Report on JMOC Limit for the Medicaid Program for the FY 2020-2021 Budget

December 2018

The Joint Medicaid Oversight Committee (JMOC) is charged with working with an outside actuarial firm to calculate the projected rate of growth for the Medicaid program on a per capita or per member per month (PMPM) basis for the upcoming biennium. The actuary's report projects the cost of continuing current Medicaid policy into the next biennium, which includes the impact of trend factors on utilization and unit cost. JMOC uses the actuary's report to establish the JMOC rate, which becomes the limit for the Executive Budget. Under Section 103.414 of the Revised Code, the committee must set the JMOC rate at least 90 days before the Governor is required to submit his budget. The purpose of this report is to notify the Governor of the JMOC rate for the FY 2020-2021 budget.

Under Section 5162.70 of the Revised Code, the Medicaid director must limit PMPM growth in the Medicaid program across all Medicaid recipients to the lower of the JMOC rate or the three-year average Consumer Price Index (CPI) for medical services for the Midwest region. *The Joint Medicaid Oversight Committee has selected 3.3% in FY 2020 and 3.4% in FY 2021 as the JMOC rate for the FY 2020-2021 budget.*

History of the JMOC Rate

Historically, the review of Medicaid spending has focused on spending at the line item level. While this is an important measure, a review of per capita (or PMPM) costs, which factor out population growth in spending, provides additional insight for state policymakers. The per capita measure, particularly as it is disaggregated by population category and category of service, provides greater insight into underlying cost drivers including utilization and unit cost. While caseload growth is largely driven by external factors such as demographics and the economy, state policymakers have some ability to control growth in per capita costs through the policies that they set for reimbursement, benefit design, and system management.

Like the Medicaid budget forecasts prepared by the Executive and the Legislative Service Commission (LSC), the JMOC rate process assesses the impact of continuing current policy. The JMOC rate is developed first, 90 days prior to the submission of the Executive Budget, and limits the allowable per capita growth in the Medicaid budget submitted by the Executive. Unlike the Executive and LSC forecasts, the JMOC rate process does not include an estimate caseload growth. Instead, the actuary assumes a constant population based on the most recent data. The JMOC process is not meant to

supplant the forecast process but to provide an additional guardrail to help state policymakers maintain focus on the shared goal of slowing the rate of growth in the Medicaid program to a sustainable level.

Optumas Estimate for FY 2020-2021

Optumas currently serves as JMOC's consulting actuary and has completed the analysis to support development of the JMOC rate for the past two budgets. Optumas has produced the growth rate range for the upcoming budget cycle that is shown in the table below.

	FY 2019 Estimate	FY 2020 Projection	Growth Rate	FY 2021 Projection	Growth Rate	Biennial Average
Lower Bound PMPM	$ 639	$ 657	2.8%	$ 677	2.9%	2.9%
Upper Bound PMPM	$ 647	$ 675	4.4%	$ 707	4.6%	4.5%

In the November meeting, Optumas advised the JMOC committee that PMPM growth in the next biennium is driven upwards by three primary factors: an annual statutory increase for nursing facilities tied to the Medicare market basket; pre-rebate prescription drug prices; and population mix changes within the program, where the healthier adult and child populations are declining and aging and disabled populations are growing.

Changes in the JMOC Rate for FY 2020-2021

To avoid short term distortions in the JMOC rate and to provide an apples-to-apples comparison over time, JMOC has historically excluded one-time expenses as well as expenses that are not tied to a Medicaid enrollee. Those expenses include:

- State administration;
- Hospital Care Assurance Program (HCAP);
- Hospital and Physician Upper Payment Limit (UPL);
- Federal Health Insurance Providers Fee (HIFP);
- Managed Care Pay for Performance (P4P); and
- Other settlements and rebates paid outside the claims system.

To maintain consistency following changes made at the state and federal level, several other categories of expenses that meet the above criteria and flow through managed care premiums were also excluded from the JMOC rate beginning with the FY 2020-2021 budget. These expenses include:

- Physician UPL/Care Innovation and Community Improvement Program (CICIP);
- Hospital Pass Through Payment; and
- Health Insuring Corporation (HIC) Franchise and Premium Taxes.

Note that the JMOC limit pertains to uses of funds, not fund sources.

Review of Consumer Price Index for Medical Services

JMOC uses the three-year average Consumer Price Index (CPI) rate for medical services for the Midwest region as a benchmark for growth in the Medicaid program. The Consumer Price Index (CPI) is a measure of the average change in prices of goods and services purchased by households over time. Medical care is a component of the CPI and includes consumer spending on medical services such as health insurance premiums and out-of-pocket spending including copayments for services like doctor visits, prescription drugs, and other health care services.

The chart below shows the CPI rates for the past three years. Unlike in previous iterations, the three-year average CPI rate is much lower than the rate developed by the actuary. While CPI provides an important benchmark for state policymakers, it does not reflect all of the dynamics that affect state Medicaid spending.

CPI Rates for Medical Services: Midwest

	Midwest CPI
September 2016	5.1%
September 2017	0.9%
September 2018	1.5%
3 Year Average	**2.5%**

Source: Bureau of Labor Statistics

Committee Activities and Rationale for FY 2020-2021 JMOC Rate

The JMOC committee heard the actuary's report at its November 15th hearing and voted seven to three to set the JMOC rate at 3.3% growth in FY 2020 and 3.4% growth in FY 2021 at its December 13th hearing. The members who voted against the rate wanted to see a lower rate. These members wanted to see cost containment in prescription drugs, particularly in dollars retained by PBMs, and through increased use of value-based payments.

Ohio Joint Medicaid Oversight Committee

State Fiscal Years 2020-2021 Biennium Growth Rate Projections

State of Ohio

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1. Executive Summary

Per Ohio Revised Code (ORC) Section 103.414, the Ohio Joint Medicaid Oversight Committee (JMOC) must contract with an actuary to determine the projected medical inflation rate for the Ohio Medicaid program for the State Fiscal Year (SFY) 2020-2021 Biennium. Through a competitive procurement process, JMOC contracted with **Optumas** as its consulting actuary for this analysis. The estimated SFY 2020-2021 inflation rate has been developed as a range of projected rates of growth, calculated on a per-member per-month (PMPM) basis, for the entire Ohio Medicaid program. To ensure that the projections are independent of proposed policy changes that have yet to be implemented, these projections are developed with the assumption that current policy continues into the biennial period. This approach is consistent with the approach used to develop the SFY 2016-2017 and SFY 2018-2019 biennial projections.

