



**Commonwealth of Virginia  
Department of Medical Assistance Services  
Medicaid Forecasting and Rate Setting Review**

Prepared for:  
**Commonwealth of Virginia**

**Department of Medical Assistance Services**

Prepared by:  
**Milliman, Inc.**

**Shelly Brandel, FSA, MAAA**  
Principal and Consulting Actuary

**Jill Bruckert, FSA, MAAA**  
Consulting Actuary

**Alisa Gordon, FSA, MAAA**  
Consulting Actuary

**Marlene Howard, FSA, MAAA**  
Principal and Consulting Actuary

**John Meerschaert, FSA, MAAA**  
Principal and Consulting Actuary

**Christine Mytelka, FSA, MAAA**  
Principal and Consulting Actuary

15800 W. Bluemound Road  
Suite 100  
Brookfield, WI 53005  
USA  
Tel +1 262 784 2250  
Fax +1 262 923 3680

[milliman.com](http://milliman.com)

**TABLE OF CONTENTS**

**I. EXECUTIVE SUMMARY ..... 1**

**II. MILLIMAN REVIEW PROCESS ..... 7**

**III. THEMES FROM VIRGINIA INTERVIEW FEEDBACK..... 11**

**IV. SUMMARY OF VIRGINIA’S MEDICAID FORECAST PROCESS..... 16**

**V. SUMMARY OF VIRGINIA’S MEDICAID MANAGED CARE RATE SETTING PROCESS..... 24**

**VI. SUMMARY OF PROCESSES IN OTHER STATES..... 29**

**VII. RECOMMENDATIONS..... 42**

**Appendices**

Appendix A: Virginia Interviews

Appendix B: State Interviews

Appendix C: Current Process to Gather and Summarize Data Book

Appendix D: High Level State Comparison

Appendix E: Recommendations – State Summary

Appendix F: State Data Summaries

Appendix F-1: Annual Enrollment Change

Appendix F-2: Annual Medical Expenditure Change

Appendix F-3: Annual Expenditure Change Per Beneficiary

Appendix F-4: Annual Administrative Expenditures / Annual Medical Expenditures

## I. EXECUTIVE SUMMARY

The Department of Medical Assistance Services (DMAS) for the Commonwealth of Virginia retained Milliman to review and develop recommendations to improve Virginia's Medicaid forecasting based on a review of current forecasting and rate setting processes.

This report provides a summary of our review, documentation of Virginia's processes for Medicaid rate setting and forecasting, and recommendations for DMAS to consider implementing to improve their Medicaid forecasting process.

### PURPOSE

Virginia's Medicaid program covers over one million beneficiaries, with over 95%<sup>1</sup> enrolled in Medicaid managed care programs. Capitation payments, the payments made by DMAS to the contracted managed care organizations (MCOs), are projected to account for approximately 64%<sup>2</sup> of Virginia's projected Medicaid expenditures for state fiscal year (SFY) 2019 and close to 70%<sup>2</sup> in fiscal year 2020.

Each year, DMAS projects the Medicaid expenditures for the current and next two SFYs, which run from July to June, for use in the development of Virginia's biennium budget. The initial budget appropriation for the next two SFYs is developed in even-numbered SFYs and amended in odd-numbered SFYs. For example, appropriations for SFYs 2019 and 2020 were first developed in SFY 2018 and amended in SFY 2019. In the SFY 2019 update, the forecasts for SFYs 2019 and 2020 were amended upward by \$462.5 million in state funds across both years from the initial appropriation.

Based on discussions with DMAS, we understand the change in the forecasted appropriation need for SFY 2019 and SFY 2020 was attributed to the following changes in assumptions, listed in descending order of magnitude as quantified by DMAS in their presentation to the House Appropriations and Senate Finance Committees on November 1, 2018:

- Increases in managed care capitation rates for the Commonwealth Coordinated Care Plus (CCC Plus) program beyond those initially anticipated from calendar year (CY) 2019 to CY 2020
- Reductions in hospital claims that had been expected to occur due to managed care savings in the CCC Plus program, but were not realized in actual experience
- A disallowance issued by the Centers for Medicare and Medicaid Services (CMS) for federal Medicaid payments for Medicaid services provided by Piedmont and Catawba facilities
- Unanticipated increases in low-income child enrollment
- Updates to lump sum payments (Disproportionate Share Hospital (DSH), Graduate Medical Education (GME), and Intergovernmental Transfers (IGTs))
- Increases in managed care capitation rates for Medallion children beyond those initially anticipated from SFY 2019 to SFY 2020

DMAS is committed to identifying and implementing changes to their forecasting and rate setting processes to improve their Medicaid forecast process going forward.

---

<sup>1</sup> The Henry J. Kaiser Family Foundation (<https://www.kff.org/medicaid/state-indicator/share-of-medicare-population-covered-under-different-delivery-systems/>).

<sup>2</sup> Provided by DMAS.

## REVIEW APPROACH

The Milliman team worked with DMAS to identify key stakeholders for interviews and obtain existing documentation of Virginia's current forecasting and rate setting processes. The Milliman team conducted interviews and reviewed documentation to develop a detailed description of Virginia's forecasting and rate setting processes and identify recommendations for improvement.

We also identified and conducted interviews with five other states with mature Medicaid managed care programs (Arizona, Florida, Indiana, Ohio, and South Carolina). We selected these states due to their experience with Medicaid managed care and potential to share lessons learned and best practices with Virginia's Medicaid program.

## THEMES FROM INTERVIEW FEEDBACK FROM VIRGINIA STAKEHOLDERS

Table 1 outlines general themes regarding the forecasting and rate setting processes that emerged during our interviews with multiple Virginia stakeholders, both internal and external to DMAS. We did not perform a technical review of the rate setting process, but rather focused our review on how the capitation rates are incorporated into the forecasting process.

	<b>Theme</b>	<b>Overview</b>
1	<b>Timing</b>	The forecast results in the current process are not known until shortly before the forecast needs to be finalized. Allowing stakeholders within DMAS more time for review will help to ensure material items were not inadvertently overlooked or misinterpreted during the data gathering process.
2	<b>Monitoring / Reporting</b>	Updating the forecasts more than once a year to evaluate and quantify forecast changes would allow DMAS to understand and communicate anticipated changes to external parties in a more timely manner.
3	<b>Staffing / Resources</b>	Changes to the scope of work related to forecasting, such as additional review, monitoring and more frequent updates, may result in DMAS needing to dedicate additional resources to this work.
4	<b>Documentation / Transparency</b>	Creating detailed documentation of the data sources, assumptions, and methodologies used to develop the Medicaid forecast will help others not as familiar with the process be able to review and assess the reasonableness of the forecast.
5	<b>Communication / Education</b>	Enhanced communication among stakeholders before, during, and after the development of the Medicaid forecast and capitation rates will help DMAS manage stakeholder expectations and improve the comprehensiveness of the forecast.
6	<b>Data Limitations</b>	Streamlined data systems will support DMAS's ability to monitor forecast and encounter data, and allow DMAS to be more proactive when actual results are not tracking with anticipated costs.
7	<b>Peer Review</b>	Incorporating a robust peer review process into the forecast process will increase the quality of the forecast and optimize buy-in from multiple stakeholders both within and outside of DMAS.

---

## RECOMMENDATIONS

DMAS has been producing Medicaid forecasts for the Virginia Medicaid program for many years, and the DMAS forecast team possesses considerable expertise and program knowledge that is recognized by internal and external stakeholders. However, the current forecasting process has some limitations; the forecast is only performed once per year, updates require a significant amount of time and resources gathering data, and the current forecasting timeline does not allow sufficient time for reviewing and refining results. Additionally, communication within DMAS and with external stakeholders is limited and does not include regular touch points to provide opportunities to discuss emerging issues before and after the Medicaid forecast is released.

The Milliman team provides ten recommendations for Virginia to consider to strengthen Virginia's Medicaid forecasting processes. ***Even if DMAS implements all of the recommendations in this report, it is certain that actual future expenditures will not exactly match the forecasts due to a changing economy, policy changes from CMS, and other drivers not known at the time of the forecast development. However, implementation of these recommendations should improve the understanding, communication and transparency of the forecast.***

Each of these recommendations are discussed in more detail in Section VII of this report, including specific examples from other states as well as options DMAS can consider when implementing changes.

### 1. Update the forecast more frequently than once per year.

Each of the five states we interviewed updates their forecast at least two times per year. We recommend DMAS updates the forecast, or at a minimum updates key pieces of the forecast (e.g., enrollment forecasts, managed care capitation rates, fiscal impacts of program or policy changes), two to three times per year.

### 2. Build a robust review process into the forecast development timeline.

We recommend DMAS develops a detailed timeline for the forecast development that includes sufficient time at the end for review of preliminary results by multiple layers of individuals within DMAS. Having multiple layers of review and detailed documentation will help to ensure that data or assumptions are incorporated consistent with the understanding of those who provided the information.

### 3. Re-evaluate data used for forecast.

We recommend DMAS re-evaluates the data sources to be used for each iteration of the forecast and the availability of resources who supply data elements within DMAS. For instance, DMAS should weigh the value of using more recent data against the benefit of having more time for review. We suggest DMAS work with internal and external stakeholders to ensure data is available in a timely manner and new data systems address DMAS's forecasting needs.

### 4. Enhance collaboration and communication within DMAS.

We recommend teams within DMAS collaborate more frequently to ensure consistency between financial analyses and operations. Existing daily Executive Management Team (EMT) and monthly Internal Financial Review Council (IFRC) meetings present opportunities for information to be shared across different departments within DMAS. We also recommend any program changes be brought before the EMT to ensure all program changes with a potential fiscal impact are approved by the EMT prior to implementation.

## 5. Re-evaluate forecast monitoring.

We recommend DMAS implements or improves the process for periodic monitoring of the forecast, both in the current SFY and in subsequent years. This process should include monthly monitoring of actual to expected expenditures to increase transparency and facilitate understanding and review by all stakeholders. This process should also include a detailed reconciliation during the forecast update to identify and quantify changes from the prior forecast for the same time period.

## 6. Update forecast methodology.

We recommend that DMAS updates the forecast methodology to improve the current process. Specific changes to the forecast include condensing the fee-for-service (FFS) lines for the forecast series, modeling units and enrollment separately, creating an internal forecast that reflects a broader array of factors incorporating growth and anticipated program changes, and reconciling forecast updates to prior forecasts.

## 7. Develop detailed forecast documentation.

We recommend the forecasting team develops and maintains detailed documentation of the data, assumptions, and methods used to develop the forecast during each update to help others not as familiar with the process be able to review and assess the reasonableness of the forecast. Having this documentation available will help transfer knowledge internally if resources within DMAS expand or change without sufficient notice. Additionally, the documentation will provide a resource from which to develop external communications packages and answer internal and external stakeholder questions quickly.

## 8. Re-evaluate and restructure involvement of external stakeholders.

The involvement of external stakeholders in the forecast development has diminished as the Medicaid program expenditures have transitioned from being predominantly FFS claims to largely managed care capitation rates. We recommend that DMAS confers with external stakeholders to re-evaluate the motivations behind previously defined requirements to ensure objectives are still relevant and the requirements are still appropriate to achieve the desired objectives.

## 9. Expand education for external stakeholders.

We recommend DMAS continues to expand upon the education provided to external stakeholders on the Medicaid program, rate setting, and forecasting processes. Different types of education should be developed to first onboard new members of the administration versus on-going education for all external stakeholders.

## 10. Proactively address changes to the budget language.

We recommend DMAS proactively engages other stakeholders to address the implications of pending changes in the budget language in a collaborative manner. External stakeholders may not be fully aware of all the downstream implications of changes, so early engagement can alleviate surprises.

Table 2 illustrates how our recommendations align with the interview feedback themes. **Many of these recommendations are related to more than one of the interview themes from Table 1, and DMAS will need to consider resource requirements when developing an action plan to implement the recommendations.**

**Table 2**  
**Virginia Department of Medical Assistance Services**  
**Interview Themes Identified for Each Recommendation**

Recommendation	Interview Themes						
	Timing	Monitoring and Reporting	Staff and Resources	Documentation	Communication and Education	Data Limitations	Peer Review
1 Update forecast more frequently than once per year	✓	✓	✓		✓	✓	
2 Build a robust review process into the forecast development timeline	✓		✓	✓			✓
3 Re-evaluate data used for forecast	✓		✓			✓	
4 Enhance collaboration and communication within DMAS	✓				✓		✓
5 Re-evaluate forecast monitoring	✓	✓	✓	✓	✓	✓	✓
6 Update forecast methodology	✓		✓			✓	
7 Develop detailed forecast documentation		✓	✓	✓	✓		✓
8 Re-evaluate and restructure involvement of external stakeholders	✓		✓		✓		✓
9 Expand education for external stakeholders		✓	✓	✓	✓		✓
10 Proactively address changes to the budget language	✓	✓			✓		✓

## ACKNOWLEDGEMENTS

We would like to thank DMAS for identifying and assisting in scheduling interviews with Virginia Medicaid stakeholders. We also thank the officials from other state Medicaid programs and MCOs who participated in interviews, providing insights and expertise that broadened the depth and analysis of our review. The list of individuals participating in this study are included in Appendices A and B.

## CAVEATS, LIMITATIONS, AND QUALIFICATIONS

This report was developed to help DMAS identify potential improvements to their Medicaid forecasting process. This information may not be appropriate, and should not be used, for other purposes.

The information presented in this report was developed for DMAS. DMAS may share this information with outside entities with Milliman's permission. Milliman does not intend to benefit, and assumes no duty or liability to, other parties who receive this work product. Any third party recipient of this work product who desires professional guidance should not rely upon Milliman's work product, but should engage qualified professionals for advice appropriate to its own specific needs. Any release of this report to a third party should be in its entirety.

We relied on interviews with key stakeholders and supporting documents provided by DMAS and others to develop the recommendations in this report. To the extent this information is inadequate or incomplete, our recommendations may likewise be inadequate or incomplete.

The authors of this report are actuaries for Milliman, members of the American Academy of Actuaries, and meet the Qualification Standards of the Academy to render the actuarial communication contained herein. To the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices.

This report outlines the review and opinions of the authors and not necessarily that of Milliman. This report is subject to the terms and conditions of the February 1, 2019 contract between DMAS and Milliman.



## II. MILLIMAN REVIEW PROCESS

DMAS retained Milliman to review and develop recommendations to improve Virginia's Medicaid forecasting based on a review of their forecasting and rate setting processes. Key steps in the Milliman team's review of DMAS's forecasting and rate setting processes are outlined in Table 3. The remainder of this section of the report outlines each step of our review.

<b>Table 3 Virginia Department of Medical Assistance Services Key Steps of Review</b>	
<b>Step</b>	<b>Description</b>
1	Project kickoff to understand background, discuss the scope of the review, and start to identify key staff for interviews.
2	Interview key Virginia stakeholders.
3	Review process documentation provided by DMAS.
4	Discuss interview feedback and provide preliminary recommendations to DMAS.
5	Conduct interviews with other states and follow-up with Virginia stakeholders through additional interviews, as needed.
6	Develop final report including documentation of rate setting and forecasting processes, identification of themes from interview feedback, and recommended changes.

### VIRGINIA INTERVIEWS

The Milliman team worked with DMAS to identify key stakeholders for interviews and obtain available documentation of Virginia's current forecasting and rate setting processes. The Milliman team conducted interviews with a focus on understanding the following elements from the diverse viewpoints of the interviewees:

1. Data sources, assumptions, and methodologies used to develop the Medicaid forecast and managed care capitation rates.
2. Timeline and key dates in processes.
3. DMAS and external resources dedicated to processes.
4. Internal and external communication and interaction with stakeholders.
5. Successes and challenges with the current processes.
6. Suggestions to improve the forecasting process.

We conducted interviews between February 14, 2019 and March 27, 2019 with the following individuals or groups:

- DMAS Director
- DMAS Executive Management Team
- DMAS Provider Reimbursement Team

- DMAS Forecasting Team
- DMAS Program Teams
- DMAS staff in supporting roles to EMT members
- Mercer, DMAS's Actuarial Vendor for managed care capitation rate setting
- Department of Planning and Budget (DPB)
- Secretary of Finance and Deputy Secretaries of Finance
- Secretary of Health and Human Resources (HHR) and Deputy Secretary of HHR
- House Appropriations and Senate Finance Committees Medallion and CCC Plus Managed Care Organizations

Appendix A contains a detailed list of interviews conducted as part of this engagement. We interviewed some individuals most heavily involved in the forecasting and rate setting processes more than once to allow time for in-depth discussions.

These stakeholder interviews provided us with valuable insight and form the basis for the majority of the information presented in the remainder of this report. Section III outlines themes we identified from interview feedback. Section VII includes recommended changes to the current forecasting and rate setting processes to improve Virginia's forecasting, many of which address concerns communicated during these interviews.

## INTERVIEWS WITH OTHER STATES

The Milliman team also conducted interviews with state Medicaid agency staff from five states<sup>3</sup> other than Virginia. These discussions provided lessons learned and helped us identify best practices from other states to support the detailed recommendations included in Section VII of this report. We used the following criteria when selecting the other five states:

- Maturity of the Medicaid managed care program
- Similarity to Virginia in terms of populations covered in managed care (i.e., managed care programs include both acute care services and long term care services and supports (LTSS))
- Varied processes and resources utilized across the five states to develop Medicaid forecasts
- Willingness and availability of key state contacts to participate in interviews

Based on these factors, we selected the following states to interview: Arizona, Florida, Indiana, Ohio, and South Carolina. Table 4 summarizes key characteristics of each state that are most relevant to our review.

---

<sup>3</sup> Milliman contracts with all of these states except Arizona to assist with rate setting, forecasting, or both.

<b>Table 4</b> <b>Virginia Department of Medical Assistance Services</b> <b>Other State Interviews</b>	
State	Factors Contributing to Selection
Arizona	<ul style="list-style-type: none"> <li>▪ Capitation rates and forecasts developed internally</li> <li>▪ Long-standing Medicaid managed care program</li> <li>▪ As of July 2018, Arizona covers 93%<sup>4</sup> of their average monthly CY 2018 1.7 million<sup>5</sup> Medicaid beneficiaries in managed care programs, including LTSS</li> </ul>
Florida	<ul style="list-style-type: none"> <li>▪ Capitation rates developed by external actuarial vendor</li> <li>▪ Forecasts developed internally with some assistance from external actuarial vendor</li> <li>▪ Long-standing Medicaid managed care program</li> <li>▪ As of July 2018, Florida covers 92%<sup>4</sup> of their average monthly SFY 3.9 million<sup>6</sup> Medicaid beneficiaries in managed care programs, including LTSS populations</li> </ul>
Indiana	<ul style="list-style-type: none"> <li>▪ Capitation rates and forecasts developed by external consultants</li> <li>▪ Quarterly update and monitoring of forecasts</li> <li>▪ As of July 2018, Indiana covers 84%<sup>4</sup> of their average monthly CY 1.5 million<sup>7</sup> Medicaid beneficiaries in managed care programs, including its expansion populations</li> </ul>
Ohio	<ul style="list-style-type: none"> <li>▪ Capitation rates developed by external consultants</li> <li>▪ Forecasts developed internally</li> <li>▪ As of July 2018, Ohio covers 88%<sup>7</sup> of their average monthly SFY 3.0 million<sup>7</sup> Medicaid beneficiaries in managed care programs, including LTSS and expansion populations</li> <li>▪</li> </ul>
South Carolina	<ul style="list-style-type: none"> <li>▪ Capitation rates developed by external consultants</li> <li>▪ Budget supported by forecasts developed by external consultants</li> <li>▪ Recent transition of services from FFS to managed care</li> <li>▪ As of July 2018, South Carolina covers 77%<sup>4</sup> of their average monthly SFY 1.3 million<sup>7</sup> Medicaid beneficiaries in managed care programs, including LTSS</li> </ul>

During the interviews with other states, we asked questions similar to the Virginia interviews with a focus on gathering information about elements of the processes that work well for each state. The types of questions we asked can be grouped into the following categories:

1. Data sources, assumptions, and methodologies used to develop the Medicaid forecast and managed care capitation rates.
2. Timeline and key dates in processes.

