impact margin requirements?

5.2 Data and Methodology

Financial data, presented in appendices, were provided by Health Management Associates (HMA), from NAIC Annual Statement data, sourced from S&P Global Market Intelligence. Not every state requires Medicaid MCOs to submit Annual Statements, so not every MCO is represented. MCOs in California and Arizona are shown with a limited set of metrics, based on what was available and provided by HMA. These data were used to calculate margin and implied margin, as shown in Section 4 and in Appendixes 1 and 2. HMA also provided for-profit/nonprofit status and provider ownership status.

Interviews with MCO financial and actuarial executives were conducted from April 2016 through September 2016. We spoke with 26 MCOs, representing 90 individual plans in 35 states. These interviews lasted 45 minutes, and questions centered on margin and drivers of margin, including:

- Margin performance in the current and recent periods;

- Margin expectations for the future;
- Quantification of the required components of margin, if applicable, including required investments, risk-based capital, taxes and other components of margin;
- The impact on margin of medical and pharmacy costs and trends;
- The impact on margin of risk adjustment and other risk mitigation strategies;
- The market environment in a given state, including revenue from the state and the impact of competing MCOs; and
- Open discussion of other factors affecting margin.

5.3 Limitations

All financial data were collected in March through June 2016. Financial data for most MCOs was available for the three years: 2013, 2014 and 2015. Most financials are from annual statements filed with state insurance departments

MCOs in certain states do not file financials with insurance departments, but instead through Medicaid departments. These include MCOs in Arizona and California, and some additional MCOs that are not insurers registered with the state. The data for these MCOs is incomplete or missing from the data tables and the summaries.

Actuarial reports supporting state capitation calculations, also known as ratebooks or databooks, were collected by HMA from the states, and include the most recent available during the time period of March through July 2016. In some cases the ratebooks were not available. Summary statistics from the ratebooks are shown in Appendix 3.