The PMPM projections are based on a combination of data sources, including detailed claims-level Fee-for-Service (FFS) data and Managed Care encounter data, cost reports acquired from the Ohio Department of Medicaid (ODM), as well as summarized base data and projected capitation rates provided in ODM's Managed Care certification letters. The projections have been developed as a range of PMPM growth, developed at the category of aid (Medicaid eligibility category) and category of service (Medicaid covered services) summarized level. By combining the various projections using a constant category of aid mix, **Optumas** calculated a program-wide PMPM on a standardized basis to project the rate of increase of the Medicaid program over the biennium.

Optumas developed a range of projected PMPM growth, which is summarized in Figure 1, below.

Figure 1. Projected Rates of Growth

	Annualized Growth	
SFY	Lower Bound	Upper Bound
2020	2.8%	4.4%
2021	2.9%	4.6%
2020 - 2021	2.9%	4.5%

Projected growth from **Optumas'** SFY 2019 projection to SFY 2020 is estimated to be between 2.8% and 4.4% and the rate of growth from SFY 2020 to SFY 2021 is projected to be between 2.9% and 4.6%. Weighted together equally, the projected growth is projected to be between 2.9% and 4.5% annually, over the course of the biennium. For additional context, CMS released its National Health Expenditure (NHE) projections in February 2018[1]. The average annual growth for Medicaid and CHIP inherent in these projections is slightly below 4.2% from 2018 – 2021, which is in the top 25th percentile of the projected SFY 2020-2021 growth rate for Ohio Medicaid.

Per ORC Section 103.414, as the consulting actuary for this analysis, **Optumas** has developed the range of projected rates of growth; however, JMOC has the choice of selecting a rate within the range presented in Figure 1 or selecting an independent growth rate.

[1] https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsProjected.html

ORC Section 5162.70 requires that, once the JMOC rate is selected, Medicaid must limit the aggregate PMPM growth over the SFY 2020-2021 biennium to be the lower of (1) JMOC's final selected growth rate or (2) the three-year average Medical CPI for the Midwest. Figure 2 below, shows the Midwest and US Medical CPI for the past three years.

Figure 2. Midwest and US Medical CPI

Time Period	Midwest CPI	US CPI
9/1/2016	5.1%	4.9%
9/1/2017	0.9%	1.6%
9/1/2018	1.5%	1.7%
3 Year Avg. (Unweighted)	2.5%	2.7%

The remainder of this report presents the process used to develop the projections for the SFY 2020-2021 biennium. Each of the report sections are described in Figure 3, below.

Figure 3. Report Structure

Section	Contents
Background	Provides a description of **Optumas'** role in developing PMPM projections for the SFY 2020-2021 Ohio biennium.
Data	An overview of the data used when developing the projections, including data sources, limitations, and adjustments.
Trend	Provides a description of trend and the process used to develop trend for the SFY 2020-2021 biennium.
Projection Summary	Provides summarized results of the projected PMPM growth developed for the SFY 2020-2021 biennial projections.
Key Findings	Provides a description of selected cost drivers influencing the projected PMPM growth for the SFY 2020-2021 biennial projections.
Appendices	Detailed tables showing results of data summaries, analyses, and assumptions used in the projection summary methodology.

2. Background

Per ORC Section 103.414, JMOC must contract with an actuary to determine the projected inflation rate for the Ohio Medicaid program for the SFY 2020-2021 Biennium. As JMOC's contracted consulting actuary, **Optumas** has developed the SFY 2020-2021 estimated inflation rate as a range of projected rates of growth on a PMPM basis for the Ohio Medicaid program.

The Ohio Medicaid PMPM, in its most simplified form, is calculated as total dollar expenditures divided by total eligible member months. This puts costs on a standardized, normalized basis and is a way to measure costs relative to each member rather than on a total expenditure basis. Growth in total expenditures can be influenced purely by an increase in membership, even with all else being equal and costs per person remaining constant. Since enrollment growth is an external factor that the Medicaid program has limited control over, **Optumas** has worked with JMOC to focus on projecting a rate of growth specific to a rate of change on a per-member basis; in other words, a rate of change in PMPM expenditures over time.

JMOC has the choice to either select a rate of growth within the range developed by **Optumas,** or to select an independent rate. Per ORC Section 5162.70, once the JMOC rate is selected, Medicaid must limit the aggregate PMPM growth over the SFY 2020-2021 biennium to be below the lower of (1) JMOC's final selected growth rate or (2) the three-year weighted average Medical CPI for the Midwest.

To ensure a comprehensive review of the various factors that contribute to spend within a Medicaid program, **Optumas** has identified the following four key cost drivers, or determinants of risk for projecting future healthcare expenditures:

- Program Design – How the program is operationalized
- Population – Who receives the services
- Benefits – What services are offered through the program
- Network – Where services are provided in the service delivery network

Each of these determinants of risk can significantly impact both the total dollar and the PMPM spend of the Ohio Medicaid program. The following describes some of the ways in which these changes could materialize:

Program Design –
Changes in program design can impact spend for all populations, or for a specific population(s). A program-wide shift could mean a change in how all populations' eligibility is determined, which could impact total costs. A change for a particular population's eligibility process could exclude one sub-population, resulting in a material change to the entire population's risk profile.

Population –
Changes in the populations that are enrolled in Medicaid Managed Care programs can impact the program-wide spend. To the extent that a new population enrolls that is healthier and utilizes less services than the average member of the current program, the overall PMPM cost of the program would be driven down. Conversely, if the new population utilizes more services than the previously enrolled populations the overall PMPM would increase. The distribution of

members who are adults versus children is an example of how the population mix can influence the aggregate PMPM. Children often cost between 40-60% of adults, when comparing similar eligibility categories (i.e., CFC children and adults), so more children all else being equal would tend to drive the aggregate PMPM down.

Benefits –
Changes in benefits offered through the program can have an impact on the total PMPM of the program. If a new service is introduced into the Medicaid program, this could increase the overall spend of the program since additional costs would be incurred. However, if these new services are intended to be preventive in nature, over time the addition of this new service could materialize in overall savings to the program.

Network –
Changes in the service delivery network can impact the overall spend in various ways. One way this could materialize is through improved networks that include better provider coordination. To the extent that a provider network is able to work together to provide services to enrollees, this could improve the overall care of Medicaid enrollees and in turn, result in reduced costs to the program.

Optumas considers each of these determinants when evaluating the source data provided by ODM and adjusts the data as necessary to ensure it can be used to develop accurate projections of cost on a PMPM basis. The PMPM projections are based on a combination of data sources, including detailed claims-level FFS data acquired from ODM, summarized base data and projected capitation rates provided in the Managed Care certification letters, both actual and projected Medicare Buy-In/Medicare Premiums, and actual and projected Medicare Part D claw-back amounts. The data sources are projected at the detailed category of aid and category of service levels before aggregating into a category of aid level projection. Once each category of aid projection has been developed, the projected PMPMs for each category of aid are weighted together based on the number of member months in each category, to calculate a program-wide PMPM projection. Please see Appendix I.A. for a list of categories of aid (COA) and categories of service (COS) included in this analysis.