<sup>4</sup> The Henry J. Kaiser Family Foundation (<https://www.kff.org/medicaid/state-indicator/share-of-medicaid-population-covered-under-different-delivery-systems/>).

<sup>5</sup> The Henry J. Kaiser Family Foundation (<https://www.kff.org/health-reform/state-indicator/total-monthly-medicaid-and-chip-enrollment/>).

<sup>6</sup> Florida's enrollment reports ([http://ahca.myflorida.com/medicaid/Finance/data\\_analytics/enrollment\\_report/index.shtml](http://ahca.myflorida.com/medicaid/Finance/data_analytics/enrollment_report/index.shtml)).

<sup>7</sup> Provided by the state.

3. Internal and external resources dedicated to processes.
4. Monitoring and review of actual to expected expenditure estimates.
5. Internal and external communication and interaction with stakeholders.
6. Successes and challenges with the current processes.
7. Lessons learned when transitioning from forecasting FFS populations to a forecast largely influenced by managed care capitation rates.

### III. THEMES FROM VIRGINIA INTERVIEW FEEDBACK

As outlined in the prior sections, we interviewed a variety of Virginia stakeholders, both within DMAS and outside of DMAS. Throughout our interviews, a number of common themes emerged as described in this section. The next two sections outline the detailed processes used to develop the Medicaid forecast and capitation rates based upon the information collected during the interviews.

#### THEME #1: TIMING

To develop a forecast of Medicaid expenditures for the current and next two SFYs, DMAS engages in a complex process which involves gathering data and information from many different teams within DMAS. The table below lists the primary data elements and the team(s) who provide each data element.

Table 5 Virginia Department of Medical Assistance Services Forecasting Data Sources	
Data Element	DMAS Team(s) Providing Data Element
Historical FFS expenditures and utilization	Forecasting
Historical managed care capitation payments and utilization	Forecasting and Provider Reimbursement
Estimated managed care capitation rate changes	Provider Reimbursement
Projected lump-sum payments	Provider Reimbursement
Estimated pharmacy rebates	Budget
Estimated impacts of adding new populations or services to Medicaid or shifting between FFS and managed care	Program, Forecasting, and Provider Reimbursement

In order to gather this necessary information, the forecasting team must work closely with all of the stakeholders listed in Table 5 above. Historically, many of the key pieces of information needed for the budget forecast have not been available until mid-October.

The forecast results are not known until late in the process because of the timing constraints associated with the data collection. This leaves very little time for DMAS to review and analyze the forecast results prior to sharing with key stakeholders, given the firm November 1 deadline. **Allowing stakeholders within DMAS more time for review will help to ensure no material items were inadvertently overlooked or misinterpreted during the data gathering process.**

In addition, DMAS does not have sufficient time in the current process timeline to evaluate the drivers of changes in the forecast from prior years and be able to assess the reasonableness of the changes. **Allocating additional time to analyze and quantify these drivers will allow DMAS to proactively communicate and educate DMAS leadership and external stakeholders on changes in the forecast.**

## THEME #2: MONITORING / REPORTING

We heard from many external stakeholders outside of DMAS that their only opportunity to review the forecast is when the results are formally communicated each fall. In general, these stakeholders would like more frequent updates on how realized actual expenditures are tracking compared to the forecast. In addition, stakeholders would like to know about new information that may impact the Medicaid forecast as it becomes available, rather than waiting until the annual budget update to learn of these changes.

DMAS is required to provide an update each month to track actual versus forecasted expenditures based on the following budget language:

*“Authority: Title 32.1, Chapters 9 and 10, Code of Virginia; P.L. 89-97, as amended, Titles XIX and XXI, Social Security Act, Federal Code.*

*B.1. The Department of Medical Assistance Services (DMAS) shall submit monthly expenditure reports of the Medicaid program by service that shall compare expenditures to the official Medicaid forecast, adjusted to reflect budget actions from each General Assembly Session. The monthly report shall be submitted to the Department of Planning and Budget and the Chairmen of the House Appropriations and Senate Finance Committees within 20 days after the end of each month. DMAS shall convene a meeting each quarter with the Secretary of Finance, Secretary of Health and Human Resources, Secretary of Administration, or their designees, and appropriate staff from the Department of Planning and Budget, House Appropriations and Senate Finance Committees, Joint Legislative Audit and Review Commission, and Joint Commission on Health Care to explain any material differences in expenditures compared to the official Medicaid forecast, adjusted to reflect budget actions from each General Assembly Session. If necessary, the department shall provide options to bring expenditures in line with available resources.”*

DMAS believes they are complying with this requirement by publishing a monthly Accuracy Report. However, most external stakeholders we interviewed are not aware of the Accuracy Report. **Informing external stakeholders about how to access this report and interpret the results and notifying them when it is published each month will facilitate timely access for these stakeholders.**

The monthly Accuracy Report tracks expenditures in the current fiscal year relative to the budget. However, it does not reflect updates to future fiscal year forecasts due to information that has become available since the original forecasts. **Updating the forecasts more than once a year to evaluate and quantify forecast changes would allow DMAS to understand and communicate anticipated changes to external parties prior to the annual budget process. Separate strategies may be appropriate to provide updates and / or reports internally at DMAS versus to external stakeholders.**

In addition to monitoring the forecast, stakeholders also requested monitoring of MCO experience versus the capitation rates in aggregate, and MCOs expressed a desire to measure their individual performance to aggregate MCO experience. Tracking MCO-specific experience against the current capitation rates may allow DMAS to provide earlier insight into future changes in capitation rates for inclusion in the forecast. Providing MCOs with information about how they compare to their peers may not provide direct benefit to the forecasting process, but it could empower MCOs to focus resources on initiatives with significant cost-saving impacts – and that ultimately could benefit the Commonwealth.

## THEME #3: STAFFING / RESOURCES

Internal and external stakeholders shared that the current team members who support the rate setting and forecasting processes at DMAS have extensive institutional knowledge and do a good job performing their responsibilities. Senior leadership has confidence in the current team members, and many of the challenges of the current processes stem from pressure points discussed in other themes, such as timing and data limitations.

The forecasting team has many other responsibilities in addition to developing the Medicaid forecast, including but not limited to, the development of budget decision packages. **Changes in the scope of work related to forecasting, such as additional monitoring and more frequent updates, may result in DMAS needing to dedicate additional resources to this work.** These additional resources may be internal or external to DMAS, but should have the skill sets necessary to complete complex data analysis and develop statistical forecasting models.

States typically contract with external stakeholders or consultants to varying degrees, depending on the sufficiency of internal resources available, to ensure that processes and operations can be performed successfully. Cross-training and succession planning, whether with internal or external resources, can help states navigate complex processes more successfully even when key staff departs or is reassigned. External stakeholders or consultants may further assist states by transferring institutional knowledge to state staff if there is turnover, and maintaining appropriate resource levels to mitigate seasonal demands. **Lastly, as mentioned in Theme #1, additional resources outside of the forecasting team at DMAS, whether internal or external to DMAS, should have time to review the results of the forecast and suggest modifications based upon their expertise and knowledge of the Medicaid program.**

#### THEME #4: DOCUMENTATION / TRANSPARENCY

Internal documentation of the processes used to develop the forecast is currently limited. Best practice documentation allows another individual(s) with similar expertise to recreate the process and results within a reasonable tolerance for variation in judgement without guidance from the individual currently performing the process. **Developing detailed documentation of the data sources, assumptions, and methods used to develop the Medicaid forecast will help others not as familiar with the process be able to review and assess the reasonableness of the forecast.** In addition, having this documentation will help transfer knowledge internally if available resources within DMAS expand or change without sufficient notice.

Development of documentation intended for external stakeholders has the potential to support trust and transparency. For example, documentation of the method used to develop the data book could be updated annually and posted online with the data book. Such documentation, while low risk, enhances the value of the information and demonstrates a dedication to transparency. In cases where DMAS is aware of a key or controversial policy or program proposal, the agency may wish to discuss whether to make the strategic choice to reach out to external stakeholders proactively. If DMAS decides to do so, any communications with external stakeholders should be thoroughly reviewed to avoid misunderstandings.

#### THEME #5: COMMUNICATION / EDUCATION

Medicaid is a complex program whose costs are influenced by population demographics, the economy, state policies, and many more factors. Because of the interplay between the various influences on Medicaid costs, no one stakeholder or department is likely to be able to forecast Medicaid costs without the input of others. Furthermore, Virginia's biennial budget process, in which the appropriations base equals the budget from two years prior, introduces additional complexities when forecasting the budget needs of a growing and evolving program such as Medicaid.

**DMAS is already working to identify communication gaps and implement additional channels of communication. Enhanced communication among stakeholders before, during, and after the development of the Medicaid forecast and capitation rates will help DMAS manage stakeholder expectations and improve the comprehensiveness of the forecast.**

The interview participants identified the following opportunities for improved communication during our interviews:

- Include the forecasting team on internal discussions of the potential financial impact of policy changes.



- Enhance communication channels between the DMAS Provider Reimbursement and Program teams to ensure program changes and MCO contract requirements are appropriately reflected in the capitation rates.
- Update DMAS leadership and external stakeholders about the impact of emerging issues on the original forecasts more frequently.
- Proactively engage DMAS EMT on program changes that have a fiscal impact prior to implementing, and involve the EMT when determining whether a fiscal impact exists.
- Explain the managed care rate setting process to external stakeholders, particularly since future rate changes have a significant impact on the Medicaid forecast.

DMAS has already started to make great strides in improving communication in these areas through the following efforts:

- Creation of the IFRC, which includes the DMAS EMT and others at DMAS who work with the capitation rates or forecasts. Beginning in January 2019, this group meets monthly.
- Creation of the External Financial Review Council (EFRC), which includes members from the DMAS EMT and external stakeholders. This group will meet quarterly.
- Development of a series of interactive education sessions to provide an opportunity for DMAS and other external stakeholders to learn about the Medicaid rate setting and forecasting processes.
  - DMAS hosted the first of these sessions on March 1, 2019 titled “Medicaid Rate Setting 101.” This session gave an overview of the role of the actuary in rate setting and the methodology used to develop the capitation rates. DMAS may hold additional educational sessions on rate setting if feedback indicates interest.
  - DMAS plans to host a similar “101” educational session on Medicaid forecasting following the conclusion of our review.
- The MCOs commented on their appreciation of DMAS’s willingness to engage with the MCOs throughout the capitation rate setting process.

## THEME #6: DATA LIMITATIONS

There are data limitations under the historical MMIS system, resulting in significant time and resources being spent to summarize FFS data for use in the forecast, and the need to collect a special feed of encounter data from the MCOs for use in capitation rate setting. DMAS is currently implementing a new modular MMIS system, which presents a great opportunity to enhance the data systems going forward, but requires a complex level of coordination in the near term. DMAS will need time to transition to the new Medicaid Management Information System (MMIS) and to validate the data prior to being able to use it for either the forecast or rate setting processes. In the short-term, this system change may cause disruption in the current processes; however, in the long-term, this change should help to gather data in a more efficient manner.

As the new MMIS is launched, DMAS should work closely with each of its departments to best align the functionality of the data warehouse with the end users who will access the data for rate setting and forecasting purposes. DMAS has a unique opportunity to tailor their systems from the ground up to meet the needs of the users in the future.

Developing data systems that facilitate easier data gathering and processing will also support DMAS’s ability to monitor the forecast and encounter data and react when actual results are not tracking with anticipated costs.



## THEME #7: PEER REVIEW

In most states, the forecast and the fiscal impact of key program and policy changes must be reviewed by external parties, including the Governor's office, legislators, finance, and other key stakeholders. There is often another requirement for agency estimates to be shared with external stakeholders on a timeline that allows for feedback and adjustments if needed.

Current statutory requirements for external review in Virginia are generally in line with or less burdensome than those in other states we interviewed. Recent comments and actions by the Legislature indicate there is a risk this could change in the absence of proactive outreach. DMAS should proactively determine resources for multi-level internal peer review and potential external peer review (e.g., the newly formed External Financial Review Council) to increase transparency and build trust in the forecast process with external stakeholders.

## IV. SUMMARY OF VIRGINIA'S MEDICAID FORECAST PROCESS

Virginia develops their budget on a biennial cycle. The biennium budget appropriation is passed by the General Assembly and signed by the Governor in even-numbered SFYs, and amendments are made to the prior SFY budget in odd-numbered years. For example, the budget appropriations for the 2019 and 2020 biennium was enacted in SFY 2018 and amended in SFY 2019.

To develop the biennium budget appropriation in even-numbered SFYs, the following steps are taken:

1. The initial appropriation is equal to the final appropriation from the prior budget biennium. For example, the initial SFY 2021 and SFY 2022 appropriations will be set equal to the final budgeted SFY 2020 appropriation based on the forecasted expenditures developed in SFY 2019.
2. Each state agency must then analyze the requirements to run their program(s), project expenditures for each SFY within the budget period, and submit their forecast to DPB.
3. The “need” or “ask” for each year is determined by subtracting the initial appropriation from the forecasted amount.

To develop the amended amounts to the budget in odd-numbered SFYs, the following steps are taken:

1. The initial appropriation is equal to the appropriations from the budget biennium passed in the previous SFY. For example, for the SFY 2021 amendment the SFY 2022 appropriation will be set equal to the SFY 2022 appropriation developed in SFY 2020.
2. Similar to above, each state agency must then analyze the requirements to run their program(s), project expenditures for each year within the budget period, and submit their forecast to the DPB.
3. The amended amount of the appropriations is determined by subtracting the initial appropriation from the forecasted amount.

**This two year cycle results in a larger “need” in the even-numbered years for DMAS because general health care cost inflation is not incorporated into the initial appropriation, which is equal to the prior budget appropriation.**

DMAS must work within the following budget language to develop the forecast of future Medicaid expenditures funded through general state funds.

*“Authority: Title 32.1, Chapters 9 and 10, Code of Virginia; P.L. 89-97, as amended, Titles XIX and XXI, Social Security Act, Federal Code.*

*A.1. By **November 1** of each year, the Department of Planning and Budget, in cooperation with the Department of Medical Assistance Services, shall prepare and submit a forecast of Medicaid expenditures, upon which the Governor's budget recommendations will be based, for the current and subsequent two years to the Chairmen of the House Appropriations and Senate Finance Committees. In addition to the expenditure forecast, the Department of Medical Assistance Services shall provide a breakout that shows forecasted expenditures by caseload/utilization, inflation, and policy changes. An enrollment forecast for the same forecast period shall also be submitted with the expenditure forecast.*

*2. **The forecast shall be based upon current state and federal laws and regulations.** The forecast shall only include expenditures for medical services in Program 45600 and shall exclude administrative expenditures. Rebasing and inflation estimates that are required by existing law or regulation for any Medicaid provider shall be included in the forecast. The forecast shall also include an estimate of projected increases or decreases in managed care costs, including estimates regarding changes in managed care rates for the three-year period. In preparing for each year's*

forecast of the managed care portions of the budget, the department shall submit to its actuarial contractor a letter, with a copy sent to the Department of Planning and Budget and the Chairmen of the House Appropriations and Senate Finance Committees. This letter shall document the department's request for a point estimate of the rate of increase in rates, based on application of actuarial principals (sic) and methodologies and information available at the time of the forecast, that the contractor estimates will occur in the years being forecast, and shall specify the population groupings for which estimates are requested. The department shall request that the contractor reply in writing with a copy to all parties copied on the department's letter.

3. The Department of Planning and Budget and the Department of Medical Assistance Services shall convene a meeting on or before **October 15** of each year with the appropriate staff from the House Appropriations and Senate Finance Committees to review current trends and the assumptions used in the Medicaid forecast prior to its finalization. The departments shall provide at this meeting a complete list of all policy and manual adjustments along with the estimated amounts of each adjustment by fiscal year that will be included in the Medicaid forecast due November 1."

Items A.1 and A.3 dictate the timing of the forecast, whereas item A.2 restricts the extent to which anticipated programmatic changes can be reflected in the forecast.

Table 6 shows the variation of the "need" throughout the two year cycle, based on the actual appropriations and forecasts from the past three years.

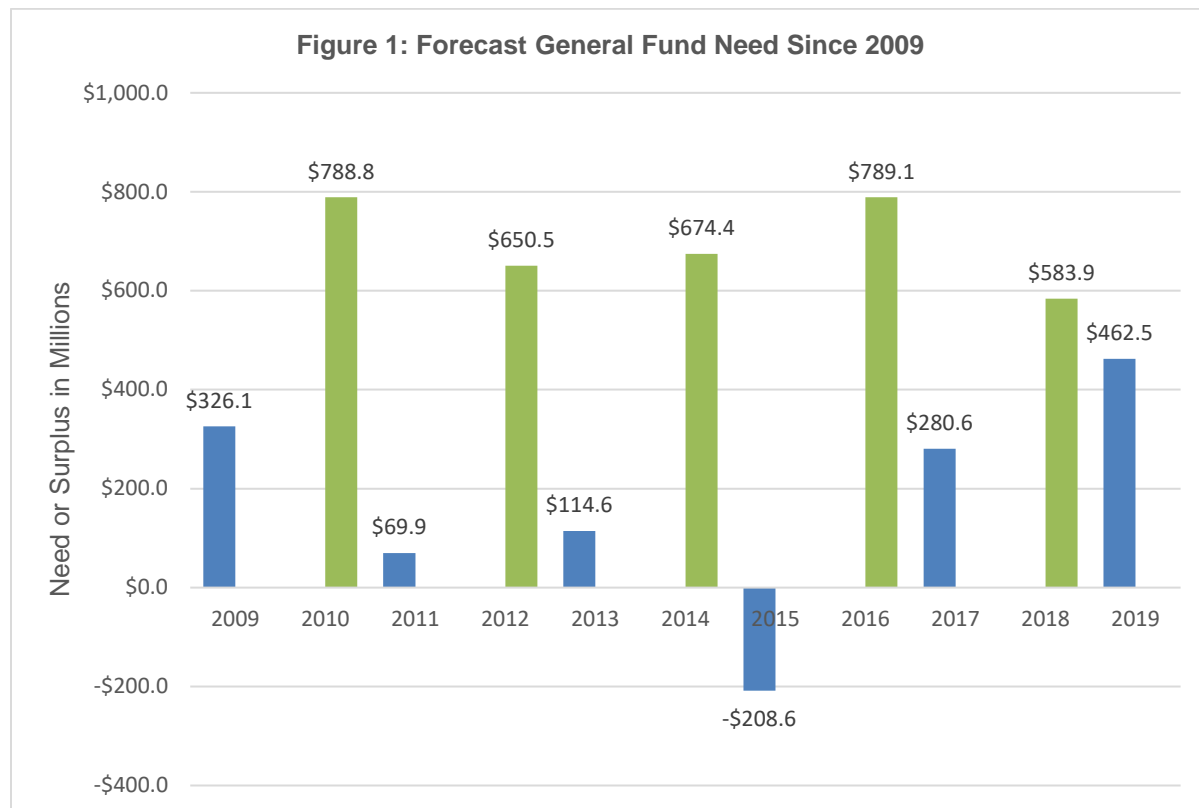
The forecast submitted on November 1, 2016 reflected forecast expenditures of \$4,917M in SFY 2018. This amount set the initial appropriations for both SFY 2019 and SFY 2020 for the 2019-2020 biennium. Setting the initial appropriation equal to the prior year does not reflect any change in health care expenditures due to inflation or any changes in utilization or enrollment. When the forecast was updated on November 1, 2017, the forecast for SFY 2019 was \$5,116M (requiring an "ask" of \$199M more than the initial appropriation), and the forecast for SFY 2020 was \$5,301 (requiring an "ask" of \$384M more than the initial appropriation). The total "need" for the biennium is the sum of the two years or \$583.9M.