Appendixes

Appendix 1: Summary of Financial Results for 2013, 2014 and 2015

For-profit versus nonprofit

	2013			2014			2015		
	For Profit	Not for profit	Total	For Profit	Not for profit	Total	For Profit	Not for profit	Total
0-24k lives									
Number of plans	23	18	41	14	18	32	14	14	28
Average membership	10,784	10,004	10,441	10,166	12,889	11,697	11,126	10,765	10,945
Total claims	2,408,088	1,141,454	3,549,542	663,990	1,230,882	1,894,872	1,054,501	1,560,975	2,615,476
Claims PMPM	\$809.10	\$528.26	\$690.97	\$388.79	\$442.14	\$421.85	\$564.17	\$863.16	\$711.20
Total prem. (000)	\$2,813,289	\$1,358,242	\$4,171,531	\$768,120	\$1,402,824	\$2,170,945	\$1,343,447	\$1,783,152	\$3,126,599
Premium PMPM	\$945.25	\$628.59	\$812.05	\$449.76	\$503.90	\$483.32	\$718.76	\$986.02	\$850.19
Margin %	1.4%	5.6%	3.2%	0.5%	0.3%	0.4%	9.5%	3.3%	6.4%
25k - 49k lives									
Number of plans	15	8	23	12	10	22	11	9	20
Average membership	36,498	35,694	36,218	37,675	40,201	38,823	39,900	34,077	37,280
Total claims	1,667,010	967,499	2,634,509	1,900,691	1,158,085	3,058,776	1,649,452	1,048,966	2,698,417
Claims PMPM	\$253.75	\$282.35	\$263.55	\$350.34	\$240.06	\$298.44	\$313.18	\$285.02	\$301.60
Total prem. (000)	\$1,910,705	\$1,060,527	\$2,971,232	\$2,193,322	\$1,313,660	\$3,506,982	\$1,932,515	\$1,163,458	\$3,095,973
Premium PMPM	\$290.84	\$309.50	\$297.24	\$404.28	\$272.31	\$342.17	\$366.92	\$316.13	\$346.03
Margin %	2.4%	2.5%	2.5%	0.2%	5.6%	2.6%	-1.3%	-0.1%	-0.7%
50k - 99k lives									
Number of plans	22	17	39	28	16	44	22	19	41
Average membership	73,081	72,016	72,617	77,339	77,629	77,445	78,215	79,440	78,782
Total claims	4,576,358	3,561,295	8,137,653	7,096,839	3,918,881	11,015,719	6,532,167	4,994,314	11,526,481
Claims PMPM	\$237.20	\$242.41	\$239.45	\$273.10	\$262.93	\$269.39	\$316.35	\$275.74	\$297.37
Total prem. (000)	\$5,205,479	\$3,919,688	\$9,125,166	\$8,349,264	\$4,420,440	\$12,769,704	\$7,760,751	\$5,749,855	\$13,510,606
Premium PMPM	\$269.81	\$266.80	\$268.51	\$321.30	\$296.58	\$312.29	\$375.85	\$317.46	\$348.56