As part of the biennial projection, **Optumas** developed a base data set from historical FFS expenditure data and projected that base data using trends specifically developed for each category of aid and category of service. The projections for the Managed Care populations (excluding FFS-delivered services) were developed based on capitation rates and trend factors developed by ODM's actuary.

Projected PMPMs include total Medicaid spending, excluding any one-time expenses and expenses not tied directly to a member. Consistent with the SFY 2018-2019 analysis, the following expenses are excluded from the JMOC rate:

- All-Agency State Administration,
- Hospital Care Assurance Program (HCAP),
- Hospital Upper Payment Limit (UPL),
- Federal Health Insurance Providers Fee (HIPF),
- Managed Care Pay for Performance (P4P), and

- Other settlements and rebates paid outside of the claims system and outside of the Managed Care capitation rates.

In addition to the exclusions noted above, additional cost categories were excluded from the SFY 2020-2021 biennium that were either previously included, or in the case of the Care Innovation and Community Improvement Program (CICIP), did not exist in previous JMOC rate projections. The purpose of excluding these additional costs is that they reflect expenditures outside of the direct control of ODM. These additional cost category exclusions are as follows:

- Hospital Pass Through Payments,
- Health Insuring Corporation (HIC) Franchise and Premium Tax, and
- Care Innovation and Community Improvement Program (CICIP)

The next section of this report outlines the process and steps taken to develop a base data set from which to develop the projections for the SFY 2020-2021 biennium.

3. Data

3.01 Sources

Optumas utilized detailed claims-level cost and utilization FFS data in conjunction with member-level eligibility information to develop a comprehensive base data set that includes both COA and COS level of detail. This data reflects FFS services incurred from January 2016 through June 2018 for all Ohio Medicaid eligible members. This cost and utilization information was used to develop PMPMs for the COS within each COA, allowing detailed analysis of Medicaid spend for the SFY 2020-2021 biennial projection. In addition to the FFS data, **Optumas** also received detailed claim-level cost and utilization encounter data and cost report information from the Managed Care Plans (MCPs) operating under the Ohio Managed Care Program (MCP). This information was used to validate and inform the projection of the MCP costs based on the capitation rates developed by Milliman, the actuarial firm contracted with ODM who developed the Midyear July 2018 Ohio Managed Care capitation rates, on a PMPM basis.

The following data sources were used to compile the base data for the SFY 2020-2021 biennial projections:

Ohio January 2016-June 2018 FFS Claims and Managed Care Encounter Data –
The Ohio FFS claims and Managed Care encounter data was provided by Ohio's data vendor, HP, and is a comprehensive claims-level data set comprised of all claims incurred and reported through the Ohio Medicaid delivery system. This level of detailed data allowed **Optumas** to quantify key actuarial metrics for the Ohio Medicaid program, including average annual utilization per 1,000 members (Util./1,000), unit cost (UC), and per-member-per-month costs for all categories of aid and categories of service. Having this level of claims detail and metrics available allows for a robust projection of the utilization and cost components of the SFY 2020-2021 biennial growth rate. After a review of each year of base data, as well as policy and program changes that were implemented during this time period, **Optumas** determined that calendar year (CY) 2017 would serve as the base data for the FFS component of the SFY 2020-2021 biennial projection. Nevertheless, historic data prior to CY 2017 and the emerging CY 2018 data was utilized when developing the projected trend factors and for benchmarking purposes, after adjusting the data for applicable policy changes to allow for consistent trend review.

Ohio January 2016-June 2018 Eligibility Data –
The Ohio eligibility data was provided by Ohio's data vendor HP and is a comprehensive list of member-level eligibility for all Medicaid enrollees. This includes demographic information, as well as indicators for population types that help identify each member's category of aid. The monthly eligibility data is used to calculate COA-specific and program-wide member months and to link eligible members to the claims incurred for each month to ensure that costs are directly associated with an eligible Medicaid recipient.

Ohio CY 2017 Medicaid Cost Reports –
The Ohio Medicaid Cost Reports are filled out on a quarterly and annual basis by the MCPs and provide a detailed report of their total revenue and expenditures for each period. **Optumas** was provided the CY 2017 MCP annual cost reports. These reports were used in conjunction with

the encounter data to review the certification letters and corresponding capitation rates (noted below) for reasonableness.

Monthly Medicaid Variance Reports –
The monthly Medicaid Variance Reports were used to validate the CY 2017 base FFS expenditures. These reports capture monthly expenditures at the aggregate COS level, reported on a month of payment basis. For example, all costs associated with FFS Inpatient Hospital claims are reported as one number each month, and these reports serve as a high-level benchmark to ensure the CY 2017 base data has been categorized appropriately.

Ohio Department of Medicaid Caseload Reports –
The Ohio Department of Medicaid Caseload Reports, reported with enrollment through September 2018, were used as a benchmark for the membership calculated from the member-level eligibility file. These reports help **Optumas** ensure that members within the monthly eligibility data have been attributed to the appropriate COA for projection purposes.

Managed Care Certification Letters and Capitation Rates –
Midyear July 2018 Managed Care certification letters provided by Milliman to ODM as part of the Milliman actuarial contract with ODM, their corresponding capitation rates, and summarized base data and trend projections (by COA, COS, and regional) included therein, were used as the basis for projecting the growth rate for Managed Care expenditures.

Actual and Projected Medicare Premium Assistance/Part D Claw-Back Payment –
As part of the projection process, **Optumas** received the latest CY 2017-2019 Part D claw-back amounts for dual eligible Medicaid and Medicare members. Additionally, **Optumas** reviewed projected Medicare Part A and B premiums through CY 2021 as part of the Buy-In population projections. These additional Medicare costs are paid outside of the Medicaid claims delivery system but are tied to a Medicaid recipient, so, while fairly small, they are a contributor to the overall Ohio Medicaid program spending. These costs were projected forward into the SFY 2020-2021 biennial period on a PMPM basis and are added to the final PMPMs developed from the FFS data and Managed Care projected rates.

The Ohio Medicaid FFS data allows **Optumas** to analyze member-specific costs at a very detailed level. **Optumas** performs the following data validation analyses prior to developing projections to ensure that the base data used for projections is appropriate and complete:

Referential Integrity Checks –
This ensures that all claims included in the base data were incurred by a member with a valid eligibility determination that coincided with the incurred date associated with the specific claim.