The forecast was updated on November 1, 2018 using more recent information. The difference between the initial appropriation and the updated forecast in this off-year reflected any changes in the forecasting assumptions. The updated forecast for SFY 2019 was \$5,205M (resulting in a \$202M amendment) and SFY 2020 forecast was \$5,346M (resulting in a \$260M amendment). The total "need" for the amendment to the 2019-2020 biennium budget is the sum of the two years or \$462.5M.

Table 6 Virginia Department of Medical Assistance Services Historical Cycle of Budget "Need" to Illustrate Biennium Budget Bias (in Millions)					
	SFY 2018	SFY 2019	SFY 2020	SFY 2021	Total "Need"
Forecast submitted on 11/1/2016	4,917				
2019-2020 Initial Appropriation		4,917	4,917		
Forecast submitted on 11/1/2017	5,003	5,116	5,301		
2019-2020 "Ask"		199	384		<b>583.9</b>
2019-2020 Updated Appropriation		5,003	5,086		
Forecast submitted on 11/1/2018		5,205	5,346	5,533	
2019 Amendment		202	260		<b>462.5</b>

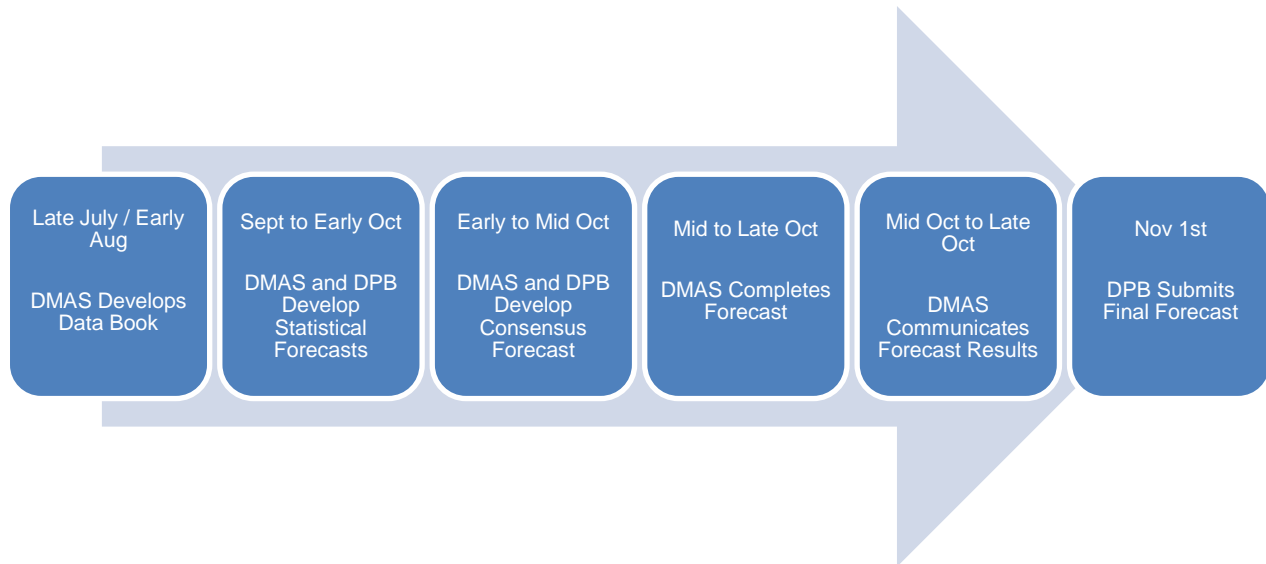
Table 6 demonstrates how Virginia’s budget process biases the Medicaid forecast to have a significant “ask” in the first year of each biennium., even if Medicaid expenditures are less than expected leading up to the biennium. A significant driver of this bias is that no future growth in health care expenditures is included in the initial appropriations (examples highlighted in green and blue in Table 6). If the initial appropriation reflected some level of trend, such as the medical care consumer price index (CPI) or projected Medicaid trends from published CMS reports, this would lower the “need” in the first year of the biennium. Based on how the budget is currently developed, DMAS must educate stakeholders about the two year cycle of “need” to set realistic expectations.

Figure 1 shows the historical cycle of “need” for the past 11 years, with even-numbered years (larger ask) in green and odd-numbered years (smaller ask) in blue.



### MEDICAID FORECAST PROCESS

The figure below provides an overview of the current process to develop the Medicaid forecast. DMAS currently updates the forecast once per year to align with the forecast due date of November 1, as outlined in the budget language above. Each step of the current process is described in detail in the following sections.



### DMAS Develops Data Book

Each year in late July or early August, DMAS develops a data book of historical Medicaid and Children’s Health Insurance Program (CHIP) expenditures and enrollment for use in the forecast. The data book only includes expenditures that can be attributed to an individual and does not include lump sum payments or other items paid outside the claim system. For the forecast due November 1, 2018, historical data from SFY 2010 to SFY 2018 was summarized and included in the 2018 data book. The data book includes summaries of expenditures and enrollment by the following groupings:

- Category of service
- Eligibility category
- Age group
- Region

Data books are published online at <http://www.dmas.virginia.gov/#/deidentifiedreports>.

Under the current data systems, creating the data book is a significant undertaking. Data must be gathered from multiple sources and carefully analyzed and validated to ensure that claims are not double counted or missing. Appendix C displays the current process used to gather and summarize the data to create the data book. The time and resources needed to gather the data is a key reason that DMAS currently updates the forecast only once per year.

The categories of service included in the data book are similar to the groupings included in the CMS-37 (Medicaid Program Budget Report) and the CMS-64 (State Expenditure Reporting) reports. Claims paid through a FFS delivery model are summarized by 46 detailed categories of service within 7 subcategories of service:

- Acute Care Services
  - General medical services
  - Health insurance premium payments
- Long-Term Care Services
  - Institutional services
  - Community-based services
- Case Management

- Mental Health Services
  - Institutional services
  - Community-based services

For services delivered through managed care, the only data provided in the data book is the paid capitation rates divided into the following major population types:

- Low Income Families and Children (LIFC)
- Aged, Blind and Disabled (ABD)
- CCC (Program prior to CCC Plus)
- CCC Plus
- Programs of All-Inclusive Care for the Elderly (PACE)

The data book is developed on a “paid basis”, reflecting payments made in each SFY, consistent with how the budget appropriations will be made. Managed care capitation rates are paid one month in arrears. Therefore, as an example, SSFY 2019 capitation rates on a paid basis represent payments made for members enrolled in an MCO from June 2018 through May 2019.

### **DMAS and DPB Develop Independent Statistical Forecasts**

DMAS shares the completed data book with the DPB economist. DPB's economist and DMAS's budget team, consisting of three analysts, each then develop independent utilization and expenditure forecasts. The forecast is developed at a budget series level, with a total of 94 series modeled including 11 managed care series and 83 FFS series. The budget series are a combination of categories of service and service areas or specific providers from the data book. Similar to the data book, the managed care forecasting series are aggregated at the population level and only track the capitation rates paid to the MCOs. The DPB forecast for managed care is only based on utilization (e.g., capitation payments) and does not include additional information about managed care spending needed to complete an expenditure forecast, such as:

- Actual MCO spending versus the capitation rates paid
- Proportionate allocation of the capitation rates by different categories of service (e.g., inpatient vs. physician)

DMAS and DPB use the information in the data book to develop time series statistical models to evaluate historical patterns, including seasonality and growth / decline, and estimate expenditures for the current and next two SFYs for each of the 94 forecast series. For example, the forecast developed in fall of 2018 included expenditure estimates for SFYs 2019, 2020, and 2021.

### **DMAS and DPB Develop Consensus Forecast**

After DPB and DMAS complete their independent forecasts, they go through each of the 94 forecast series to compare results and discuss differences. If these discussions identify necessary revisions, such as adjustments to the data, these changes are incorporated into each individual forecast, as deemed appropriate by the developer of the forecast (DPB or DMAS).

Once all revisions are made to the DPB and DMAS independent expenditure forecasts, they are averaged at a forecast series level. This average becomes known as the “consensus forecast”.

### **DMAS Incorporates Additional Costs and Finalizes the Forecast**

The process to create a consensus forecast between DPB and DMAS only applies to the statistical portion of the forecast, meaning only future expenditures that have sufficient historical data within a series from which a statistical model can be developed to estimate future expenditures. For the November 1, 2018 forecast, this equates to only the FFS portions. For future expenditures with insufficient historical data within

a series, DMAS separately develops estimates of additional costs to include in the total Medicaid expenditures in the forecast.

The following types of expenditures with insufficient historical data within a series are added by DMAS separately to create the final forecast:

- Program or policy changes: Estimations of the cost of policy or program changes are developed for service or population changes effective between the historical data and the forecasting time period.
  - Services (e.g., adding new services such as Applied Behavior Analysis, expanding services such as for substance use disorder, or moving services from FFS to managed care): Historical data for the services, if available outside of the series where the costs are being added, is adjusted to move the costs from the forecast series in which the costs were summarized in the historical data to the forecast series to which costs are expected to transition after the change.
  - Populations: DMAS and their actuaries estimate the expected costs for new populations or populations transitioning between FFS and managed care. For example, there is no historical data available to estimate future enrollment of the Medicaid expansion population which first became eligible to apply for Medicaid coverage on November 1, 2018.
  - When populations or services transition between FFS and managed care, the following items are considered when estimating future expenditures. The DMAS budget team works with the DMAS provider reimbursement team and their contracted actuaries to understand the impacts assumed for the capitation rate development for each item (if applicable).
    - When will the services or members transition?
    - What is the estimated fiscal impact? Will services cost more or less under the new delivery system?
    - What is the impact to expenditures on a paid basis? For example, if services or populations are transitioning from FFS to managed care, there is run-out yet to be paid on FFS claims that needs to be included in the expenditures.
    - Is the estimate of these changes already accounted for in the projected changes to the capitation rates?
- Lump sum payments: These payments are estimated by DMAS's provider reimbursement team and include the following types of payments:
  - Disproportionate Share Hospital
  - Graduate Medical Education
  - Intergovernmental Transfers
- Pharmacy rebates: Rebates paid to the Commonwealth by drug manufacturers are estimated by DMAS's budget team.
- Managed care capitation rates: Managed care rate change estimates from DMAS's actuarial vendor are incorporated into the forecast to estimate future expected capitation payments for managed care members. Section V contains a detailed discussion of the managed care rate setting process and how rate changes are incorporated into the forecast.
- General Assembly actions: Actions from the last session (e.g., expanded number of waiver slots) that are not reflected in the historical data are incorporated into the final forecast.



Medicaid costs are paid from both federal and state funds. The level of federal funding varies by state, with the percentage of costs funded by the federal government referred to as the Federal Medical Assistance Percentage (FMAP). States with higher income per capita receive a lower percentage of total costs funded by the federal government than states with lower income per capita compared to the national income per capita. CHIP, Medicaid expansion, and other select populations and services have enhanced federal funding levels. For federal fiscal year 2019 (October 1, 2018 to September 30, 2019), Virginia's FMAP is 50%, meaning the Medicaid expenditures for services without an enhanced match are funded equally between the federal government and Virginia. DMAS applies the FMAP by forecasting series to convert the total expenditures to state expenditures included in the budget. Virginia has an advantage in developing their forecast because their FMAP generally stays constant at 50%, whereas the FMAP in many states changes from year to year. This predictability eliminates one assumption (and source of potential variation) from the forecasting process in Virginia.

In addition, DMAS estimates other revenue sources to fund Medicaid expenditures, such as provider assessments, and adjusts the state funding request to reflect this additional revenue. For example, a hospital assessment covers the state share of the cost of Medicaid expansion.

The Medicaid forecast includes estimates of all Medicaid expenditures, but the budget request only includes expenditures that will be paid through DMAS appropriations. Items that are funded through other revenue sources, such as the state share of the Medicaid expansion population being funded through a hospital assessment or services that are funded through a different Commonwealth agency, are ultimately not included in the DMAS budget request.

### **DMAS Communicates Forecast Results**

DMAS delivers the results of the forecast to DPB and other stakeholders through a series of presentations led by members of the DMAS budget team. The timing of these communications in the prior forecasting cycle is included for reference below.

#### Preliminary Assumption Discussion

Per the legislated requirement in the budget language, DMAS must present the assumptions used in the forecast to DPB and members of the House Appropriations and Senate Finance Committees by October 15 of each year. This presentation occurred on October 15, 2018 during this past forecast cycle and included the following information:

- Changes in historical enrollment through July 2018
- Estimated managed care rate changes and timing of these changes
- Other trends and assumptions
  - Expedited enrollment
  - Movement of services to managed care
  - CMS disallowances, if applicable for the given time period
- General Assembly actions

No numerical results of the forecast were shared at the October 15, 2018 meeting. At this point in time, DMAS was still finalizing the forecast.



### Initial Delivery of Forecast to DPB

Once the forecast is complete, DMAS presents the forecast to DPB. Last year this presentation occurred on October 24 and included the following information:

- SFY 2019 to SFY 2020 funding surplus / (need) based on the preliminary Medicaid forecast
- Major factors contributing to need for SFY 2019 and SFY 2020
- Assumption information previously shared at the October 15 meeting

### Forecast Presentation to the Governor

DMAS next presents the forecast results to the Governor's office. Last year this presentation occurred on October 30, 2018 and included the following information:

- SFY 2019 to SFY 2020 funding surplus / (need) based on the preliminary Medicaid forecast
- Additional information related to the major factors contributing to need since the October 24 DPB presentation
- Medicaid expansion overview
- Future planned improvements for rate setting and forecasting

### Forecast Presentation to the House Appropriations and Senate Finance Committees

DMAS next presents the forecast to the House Appropriations and Senate Finance Committees. Last year this presentation occurred on November 1, 2018 and coincided with DPB submitting the forecast for review, as outlined in the budget language. This presentation was similar to the presentation on October 30, 2018 to the Governor.

## V. SUMMARY OF VIRGINIA’S MEDICAID MANAGED CARE RATE SETTING PROCESS

As stated above, approximately 95% of Virginia’s Medicaid beneficiaries are enrolled in managed care through two programs:

- CCC Plus serves beneficiaries with complex care needs, including the ABD population, members eligible both for Medicaid and Medicare (dual eligibles), and beneficiaries receiving LTSS services
- Medallion 4.0 serves low-income families and children, adoption assistance, and foster care populations

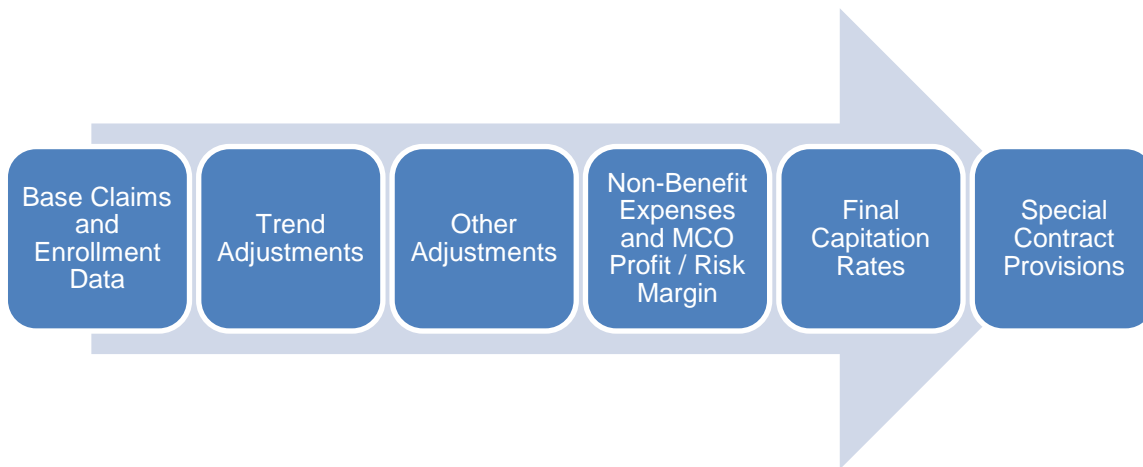
Virginia contracts with external actuaries to develop capitation rates to be paid the MCOs. Effective January 2018, Virginia changed their actuarial vendor from PricewaterhouseCoopers (PwC) to Mercer. The actuary must certify that rates are “actuarially sound” and in compliance with the appropriate federal regulations that govern the Medicaid managed care rate setting process.

Capitation rates are developed annually for both programs with Medallion 4.0 rates effective July 1 of each year and CCC Plus rates historically effective January 1 of each year. Beginning in 2020 the CCC Plus rates will move to also be effective July 1 of each year and coincide with the fiscal year.

The most recent rate reports are published online at <http://www.dmas.virginia.gov/#/ratesetting>

### GENERAL RATE SETTING PROCESS

The figure below provides an overview of the current operational procedures and methodologies being applied in Virginia’s capitation rate development. Similar processes are used to develop the Medallion 4.0 and CCC Plus capitation rates, with base data and assumptions differing to match the populations served by each program. Each step of the process is described below.



### Base Data

Typically, two years of base data are used to develop the capitation rates for both the Medallion 4.0 and CCC Plus programs. If there are special circumstances, the actuary will determine if less than two years of data is credible to use as the base data. This data is a combination of the following sources:

- Populations / Services previously in managed care: Enrollment and encounter data provided from the MCOs and sub-capitated vendor data
- Populations / Services not previously in managed care: FFS enrolment and claims data

The base data time periods used in recent capitation rate development are shown in Table 7.

<b>Table 7</b> <b>Virginia Department of Medical Assistance Services</b> <b>Capitation Rate Base Data</b>				
<b>Program</b>	<b>Rate Effective Dates</b>	<b>Base Period Data - Year 1</b>	<b>Base Period Data - Year 2</b>	<b>Average Years Between Base Data and Rating Period</b>
Medallion 4.0	8/2018 to 6/2019	7/2014 to 6/2015	7/2015 to 6/2016	3.5 years
CCC Plus Non-Expansion	1/2019 to 12/2019	7/2015 to 6/2016	7/2016 to 6/2017	3.0 years
CCC Plus Expansion	1/2019 to 12/2019	1/2015 to 12/2015	1/2016 to 12/2016	3.5 years

Using base period historical data from multiple years prior to the rating period is a common practice in developing Medicaid managed care rates. The rate setting process must carefully balance gathering the most recent and complete data available, while still having sufficient time to validate the data and develop capitation rates. During the development of capitation rates, more recent high level data, such as financial reporting, is often reviewed to help inform trend assumptions to project the base period data to the rating period.