Margin %	3.3%	1.6%	2.6%	3.8%	1.1%	2.8%	3.6%	3.8%	3.7%
100k - 249k lives									
Number of plans	29	23	52	35	24	59	32	23	55
Average membership	167,354	161,935	164,957	176,039	160,449	169,697	171,330	170,634	171,039
Total claims	15,893,922	13,916,099	29,810,021	20,940,407	14,330,236	35,270,644	23,648,048	14,300,760	37,948,809
Claims PMPM	\$272.91	\$311.36	\$289.61	\$283.22	\$310.12	\$293.57	\$359.44	\$303.66	\$336.17
Total prem. (000)	\$18,498,392	\$15,333,192	\$33,831,583	\$24,632,137	\$15,916,438	\$40,548,575	\$27,401,493	\$16,530,147	\$43,931,641
Premium PMPM	\$317.63	\$343.07	\$328.68	\$333.15	\$344.44	\$337.50	\$416.50	\$350.99	\$389.17
Margin %	4.2%	1.4%	2.9%	3.5%	3.2%	3.3%	3.2%	3.4%	3.3%
250k+ lives									
Number of plans	17	7	24	24	11	35	35	16	51
Average membership	349,896	457,452	381,267	396,035	471,579	419,777	380,627	491,191	415,314
Total claims	18,682,187	12,626,653	31,308,840	29,684,934	19,854,815	49,539,749	45,888,957	29,491,935	75,380,892
Claims PMPM	\$261.73	\$328.60	\$285.13	\$260.26	\$318.96	\$280.99	\$287.05	\$312.72	\$296.57
Total prem. (000)	\$21,815,540	\$14,393,029	\$36,208,569	\$35,437,033	\$22,805,835	\$58,242,868	\$54,888,960	\$33,436,313	\$88,325,272
Premium PMPM	\$305.63	\$374.57	\$329.75	\$310.69	\$366.37	\$330.35	\$343.35	\$354.54	\$347.50
Margin %	3.8%	1.9%	3.3%	3.4%	2.5%	3.1%	4.0%	1.6%	3.2%
All Plans									
Number of plans	106	73	179	113	79	192	114	81	195
Average membership	124,573	118,035	121,907	163,063	138,154	152,814	185,262	169,758	178,822
Total claims	43,227,566	32,212,999	75,440,564	60,286,860	40,492,899	100,779,759	78,773,124	51,396,951	130,170,075
Claims PMPM	\$272.80	\$311.54	\$291.65	\$272.65	\$309.18	\$289.40	\$310.82	\$311.49	\$311.14
Total prem. (000)	\$50,243,405	\$36,064,676	\$86,308,081	\$71,379,876	\$45,859,197	\$117,239,073	\$93,327,166	\$58,662,925	\$151,990,091
Premium PMPM	\$317.08	\$348.79	\$329.60	\$322.82	\$350.15	\$332.99	\$368.24	\$355.52	\$363.23
Margin %	3.1%	2.7%	2.9%	2.8%	2.3%	2.6%	3.9%	2.7%	3.4%