Volume Checks –
Optumas checked both volume of claims and total expenditures by category of service by looking at totals longitudinally over time. This ensured that potential gaps or spikes in the data were identified and addressed before creating the base data.

Benchmark Comparison –
Optumas compared summarized costs and enrollment data, derived from the detailed data, to several sources, including monthly variance reports, cost reports, and caseload reports provided by ODM as described above.

These analyses enabled **Optumas** to identify and address any significant data limitations associated with the January 2016-June 2018 FFS data prior to developing the rate of growth projections.

As mentioned earlier in this report, **Optumas** utilized the Midyear July 2018 Managed Care capitation rates, along with supporting data, as the baseline for projecting Managed Care costs into the biennium period. The base data referenced in the certification letters is benchmarked to the cost reports and encounter data provided by ODM prior to **Optumas** completing its projections. In addition, the various adjustment and projection factors used by Milliman are reviewed for reasonableness; ultimately, **Optumas** relied upon the Milliman adjustment and projection factors developed by Milliman for the Ohio Medicaid Managed Care program for the Managed Care portion of the projection. To the extent that programmatic changes within the Managed Care environment occur within the biennium, or significant changes in the rate setting process occur, these are not considered in the biennial projections, consistent with the "current policy" approach to the projections.

The following section describes the base data adjustments **Optumas** made to the FFS claims base data to ensure that all data be on the same "current policy" basis before projecting into the biennium.

3.02 Base Data Adjustments

Population Adjustments

To project base data into a future time period, historical data needs to be adjusted to reflect any policy and program changes that have occurred between the base data period and the projection period. For example, if certain populations change from a FFS delivery system to a Managed Care delivery system after the base data period, adjustments to the base data would be required.

The projections for the SFY 2020-2021 biennium are intended to reflect current policy within the Medicaid program. The base data includes expenditures for services incurred during CY 2017 at both the population and service level. The use of more recent base data, as well as the ability to separately categorize expenditures by population, allows for costs to be isolated in the base data for specific Medicaid populations. **Optumas'** projected growth rate ranges are based on current Medicaid policy and the projections assume that current policies will continue into the future. As such, the following population adjustments have been considered as part of the biennial projections:

1634 Adjustment –
Beginning August 1, 2016 Ohio transitioned from 209(b) to 1634 for disability determination. The prior 209(b) criteria was more restrictive than the criteria used by the Social Security Administration. **Optumas** reviewed and discussed this change with ODM and its actuaries contracted to develop the Medicaid rates, and learned that the complete transition under 1634 was not fully implemented until July 2017. As such, **Optumas** retrospectively adjusted

applicable members' eligibility in both FFS and Managed Care to match Aged, Blind, and Disabled (ABD) eligibility as of July 2017.

Day 1 Managed Care Eligibility –
Effective January 1, 2018, Medicaid Managed Care (MMC) members are enrolled in an MCP beginning the month of Medicaid eligibility approval, provided enrollment occurs before the 20th of any given month. If a member gains eligibility approval on the 20th or later, MCP enrollment will be given the following month. **Optumas** reviewed historical data and found the first month of MCP enrollment typically occurred during the month after Medicaid eligibility approval. However, there were some cases when MCP enrollment occurred upwards of three months after approval. For this adjustment, **Optumas** identified members with an eligibility approval date and corresponding FFS enrollment requiring adjustment within the FFS eligibility data before MMC enrollment and removed any FFS related costs and membership from the FFS baseline for projection purposes. Consistent with discussion with ODM and its actuaries, **Optumas** has assumed that the Managed Care COAs for which these members' enrollment is shifting to, maintain similar costs on a PMPM basis as the member months transitioning to Managed Care. However, in the case of certain services that are still covered under FFS for Managed Care enrolled members, the total amount of FFS expenditures for the Managed Care enrolled members would increase as a result of the shift of members from FFS to Managed Care.

Buy-in Shift to Managed Care
Beginning July 1, 2018, the non-Dual Medicaid Buy-In for Workers with Disabilities (MBIWD) population are mandatorily enrolled into Managed Care under the ABD cohorts; MBIWD members that were included in the DD waiver population will be eligible for voluntary enrollment into Managed Care. For this prospective adjustment, **Optumas** relied on an indicator provided in the eligibility file received from HP. For members with a buy-in indicator that were enrolled in FFS, the membership and costs were removed from the CY 2017 FFS baseline. The enrollment was then shifted into the Managed Care base, depending on age, to the ABD 21+ or ABD <21 cohorts. In the case of certain services that are still covered under FFS for Managed Care enrolled members, the total amount of FFS expenditures for the Managed Care enrolled members would increase as a result of the shift of members from FFS to Managed Care.

The aggregate population impact of the adjustments to the FFS and Managed Care populations base data listed above can be found in Appendix I.B by major category of aid.

In addition to the population changes noted above, it is important to recognize that additional policy changes, some more material than others, may occur within the biennium that have not been adjusted for, consistent with the "current policy" approach taken to develop the biennial rate of growth projections. Consistent with the remainder of the projection process and historical JMOC projections developed by **Optumas**, this approach assumes that current policies in effect will continue into the future, rather than adjusting for future policies that are expected to take effect during the biennium.

Policy Change Adjustments

In addition to adjustments used to reflect changes in population over time, changes in policy that impact specific services require additional adjustments to the base data. For example, if a one-time 5% increase to Inpatient Hospital reimbursement occurs during the base data period, all data prior to this increase needs to be adjusted by 5%; the adjustment reflects the fact that going forward, this 5% increase would be inherent in all Inpatient Hospital costs. This brings all base data expenditures up to the most current reimbursement level and avoids projecting base data that does not reflect current policy. Many policy changes have occurred since the beginning of the base data period, starting January 1, 2017. The following section discusses major policy changes that have been considered in the development of the base data used in the SFY 2020-2021 biennial projections. In addition to the items noted below, additional reimbursement changes have been captured as part of the trend development, which is described in Section 4.

Rebase Inpatient APR DRG Base Rates and Outlier Update –
Beginning January 1, 2018, ODM rebased Inpatient Hospital services under the All Patients Refined Diagnosis Related Groups (APR DRG). This reimbursement rebasing includes changes to APR DRG relative weights and base rates by hospitals delivering the service. **Optumas** did not have the contractual ability to run the APR DRG grouper, so instead reviewed the emerging provider base rates relative to the published base rates for the incurral period of each Inpatient claim and used the difference to develop the impact of this program change. The rate change between the two time periods was applied to the FFS data, resulting in an overall PMPM decrease of 0.3% to the aggregate base data for the FFS enrolled population and less than 0.1% decrease to the aggregate FFS expenditure base data for the Managed Care enrolled population.