### Trend Adjustments and Other Base Data Adjustments

The contracted actuaries develop trend and other base data adjustments based on historical data and input from the DMAS Provider Reimbursement team. These adjustments are developed specific to the populations included in the programs and vary between the Medallion 4.0 and CCC Plus programs. The types of adjustments applied to the base data to project estimated costs in the rating period include:

- Prospective trend adjustments for changes in unit cost and utilization
- Seasonality, if applicable, due to a contract period not equal to a full year
- Managed care adjustments to reflect estimated savings on populations or services previously not delivered in a managed care delivery model
- Program changes for differences in covered services or populations between the base data and rating period

The Provider Reimbursement team is the primary conduit between DMAS and the contracted actuaries to share information regarding program changes, fee schedule changes, or other issues that may impact the capitation rates.

### Non-Benefit Expenses and MCO Profit / Risk Margin

The capitation rates include amounts to cover non-benefit expenses accounting for reasonable MCO expenses, such as administration, taxes, licensing or regulatory fees, contribution to reserves, risk margin (or profit), cost of capital, and other operational costs associated with providing the services covered under the managed care contract.

---

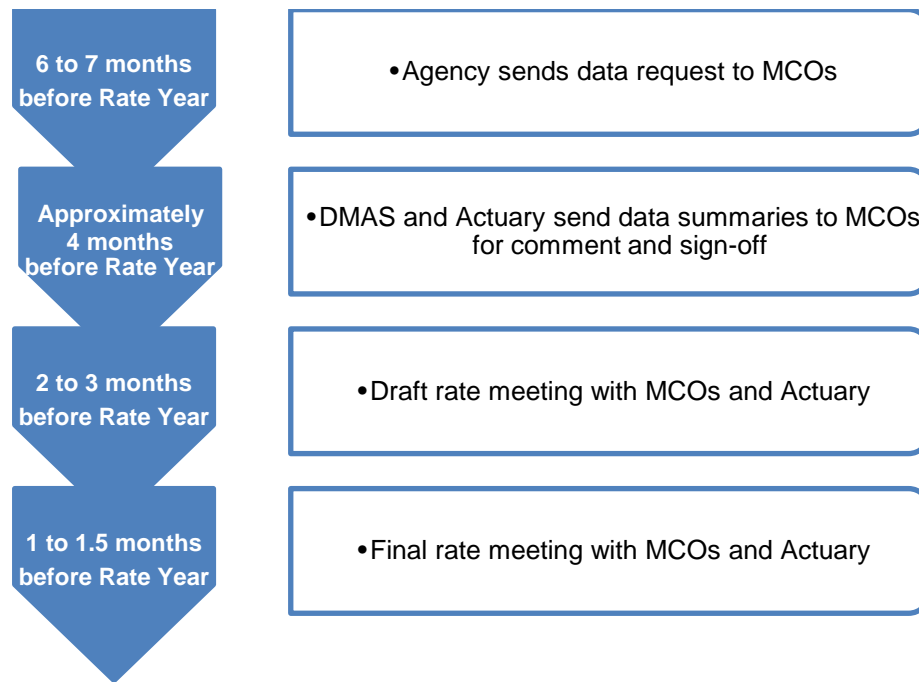
## Special Contract Provisions

The final capitation rates include special contract provisions to incentivize quality in the program and mitigate financial risk – both at the MCO level and at the program aggregate level.

- Risk score adjustments (for select populations) and pharmacy risk pool adjustments account for material differences in the risk profiles of the beneficiaries between MCOs by reallocating revenue from MCOs with lower risk exposures to the MCOs with higher risk exposures. The risk score adjustments are applied directly to the capitation rates for all beneficiaries in a given rate cell (i.e., population) within an MCO based on that MCO's composite risk level for that rate cell. The pharmacy risk pool redistributes revenue based on the MCOs' relative share of beneficiaries with high pharmacy costs in aggregate. Both of these adjustments are budget-neutral to the state, meaning that the total program costs remain the same as they would have been without these adjustments.
- Per CMS request, the expansion populations are covered by a risk corridor. The capitation rates reflect the actuarial vendor's estimate of program costs, and the risk corridor provides protection in the event actual costs are significantly different than expected. Because the rates are expected to reflect actual costs, the underlying assumption in the capitation rate development is that no risk corridor settlements will be required.
- The Medallion 4.0 capitation rates include a Performance Incentive Award (PIA) that may result in additional payments to an MCO based on their relative performance of quality measures defined by DMAS. These payments are funded by withholding a portion of capitation rate payments that are paid to MCOs only if the measures are achieved. This withhold is budget-neutral to DMAS.
- The CCC Plus capitation rates include a Quality Performance Incentive program funded through a 1.0% withhold that MCOs may earn back based on quality measures identified in their contract. This withhold is not budget-neutral to DMAS unless all MCOs fully earn back their 1.0% withhold.
- The Medallion 4.0 capitation rates include directed supplemental payments to the Eastern Virginia Medical School and the University of Virginia and Virginia Commonwealth University.

## RATE SETTING TIMELINE

The rate year for the Medallion 4.0 program is on a SFY basis, beginning July 1 each year and running through June 30 of the following year. Since the inception of the CCC Plus program, the rate year has run on a CY basis from January 1 through December 31. The CCC Plus rates will transition to be on a SFY basis in 2020, consistent with the Medallion 4.0 program, with a six month rate from January 1, 2020 to June 30, 2020 and a full SFY rate effective July 1, 2020. The general historical rate setting timeline is illustrated below.



### IMPACT OF RATE SETTING ON THE FORECAST

Virginia has made significant changes to the managed care program each year for the past several years. Although the general rate setting process has been the same, these program changes have impacted the timing and demand on DMAS resources (for example, the transition from the Medallion 3.0 program to the Medallion 4.0 program was phased in between August 2018 and January 2019). Therefore, different regions and / or populations were operating under different models within the same year. Furthermore, Virginia changed actuarial vendors during this transition. Although general actuarial principles remain consistent between firms, different actuaries are likely to aggregate and communicate results differently. These types of changes to the rate setting process are likely to impact the forecasting process because the managed care rate analysis itself is changing.

The actuarial vendor produces a capitation rate forecast letter for DMAS that is used by the forecasting team to inform the managed care portion of the forecast. For the prior forecasting cycle, DMAS received this letter from the actuarial vendor on October 10, 2018. The rate change communicated by the actuarial vendor is an aggregate percentage based on the enrollment mix as of a point in time. To the extent the future enrollment mix deviates from the point in time used by the actuarial vendor, the observed change in capitation costs will differ from the percentage communicated by the actuarial vendor. Additionally, capitation rates are paid to MCOs one month in arrears, and the forecast is based on the date payments are made. As a result, a capitation rate change effective in July will impact the budget year for eleven months rather than twelve.

The Medallion 4.0 and CCC Plus program teams at DMAS communicate program and policy changes to the Provider Reimbursement team, and the Provider Reimbursement team works with the actuarial vendor to incorporate the changes into the capitation rates for the applicable time period.

The rate year for the CCC Plus program was initially staggered from the Medallion program. This misalignment between the CCC Plus program rate cycle and the fiscal year has historically created additional challenges with the forecast process because of several factors:

- The CCC Plus rates effective January 1 of each year typically have not been finalized prior to the development of the forecast. For example, the CCC Plus rates effective January 1, 2018 were not finalized until December 4, 2017, after the forecast estimates for SFY 2018 (first six months of rate cycle) and SFY 2019 (last six months of rate cycle) were already completed. Therefore, preliminary estimates of the rate changes for SFY 2018 and SFY 2019 were used in the forecast development, rather than the actual rate changes effective January 1, 2018.
- Historically, the rate setting cycle for the CCC Plus program overlapped the forecast development timeframe. This overlap has made it more challenging for DMAS to focus resources on the forecast.

The new actuarial vendor has capacity to set rates for both the Medallion 4.0 and CCC Plus programs on a consistent SFY basis. Therefore, the CCC Plus rate cycle beginning January 1, 2020 will be a six-month rate cycle. Beginning July 1, 2020, both CCC Plus and Medallion 4.0 capitation rates will be set on the same twelve-month SFY rate cycle beginning July 1 each year. This shift will alleviate the impact of the January 1 rate cycle on the forecast results and DMAS resources.

## VI. SUMMARY OF PROCESSES IN OTHER STATES

This section includes a summary of the information provided by each of the five states<sup>8</sup> we interviewed, focusing on their staffing models, the frequency of their forecast updates, and any unique characteristics of the states' processes. Appendix B contains the detailed list of individuals we interviewed from each state. The table in Appendix D provides key information gathered from each state, including Virginia, for easy comparison. Our recommendations for changes or improvements to the forecasting and rate setting processes in Section VII refer to examples of other states' practices outlined in Appendix E. Appendix F includes summarized expenditure and enrollment data for each state over the past five years.

### ARIZONA HEALTH CARE COST CONTAINMENT SYSTEM (AHCCCS)

#### Program Overview

As of July 2018, 93%<sup>9</sup> of Arizona's Medicaid population is enrolled in managed care and an average of approximately 1.7 million<sup>10</sup> Medicaid beneficiaries per month were enrolled in managed care in CY 2018. Arizona's Medicaid managed care programs include almost all Medicaid members except for some small populations, such as Native Americans.

#### Staffing and Resources

Almost all rate setting and forecasting is performed by AHCCCS staff, with minor support from external consultants. AHCCCS's rate setting team consists of five actuaries and four support staff. AHCCCS's forecasting team consists of a budget administrator, two economists, and three to four administrative staff.

The organizational chart for AHCCCS is published online:

<https://www.azahcccs.gov/shared/Downloads/AHCCCSorgchart.pdf>

#### Legislative Requirements

AHCCCS is required to provide preliminary capitation rate information to the Legislature and Governor's Office by March 1 each year. This information is used for budget negotiations in May.

Additionally, AHCCCS is required to submit all capitation rate changes to the Legislature in advance for review and approval, although the Legislature does not have the ability to change the capitation rates. An example of the level of information shared with the Legislature to describe the rate changes can be found on AHCCCS's website:

[https://www.azahcccs.gov/shared/Downloads/Reporting/2019/JBLC\\_March0119\\_Prelim.pdf](https://www.azahcccs.gov/shared/Downloads/Reporting/2019/JBLC_March0119_Prelim.pdf)

AHCCCS is required to submit a monthly appropriation status report to the Legislature that tracks actual expenditures to the appropriation. These appropriation status reports include a brief summary of the key drivers of changes and are published online (February 2019 example below):

<https://www.azahcccs.gov/shared/Downloads/MonthlyReports/AppropriationStatusReports/FY2019/CompleteASR201902.pdf>

The Legislature provides a targeted baseline Medicaid budget increase (excluding program changes) each year. AHCCCS attempts to set rates within this target when possible, but recognizes the capitation rates are developed separately from the budget and must be actuarially sound.

<sup>8</sup> Milliman contracts with all of these states except Arizona to assist with rate setting, forecasting, or both.

<sup>9</sup> The Henry J. Kaiser Family Foundation (<https://www.kff.org/medicaid/state-indicator/share-of-medicaid-population-covered-under-different-delivery-systems/>).

<sup>10</sup> The Henry J. Kaiser Family Foundation (<https://www.kff.org/health-reform/state-indicator/total-monthly-medicaid-and-chip-enrollment/>).

## Executive Management Team Review

All agency decisions with a financial impact must be approved by the Financial Review Committee (FRC). This executive level committee includes the AHCCCS director, two deputy directors, chief medical officer, internal budget administrator, and members from AHCCCS Finance and Operations. The FRC meets at least monthly, and more often during legislative session. Analyses reviewed within the FRC, such as policy changes, are shared with the actuaries for use in rate setting.

Many of the key staff in the executive level of the agency came from the Governor's budget office or have other budget background and have a deep understanding of the forecasting process, which facilitates a meaningful review from the executive level of the agency.

## Rate Setting Process

### Timeline, Data, and Methodology

AHCCCS's current process to develop the managed care capitation rates includes the following timetable for rates with an October 1 effective date:

- End of May: Send projected trends to the MCOs for review
- June: Send projected administrative cost component to the MCOs for review
- Early July: Preliminary capitation rates are completed and reviewed by the actuarial team, including peer review from other actuaries
- Last two weeks of July: Capitation rates go through an executive rate review process which includes involvement by the Medicaid director
- August: AHCCCS submits rate changes to CMS 45 days in advance of effective date (i.e., by August 15)

### Review, Monitoring, and Communication

The capitation rates are developed by the internal actuaries and support staff, and the rates are reviewed by the assistant director, deputy directors, and directors. Following the directors' review, additional executive level members review the capitation rates.

AHCCCS performs a monthly data validation exercise to review emerging encounter data and identify gaps to resolve them as quickly as possible. They compare MCO financials to encounter data and to assumptions built into the capitation rates to identify variances. MCOs will also inform the state of any potential issues. Analyses resulting from these comparisons undergo various levels of review, depending on the severity and the issue.

## Forecast Process

### Timeline, Data, and Methodology

AHCCCS updates their Medicaid forecast two to three times per year. AHCCCS's process to develop the Medicaid forecasts includes the following timetable:

- Prior to September: Forecasts for FFS and managed care populations are developed and used by the actuaries for rate development in addition to the forecast. The capitation rates are fed into the budget models. Utilization, inflation, and reimbursement estimates for FFS claims are developed and incorporated into the forecast.



- September 1: Main forecast is due for budget submittal.
- Throughout September: Budget is immediately recast.
- October: Budget is resubmitted with changes, if needed.
- January: Forecast is rebased if material changes warrant an update.
- February: Governor's budget is published.

### Review, Monitoring, and Communication

The review of the Medicaid forecasts follows a similar review process as the capitation rates. The forecasts are developed by the budget team and reviewed by the assistant director, deputy director(s), and directors. Following the review by the directors, additional executive level members review the forecasts.

AHCCCS tracks expenses against the budget on a monthly basis. If there are large variances, AHCCCS may perform a budget rebase, possibly limited to certain programs versus a full rebase.

The budget is posted online and external communication is tracked and logged by a legislative liaison. This helps AHCCCS anticipate future questions from stakeholders.

AHCCCS has no formal meetings with external stakeholders throughout the year other than submitting rates to CMS for review. They do, however, have an open dialogue with the Governor and legislative budget committees.

## **FLORIDA AGENCY FOR HEALTH CARE ADMINISTRATION (AHCA)**

### **Program Overview**

As of July 2018, 92%<sup>11</sup> of Florida's Medicaid population is enrolled in managed care. An average of approximately 3.9 million<sup>12</sup> Medicaid beneficiaries per month are enrolled in managed care during state SFY 2018. Florida's Medicaid managed care programs include almost all Medicaid members except for small populations, such as medically needy, partial duals, family planning, breast and cervical cancer program, presumptively eligible pregnant women, and emergency medical assistance aliens / other. The managed care programs covers all mandatory acute, primary, specialty, and long term care services. Additionally, dental services for children and adults are covered under the new dental program.

### **Staffing and Resources**

Rate setting work is performed by an outside actuarial vendor and supported by an internal Actuarial Services Unit (ASU) comprised of five individuals. The forecasting work is performed internally with support by the outside actuarial vendor. AHCA's forecasting team includes four individuals: one analyst who performs the detailed modeling, a manager who supports the analysis and develops the budget packages to be shared externally, the Chief of Medicaid Program Finance, and Assistant Deputy Secretary for Medicaid Finance and Analytics.

The organizational chart as of August 2018 for AHCA is published online:

[http://ahca.myflorida.com/Medicaid/pdf/files/High\\_Level\\_Org\\_Chart.pdf](http://ahca.myflorida.com/Medicaid/pdf/files/High_Level_Org_Chart.pdf)

---

<sup>11</sup> The Henry J. Kaiser Family Foundation (<https://www.kff.org/medicaid/state-indicator/share-of-medicaid-population-covered-under-different-delivery-systems/>).

<sup>12</sup> Florida's enrollment reports ([http://ahca.myflorida.com/medicaid/Finance/data\\_analytics/enrollment\\_report/index.shtml](http://ahca.myflorida.com/medicaid/Finance/data_analytics/enrollment_report/index.shtml)).

## Legislative Requirements

A Social Services Estimating Conference is convened each year for Medicaid caseload, Medicaid expenditures, and the CHIP program, as required by statute. There are two estimating conferences in even numbered years since the legislative session starts in January. For odd numbered years, there are three estimating conferences since the legislative session starts in March. The estimating conference has four principals who make decisions regarding the overall budget. These principals include:

- Staff director of the Health and Human Services appropriations committee from the House of Representatives
- Staff director of the Senate appropriations committee
- Representative from the Governor's office
- State economist from the Office of Economic and Demographic Research (EDR)

AHCA participates in these conferences and presents their forecast for the principals' consideration.

All projections from the estimating conferences are made public. The websites below contain links to the most recent caseload and expenditure conferences:

<https://thefloridachannel.org/videos/3-6-19-social-services-estimating-conference-medicaid-expenditures-and-county-contributions-to-medicaid/>

<https://thefloridachannel.org/videos/2-18-19-social-services-estimating-conference-medicaid-kidcare-caseloads/>

EDR posts final conference documents on their website:

<http://edr.state.fl.us/Content/conferences/medicaid/>

## Rate Setting Process

### Timeline, Data, and Methodology

AHCA works with their actuarial vendor to develop the managed care capitation rates based on following timetable for rates with an October 1 effective date:

- Mid to late December: Initial base data summaries and questions are sent to the MCOs.
- Mid-January: AHCA and the actuarial vendor meet with each MCO to discuss preliminary data summaries and MCO program concerns.
- Mid to late March: Base data summaries are provided to the MCOs. The actuarial vendor gives a base data presentation to the MCOs, and additional one-on-one meetings are held with each MCO.
- Late May to Mid-June: Draft rates are sent to the MCOs and an all MCO draft rate meeting is held at the state agency.
- End of July to Early August: Final rate estimates are provided by the actuarial vendor for AHCA to use in the August estimating conference.

The following data sources are gathered to develop the capitation rates:

- Special feed of encounter data submitted by MCOs specifically for rate setting
- FFS data
- Repriced hospital inpatient and outpatient claims experience provided by an outside contractor
- MCO financial reports
- AHCA's enrollment data

Capitation rate reports are published on AHCA's website:

[http://ahca.myflorida.com/medicaid/Finance/data\\_analytics/actuarial/index.shtml](http://ahca.myflorida.com/medicaid/Finance/data_analytics/actuarial/index.shtml)

### Review, Monitoring, and Communication

AHCA staff are heavily involved in the capitation rate review process. The ASU reviews the capitation rates, and AHCA arranges a pre-meeting with the principals before the first estimating conference to walk through the capitation rate report and answer any questions. AHCA typically invites their actuarial vendor to attend this meeting to present the capitation rate changes.

The capitation rate changes are reviewed at the rate group and regional level and compared to MCO medical loss ratios for reasonableness. Additionally, the base data is compared to the prior year. The actuarial vendor provides AHCA with a summary exhibit that shows the impact of each adjustment on the overall capitation rate change.

AHCA and the actuarial vendor monitor quarterly MCO financial reporting. AHCA also monitors monthly capitation rate payments at the rate group level.

### **Forecast Process**

#### Timeline, Data, and Methodology

The forecast is updated two to three times per year and aligns with the state estimating conferences.

AHCA's process to develop the Medicaid forecasts includes the following timetable:

- July or August – caseload conference: The first estimating conference is held in late summer of each year for the Long-Range Financial Outlook (LRFO). AHCA and EDR each develop a caseload forecast for the current budget year and the following year. The long-term forecast includes an additional three years. The growth rate for this long-term forecast is set at the estimating conference. EDR provides a comparison package to the estimating conference comparing their forecast to AHCA's forecast. The principals can also supply their own projections to the estimating conferences. AHCA and EDR walk through their forecast with the principals, and the principals decide on which projection to use for the budget.
- Fall – expenditure conference: An estimating conference is held in the fall of each year in preparation for the Governor's budget. AHCA develops a detailed projection by line item and makes manual adjustments to certain lines where needed for program changes or larger changes that have a material impact on the forecast. EDR reviews AHCA's detailed projections and growth rates. Larger changes occur during this conference due to legislative changes in July and capitation rate changes effective in October. The principals decide which projection to use for each line item.
- Spring: The third estimating conference is held in early spring for the development of the General Appropriations Act (GAA).