Provider owned versus non-provider owned

	2013			2014			2015		
	Provider-owned	Non-provider-owned	Total	Provider-owned	Non-provider-owned	Total	Provider-owned	Non-provider-owned	Total
0-24k lives									
Number of plans	18	23	41	16	16	32	13	15	28
Average membership	12,702	10,785	11,626	14,372	11,690	13,031	13,784	8,485	10,945
Total claims	1,070,649	2,478,893	3,549,542	1,076,604	818,268	1,894,872	1,351,946	1,263,530	2,615,476
Claims PMPM	\$390.24	\$832.79	\$620.53	\$390.15	\$364.56	\$378.67	\$628.73	\$827.31	\$711.20
Total prem. (000)	\$1,260,877	\$2,910,654	\$4,171,531	\$1,257,344	\$913,600	\$2,170,945	\$1,580,310	\$1,546,289	\$3,126,599
Premium PMPM	\$459.58	\$977.84	\$729.27	\$455.65	\$407.03	\$433.84	\$734.94	\$1,012.45	\$850.19
Margin %	3.0%	3.4%	3.2%	1.4%	-0.6%	0.4%	8.8%	4.3%	6.4%
25k - 49k lives									
Number of plans	5	18	23	9	13	22	8	12	20
Average membership	35,777	38,410	37,838	40,819	37,441	38,823	36,598	37,734	37,280
Total claims	498,860	2,135,648	2,634,509	956,985	2,101,790	3,058,776	749,104	1,949,314	2,698,417
Claims PMPM	\$232.39	\$257.41	\$252.27	\$217.08	\$359.84	\$298.44	\$213.21	\$358.74	\$301.60
Total prem. (000)	\$554,720	\$2,416,512	\$2,971,232	\$1,096,799	\$2,410,183	\$3,506,982	\$829,515	\$2,266,458	\$3,095,973
Premium PMPM	\$258.42	\$291.27	\$284.51	\$248.79	\$412.64	\$342.17	\$236.10	\$417.11	\$346.03
Margin %	1.5%	2.7%	2.5%	5.1%	0.9%	2.6%	-1.9%	0.0%	-0.7%
50k - 99k lives									
Number of plans	14	25	39	11	33	44	11	30	41
Average membership	74,197	71,732	72,617	78,291	77,163	77,445	76,676	79,554	78,782
Total claims	2,982,037	5,155,616	8,137,653	2,554,746	8,460,973	11,015,719	2,485,616	9,040,865	11,526,481
Claims PMPM	\$239.23	\$239.58	\$239.45	\$247.21	\$276.90	\$269.39	\$245.58	\$315.68	\$297.37
Total prem. (000)	\$3,306,751	\$5,818,415	\$9,125,166	\$2,872,838	\$9,896,866	\$12,769,704	\$2,810,280	\$10,700,325	\$13,510,606
Premium PMPM	\$265.28	\$270.38	\$268.51	\$277.99	\$323.89	\$312.29	\$277.66	\$373.62	\$348.56
Margin %	2.1%	2.8%	2.6%	0.3%	3.7%	2.8%	3.6%	3.7%	3.7%
100k - 249k lives									
Number of plans	15	37	52	18	41	59	19	36	55
Average membership	192,675	164,141	172,372	189,289	171,573	176,978	171,732	170,673	171,039
Total claims	8,103,789	21,706,232	29,810,021	9,981,036	25,289,608	35,270,644	10,723,455	27,225,353	37,948,809
Claims PMPM	\$233.66	\$297.84	\$277.15	\$244.12	\$299.59	\$281.49	\$273.87	\$369.25	\$336.17
Total prem. (000)	\$9,131,264	\$24,700,319	\$33,831,583	\$11,108,216	\$29,440,359	\$40,548,575	\$12,576,324	\$31,355,316	\$43,931,641
Premium PMPM	\$263.29	\$338.92	\$314.54	\$271.68	\$348.76	\$323.61	\$321.19	\$425.27	\$389.17
Margin %	2.4%	3.2%	2.9%	3.6%	3.2%	3.3%	3.6%	3.1%	3.3%
250k+ lives									
Number of plans	1	23	24	3	32	35	6	45	51
Average membership	252,708	386,856	381,267	293,476	431,618	419,777	434,059	412,815	415,314
Total claims	1,133,394	30,175,447	31,308,840	2,725,121	46,814,628	49,539,749	7,718,780	67,662,112	75,380,892
Claims PMPM	\$373.75	\$282.62	\$285.13	\$257.94	\$282.46	\$280.99	\$246.98	\$303.53	\$296.57
Total prem. (000)	\$1,263,441	\$34,945,128	\$36,208,569	\$3,005,099	\$55,237,769	\$58,242,868	\$8,479,298	\$79,845,974	\$88,325,272
Premium PMPM	\$416.63	\$327.29	\$329.75	\$284.44	\$333.28	\$330.35	\$271.32	\$358.18	\$347.50
Margin %	0.0%	3.4%	3.3%	-1.8%	3.6%	3.1%	1.9%	3.4%	3.2%
All Plans									
Number of plans	53	126	179	57	135	192	57	138	195
Average membership	86,587	140,505	124,540	100,810	178,270	155,274	126,012	200,635	178,822
Total claims	13,788,729	61,651,835	75,440,564	17,294,492	83,485,267	100,779,759	23,028,901	107,141,174	130,170,075
Claims PMPM	\$250.39	\$290.20	\$275.02	\$250.81	\$289.08	\$275.26	\$267.18	\$322.47	\$301.14
Total prem. (000)	\$15,517,053	\$70,791,029	\$86,308,081	\$19,340,296	\$97,898,777	\$117,239,073	\$26,275,727	\$125,714,363	\$151,990,091
Premium PMPM	\$281.77	\$333.22	\$322.63	\$280.48	\$338.99	\$327.71	\$304.85	\$378.37	\$363.23
Margin %	2.4%	3.1%	2.9%	2.3%	2.7%	2.6%	3.8%	3.2%	3.4%