Outpatient EAPG Reimbursement –
Beginning January 1, 2018, ODM rebased Outpatient services reimbursement with Enhanced Ambulatory Patient Grouping System (EAPG). This reimbursement rebasing includes changes to EAPG relative weights and base rates by the hospitals delivering the service. There has been a delay in reimbursement under the EAPG grouper and these costs were not appropriately identified in the emerging CY 2018 FFS data. Since the emerging costs were not available for review and **Optumas** did not have the contractual ability to run the EAPG grouping software over the CY 2017 base, the impacts determined by ODM's contracted actuaries for major category of aid and category of service were used as a proxy to best estimate the impact of the EAPG reimbursement rebase. This resulted in an overall PMPM increase of 0.2% to the aggregate base data for the FFS enrolled population and less than 0.1% increase to the aggregate FFS expenditure base data for the Managed Care enrolled population.

Nursing Facility Semi-Annual Reimbursement Updates –
ODM has historically updated nursing facility reimbursement on a semi-annual basis. To approximate the latest reimbursement **Optumas** reviewed the unit cost rate for nursing facilities over time. **Optumas** used the average unit cost from the emerging 2018 data to reflect most recent Nursing Facility per diems. Each of the six-month time periods within CY 2017 was then adjusted on a unit cost basis to the emerging 2018 reimbursement levels. This resulted in an overall PMPM increase of 0.3% to aggregate base data for the FFS enrolled population and less than 0.1% to the aggregate FFS expenditure base data for the Managed Care enrolled population.

Behavioral Health Carve-In –

Beginning July 1, 2018, behavioral health services began to be covered under the Managed Care delivery system. Underlying the CY 2017 base data, these services were provided in the FFS delivery system for all Managed Care members with the exception of those enrolled in MyCare. To make this adjustment, **Optumas** identified behavioral health services utilized by Managed Care members based on diagnosis codes within the CY 2017 claims data. After identifying these services, the expenditure volume was benchmarked for reasonableness to the base data amounts included within the July 2018 mid-year capitation rate certification letter. All costs associated with these claims were then carved out of the FFS spend for the Managed Care enrolled members. This resulted in 81.7% PMPM decrease in the FFS spend for members enrolled in Managed Care. It is important to recognize that these costs were not eliminated from the Medicaid program, rather this reflects a change in delivery system for these services; the July 2018 Midyear capitation rates developed by ODM's contracted actuary, Milliman, include expenditures for these Behavioral Health services.

The aggregate PMPM impact of the adjustments to the FFS and Managed Care populations base data and FFS expenditures listed above can be found in Appendix I.B by major category of aid.

4. Trend

Trend factors are applied to estimate the change in utilization rate (frequency of services) and unit cost (pure price change, technology, acuity/intensity, and mix of services) of services over time. These trend factors are used to project the PMPM costs from the base period to the SFY 2020-2021 biennial projection period.

The trend figures developed for the biennial projection based on claims-level detail were reviewed at various levels, including:

1. Population
2. Category of Service
3. Utilization per 1,000
4. Unit Cost

Since detailed claims were available for the FFS projection categories, FFS trend was developed at both the unit cost and utilization per 1,000 levels for each category of service within each category of aid. FFS trends were developed through utilization of 3, 6, and 12 month moving averages over the course of the base data period. Known policy and program changes were considered as well as any outlier costs so that the projected trends were not influenced by one-time reimbursement changes. These one-time changes due to program and policy changes are captured separately as noted above in Section 3.02. The unit cost and utilization trends are used to project these components into the SFY 2020-2021 biennial period and are used to calculate the implied PMPM growth rate that will be used as a part of the JMOC benchmark.

The biennial projections have been completed assuming current policy will continue. This includes the methodology used for developing the future capitation rates for the Managed Care program. As a result, **Optumas** used trends that were developed by Milliman, ODM's actuary, for the Midyear CY 2018 (July 2018) Managed Care capitation rates. Using these trends assumes that a similar methodology and similar trend projections would be used for future capitation rate contract periods. The trends developed for the Midyear CY 2018 capitation rates were displayed at a category of aid and category of service level and were included in the Midyear CY 2018 certification letters. **Optumas** used these trend estimates, along with a range of variation (assuming that trends for some categories may be higher or lower) to project the Midyear CY 2018 capitation rates into the SFY 2020-2021 biennial projection period.

In addition to the trend develop described above, beginning SFY 2020, an annual 2.8% market basket reimbursement increase has been legislatively implemented for Nursing Facility expenditures. **Optumas** incorporated this as part of the trend projection into each of the SFY 2020 and 2021 biennium years

Once trend has been developed, it is varied as part of the development of the projection range. The annualized lower and upper bound trend is then used to project each COA and COS from the FFS CY 2017 and July 2018 Managed Care base into the SFY 2020 and SFY 2021 biennium.

The annualized trends used to project each category of aid into the lower bound and upper bound of SFY 2020 and SFY 2021 are shown below in Figures 4 through 6. Each projection category reflects the growth rate across all services incurred by that population category. For example, the Adults category in

the Managed Care section reflects the projected growth rate across both their capitated expenses and FFS expenses. Although the growth rates for the FFS program is generally lower than the Managed Care program, the significantly larger PMPM for FFS (see Appendix I.B) means that small changes in the FFS growth rate can result in large changes to the overall cost of the Medicaid program.

Figure 4: Annualized FFS Trend Projections – FFS Populations

FFS Populations	SFY 2020 Lower Bound	SFY 2020 Upper Bound	SFY 2021 Lower Bound	SFY 2021 Upper Bound	Average Annual Lower Bound	Average Annual Upper Bound
Adults	1.9%	3.0%	2.0%	3.0%	1.9%	3.0%
Children	2.2%	3.2%	2.2%	3.2%	2.2%	3.2%
Disabled	1.8%	2.8%	1.9%	2.8%	1.9%	2.8%
Dual	2.1%	3.2%	2.1%	3.2%	2.1%	3.2%
Other	1.6%	2.6%	1.6%	2.6%	1.6%	2.6%
Total	**2.0%**	**3.0%**	**2.0%**	**3.0%**	**2.0%**	**3.0%**