The analyst working on the initial forecast projections collects caseload and expenditure data on a monthly basis going back to the start of managed care. Various models are used to develop the forecast, including Autoregressive Integrated Moving Average (ARIMA), linear regression, averages, and last actual. For the caseload forecast, models are run through the “Shiny App” in R to produce visual representations of various projections. For the expenditures forecast, the ARIMA model assigns confidence levels to each projection.

The analyst makes a preliminary decision regarding the projection that best fits with future expectations for each line item on the caseload and expenditures forecast. Then the analyst and three additional management individuals discuss, review, and make final decisions about which models to use for each line item. Manual adjustments are made for legislative program changes that are not included in the historical data. For FFS claims, AHCA consolidates FFS line items since it is hard to project small lines individually due to limited FFS experience available since the implementation of statewide managed care. Additionally, the projections rely heavily on the capitation rate projections since the majority of Medicaid individuals statewide are enrolled in managed care. The projections are generated in approximately one day, but it takes a few weeks to select the best model to use for each line item for the estimating conference. Work on the forecast projections begins one month prior to the estimating conference.

### Review, Monitoring, and Communication

AHCA compares projections to the appropriations and final expenditures from the prior year. They review the overall surplus or deficit versus the general revenue and may revisit and adjust certain line items.

The forecasts are discussed with the agency Secretary and Medicaid director. The agency briefs the Governor’s office, and then the forecast is shared with the estimating conference principals.

AHCA tracks actual expenditures to forecast expenditures by reviewing monthly expenditure reports, daily cash balances, and quarterly surplus or deficit reports. AHCA maintains a quarterly report comparing actual costs to the appropriation that is required to be submitted to the Legislature. They also produce daily cash reports to review how much has been disbursed for each line item to compare to the appropriations.

## **INDIANA FAMILY AND SOCIAL SERVICES ADMINISTRATION (FSSA)**

### **Program Overview**

As of July 2018, 84%<sup>13</sup> of Indiana’s Medicaid population is enrolled in managed care. An average of approximately 1.5 million<sup>14</sup> Medicaid beneficiaries per month are enrolled in managed care during state CY 2018. Indiana’s Medicaid managed care programs provide comprehensive services. Dual eligibles and LTSS populations are excluded from managed care.

### **Staffing and Resources**

Rate setting and detailed forecast modeling work is performed by an outside actuarial vendor and supported by three internal staff members (state actuary, Medicaid Director, Medicaid Chief Financial Officer (CFO)). Additional policy and program staff assist with forecasting.

FSSA’s organizational chart is published online:

<https://www.in.gov/fssa/4829.htm>

### **Legislative Requirements**

The state budget plan amendment guides most forecasting and rate setting processes. The state budget agency requires a forecast every December. FSSA updates their forecast in April when they are in

---

<sup>13</sup> The Henry J. Kaiser Family Foundation (<https://www.kff.org/medicaid/state-indicator/share-of-medicaid-population-covered-under-different-delivery-systems/>).

<sup>14</sup> Provided by FSSA.

legislative session for the next biennium budget. FSSA works with the state budget agency to determine what should be included or excluded in the Medicaid forecast.

## Rate Setting Process

### Timeline, Data, and Methodology

FSSA works with their actuarial vendor to develop the managed care capitation rates based on the following timetable for rates with a January 1 effective date:

- Ongoing all year: Review and reconciliation of encounter data
- Early May: Kickoff meeting to discuss overview of planned methodology, policy and program changes
- Early May: Final reconciliation of base data period and data “signoff”
- Mid July: Draft capitation rates sent to FSSA for internal discussion
- End of July: Draft capitation rates are sent to the MCOs for review
- August 1: Meeting to present draft capitation rates to the MCOs
- August 10: MCOs submit written questions on draft capitation rates
- August 20: FSSA and the actuarial vendor respond to written questions and develop final capitation rates
- Early September: FSSA finalizes contract amendments and send them to the MCOs
- Mid-September: MCOs sign contracts
- October 1: FSSA submits rate certifications and signed contracts to CMS
- After October 1: Capitation rates are approved by CMS (capitation rates are paid at the prior year rate until approved by CMS and then adjusted on a retroactive basis)

### Review, Monitoring, and Communication

Two types of reconciliations are performed by the actuarial vendor to reconcile capitation rates to the prior year’s rates:

1. Documentation of a build-up of the base period data.
2. Documentation of changes from the prior year’s capitation rates.

The three main FSSA staff members work closely with the actuarial vendor and other state staff members throughout the encounter data reconciliation and capitation rate development. The state actuary reviews the capitation rates and other interim deliverables. Program and policy changes with a fiscal impact are discussed with the state budget agency and the Governor’s office and reviewed by the legislative state budget committee.

## Forecast Process

### Timeline, Data, and Methodology

The forecast is updated twice a year. If there is a material policy or program change, an ad hoc interim forecast update may be requested. FSSA works with their actuarial vendor to develop the Medicaid forecast based on the following timetable:

- Ongoing all year: Monitor expenditure experience monthly. This includes detailed reporting by population and category of service, including a comparison to the budget (based on the last full forecast) and updated appropriation need.
- Three to four months prior to forecast: The CFO requests fiscal impact estimates for major policy and program changes from their actuarial vendor, FSSA divisions, Office of Medicaid Policy and Planning, and other contractors, as appropriate.

- Approximately two months prior to the forecast: Actuarial vendor develops forecast.
- At least one week prior to the forecast: Forecast is shared with three key staff at FSSA for review and discussion.
- One week prior to the forecast: Forecast is shared with full FSSA leadership, liaisons to the state budget, and Governor for discussion and dissemination as appropriate. The forecast is also shared with the full state budget group and the state director.
- Mid-April or Mid-December: Forecast is presented to the Budget Committee.

The primary data source used in the forecast is enrollment and expenditure data summarized from the state's encounter data warehouse. Data not reported in the encounter data warehouse is supplemented as needed. The historical enrollment is stratified into approximately sixty populations, summarized by month, and projected on a monthly basis. Enrollment trend assumptions vary by population. Expenditures for each population are stratified into approximately twelve categories of service. For each population and category of service, historical monthly expenditures are divided by enrollment to develop a cost per member per month (PMPM). The PMPM values are projected using cost trend assumptions that vary by category of service and multiplied by projected enrollment for each population and month to develop projected incurred expenditures. Projected incurred expenditures are converted to paid expenditures by reviewing historical payment timing information as a part of an incurred but not reported (IBNR) analysis. Ad hoc paid timing adjustments are modeled for anticipated payment adjustments (e.g., health insurer fee payment anticipated in the future). The forecast also incorporates monthly updates on non-claim expenditures (e.g., pharmacy rebates, third party liability) and estimates the state share appropriation need.

### Review, Monitoring, and Communication

The Medicaid forecast review follows a similar process as the capitation rate review. Throughout the year, the three main FSSA staff members work with the actuarial vendor and others within the state agency to monitor the program experience and limit "surprises." Formal meetings are arranged with FSSA leadership, the state budget agency, Governor's office, and legislative analysts to review the forecast, ask questions and provide input that may be incorporated into the final forecast. The state budget agency is the first external stakeholder to review the forecast. They may request additional information from the CFO if they have questions or concerns. In addition, FSSA meets with the state budget agency each month to discuss and review Medicaid financials.

Expenditure experience is updated in a monthly report, including detail by program and category of service, along with analysis of key variances from the forecast which is shared within FSSA and with the state budget agency. Actual expenditures are compared to the forecast and the actuarial vendor investigates significant variances. Advance notice may be given to other stakeholders (e.g., Governor's liaison, legislative analysts, and in rare circumstances, the public) where the variance is judged to be material. The final budget is shared publicly at a high level.

There is no formal committee that reviews the forecast. FSSA staff works closely with their actuarial vendor and stakeholders to limit surprises by monitoring program experience on a monthly basis. FSSA also works with their actuarial vendor to develop a list of potential policy and program changes to reflect in the forecast, and FSSA gathers input from key stakeholders.

## **OHIO DEPARTMENT OF MEDICAID (ODM)**

### **Program Overview**

As of July 2018, 88%<sup>15</sup> of Ohio's Medicaid population is enrolled in managed care and an average of approximately 3.0 million<sup>15</sup> Medicaid beneficiaries per month are enrolled in managed care during state

---

<sup>15</sup> Provided by ODM.



SFY 2019. Ohio's Medicaid managed care programs include almost all Medicaid members except populations in long term support services.

## Staffing and Resources

Rate setting work is performed by an external actuarial vendor with support from four internal staff members and ODM's policy group. Forecasting work is performed by ODM staff. ODM's forecasting team is comprised of ten staff members, five who work on the forecast and five who work on the budget.

## Legislative Requirements

During the 130th Ohio General Assembly (January 2013 to December 2014), the Senate established the Joint Medicaid Oversight Committee (JMOC), comprised of five state senators and five state representatives. JMOC's primary function is to provide continuing oversight of all facets of the state's Medicaid program. One of JMOC's responsibilities is to determine the projected growth rate for the Ohio Medicaid program. JMOC uses an outside actuarial vendor (different from ODM's vendor) to establish this value. By law, ODM must keep their aggregate PMPM growth under the lower of the JMOC growth rate or the three-year weighted average of the Midwest Medical Consumer Price Index (CPI).

More information on JMOC can be found on their website:

<http://jmoc.state.oh.us/home>

## Rate Setting Process

### Timeline, Data, and Methodology

ODM works with their actuarial vendor to develop the managed care capitation rates based on the following steps for rates with a January 1 effective date:

- Administer the MCO rate setting survey
- Gather program and policy adjustments
- Develop the data book and methodology report
- Meet with the actuarial vendor to discuss the data book and methodology report
- Meet with the MCOs and the actuarial vendor to discuss the data book and methodology report
- Respond to ODM and MCO feedback on the data book and methodology
- Develop the draft capitation rates
- Meet with ODM, MCOs and the actuarial vendor to discuss the draft capitation rates
- Respond to internal and MCO feedback on draft rates
- Early December: Development of final capitation rates with risk adjustment

The data sources used to develop the capitation rates include the following:

- MCO encounter data
- ODM enrollment
- MCO annual cost report data
- FFS data
- MCO survey responses
- Statutory financial data
- Repriced inpatient and outpatient hospital claims experience provided by ODM

## Review, Monitoring, and Communication

ODM and their actuarial vendor have monthly meetings with the MCOs to discuss rate setting and other considerations. These meeting agendas are driven by the MCOs.

ODM has a robust system for review of MCO encounter data, including dashboards that are shared with their actuarial vendor, and ODM staff to review MCO performance compared to the capitation rates. Additionally, ODM's actuarial vendor produces a series of "waterfall" charts to provide stakeholders with insight into the key drivers of the capitation rate changes. The capitation rates are shared first with the policy area at ODM and a few individuals who focus on the data for review. Afterwards, the capitation rates are shared with additional staff at ODM who also perform a review of the capitation rates.

The actuarial vendor gathers financial data submitted by the MCOs, compares the financial data to submitted encounter data and capitation rate expectations, and provide observations that require MCO response. In addition, they monitor MCO experience on a quarterly basis through the MCO cost report processes and produce a series of dashboard reports that are shared and reviewed with ODM. ODM and their actuarial vendor share their dashboards with the MCOs to ensure accuracy and completeness of the data. ODM also utilizes these dashboards to review and monitor financial performance measures.

## Forecast Process

### Timeline, Data, and Methodology

ODM performs a full forecast update each quarter except for the first quarter after the biennium. ODM's process to develop the Medicaid forecasts includes the following timetable:

- Six weeks prior to the forecast: ODM gathers necessary data for the forecast. ODM produces quarterly cycles of data extracts. They receive monthly case load files. The rest of the data is extracted the first week of each quarter.
- Five weeks prior to the forecast: ODM incorporates the capitation rates by category of service from their actuarial vendor into the forecast. ODM starts with their models from the prior quarter and makes updates as needed. They spend approximately one week on the forecast modeling and choosing a model that best mirrors the Medicaid growth for each projection line item. ODM incorporates outside sources such as external employment data to correlate and predict how Medicaid enrollment changes over time for income-based populations. ODM bases projections for the ABD populations on time series models.
- Four weeks prior to the forecast: ODM updates the forecast as needed to reflect policy changes.
- One week prior to the forecast: ODM meets with the executive budget office to present the forecast.

### Review, Monitoring, and Communication

The Medicaid forecasts are reviewed by many staff within ODM, as well as the executive budget team. Quarterly meetings are held with the executive budget team to discuss the forecast and include the state budget director, Medicaid director, and Health and Human service cabinet members. There are also monthly meetings with the executive budget team to track forecast expenditures against the current budget. In addition, ODM has monthly meetings with JMOC, monthly meetings with the Legislature, and monthly meetings with Medicaid budget team.

Information presented at each JMOC meeting is published online:

<http://jmoc.state.oh.us/meetings>

ODM tracks cost reports so they can predict if a large adjustment is expected in the next rate setting period. They track the forecast against the budget on a monthly basis. These results are published online:

Monthly budget variance reports: <https://medicaid.ohio.gov/RESOURCES/Reports-and-Research/Budget-Variance-Reports>



Monthly caseload reports: <https://medicaid.ohio.gov/RESOURCES/Reports-and-Research/Caseload-Reports>

ODM communicates to external stakeholders, such as associations, quarterly or bi-quarterly. For any major change to the budget forecast, ODM creates a white paper to discuss with JMOC or post online.

## **SOUTH CAROLINA DEPARTMENT OF HEALTH AND HUMAN SERVICES (SCDHHS)**

### **Program Overview**

As of July 2018, 77%<sup>16</sup> of South Carolina's Medicaid population is enrolled in managed care. An average of approximately 1.3 million<sup>17</sup> Medicaid beneficiaries per month are enrolled in managed care during SFY 2018. South Carolina has not adopted Medicaid expansion, but covers the majority of the Medicaid populations including ABD, Temporary Assistance for Needy Families (TANF)<sup>18</sup>, and full services dual eligible populations.

### **Staffing and Resources**

Rate setting and detailed forecast modeling work is performed by an outside actuarial vendor and supported by the managed care team, the CFO and CFO's team, and a combination of individuals from the budget office.

Key leadership for SCDHHS is summarized on their website:

<https://www.scdhhs.gov/staff-directory/leadership>

### **Legislative Requirements**

There are no specific state statutes or guidance on the rate setting or forecasting processes. SCDHHS largely operates outside of the state legislative area.

### **Rate Setting Process**

#### Timeline, Data, and Methodology

SCDHHS works with their actuarial vendor to develop the managed care capitation rates based on the following timetable:

- Four to five months prior to effective date of capitation rates: Actuarial vendor validates encounter base data
- Three to four months prior to effective date of capitation rates: Data book and rate methodology letter is presented to the MCOs
- Two months prior to effective date of capitation rates: Draft rates are provided to SCDHHS
- One and a half months prior to effective date of capitation rates: Draft rates are presented to the MCOs to discuss rate assumptions and offer the MCOs an opportunity to ask questions
- One month prior to effective date of capitation rates: Publication of final capitation rates and risk adjustment

---

<sup>16</sup> The Henry J. Kaiser Family Foundation (<https://www.kff.org/medicaid/state-indicator/share-of-medicicaid-population-covered-under-different-delivery-systems/>).

<sup>17</sup> Provided by SCDHHS.

<sup>18</sup> The TANF population in South Carolina is comparable to the Low Income Families with Children (LIFC) population in Virginia.

---

The data sources used to develop the capitation rates include the following:

- MCO encounter data (three years for historical trend analysis, and one year for rate setting base data)
- MCO survey responses
- National Association of Insurance Commissioners (NAIC) Annual Statement Data
- FFS data

The actuaries compare capitation rates to the prior rates to quantify and identify major drivers of the rate changes. Anticipated changes in capitation rates are communicated through standing bi-weekly meetings between SCDHHS and their actuarial vendor.

The capitation rates undergo review by the managed care program staff, executive staff, and budget staff at SCDHHS. SCDHHS has a dedicated staff member assigned to ad hoc reporting and monitoring. MCO revenue and claims are collected at the rate cell level from the MCOs on a quarterly basis to evaluate the experience for each capitation rate cell compared to the pricing target.

Each quarter, SCDHHS meets with MCOs to discuss policy initiatives and other rate setting considerations. SCDHHS also meets with the MCOs to discuss rate methodology before providing any numbers or rates.

#### Review, Monitoring, and Communication

There is no formal committee that reviews the capitation rates. SCDHHS works with their external actuarial vendor to discuss and review program and/or policy changes for reasonableness.

#### **Forecast Process**

##### Timeline, Data, and Methodology

The forecast is updated twice per year and submitted to the state budget agency once per year. The second forecast update is used to review how actual emerging experience compares to the forecast projections.

SCDHHS works with their actuarial vendor to develop the Medicaid forecast using the following steps:

- SCDHHS completes an information request and submits this to their actuarial vendor for review. This request includes information regarding program and policy changes, enrollment and expenditure assumptions, and other forecast related items.
- SCDHHS and their actuarial vendor meet to review key assumptions included in the information request and discuss any missing detail or pieces of information.
- The actuarial vendor completes an eligibility forecast to project enrollment by program and population.
- SCDHHS and their actuarial vendor meet to review the eligibility forecast and discuss assumption changes or modifications if necessary.
- SCDHHS completes the draft expenditure forecast to project claims and other expenses by budget category, program, and population grouping.
- SCDHHS reviews the expenditure forecast and discusses modifications with their actuarial vendor if necessary.

The forecast is completed several weeks prior to the state budget submission to allow time for internal meetings and review. Last year, the budget deadline was September 15. Therefore, the forecast was developed in July/August and updated again in February / March.

The primary models used to develop the forecast use historical monthly claims and enrollment data, adjusted for known program changes, to forecast future monthly claims and enrollment patterns. Additional models are created for completion factor development, trend analysis, seasonality factor development, and adjustment specific models for population and / or benefit changes (as needed) to serve as inputs to the primary models. Enrollment data is summarized by program (FFS or managed care), population, and waiver eligibility. Enrollment is forecasted by month. Adjustments are applied to account for completion, trend, seasonality, and population changes. Claims data including incurred expenditures and paid expenditures, and incurred utilization and recipients, is summarized by population groups and budget categories. Incurred PMPM estimates are developed and forecasted by month. PMPM values are adjusted for expected population and policy changes that are not reflected in the historical data.

Fiscal impact analyses are completed and discussed with SCDHHS. Incurred expenditures are developed using forecasted enrollment data and the projected PMPM values. Paid expenditures are then developed from the forecasted incurred dollars by applying incurred to paid factors based on historical payment patterns.

### Review, Monitoring, and Communication

A review of the Medicaid forecasts is performed by the budget staff and other program areas at SCDHHS. The forecast and budget is then shared with each deputy director before it is presented to the director for final approval. Any large program or policy change that has a fiscal impact is presented to the director for approval. The director communicates with the legislators and Governor's office throughout the year which limits "surprises" to the budget "ask."

Monthly expenditures are tracked on a weekly basis to monitor actual expenditures compared to forecasted expenditures and are presented to the program area within SCDHHS and executive management. SCDHHS reconciles the current year's appropriation to the revised projection and to next year's budget "ask."