Appendix 2: Detailed Financial Data Tables

Separate files in Excel, on SOA Website:

<https://www.soa.org/Files/Research/medicaid-managed-data.xlsx>

Appendix 3: Summary of States' Provision of Margin, Administrative Expense and Risk Adjustment, from Recent Actuarial Ratebooks

State	Ratebook Date	Margin %	Admin %	Data Risk Adjusted
Alabama	N/A ¹	N/A ¹	N/A ¹	N/A ¹
Alaska	N/A ¹	N/A ¹	N/A ¹	N/A ¹
Arizona	2015-2016	1.0%	8%	Yes
Arkansas	N/A ¹	N/A ¹	N/A ¹	N/A ¹
California	2012	2.0% ⁵	7% ⁵	Unknown ²
Colorado	2016	1.0%	Ranges 4-12% depending on Population	Yes
Connecticut	N/A ¹	N/A ¹	N/A ¹	N/A ¹
DC	Unknown ²	Unknown ²	Unknown ²	Unknown ²
Delaware	Unknown ²	Unknown ²	Unknown ²	Unknown ²
Florida	2015-2016	2.0%	10%	Yes
Georgia	2014-2015	2% (included in the admin %)	LIM (Medicaid) & BCC(Breast and Cervical Cancer): Low - 11.5% High - 14.5% PeachCare (CHIP): Low - 11.5% High - 14.5% Maternity and NICU: Low - 9% High - 12% Average: Low - 11.2% High - 14.2%	No
Hawaii	2016	Unknown ²	Non-ABD - 10% ABD - 7% Expansion - 10%	Yes
Idaho	N/A ¹	N/A ¹	N/A ¹	N/A ¹
Illinois	2015	1.0%	12.85% for Mananged TANF (FHP) 11.25% for SSI and ABD	Yes
Indiana	2011	1.0%	\$17 PMPM + 6% of Rate	Yes
Iowa	2016-2017	0.5% for All poplulations (included in Admin %)	10.5% TANF, Family Planning, H&W 2% Maternity 7.25% ABD Non-Dual 6.25% Dual Community	Yes
Kansas	Unknown ²	Unknown ²	Unknown ²	Unknown ²
Kentucky	2015-2016	1.0%	7% low estimate 8.9% high estimate Average over all age and regions to create fixed PMPM of \$23.89 and \$24.96	Yes
Louisiana	Unknown ²	Unknown ²	Unknown ²	Unknown ²
Maine	N/A ¹	N/A ¹	N/A ¹	N/A
Maryland	Unknown ²	Unknown ²	Unknown ²	Unknown ²
Massachusetts	Unknown ²	Unknown ²	Unknown ²	Unknown ²
Michigan	2016	1.75% TANF and Disabled 1.25% Maternity Case Rate	9% TANF and Disabled 1.5% Maternity Case Rate	Yes
Minnesota	2010	0-1.7%	Ranges 7-12%	Yes
Mississippi	2015	2.0%	Original Medicaid - 8% Expansion Medicaid and Newborns-10%	Yes for some populations
Missouri	2016	2% (1.5% cost of capital .5% risk margin)	Ranges by region and population 7%-11%	Yes

Appendix 3 (continued)

State	Ratebook Date	Margin %	Admin %	Data Risk Adjusted
Montana	N/A	N/A ¹	N/A ¹	N/A ¹
Nebraska	2015	2.0%	7%	Yes
Nevada	Unknown ²	Unknown ²	Unknown ²	Unknown ²
New Hampshire	2011	Unknown ²	Unknown ²	Unknown ²
New Jersey	2014-15	Unknown ²	Unknown ²	Unknown ²
New Mexico	Unknown ²	Unknown ²	Unknown ²	Unknown ²
New York	2016	1.0%	Ranges by region and population 5%-11%	Yes
North Carolina	N/A ¹	N/A ¹	N/A ¹	N/A ¹
North Dakota	N/A ¹	N/A ¹	N/A ¹	N/A ¹
Ohio	2014	1.75% Included in Admin %	10.725%	Yes
Oklahoma	N/A ¹	N/A ¹	N/A ¹	N/A ¹
Oregon	2016	1.0%	8% or 10% depending on region	Yes
Pennsylvania	2015	2.5%	7.4%-8.6% depending on region	Yes
Rhode Island	2015	1.5% ³	~10% ³	Unknown ²
South Carolina	2015	Unknown ²	11.5%: TANF Age 14-18 Female and TANF 19-44 Female 9.5% For all other TANF ages/sexes	Yes
South Dakota	N/A ¹	N/A ¹	N/A ¹	N/A ¹
Tennessee	2013	Unknown ²	9%	Yes
Texas	2016	2.0%	\$8.00 PMPM plus 5.75% of gross premium	Yes
Utah	N/A	Unknown ²	Unknown ²	Unknown ²
Vermont	N/A ¹	N/A ¹	N/A ¹	N/A ¹
Virginia	N/A ¹	Unknown	9.1% LIFC Child 7.6% LIFC Adult 7.0% ABAD	Yes
Washington	2015	1.5%	Ranges by Region and Population ~10%	Yes
West Virginia	2016	0.7%	9%	No
Wisconsin	2016	0.5%	3.8% - 5.2% depending on population ⁴	Yes
Wyoming	N/A ¹	N/A ¹	N/A ¹	N/A ¹

¹ No mainstream Managed Care Medicaid

² Data was incomplete or missing

³ Percentages were calculated from rates

⁴ Admin is a fixed PMPM that varies by population. Percentages represent admin portion of the total capitated rate

⁵ Community Based Adult Services Population

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