Figure 5: Annualized Total Spend Trend Projections – MC Populations

Managed Care Populations	SFY 2020 Lower Bound	SFY 2020 Upper Bound	SFY 2021 Lower Bound	SFY 2021 Upper Bound	Average Annual Lower Bound	Average Annual Upper Bound
Adults	3.5%	5.4%	3.6%	5.6%	3.5%	5.5%
Children	2.7%	4.6%	2.7%	4.7%	2.7%	4.7%
Disabled	3.1%	5.1%	3.2%	5.2%	3.1%	5.1%
Dual	3.1%	5.1%	3.1%	5.2%	3.1%	5.2%
Other	N/A	N/A	N/A	N/A	N/A	N/A
Total	**3.2%**	**5.1%**	**3.3%**	**5.3%**	**3.2%**	**5.2%**

Figure 6: Annualized Statewide Trend Projections – All Populations and Services

All Populations	SFY 2020 Lower Bound	SFY 2020 Upper Bound	SFY 2021 Lower Bound	SFY 2021 Upper Bound	Average Annual Lower Bound	Average Annual Upper Bound
FFS - FFS Costs	2.0%	3.0%	2.0%	3.0%	2.0%	3.0%
MC - FFS Costs	2.9%	4.0%	3.0%	4.0%	3.0%	4.0%
MC - MC Costs	3.2%	5.1%	3.3%	5.3%	3.2%	5.2%
Additional Payments[1]	2.3%	2.9%	3.6%	4.8%	2.9%	3.9%
Program Wide	**2.8%**	**4.4%**	**2.9%**	**4.6%**	**2.9%**	**4.5%**

[1] *Includes Buy-In/Part D Clawback*

The aggregate 'Program Wide' trend shown in the table above reflects the following:

- SFY 2020 – This reflects the projected rate of growth from the SFY 2019 projected lower and upper bounds to the SFY 2020 projected lower and upper bounds.
- SFY 2021 – This reflects the projected rate of growth from the SFY 2020 projected lower and upper bounds to the SFY 2021 projected lower and upper bounds.

As exhibited in the table above, the projected growth rate assuming current policy is:

- Between 2.8% and 4.4% from SFY 2019 to SFY 2020
- Between 2.9% and 4.6% from SFY 2020 to SFY 2021

As noted in the Executive Summary, CMS released its National Health Expenditure (NHE) projections in February 2018[2]. The average annual growth for Medicaid and CHIP inherent in these projections is slightly below 4.2% from 2018 – 2021, which is in the top 25th percentile of the projected SFY 2020-2021 growth rate range for Ohio Medicaid.

The following section summarizes the overall projection results from the combination of each step of the biennial projection process previously described.

[2] https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsProjected.html

5. Projection Summary

To develop a range of projected growth for Ohio's Medicaid program, **Optumas** has developed projections on a PMPM basis for each of the projection categories noted in the preceding sections of this report. Since Medicaid is limited in the amount of control it has over the change in enrollment over time, a growth target based on PMPM expenditures provides a means of reducing the effect of population growth on this target. In addition to developing projections on a PMPM basis, the aggregate PMPM (across all populations) is calculated by weighting the individual COA projections based on the CY 2017 point-in-time enrollment snapshot. Furthermore, as outlined within Section 3.02 of this report, these projections assume that current policy continues.

Optumas began with the base data time period of CY 2017 for FFS expenditures, and the July 2018 Managed Care capitation rates for Managed Care expenditures. The FFS base period was then adjusted for program changes, based on the current policy within the Medicaid program discussed in Section 3.02; the Managed Care capitation rates already reflect current policy, so no program change adjustments were conducted outside of the rates already developed. To bring the time periods onto the same relative basis as the biennium, the base periods were trended forwarded to SFY 2019 before trending into each year of the biennium using the lower and upper bound trend estimates. These trended values are shown in Appendix I.B. The summary in Figure 7 below shows the blended SFY 2019 aggregate PMPM estimates for the base year of the biennium.

Figure 7: SFY 2019 PMPM Estimates

SFY 2019 Aggregate PMPM Projection Estimates		
SFY	Lower Bound Estimate	Upper Bound Estimate
2019	$639	$647

Using the SFY 2019 base described above, **Optumas** applied the trend factors described within Section 4 of this report to project both the lower bound and upper bound to each fiscal year in the biennium. For each year of the biennium the lower bound trend is applied to the lower bound estimate from SFY 2019 to SFY 2020, and a similar approach is applied for the upper bound estimates. Figure 8 below shows the final SFY 2020 and SFY 2021 aggregate PMPM projections and corresponding trends.

Figure 8: SFY 2020-2021 Projections

Overall Projection				
	PMPM		Trend	
SFY	Lower Bound	Upper Bound	Lower Bound	Upper Bound
2020	$657	$675	2.8%	4.4%
2021	$677	$707	2.9%	4.6%
2019 - 2021			2.9%	4.5%

The figures above exclude all cost categories as described in Section 2. It should be noted that comparing prior JMOC biennium rate of growth PMPM projections to these figures would not be an even comparison because of changes in this year's methodology for exclusions. As such, Appendix I.C includes a comparable PMPM development, with the Hospital Pass Through Payments and HIC Franchise

and Premium tax that were removed during the SFY 2020-2021 biennium projection but reflected within the SFY 2018-2019 biennium projections.

The projections shown above and in Appendices I.E-I.G, should be viewed as estimates of aggregate spend across each projection category. These estimates are only intended to reflect Medicaid's share of spend for each service, and do not include member or recipient liability. For example, costs for Nursing Facility services are included within the projections; these expenditures reflect an estimate of Medicaid's share of the cost for members who reside in a Nursing Facility. However, this does not reflect additional service costs for which a recipient is liable to pay (patient share of cost).

The projections noted above are indicative of estimated PMPM expenditures based on current policy and a constant population mix from CY 2017. While the PMPM projection provides a method of normalizing for population growth over time, the change in both mix of membership and services delivered within each category above could have a significant impact on the overall program-wide PMPM as we move forward into the biennium. For example, if new populations that cost less than the program average begin to enroll into Medicaid, the overall spend of the program would increase. However, since the average cost of these members would be less than the current average, this would drive down the overall PMPM of the program, resulting in a lower aggregate PMPM; at the same time the total aggregate dollars would have increased.

As described in the executive summary, **Optumas** developed projected growth rates reflective of current policy, for the SFY 2020-2021 biennium per ORC Section 103.414. Upon review of this report and the associated projected growth rates, JMOC is tasked with selecting an overall growth rate within the projected range or selecting an independent growth rate for each year of the SFY 2020-2021 biennium.

The following section describes key findings observed within the development of the projected rate of growth for the Ohio Medicaid Program in the SFY2020-2021 biennium.