In addition to regular SCDHHS communication with internal stakeholders, SCDHHS has regular conversations with external stakeholders such as the provider communities.

Similar to the capitation rate development, there is no formal committee that reviews the forecast. SCDHHS works with their external actuarial vendor to discuss and review program and/or policy changes, forecast assumptions, and forecast projections for reasonableness. The deputies, director, and other staff at SCDHHS review the forecast. SCDHHS also partners with university researchers to review high level trends.

## VII. RECOMMENDATIONS

This section outlines recommendations for changes or improvements in the current forecasting and rate setting processes.

***Even if DMAS implements all of the recommendations in this report, it is certain that actual future expenditures will not exactly match the forecasts due to a changing economy, policy changes from CMS, and other drivers not known at the time of the forecast development. However, implementation of these recommendations should improve the understanding, communication and transparency of the forecast.***

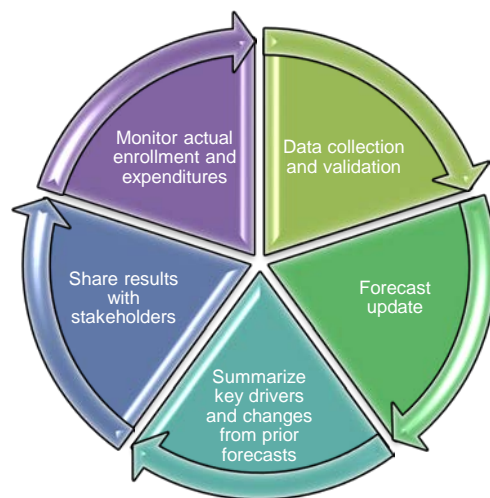
For each recommendation, we discuss multiple approaches DMAS could consider when implementing the recommendation, with some options requiring more resources (such as staffing) than other options. DMAS will need to carefully consider the resources and other factors required to pursue each strategy when developing action plans to address these recommendations. Many of these recommendations may require more resources during the implementation and development of the processes than will ultimately be required to maintain the recommendations. For example, producing more formal and thorough documentation will require substantial investments of time, but maintaining the documentation will be less time intensive. Therefore DMAS should evaluate short-term versus long-term resource and staffing needs.

Where applicable, we include examples from comparison states to illustrate how these recommended changes have been successful in other states.

### RECOMMENDATION #1: UPDATE THE FORECAST MORE FREQUENTLY THAN ONCE PER YEAR

**Related Interview Themes: Timing, Monitoring and Reporting, Staff and Resources, Communication and Education, Data Limitations, and Peer Review**

Based on our conversations with other states, the most accurate forecasts result from a rigorous year round process, with multiple updates made during the year to reflect recent trends, either positive or negative. The following graphic illustrates the general process used to develop and monitor forecasts:



Currently, DMAS completes the forecasting process once per year. We recommend DMAS updates their forecast more than once per year to allow early and more frequent communication of the impact of changes that occur between the current annual updates. All the comparison states we interviewed update their Medicaid forecast at least twice per year. Currently, resources and data availability are the two key roadblocks to DMAS updating the forecast more than once per year.

- **Resources:** The forecasting team has many other responsibilities in addition to developing the Medicaid forecast, such as supporting the development of budget decision packages. An increase in the scope of work related to forecasting, such as additional monitoring and more frequent updates, may result in DMAS needing to dedicate additional resources to this work or realigning the responsibilities of the current forecasting team. These additional resources may be internal or external to DMAS, but should have the skill sets necessary to complete complex data analysis and develop statistical forecasting models.
- **Data:** A significant portion of the current time devoted to developing the current annual forecast is gathering and validating the data used to develop the detailed statistical forecasts.

We provide two different options DMAS could implement to update the forecast more than once per year.

1. **Option #1: Complete a full update of the forecast two to three times a year, similar to what other states we interviewed are currently doing.** This would require DMAS to dedicate additional resources to or realign the responsibilities of the current forecasting team to give them the capacity to devote time to forecast updates throughout the year.
2. **Option #2: Update key pieces of the forecast two to three times a year.** Key items that have a material impact on the forecast and do not require significant data processing should be considered more frequently than once per year. Based on our interviews with DMAS staff, we believe the following processes could be updated more frequently than once per year with current staff or with minimal additional resources:
  - a. Reevaluate enrollment forecasts using more recent enrollment data.
  - b. Update managed care capitation rates when draft rates for the upcoming rate year are received from DMAS's actuarial vendor.
  - c. Include fiscal impacts of program or policy changes as they become available.

**RECOMMENDATION #2: BUILD A ROBUST REVIEW PROCESS INTO THE FORECAST DEVELOPMENT TIMELINE**

**Related Interview Themes: Timing, Staff and Resources, Documentation, and Peer Review**

The timing of the current forecast process does not allow for review of preliminary forecasts by others before the forecast is finalized. We recommend DMAS develops a detailed timeline for the forecast development that includes sufficient time at the end for review of preliminary results by multiple layers of individuals within DMAS.

We provide a sample timeline below, assuming the current November 1 due date for the annual forecast, that would allow adequate time for multiple layers of review within DMAS and revisions to the forecast and communication package, as needed. We provided an initial timeline that might be applicable in the first few cycles as stakeholders adjust to the process, and we also included second timeline that might be reasonable once the process is more established. The initial timeline allows for a longer forecast timeline, particularly more time between the kick-off meeting and finalizing the consensus forecast. Additional time is allotted here for DMAS to develop an efficient process to gather data required for the data book and create an independent forecast. Once data can be gathered quickly and a routine process has been established, the ultimate timeline condenses this timeframe from six to three weeks.

**Table 8**  
**Virginia Department of Medical Assistance Services**  
**Sample Forecast Timeline**

Step #	Step Description	Initial Timeline (T = Forecast Due Date)	Initial Timeline Dates	Ultimate Timeline (T = Forecast Due Date)
1	Kick-off meeting	T – 12 weeks	Aug 9	T – 9 weeks
2	DMAS completes data book	T – 11 weeks	Aug 16	T - 8 weeks
3	DMAS and DPB complete independent forecasts	T – 8 weeks	Sep 6	T - 7 weeks
4	Consensus forecast finalized	T – 7 weeks	Sep 13	T - 7 weeks
5	DMAS incorporates other items into forecast not included in consensus forecast	T – 6 weeks	Sep 20	T - 6 weeks
6	DMAS finalizes internal documentation	T – 6 weeks	Sep 20	T - 6 weeks
7	DMAS provides forecast and internal documentation to Provider Reimbursement, Program, and Finance Teams	T – 6 weeks	Sep 20	T - 6 weeks
8	Provider Reimbursement, Program, and Finance Teams provide feedback	T – 5 weeks	Sep 27	T - 5 weeks
9	External communication package developed and feedback incorporated	T – 4 weeks	Oct 4	T - 4 weeks
10	Forecast and external communication package shared with EMT	T – 4 weeks	Oct 4	T - 4 weeks
11	EMT provides feedback	T – 3 weeks	Oct 11	T - 3 weeks
12	Incorporate EMT feedback	T – 2 weeks	Oct 18	T - 2 week
13	DMAS presents final forecast to DPB (Requirement of October 15)	T – 2 weeks	Oct 18	T - 2 week
14	Forecast due (Requirement of November 1)	T	Nov 1	T

Having multiple groups at DMAS review the forecast will help to ensure that data or assumptions are incorporated consistent with the understanding of those who provided the information. In the timeline above, we highlighted four groups within DMAS that should be able to provide valuable feedback to the forecast team. DMAS should determine if there are any other groups (internal or external to DMAS) not mentioned here who also should be included in the feedback loop and incorporate their review into the timeline. Detailed documentation of the assumptions and methods used to develop the forecast will aid each of these teams in performing a meaningful review of the following information:

- **Provider Reimbursement:** Review lump-sum payments and incorporate current and future capitation rates into the forecast.
- **Program:** Ensure that all program changes and their fiscal impacts are incorporated into the forecast.
- **Finance:** Review overall forecast and documentation for consistency with DMAS expectations, and anticipate questions that EMT may ask.



- EMT: Provide higher level review of the forecast and external communication package to anticipate and proactively answer questions that external stakeholders may ask.
- A kick-off meeting should occur at the start of each forecast cycle among these stakeholders to discuss and identify considerations for the forecast development.

### **RECOMMENDATION #3: RE-EVALUATE DATA USED FOR FORECAST**

#### **Related Interview Themes: Timing, Staff and Resources, and Data Limitations**

As outlined in Theme #6, the resources and time currently needed to gather the data to use for the forecast is a key roadblock to performing a full update of the Medicaid forecast more than once per year. When developing the forecast timeline in Recommendation #2, DMAS will need to consider the data sources to be used for each iteration of the forecast and the availability of the DMAS resources who supply the data elements.

- FFS and enrollment data: Determine what month will need to be the cut-off date for the historical data in order to meet the timeline. In general, the improvement to the process by having the ability to perform multiple layers of review at the end of the process should outweigh having fewer months of historical data to analyze.
- Capitation rates: DMAS already recognized that moving the CCC Plus rate timeline to a SFY basis to align with Medallion 4.0 will improve the forecast timing, since the SFY capitation rates are generally finalized in June of each year and therefore will be known prior to the development of the November 1 forecast. DMAS should work closely with their actuarial vendor to receive draft January 1, 2020 to June 30, 2020 CCC Plus rates by early to mid-September this fall to leave time for DMAS to evaluate, incorporate, and understand the drivers in the rate change for the November 1 forecast. In addition, DMAS should work with their actuarial vendor to receive the estimated future rate changes for both Medallion 4.0 and CCC Plus by early to mid-September for incorporation into the November 1 forecast.
- Other data elements: The forecast team should work closely with the other teams within DMAS to gather all necessary data elements by early to mid-September to be incorporated into the November 1 forecast.

DMAS is currently implementing a new modular MMIS system, which presents a great opportunity to enhance the data systems going forward, but requires a complex level of coordination in the near term. DMAS will need time to transition to the new MMIS and to validate the data prior to being able to use it for either the forecast or rate setting processes. In the short-term, this system change may cause disruption in the current processes; however, in the long-term, this change should help to gather data in a more efficient manner.

As DMAS rolls out the new MMIS, careful consideration should be given to ensure the data warehouse and financial reporting modules allow the forecast team to easily access the data needed to develop the forecast series. Enhancing the data availability and accuracy of the data will enable the forecast team to devote more resources to the actual modeling of the forecast, compared to data collection and validation.



---

## RECOMMENDATION #4: ENHANCE COLLABORATION AND COMMUNICATION WITHIN DMAS

### Related Interview Themes: Timing, Communication and Education, and Peer Review

Successfully running a Medicaid program requires groups with varied expertise to work together to ensure consistency between the financial, policy, and operations functions of the agency. Below are examples where this collaboration is needed to improve the forecasting process:

Assumptions in the capitation rates need to align with contract requirements for the MCOs.

- Payment of capitation rates needs to be consistent with the assumptions used by the actuary to develop the rate cells in the capitation rate development.
- Assumptions in the forecast need to be consistent with expected expenditure changes throughout the agency.
- Trend rates used for capitation rate development, by category of service, should be compared with FFS trends used in the forecast. Material discrepancies may indicate areas where reimbursement or assumptions may require adjustment.
- The fiscal impact of program changes need to be incorporated into both the capitation rates and forecast.
- Internal and external communication needs to align with assumptions and methods used for rate setting and the forecast.

During our interviews, there were many examples shared where one department within DMAS was not aware of changes implemented by a different department. As an example, the introduction of a maternity kick payment in the capitation rate structure had potential forecasting implications, but was not discussed with the forecasting team prior to the development of the payment. A kick payment for maternity services is a common mechanism used to help align revenue with the MCO responsible for covering the cost of a delivery for a beneficiary and it is commonly budget-neutral in terms of the rate development. However, it is typical for these kick payments to be made later than the monthly capitation payments through which these costs were previously reimbursed, as the delivery first needs to be identified in the data. This can result in payments crossing a state fiscal year, which would need to be accounted for in the forecast since the forecast is developed on a paid basis and the timing of payments is important.

DMAS's daily EMT and monthly IFRC meetings present opportunities for information to be shared across different departments within DMAS. Similar to the example shared by Arizona, we recommend that it become standard practice for any program changes with a potential fiscal impact to be thoroughly vetted by the EMT prior to the change being implemented. Given that the EMT meets daily, we also recommend that even program changes that are not associated with a projected fiscal impact are still outlined for the EMT so that all departments are aware of changes.

In addition, including multiple layers of review within DMAS for the forecast, as outlined in Recommendation #2, will facilitate more collaboration among the different departments.

## RECOMMENDATION #5: RE-EVALUATE FORECAST MONITORING

### Related Interview Themes: Timing, Monitoring and Reporting, Staff and Resources, Documentation, Communication and Education, Data Limitations, and Peer Review

DMAS performs some monitoring of actual expenses relative to the forecast, but this analysis could be enhanced and shared more effectively with external stakeholders. We recommend DMAS implements processes for periodic monitoring of the forecast, both in the current state fiscal year and in subsequent years. This process should include the following steps.

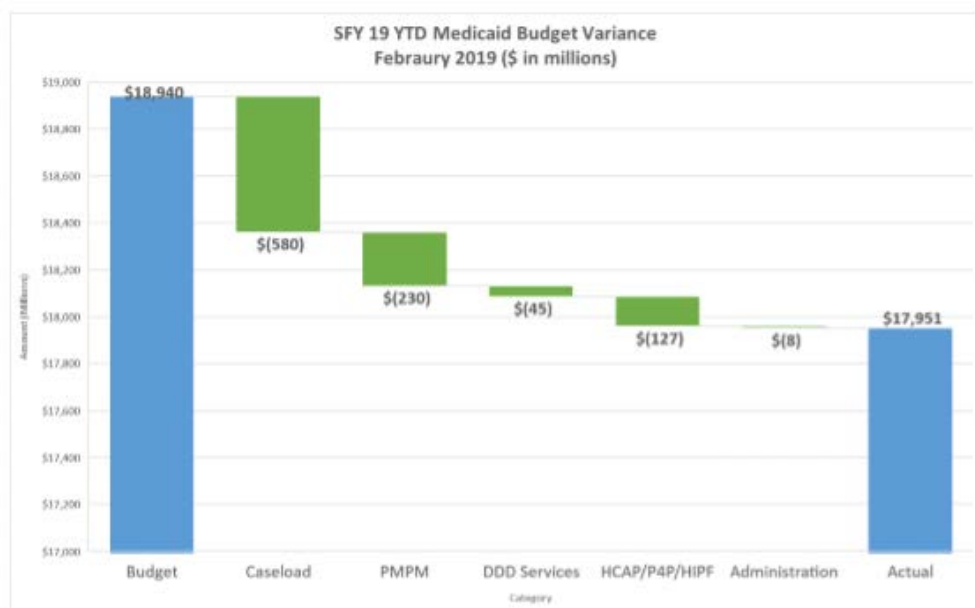
1. Monthly monitoring of actual to expected expenditures

- a. DMAS develops and publishes a monthly Accuracy Report that tracks monthly expenditures against the appropriated amounts. However, most external stakeholders we interviewed are not aware of the Accuracy Report. Informing external stakeholders about how to access this report and interpret the results, and notifying them when it is published each month will facilitate timely access for these stakeholders.
- b. Developing a summary of the drivers of the budget variance either quarterly or monthly will help increase transparency as well as facilitate understanding and review by internal and external stakeholders. Performing this exercise frequently throughout the year will help DMAS identify key assumptions or data that should be revised in the next forecast update.

- i. An example of the monthly documentation summarizing the budget variance for Ohio is published monthly on their website at the following location:

<https://medicaid.ohio.gov/RESOURCES/Reports-and-Research/Budget-Variance-Reports>

- ii. A key feature of the Ohio report is a waterfall graph where the largest drivers of the budget variance are quantified with detailed descriptions included as a narrative. The waterfall graph from February 2019<sup>19</sup> is shown below as an example.



The Ohio report also displays the monthly and year-to-date variance by appropriation line.

- c. A summary of the monthly Accuracy Report should be presented at each monthly IFRC meeting.
- d. Feedback should regularly be solicited from internal and external stakeholders on ways that this information could be shared or summarized differently to facilitate their review.

<sup>19</sup> Ohio Budget Variance Report (<https://medicaid.ohio.gov/Portals/0/Resources/Reports/BudgetVariance/2019/BV-2.pdf>).

2. Detailed reconciliation during forecast update
  - a. As part of the development of each forecast, a detailed reconciliation should be performed to identify and quantify changes from the prior forecast for the same time period. This analysis and documentation should be developed prior to sharing forecast results and provides valuable information for reviewers:
    - i. Increases transparency into the changes in assumptions and methods used to develop the forecast.
    - ii. Identifies whether the change in forecast is due to methodology changes or due to underlying changes in the data used to develop the forecast.
    - iii. Explains key drivers, either favorable or unfavorable, of the change in the forecast estimates.
    - iv. Provides internal and external stakeholders confidence that DMAS understands what is driving the change in forecasted expenditures and has carefully reviewed that these changes are reasonable.
3. Documentation of key changes and dates
  - a. A centralized resource can be developed where policy or program changes and the date each change was implemented can be documented and easily accessed by key stakeholders. This high level summary can be a resource DMAS can use to understand changes in historical expenditures.
4. Monitoring managed care expenditures
  - a. Developing a process to monitor MCO expenditures relative to the capitation rates can help DMAS identify emerging experience and anticipate potential future rate changes sooner. DMAS should work closely with their actuarial vendor to develop a monitoring process that is consistent with the rate setting methodology (e.g., reported claims need to be adjusted to reflect costs that are incurred but not paid).

## RECOMMENDATION #6: UPDATE FORECAST METHODOLOGY

### Related Interview Themes: Timing, Staff and Resources, and Data Limitations

DMAS's forecast methodology has remained largely the same while the Medicaid program has undergone significant changes, including Medicaid expansion and movement of other populations from FFS to managed care. The existing process presents several challenges in the current Medicaid environment, including:

- The time spent on the FFS portion of the forecast is substantially disproportionate to the impact of FFS expenditures on the total forecast
- Drivers of variances between the forecast and actual experience are difficult to identify and quantify
- Changes in the forecast from one year to the next are difficult to identify and quantify

We recommend that DMAS consider the following changes to the forecasting process:

- Condense FFS lines for the forecast series: DMAS spends a significant amount of time updating the 83 FFS forecast series. Since less than a third of Medicaid expenditures are expected to be in FFS by SFY 2020, DMAS should consider condensing the FFS forecast series so that additional

time can be dedicated to more material forecast series. Additionally, these series have limited data; therefore, assumptions developed from this data may not be as credible as assumptions developed at a more aggregate level. If DMAS needs to keep the forecasting series at the level of granularity currently used for other reporting purposes, assumptions such as trends could be developed at a more aggregated level and applied to multiple series (i.e., inpatient trend).

- Model units and enrollment separately: Currently, DMAS models utilization in total without isolating enrollment from units, making it more challenging to decipher the underlying causes for changes in overall utilization. We recommend DMAS models enrollment and units separately to facilitate the analysis of variances in utilization.
- Create an internal forecast that reflects additional forward-looking factors related to growth and anticipated program changes: The budget language requires the forecast to reflect only the laws and regulations in effect at the time the budget is submitted. This approach results in embedded variances attributable to growth and anticipated program changes. We suggest DMAS create an internal forecast that reflects growth and anticipated program changes. This internal forecast may be a more appropriate benchmark for monitoring actual experience.
- Reconcile forecast updates to prior forecasts: We recommend DMAS considers developing a standardized approach for reconciling forecast updates to the previous forecast. A standardized approach will allow for consistent and timely analysis of the drivers of variances, and the reconciliation may help DMAS identify potential data or modeling issues earlier in the process. Additionally, these reconciliations can be a tool to build credibility and trust when DMAS presents analysis to external stakeholders.