6. Key Findings

Nursing Facility Market Basket

Beginning in SFY 2020, nursing facilities will begin receiving a market basket reimbursement increase of 2.8% per fiscal year. **Optumas** has quantified the estimated impact to the Medicaid program due to this reimbursement increase over both years of the biennium. This policy change is projected to impact the Dual cohorts the greatest, since this is where majority of the nursing facility costs are incurred. Figure 9 below shows an estimated dollar impact based on using a constant CY 2017 Medicaid enrollment snapshot with the adjustments mentioned in Section 3.

Figure 9. Nursing Facility Market Basket Estimated Dollar Impact

	Nursing Facility Market Basket Dollar Impact[1]		
Market Basket	**SFY 2020**	**SFY 2021**	**Total Biennium Impact**
Market Basket Dollar Impact (Lower Bound)	$96,600,000	$196,400,000	$293,000,000
Market Basket Dollar Impact (Upper Bound)	$100,800,000	$209,200,000	$310,000,000

[1] Impact represents potential reimbursement based on adjusted CY 2017 eligibility

While this does not represent the actual Nursing Facility Market Basket reimbursement that will occur during the biennium, because there may be differences in services utilization and population mix, **Optumas** believes a similar magnitude will continue to grow and compound in future biennia past SFY 2020 and SFY 2021 if this policy continues as currently directed.

For reference for the impact to the overall projection, Appendix I.D shows the projected growth rate into the SFY2020-2021 excluding the Nursing Facility Market Basket, which can be compared to the projected growth rates shown in Section 5 of this report.

Enrollment Age Distribution

Optumas has found during its review of emerging Medicaid experience that one of the adult populations growing at the fastest rate are members in the 55-64 age band. This population represents members who would be potentially enrolled in LTC facilities within the next 5-10 years; this finding is less material to the growth of the program for the SFY 2020-2021 biennium, but a leading indicator into cost growth for future years. The increased growth of this aging population coupled with the additional reimbursements in Nursing Facilities under the Market Basket policy change, leaves great potential for costs related to LTC services to significantly increase the overall Ohio Medicaid program over time.

Pharmacy Therapeutic Classes

Optumas identified two pharmaceutical categories that made up the plurality of the pre-rebate pharmacy costs when developing the biennial projections: Nervous System (Non-Autonomic) and Electrolyte Balancing. These categories made up over 43% of the pre-rebate pharmacy category of service spend in CY 2016-2017 (excluding the Dual and Other categories of aid). Within these groupings, **Optumas** found that Insulins, Anti-Psychotics, and Anti-Convulsants made up the largest portion of spend and see significant unit cost increases nationwide. Appendix I.H includes a graphic representation

of the pre-rebate dollar distribution of these pharmaceuticals, as was shown in the JMOC presentation on November 15, 2018.

Population Mix

During the **Optumas** review, enrollment has started to decrease significantly beginning July 2017. Depending on which cohorts experience shifts in enrollment, the impact due to population mix could result in a change of the overall PMPM of the Medicaid Program. The table below shows an illustration example of what the change in population mix could have on the overall PMPM.

Figure 10. Population Mix Change Impact

	Actual	Hypothetical Membership		Result
COA	Adj. CY 2017 MMs	MMs % Change[1]	Example MMs Change	Lower Bound SFY20 PMPM
Adults	14,546,123	-5.0%	13,818,817	$524
Children	14,585,160	-2.0%	14,293,457	$238
Disabled	2,967,999	3.0%	3,057,039	$1,961
Dual	2,966,329	-2.0%	2,907,002	$2,070
Other	1,789,259	0.0%	1,789,259	$58
Total	36,854,870	-2.7%		$628
Total (MMs Change Mix)[1]			35,865,574	$635
			Percent Change	**1.0%**

[1] *Membership change is for illustrative purposes only, does not represent actual change in caseload*

It is important to note, while PMPMs could increase due to population mix, the offsetting disenrollment of members could keep Medicaid spending at similar or possibly even lower levels from a total dollar perspective. Likewise, additional less-costly members could grow enrollment while reducing overall PMPMs.

Optumas considered the interaction of each component of the four determinants of risk when developing the rate of growth projections for the SFY2020-2021 biennium. There are many factors that contribute to the overall growth of a Medicaid program. The items noted above are seen as significant drivers of overall growth within the Ohio Medicaid program in the current biennium and also as considerations to be cognizant of moving into future biennia. The remainder of this document includes appendices providing additional detail related to the SFY2020-2021 rate of growth projections.

7. Appendices

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Appendix I.A – Projection Categories

Categories of Aid	Rollup - Categories of Aid
CFC Adults	Adults
Extension	Adults
AFK	Children
CFC Children	Children
CHIP	Children
ABD <21	Disabled
ABD 21+	Disabled
Breast & Cervical Cancer (BCCP)	Disabled
LTSS Institutional Non-Dual Populations[1]	Disabled
LTSS Waiver Non-Dual Populations[2]	Disabled
Community Dual <65 (Non-MC)	Dual
Community Dual 65+ (Non-MC)	Dual
LTSS Institutional Dual Populations[1]	Dual
LTSS Waiver Dual Populations[2]	Dual
MyCare	Dual
Medicare Premium Assistance	Other
Refugee/Not Assigned	Other
RoMPIR/Presumptive/Alien	Other

[1] *DD: ICF*
Non-DD: SNF
[2] *DD: Individual Options, Level One, SELF*
Non-DD: Assisted Living, PASSPORT, OH Home Care, PACE

Categories of Service	
Clinics	Medicaid Schools Program
Clinics - Mental Health	Mental Health and Addiction Services
Dental Services	Other
DME	Other Professional
EPSDT	Outpatient ER
Family Planning	Outpatient Non-ER
FQHC/RHC	PCP
Home Health/PDN	Prescribed Drugs
Hospice Services	Psychology Services
ICF & ID Public	SNF
ICF & ID Private	Specialty
ID Services	Transportation
Inpatient Hospital	Vision
Inpatient Hospital - BH	Waiver Services
Laboratory/Radiology	

Appendix I.B – SFY 2020-2021 Biennium Projection Build-Up

FFS Populations – CY 2017 FFS Data Buildup Eligibility Adjustments

COA	Raw CY 2017 MMs	Raw CY 2017 PMPM	MMs Adj. Percent Impact	PMPM Adj. Percent	Adj. CY 2017 MMs	Adj. PMPM	IBNR Factor	Completed Adj. CY 2017 PMPM	Patient Share of Cost Removal % (Non-LTC)	Adj. CY 2017 PMPM
Adults	1,318,921	$378	-29.4%	-7.3%	931,357	$350	0.97	$360	-0.4%	$359
Children	866,236	$229	-27.3%	-5.5%	629,535	$216	0.97	$223	0.0%	$222
Disabled	647,020	$3,536	-3.9%	1.2%	621,560	$3,577	0.99	$3,622	0.0%	$3,621
Dual	1,684,434	$2,300	-0.2%	0.1%	1,681,781	$2,303	0.99	$2,328	-0.1%	$2,326
Other	1,791,673	$56	-0.1%	-0.6%	1,789,259	$56	0.98	$57	-1.1%	$56
Total	**6,308,284**	**$1,103**	**-10.4%**	**6.7%**	**5,653,492**	**$1,178**	**0.99**	**$1,193**	**-0.1%**	**$1,192**