## RECOMMENDATION #7: DEVELOP DETAILED FORECAST DOCUMENTATION

### Related Interview Themes: Monitoring and Reporting, Staff and Resources, Documentation, Communication and Education, and Peer Review

While it was clear through our interview process that DMAS has the necessary expertise and knowledge to perform Medicaid forecasting, the forecasting process would benefit from more formal and thorough documentation. We recommend the forecasting team develop and maintain detailed documentation of the data, assumptions, and methods used to develop the forecast. Best practice documentation allows another individual(s) with similar expertise to recreate the process and results within a reasonable tolerance for variation in judgement without guidance from the individual currently performing the analysis. Developing detailed documentation of the data sources, assumptions, and methods used to develop the Medicaid forecast will help others not as familiar with the process be able to review and assess the reasonableness of the forecast. In addition, having this documentation available will help transfer knowledge internally if available resources within DMAS expand or change without sufficient notice.

This documentation should be maintained and updated each time the forecast is developed and include detailed information containing the following:

- Data source(s) and the time period analyzed
- Smoothing or adjustments made to the raw data for use in the analysis
- Definitions of the data series used in the forecasting
- Methodology used to develop future trend assumptions
- Future trend assumptions, separately for utilization, unit charge and enrollment
- Documentation of the estimated rate changes from the actuarial vendor and how these rate changes were incorporated into the forecast
- The impact of any policy or program changes, documentation of data, assumptions, and methods used to develop the fiscal impacts, and the program changes were incorporated into the forecast
- Comparisons of the current forecast to prior forecast including:
  - Changes in data sources or processing

- Updates to methods or assumptions
- Drivers of changes to the expenditures between forecasting analyses

This detailed documentation will also be a good resource from which to develop external communications packages and answer internal and external stakeholder questions quickly, rather than having to review the detailed models themselves to answer answers about the data, methods or assumptions used in the forecast.

## **RECOMMENDATION #8: RE-EVALUATE AND RESTRUCTURE INVOLVEMENT OF EXTERNAL STAKEHOLDERS**

### **Related Interview Themes: Timing, Staff and Resources, Communication and Education, and Peer Review**

The involvement of external stakeholders in the forecast development has diminished as the Medicaid program has transitioned from being predominantly FFS expenditures to largely managed care capitation rates. From the perspective of many external stakeholders, DPB's role in the forecast adds value because DPB provides external oversight and independent review. However, DPB's input through their independent statistical forecast is only relevant to approximately 30% of the expenditures as more expenditures have shifted into managed care in recent years. DMAS completes the remainder of the forecast, which is not validated or reviewed by DPB, for anticipated managed care capitation payments and other lump sum amounts. In addition, since the data DPB uses to produce their statistical forecast is provided by DMAS, the independence of DPB's forecast is also limited to the projection methodology.

From DMAS's perspective, DPB's role in the forecast process adds value because DMAS gains the perspective of an economist. This same value could be achieved by adding an economist to DMAS's forecasting team. Furthermore, DPB expressed they must maintain objectivity regarding department budget requests, and DPB cannot influence those requests.

We recommend that DMAS confer with external stakeholders to re-evaluate the motivations behind previously defined requirements to ensure objectives are still relevant and the requirements are still appropriate to achieve the desired objectives.

Most internal and external stakeholders believe the forecast, known as the "consensus forecast", is developed jointly by DBP and DMAS due to budget language requirements. However, our interpretation of the budget language appears to only require the forecast of Medicaid expenditures submitted by DPB be prepared "in cooperation with" DMAS. The budget language driving the forecast is as follows:

*"Authority: Title 32.1, Chapters 9 and 10, Code of Virginia; P.L. 89-97, as amended, Titles XIX and XXI, Social Security Act, Federal Code.*

*A.1. By November 1 of each year, the Department of Planning and Budget, in cooperation with the Department of Medical Assistance Services, shall prepare and submit a forecast of Medicaid expenditures, upon which the Governor's budget recommendations will be based, for the current and subsequent two years to the Chairmen of the House Appropriations and Senate Finance Committees. In addition to the expenditure forecast, the Department of Medical Assistance Services shall provide a breakout that shows forecasted expenditures by caseload/utilization, inflation, and policy changes. An enrollment forecast for the same forecast period shall also be submitted with the expenditure forecast."*

The objectives of external oversight and independence intended to be achieved through DPB's role in the forecast may be achieved in other ways. Some questions DMAS and external stakeholders may want to consider are:

- Is DPB's current role still achieving the desired objectives, given the significant changes to the Medicaid program?
- Since managed care capitation rates are a key driver of the Medicaid forecast, does the fact that these rates are produced by external actuaries satisfy any of the objectives for independence and oversight?
- Does the implementation of the IFRC, EFRC, and other recommendations made in this report (e.g., more robust monitoring, more frequent updates, allowing more time for internal and external review of the forecast) satisfy the objectives previously achieved by DPB's involvement?

We suggest external stakeholders collaborate with DMAS to ensure the budget language and any prescribed involvement of external stakeholders is aligned with desired outcomes.

## **RECOMMENDATION #9: EXPAND EDUCATION FOR EXTERNAL STAKEHOLDERS**

### **Related Interview Themes: Monitoring and Reporting, Staff and Resources, Documentation, Communication and Education, and Peer Review**

During our interviews, many external stakeholders expressed the desire for more frequent communication with DMAS to educate stakeholders of the processes used to develop the Medicaid capitation rates and forecast. DMAS has already begun to offer educational sessions and should continue to expand upon the communication and education of external stakeholders throughout the year. This additional effort up front will lead to enhanced transparency and confidence in the processes used by DMAS. There are two separate types of education that would be helpful: on-boarding of new administration and ongoing education.

When new members are added to the administration an overview of the Medicaid program and DMAS's appropriations would help these individuals to gain a baseline understanding of the program. This understanding can then be enhanced throughout the year through additional on-going education and communication. Below are topics, based upon the interview feedback that would be helpful to include as part of this education. DMAS has already begun to implement some of the on-going education listed below and should continue to expand upon this.

- New administration:
  - DMAS's cycle of requested appropriations given requirements of the forecast amounts included in the biennium budget. A graphic similar to Table 6 in Section IV that illustrates the historical pattern of DMAS appropriations in odd versus even numbered years should be shared to help develop expectations of future DMAS appropriations.
  - An overview of the CCC Plus and Medallion 4.0 populations and services that are covered in these managed care programs. In addition, an explanation of the populations and services that are still covered by FFS.
  - Explanation of Medicaid expansion and the funding mechanisms used to pay for the cost of this population.
  - A timeline of when DMAS updates their forecast and capitation rates.
  - Overview of upcoming program changes, their anticipated fiscal impacts and other non-fiscal impacts that these program changes will have (e.g., access or quality improvement).
- On-going education:



- An explanation of the process used to develop capitation rates and details around the drivers of rate changes when rates are updated.
- Overview of upcoming program changes, their anticipated fiscal impacts and other non-fiscal impacts that these program changes will have (e.g., access or quality improvement).
- An explanation of the process used to develop the forecast and details around drivers of the change from the prior forecast.
- Periodically gather recommendations from external stakeholders regarding additional topics of interest.

The EFRC is set to have their first meeting on May 21, 2019, and will meet quarterly going forward. DMAS can determine if these meetings are an appropriate venue for shorter education sessions.

## **RECOMMENDATION #10: PROACTIVELY ADDRESS CHANGES TO THE BUDGET LANGUAGE**

### **Related Interview Themes: Timing, Monitoring and Reporting, Communication and Education, and Peer Review**

States face many challenges when trying to keep Medicaid programs up-to-date with the constantly changing health care landscape, including operational challenges, budgetary challenges, and legislative challenges. We recommend DMAS proactively engages other stakeholders to address the implications of pending changes in a collaborative manner. These stakeholders are often not fully aware of all the downstream implications of changes, so early engagement can alleviate surprises.

The Virginia Legislature added language to the budget for the 2020 – 2022 biennium that shows intent to implement a Medicaid spending target, as follows:

*“Authority: Title 32.1, Chapters 9 and 10, Code of Virginia; P.L. 89-97, as amended, Titles XIX and XXI, Social Security Act, Federal Code.*

*V.1. Effective with the development of the 2020-2022 biennium, it is the intent of the General Assembly that there is hereby established an annual Medicaid state spending target for each fiscal year. The Joint Subcommittee for Health and Human Resources Oversight shall establish the annual target by September 15 of each year for the following two fiscal years. The target shall take into account the following: a 10-year rolling average of Medicaid expenditures by eligibility category and utilization of services, a 20-year rolling average of general fund revenue growth, and for policy decisions adopted by General Assembly during the previous Session which impact Medicaid spending.”*

We consistently heard during our interviews that the details of the intended spending target have not yet been developed. We recommend DMAS engages internal and external stakeholders soon to understand the operational and financial implications of the annual state spending target. DMAS should be included in discussions as the General Assembly defines the parameters of the spending target to ensure the General Assembly understands how the target will be impacted by operational limitations, resource limitations, policy changes, professional standards (e.g., actuarial soundness), etc.



## APPENDIX A

### Virginia Interviews

---

**Virginia Department of Medical Assistance Services**  
Medicaid Forecasting and Rate Setting Review

This report assumes the reader is familiar with the Commonwealth of Virginia's Medicaid programs. The report was prepared solely to provide assistance to DMAS in reviewing their Medicaid rate setting and forecasting processes. It may not be appropriate for other purposes. Milliman does not intend to benefit, and assumes no duty or liability to, other parties who receive this work. This material should only be reviewed in its entirety.

May 6, 2019

## Appendix A Virginia Interviews

Date(s)	Group Description	Individual(s) and Title(s) (if applicable)
February 14	House Appropriations and Senate Finance Committees	Mike Tweedy - Staff Analyst to the Senate Finance Committee Susan Massart – Staff Analyst to the House Appropriations Committee
February 19	DMAS Media Relations	Christina Nuckols - DMAS Media Relations Manager
February 21, March 1, 11, 22	DMAS Forecasting	Rob Chapman - DMAS Forecast Manager Lanette Walker - DMAS Budget Director
February 22, March 1, 11, 21	DMAS Provider Reimbursement	Bill Lessard - DMAS Provider Reimbursement Director Nick Merciez - DMAS Rate Setting Manager
February 22	Department of Planning and Budget	Dan Timberlake - Director, DPB Michael Shook - Associate Director, DPB Ashley Colvin - Associate Director, DPB Oscar Ozifidan - DPB Chief Econometric Analyst Kenny McCabe - DPB Budget and Policy Analyst
February 25	DMAS Finance	Mukundan Srinivasan - DMAS Chief Information Officer, Former Acting Chief Financial Officer Stefanie Papps - DMAS Senior Advisor for Finance
February 27	DMAS Legislative Outreach	Rachel Pryor - DMAS Deputy Director of Administration Joanna Fowler - DMAS Senior Policy Assistant
February 28	Secretary of Finance	Aubrey Layne - Secretary of Finance Joe Flores - Deputy Secretary of Finance June Jennings - Deputy Secretary of Finance
February 28	DMAS Medallion	Cheryl Roberts - DMAS Deputy for Programs Dan Plain - DMAS Health Care Services Division Director
February 28	Secretary of Health and Human Resources	Dr. Daniel Carey - Secretary of Health and Human Resources Marvin Figueroa - Deputy Secretary of Health and Human Resources
March 1	DMAS CCC Plus	Tammy Whitlock - DMAS Deputy for Complex Care Brian Campbell - DMAS Senior Advisor for Complex Care Jason Rachel - DMAS Integrated Care Division Director
March 7	DMAS Director	Dr. Jennifer Lee – DMAS – Medicaid Director
March 20	Mercer	Ron Ogborne – Partner and Actuary Katherine Long – Principal and Actuary
March 26, 27	Virginia MCOs	Mercer, Optima, Anthem, Magellan, Aetna Better Health, Virginia Premier, and United Health Care

## APPENDIX B

### Other State Interviews

---

**Virginia Department of Medical Assistance Services**  
Medicaid Forecasting and Rate Setting Review

This report assumes the reader is familiar with the Commonwealth of Virginia's Medicaid programs. The report was prepared solely to provide assistance to DMAS in reviewing their Medicaid rate setting and forecasting processes. It may not be appropriate for other purposes. Milliman does not intend to benefit, and assumes no duty or liability to, other parties who receive this work. This material should only be reviewed in its entirety.

May 6, 2019

Appendix B Other State Interviews		
Date(s)	Group Description	Individuals and Titles (if applicable)
March 18	Arizona	Matthew Isiogu – Actuarial and Rates Administrator Windy Marks – Actuary
March 19	Florida	Tom Wallace – Assistant Deputy Secretary, Medicaid Finance and Analytics Stephanie Scanlon – Budget and Fiscal Planning Supervisor, Medicaid Program Finance Farah Kiswani – Senior Management Analyst II, Medicaid Program Finance
March 19	South Carolina	Erin Boyce – Chief of Staff Bryan Amick – Deputy Director, Office of Health Programs
March 25	Indiana	Paul Bowling – Chief Financial Officer Allison Taylor – Medicaid Director Kathy Leonard – Director, Reimbursement Section and Actuary
March 26	Ohio	Al Dickerson, Thomas Chapman, Craig Figi, Daniel Hirschler, Lisa Graupmann, and Lisa Carter

## APPENDIX C

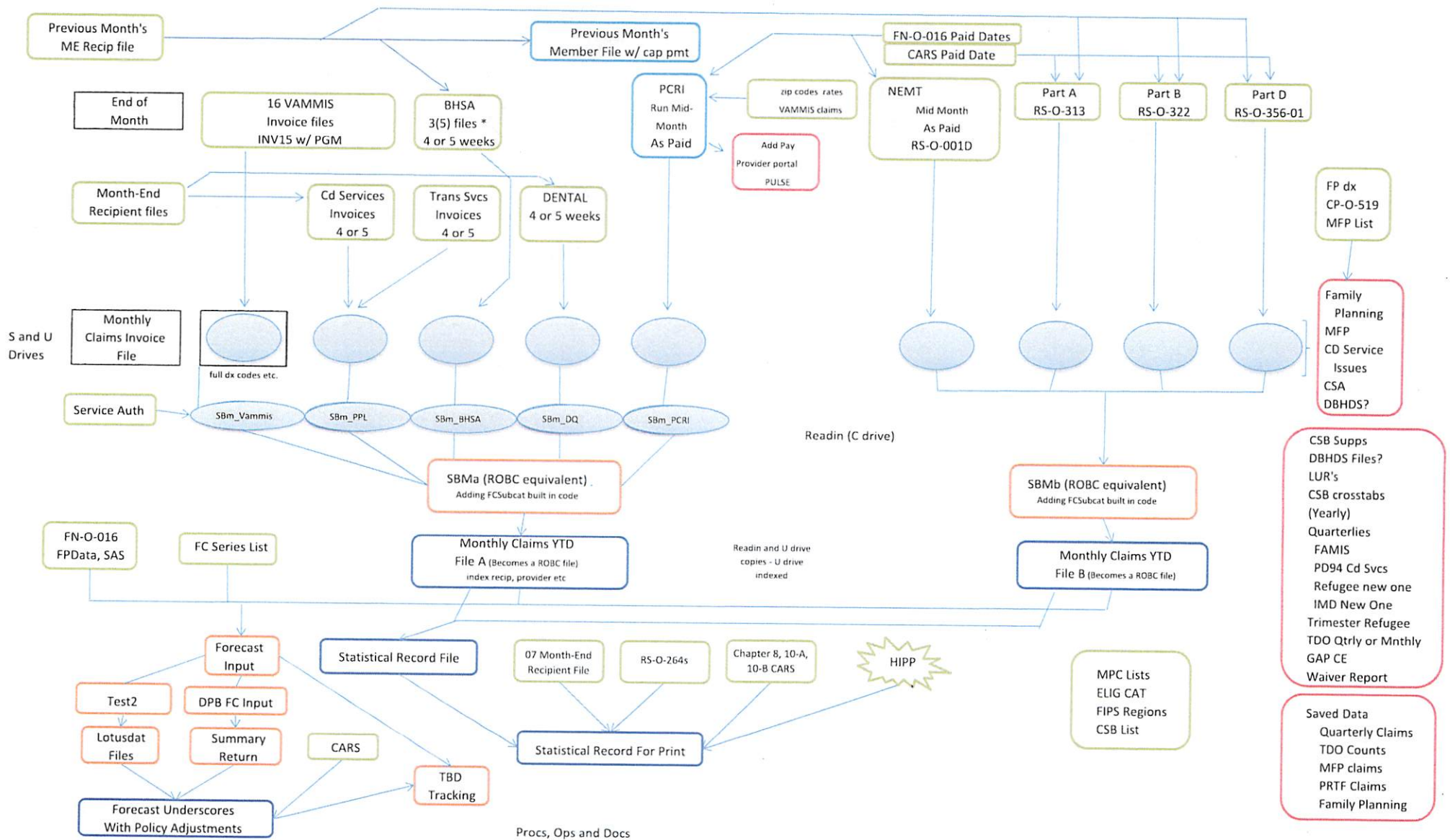
### Current Process to Gather and Summarize Data Book

---

**Virginia Department of Medical Assistance Services**  
Medicaid Forecasting and Rate Setting Review

This report assumes the reader is familiar with the Commonwealth of Virginia's Medicaid programs. The report was prepared solely to provide assistance to DMAS in reviewing their Medicaid rate setting and forecasting processes. It may not be appropriate for other purposes. Milliman does not intend to benefit, and assumes no duty or liability to, other parties who receive this work. This material should only be reviewed in its entirety.

May 6, 2019



## APPENDIX D

### High Level State Comparison

---

**Virginia Department of Medical Assistance Services**  
Medicaid Forecasting and Rate Setting Review

This report assumes the reader is familiar with the Commonwealth of Virginia's Medicaid programs. The report was prepared solely to provide assistance to DMAS in reviewing their Medicaid rate setting and forecasting processes. It may not be appropriate for other purposes. Milliman does not intend to benefit, and assumes no duty or liability to, other parties who receive this work. This material should only be reviewed in its entirety.

May 6, 2019



Appendix D Virginia Department of Medical Assistance Services High Level State Comparison						
	Virginia	Arizona	Florida	Indiana	Ohio	South Carolina
	Virginia Department of Medical Assistance Services (DMAS)	Arizona Health Care Cost Containment System (AHCCCS)	Florida Agency for Health Care Administration (AHCA)	Indiana Family and Social Services Administration (FSSA)	Ohio Department of Medicaid (ODM)	South Carolina Department of Health and Human Services (SCDHHS)
<b>General</b>						
<b>Program Information</b>						
State Budget Fiscal Year Beginning Date	July 1	July 1	July 1	July 1	July 1	July 1
Medicaid Expansion Implementation Date	1/1/2019	1/1/2014	N/A	2/1/2015	1/1/2014	N/A
<b>General Program Metrics <sup>1</sup></b>						
Program Metrics on Calendar Year (CY), State Fiscal Year (SFY), or Federal Fiscal Year (FFY) Basis Unless Otherwise Specifically Noted	SFY	CY for Enrollment, FFY for Expenditures and Administrative Expenses	SFY	CY	SFY	SFY, FFY for Administrative Expenses
2018 Medicaid Spending (in Billions) <sup>2</sup>	\$9.8	\$11.8	\$27.7	\$12.0	\$26.3	\$6.8
2018 Percentage of Spending in Managed Care <sup>2</sup>	53%	81%	65%	53%	74%	44%
2018 Average Monthly Medicaid Enrollment (in Millions) <sup>3</sup>	1.0	1.7	3.9	1.5	3.0	1.3
Percentage of Enrollment in Managed Care as of July 2018 <sup>4</sup>	95%	93%	92%	84%	88%	77%
Approximate State Medicaid Administrative Costs as Percentage of Medical Expenditures (excludes managed care administrative costs)	2.4%	2.0%	3.1%	1.8%	3.5%	4.6%
<b>Populations in Managed Care</b>						
Aged, Blind, and Disabled (ABD)	X	X	X	X	X	X
Traditional Medicaid / CHIP <sup>5</sup>	X	X	X	X	X	X
Long Term Support Services (LTSS)	X	X	X	X	X	X
Dual Eligibles	X	X	X	X	X	X
Medicaid Expansion	X	X		X	X	
<b>Rate Setting</b>						
<b>Managed Care Program Information</b>						
Number of Managed Care Programs (Excluding Programs of All-Inclusive Care for the Elderly)	2	5	3	3	2	2
Managed Care Rate Year	July through June 7/1 - 6/30 (TANF/CHIP, ABD) 1/1 - 12/31 (LTSS, Duals)* *All rates will be 7/1 - 6/30 as of SFY 2021	October through September 10/1 - 9/30 (ABD, TANF) 7/1 - 6/30 (Foster Care, LTSS and BH services)* *All rates will be 10/1 - 9/30 as of SFY 2020	October through September	January through December	January through December	July through June
<b>Staffing/Resources</b>						
Actuarial Certification	Outside Actuarial Vendor	Internal	Outside Actuarial Vendor	Outside Actuarial Vendor	Outside Actuarial Vendor	Outside Actuarial Vendor
Internal Staff Resources	6 staff (4 analysts)	5 actuaries, 4 support staff	Actuarial Services Unit (ASU) usually comprised of 5 full time employees	1 actuary, Medicaid Director, Medicaid CFO	4 staff, leverages policy group of 40-50 People	CFO, CFO's team, managed care team, individuals from the budget office
<b>Forecast</b>						
<b>Staffing/Resources</b>						
Modeling	Internal; External for Managed Care Rates only	Internal	Internal; External for Managed Care Rates only	External	Internal; External for Managed Care Rates only	Internal and External
Internal Staff Resources	3 staff	1 Budget Administrator, 2 Economists, 3-4 Administrative Staff	4 staff (one developing models, all four reviewing)	1 Actuary, Medicaid Director, Medicaid CFO (same as rate setting), Office of Medicaid Policy and Planning (OMPP) Controller, OMPP Policy and Program staff	10 Staff (5 forecast, 5 budget)	Office of Planning and Budget Department
<b>Budget Parameters</b>						
Budget Cycle Frequency	Biennial	Annual	Annual	Biennial	Biennial	Annual
State Requirements	Budget language defines timing of submission of forecast and stipulates that DMAS must present the assumptions used in the forecast to DPB and members of the House Appropriations and Senate Finance Committees by a specific date.	Requirement for AHCCCS to provide preliminary capitation rate information to the Legislature and Governor's Office. On an ongoing basis, AHCCCS is required to submit all capitation rate changes to the Legislature in advance for review and approval.	Numerous estimating conferences are convened each year for Medicaid caseload, Medicaid expenditures, and the CHIP program. The conferences are required by statute. There is some guidance from the estimating conference principals, but the methodology is not prescribed.	The state plan amendment guides most forecasting and rate setting processes. FSSA is not aware of any laws or legislation that require FSSA to develop a forecast. The state budget agency requires a forecast every December. FSSA updates their forecast in April when they are in legislative session for the next biennium budget.	The Joint Medicaid Oversight Committee (JMOC) sets a JMOC rate in Ohio based on Medicaid Consumer Price Index (CPI).	There are no specific statutes or guidance currently.
State Caps	Legislative Cap implemented with 2020 biennium budget	Legislature provides targeted baseline Medicaid budget increase.	There are no caps on any line items, except for the line items that are held at the appropriated level and are not projected.	No caps and/or targets.	The JMOC rate (in the biennial budget).	No caps at the service level, but the global budget determines the overall Medicaid budget. There is a coordinated care budget line where funds can be fluidly transferred between components by the state.

Appendix D Virginia Department of Medical Assistance Services High Level State Comparison						
	Virginia	Arizona	Florida	Indiana	Ohio	South Carolina
	Virginia Department of Medical Assistance Services (DMAS)	Arizona Health Care Cost Containment System (AHCCCS)	Florida Agency for Health Care Administration (AHCA)	Indiana Family and Social Services Administration (FSSA)	Ohio Department of Medicaid (ODM)	South Carolina Department of Health and Human Services (SCDHHS)
<b>Forecast Timelines</b>						
Frequency of Updates	Once Per Year	Two to Three Times Per Year	Two to Three Times Per Year	Two Times Per Year	Four Times Per Year	Two Times Per Year
Approximate time spent developing the forecast	Two Months (Majority of time spent preparing data)	Varies, approximately one to two months	One Month	One Month	Six Weeks	Several Weeks
Frequency of Monitoring	Monthly	Monthly	Monthly and Quarterly	Monthly	Monthly (posted to web)	Monthly and Weekly; Expenditures are tracked on a weekly basis
<b>Forecast and Budget Review, Approval and Oversight</b>						
Review Committee	N/A prior to 2019. Internal Financial Review Council (IFRC) established early 2019 includes the Executive Management Team and members from DMAS. External Financial Review Council (EFRC) starting July 2019.	Financial Review Committee (FRC) includes the executive team (AHCCCS director, two deputy directors, chief medical officer, management from finance, operations, and budget departments).	Estimating Conferences are led by four principals: 1. House of Representatives (staff director of Health and Human Services appropriations committee) 2. Senate (staff director of Senate appropriations committee) 3. Governor's Office representative 4. State economist from the Office of Economic and Demographic Research (EDR)	N/A - No Established Committee	N/A - No Established Committee	N/A - No Established Committee
Leadership Involved in Forecast Review	DMAS Director, Executive Management Team	Executive team / FRC	Assistant Deputy Secretary, Medicaid Program Finance Supervisor, Medicaid Program Finance Analyst and Principals. Principals are staff members of the Executive Office of the Governor.	FSSA leadership, the state budget agency, the Governor's office, and legislative analysts review the forecast.	Executive budget team (State Budget Director, Director of Medicaid, Health and Human Services Cabinet members) and other staff at ODM.	Deputies, the Director, and Staff at SCDHHS. SCDHHS also partners with university researchers to review high level trends.
Departments and Teams Involved in Forecast Review	Provider Reimbursement, Finance, Program	Executive team, Finance, Budget, Operations	Finance, Governor's Office	State Budget Agency, Governor's Office, Legislative Office	Executive Budget team, Policy, and Other Departments	Budget, Program, and Other Departments
Interaction with External Stakeholders	DMAS delivers the results of the forecast to DPB and other stakeholders (Governor, House Appropriations and Senate Finance Committees) through a series of presentations.	Arizona has an open and continuing dialogue with the Governor's and legislative budget committees throughout the year.	All projections are made public two or three times a year at estimating conferences.	Monthly monitoring of expenditures is shared within FSSA, with the state budget department, and others as needed. FSSA has some engagement with the public.	Monthly meetings with JMOC. ODM also talks to associations quarterly or bi-quarterly. For any major change to the budget forecast, ODM will create a white paper and post it online or discuss it with JMOC.	Meets regularly with providers.

<sup>1</sup> The program metrics in this appendix include information from multiple data sources, including information provided by each state, The Henry J. Kaiser Family Foundation, and the CMS 64 Reports. These metrics are intended to provide a general comparison between states. Please note that for a given program metric each state may use different data sources and / or represent data on a state fiscal year, calendar year, or federal fiscal year basis. Therefore, the program metrics may not be directly comparable across states.

<sup>2</sup> Arizona is based on FFY 2017 data from The Henry J. Kaiser Family Foundation: <https://www.kff.org/medicaid/state-indicator/distribution-of-medicaid-spending-by-service/>. All other states are based on 2018 data provided by each of the states for this study.

<sup>3</sup> Florida's Average Monthly Medicaid enrollment for SFY 2018 is based on Florida's enrollment reports posted online: [http://ahca.myflorida.com/medicaid/Finance/data\\_analytics/enrollment\\_report/index.shtml](http://ahca.myflorida.com/medicaid/Finance/data_analytics/enrollment_report/index.shtml). Arizona's Average Monthly Medicaid enrollment for CY 2018 is based on data from The Henry J. Kaiser Family Foundation: <https://www.kff.org/health-reform/state-indicator/total-monthly-medicaid-and-chip-enrollment/>. All other states are based on data provided by each state for this study.

<sup>4</sup> Percentage of Enrollment in Managed Care as of July 2018 based on data from The Henry J. Kaiser Family Foundation: <https://www.kff.org/medicaid/state-indicator/share-of-medicaid-population-covered-under-different-delivery-systems/>

<sup>5</sup> Comparable to Low Income Families and Children (LIFC) in Virginia.

## APPENDIX E

### Recommendations – State Summary

---

**Virginia Department of Medical Assistance Services**  
Medicaid Forecasting and Rate Setting Review

This report assumes the reader is familiar with the Commonwealth of Virginia's Medicaid programs. The report was prepared solely to provide assistance to DMAS in reviewing their Medicaid rate setting and forecasting processes. It may not be appropriate for other purposes. Milliman does not intend to benefit, and assumes no duty or liability to, other parties who receive this work. This material should only be reviewed in its entirety.

May 6, 2019

Appendix E  
Virginia Department of Medical Assistance  
Recommendations - State Summary

Recommendation	Gap Versus Other States:					
	Virginia	Arizona	Florida	Indiana	Ohio	South Carolina
	Virginia Department of Medical Assistance Services (DMAS)	Arizona Health Care Cost Containment System (AHCCCS)	Florida Agency for Health Care Administration (AHCA)	Indiana Family and Social Services Administration (FSSA)	Ohio Department of Medicaid (ODM)	South Carolina Department of Health and Human Services (SCDHHS)
Update the forecast more frequently than once per year	Once Per Year	Two to Three Times Per Year	Two to Three Times Per Year	Two Times Per Year	Four Times Per Year	Two Times Per Year
Build a robust review process into the forecast development timeline	Minimal review prior to finalization due to timing	Review performed by Executive team, Finance, Budget, and Operations	Review performed by Finance and Governor's Office	Review performed by State Budget Agency, Governor's Office, and Legislative Office prior to finalization	Review performed by Executive Budget team, Policy, and Other Departments	Review performed by Budget, Program, and Other Departments
Re-evaluate data used for forecast	N/A	N/A	N/A	N/A	N/A	N/A
Enhance collaboration and communication within DMAS	Daily EMT meetings New in 2019: Internal Financial Review Council (IFRC) established early 2019 includes the Executive Management Team and members from DMAS External Financial Review Council (EFRC) starting July 2019	Financial Review Committee (FRC) includes the executive team (AHCCCS Director, 2 Deputy Directors, Chief Medical Officer, management from finance, operations, and budget departments) and must approve all program changes with a fiscal impact	No established committee for sharing information; however, AHCA regularly communicates within the agency	No established committee for sharing information; however, FSSA regularly communicates within the agency	No established committee for sharing information; however, ODM regularly communicates within the agency	No established committee for sharing information; however, SCDHHS regularly communicates within the agency
Re-evaluate forecast monitoring	Monthly Accuracy Report, distribution not well known	Monthly monitoring of expenditures and key drivers of variances published online <a href="https://www.azahcccs.gov/shared/Downloads/MonthlyReports/AppropriationStatusReports/FY2019/CompleteASR201902.pdf">https://www.azahcccs.gov/shared/Downloads/MonthlyReports/AppropriationStatusReports/FY2019/CompleteASR201902.pdf</a>	Quarterly report comparing actual costs compared to appropriation that is required to be submitted to the legislature. Monthly monitoring performed within AHCA.	Monthly and quarterly monitoring of expenditures is shared within FSSA, state budget and others (when larger changes occur), including drivers of variances	Monthly Budget Variance Report published online, including documentation of drivers of changes <a href="https://medicaidohiogov/RESOURCES/Reports-and-Research/Budget-Variance-Reports">https://medicaidohiogov/RESOURCES/Reports-and-Research/Budget-Variance-Reports</a>  Quarterly monitoring of changes in forecast communicated to JMOC and others	Monthly variance analysis is presented to program area and executive management.
Update forecast methodology	N/A	N/A	Condensed FFS lines in forecast when statewide managed care implemented	N/A	N/A	N/A
Develop detailed forecast documentation	No detailed documentation	Unknown	Unknown	External vendor prepares detailed documentation of forecast data, assumptions and methods and quarterly monitoring	Multiple state staff have a detailed understanding of the forecast process to enable knowledge transfer when staff changes	External vendor prepares detailed documentation of data, assumptions and methods
Re-evaluate and restructure involvement of external stakeholders	DPB consensus on statistical forecast	Legislature must approve managed care capitation rate changes, which must stay within the Medicaid budget increase set by the Legislature.	Estimating Conferences are held three times a year and led by four principals: 1 House of Representatives (staff director of HHS appropriations committee) 2 Senate (staff director of Senate appropriations committee) 3 Governor's Office representative 4 State economist from the Office of Economic and Demographic Research (EDR)	Monthly monitoring of expenditures is shared within FSSA, with the state budget department, and others as needed.	Joint Medicaid Oversight Committee's (JMOC) primary function is to provide continuing oversight of all facets of the state's Medicaid program	Frequent interaction with external stakeholders, however no external stakeholders are involved in forecast process
Expand education for external stakeholders	Started education sessions in 2019	Open and continuing dialogue with the Governor's and legislative budget committees throughout the year.	AHCA asks their actuarial vendor to present to the Estimating Conference to educate the group about the process used for managed care rate setting and explain major drivers of rate change.	FSSA has increased the level of detail about the forecast development (trends, utilization, etc.) with external stakeholders to help increase the knowledge of those reviewing the results	Education of upcoming program changes through monthly JMOC meetings	Frequent interaction with external stakeholders
Proactively address changes to the budget language	2019 strategy is to be proactive, mostly reactive in the past	AHCCCS has an open and continuing dialogue with the Governor's and legislative budget committees throughout the year	Estimating conferences three times per year provide discussion opportunities	Open and continued dialogue with legislators	Monthly meetings with JMOC Meeting minutes and presentations published online <a href="http://jmc.state.oh.us/meetings">http://jmc.state.oh.us/meetings</a>	Open and continued dialogue with legislators

## APPENDIX F

### State Data Summaries

---

**Virginia Department of Medical Assistance Services**  
Medicaid Forecasting and Rate Setting Review

This report assumes the reader is familiar with the Commonwealth of Virginia's Medicaid programs. The report was prepared solely to provide assistance to DMAS in reviewing their Medicaid rate setting and forecasting processes. It may not be appropriate for other purposes. Milliman does not intend to benefit, and assumes no duty or liability to, other parties who receive this work. This material should only be reviewed in its entirety.

May 6, 2019

## Appendix F

### State Data Summaries

#### OVERVIEW OF STATE ENROLLMENT AND EXPENDITURES

We gathered enrollment, medical expenditures, and administrative costs from each of the five states we interviewed to summarize the size of the program and changes in Medicaid spending over the past five years. We supplemented the following information we were not able to gather from states with information from The Henry J. Kaiser Family Foundation, published CMS 64 reports, and state agency websites:

- Arizona: Enrollment, medical and administrative expenditures
- Florida: Enrollment
- South Carolina: Administrative expenditures

The CMS 64 reports are published online on the following website. At the time of this report, CMS 64 reports were available through federal fiscal year 2017.

<https://www.medicaid.gov/medicaid/finance/state-expenditure-reporting/expenditure-reports/index.html>

These metrics are intended to provide a general comparison between states. Please note that we have not audited this data or investigated key changes to services or populations over time to normalize these metrics to account for the impact of program changes on either the enrollment or the expenditures values. Additionally, each state may use different data sources and / or represent data on a state fiscal year, calendar year, or federal fiscal year basis. Therefore, the changes in enrollment and medical expenditures may not be directly comparable across states.

<b>Appendix F-1 Virginia Department of Medical Assistance Services State Medicaid Data Annual Enrollment Change</b>						
<b>Time Period</b>	<b>Virginia</b>	<b>Arizona</b>	<b>Florida</b>	<b>Indiana</b>	<b>Ohio</b>	<b>South Carolina</b>
From 2017 to 2018	3.70%	-3.00%	-1.50%	-0.80%	-2.70%	-0.50%
From 2016 to 2017	2.00%	2.20%	0.10%	3.30%	1.10%	4.20%
From 2015 to 2016	5.70%	7.00%	3.00%	10.00%	2.50%	2.00%
From 2014 to 2015	5.40%	13.30%	8.50%	10.40%	18.00%	14.30%

**Appendix F-2**  
**Virginia Department of Medical Assistance Services**  
**State Medicaid Data**  
**Annual Medical Expenditure Change**

Time Period	Virginia	Arizona	Florida	Indiana	Ohio	South Carolina
From 2017 to 2018	5.10%	N/A	9.10%	4.10%	3.30%	1.50%
From 2016 to 2017	5.80%	4.70%	0.60%	7.00%	0.60%	4.70%
From 2015 to 2016	7.50%	5.00%	8.60%	5.70%	8.10%	0.40%
From 2014 to 2015	4.30%	15.40%	3.20%	6.90%	12.70%	11.20%

Appendix F-3 converts the expenditures to a per beneficiary basis to allow for an easier comparison across the different states.

**Appendix F-3**  
**Virginia Department of Medical Assistance Services**  
**State Medicaid Data**  
**Annual Expenditure Change Per Beneficiary**

Time Period	Virginia	Arizona	Florida	Indiana	Ohio	South Carolina
From 2017 to 2018	1.40%	N/A	10.80%	5.00%	6.10%	2.10%
From 2016 to 2017	3.70%	2.40%	0.50%	3.60%	-0.50%	0.50%
From 2015 to 2016	1.70%	-1.80%	5.40%	-4.00%	5.50%	-1.50%
From 2014 to 2015	-1.00%	1.90%	-4.90%	-3.10%	-4.50%	-2.70%

Over the past five years, Virginia’s annual changes in expenditures per beneficiary are not an outlier compared to the other five states interviewed.

Appendix F-4 shows the administrative expenditures for each state as a percentage of the medical expenditures. The administrative expenditures reflect only the state administrative costs and do not include any administrative costs included in capitation rates paid to MCOs. Virginia’s administrative expenses are consistent with Arizona, Florida and Indiana, and are lower than Ohio and South Carolina.

**Appendix F-4**  
**State Medicaid Data**  
**Annual Administrative Expenditures / Annual Medical Expenditures**

Time Period	Virginia	Arizona	Florida	Indiana	Ohio	South Carolina
2018	2.40%	N/A	N/A	1.80%	3.50%	N/A
2017	2.20%	2.00%	3.10%	2.10%	3.80%	N/A
2016	2.40%	2.00%	3.00%	2.30%	3.40%	4.60%
2015	2.50%	2.60%	3.30%	2.30%	3.70%	4.20%
2014	2.40%	2.90%	2.50%	2.20%	3.90%	5.00%