FFS Populations – CY 2017 FFS Data Buildup Eligibility Adjustments

					SFY 2019							
					Lower Bound				Upper Bound			
COA	Adj. CY 2017 MMs	Adj. CY 2017 PMPM	Retro Program Changes	PC Adj. CY 2017 PMPM	Projected Growth	PMPM	LTC Patient Share of Cost Removal %	PMPM	Projected Growth	PMPM	LTC Patient Share of Cost Removal %	PMPM
Adults	931,357	$359	1.1%	$363	1.9%	$374	0.0%	$374	2.9%	$379	0.0%	$379
Children	629,535	$222	-2.3%	$217	2.2%	$225	0.0%	$225	3.2%	$228	0.0%	$228
Disabled	621,560	$3,621	0.3%	$3,631	1.4%	$3,705	-0.9%	$3,672	2.3%	$3,757	-0.9%	$3,723
Dual	1,681,781	$2,326	0.4%	$2,334	1.1%	$2,372	-9.4%	$2,149	2.0%	$2,404	-9.2%	$2,182
Other	1789259	$56	-1.1%	$56	1.6%	$57	0.0%	$57	2.6%	$58	0.0%	$58
Total	**5,653,492**	**$1,192**	**0.3%**	**$1,195**	**1.2%**	**$1,218**	**-5.8%**	**$1,147**	**2.2%**	**$1,234**	**-5.7%**	**$1,165**

FFS Populations – Projected SFY 2019 – SFY 2021 FFS Expenditures

		SFY 2019		SFY 2020				SFY 2021			
		Lower Bound	Upper Bound	Lower Bound		Upper Bound		Lower Bound		Upper Bound	
COA	Adj. CY 2017 MMs	PMPM	PMPM	Projected Growth	PMPM	Projected Growth	PMPM	Projected Growth	PMPM	Projected Growth	PMPM
Adults	931,357	$374	$379	1.9%	$381	3.0%	$390	2.0%	$388	3.0%	$402
Children	629,535	$225	$228	2.2%	$230	3.2%	$235	2.2%	$235	3.2%	$243
Disabled	621,560	$3,672	$3,723	1.8%	$3,739	2.8%	$3,827	1.9%	$3,809	2.8%	$3,936
Dual	1,681,781	$2,149	$2,182	2.1%	$2,194	3.2%	$2,251	2.1%	$2,240	3.2%	$2,322
Other	1789259	$57	$58	1.6%	$58	2.6%	$59	1.6%	$59	2.6%	$61
Total	**5,653,492**	**$1,147**	**$1,165**	**2.0%**	**$1,170**	**3.0%**	**$1,200**	**2.0%**	**$1,194**	**3.0%**	**$1,236**

Appendix I.B – SFY 2020-2021 Biennium Projection Build-Up

Managed Care Populations – CY 2017 FFS Data Buildup Eligibility Adjustments

COA	Raw CY 2017 MMs	Raw CY 2017 PMPM	MMs Adj. Percent Impact	PMPM Adj. Percent	Adj. CY 2017 MMs	Adj. PMPM	IBNR Factor	Completed Adj. CY 2017 PMPM	Patient Share of Cost Removal % (Non-LTC)	Adj. CY 2017 PMPM
Adults	13,411,563	$43	1.5%	-1.4%	13,614,766	$43	0.99	$43	0.0%	$43
Children	13,815,015	$30	1.0%	-3.1%	13,955,625	$30	0.99	$30	0.0%	$30
Disabled	2,035,354	$107	15.3%	2.1%	2,346,439	$109	0.99	$110	0.0%	$110
Dual	1,284,548	$0	N/A	N/A	1,284,548	$0	N/A	$0	N/A	$0
Other										
Total	**30,546,480**	**$40**	**2.1%**	**0.3%**	**31,201,378**	**$40**	**0.99**	**$40**	**0.0%**	**$40**

Managed Care Populations – CY 2017 – SFY 2019 FFS Expenditures Lower Bound Buildup

					SFY 2019							
					Lower Bound				Upper Bound			
COA	Adj. CY 2017 MMs	Adj. CY 2017 PMPM	Retro Program Changes	PC Adj. CY 2017 PMPM	Projected Growth	PMPM	LTC Patient Share of Cost Removal %	PMPM	Projected Growth	PMPM	LTC Patient Share of Cost Removal %	PMPM
Adults	13,614,766	$43	-86.5%	$6	2.5%	$6	0.0%	$6	3.5%	$6	0.0%	$6
Children	13,955,625	$30	-78.6%	$6	2.1%	$7	0.0%	$7	3.1%	$7	0.0%	$7
Disabled	2,346,439	$110	-71.4%	$31	3.9%	$33	0.0%	$33	4.9%	$34	0.0%	$34
Dual	1,284,548	$0	N/A	$0	N/A	$0	N/A	$0	N/A	$0	N/A	$0
Other												
Total	**31,201,378**	**$40**	**-80.8%**	**$8**	**2.8%**	**$8**	**0.0%**	**$8**	**3.8%**	**$8**	**0.0%**	**$8**

Managed Care Populations – Projected SFY 2019 – SFY 2021 FFS Expenditures

		SFY 2019		SFY 2020				SFY 2021			
		Lower Bound	Upper Bound	Lower Bound		Upper Bound		Lower Bound		Upper Bound	
COA	Adj. CY 2017 MMs	PMPM	PMPM	Projected Growth	PMPM	Projected Growth	PMPM	Projected Growth	PMPM	Projected Growth	PMPM
Adults	13,614,766	$6	$6	2.6%	$6	3.6%	$6	2.6%	$6	3.7%	$7
Children	13,955,625	$7	$7	2.1%	$7	3.2%	$7	2.2%	$7	3.2%	$7
Disabled	2,346,439	$33	$34	4.3%	$35	5.3%	$36	4.3%	$36	5.4%	$38
Dual	1,284,548	$0	$0	N/A	$0	N/A	$0	N/A	$0	N/A	$0
Other											
Total	**31,201,378**	**$8**	**$8**	**2.9%**	**$8**	**4.0%**	**$9**	**3.0%**	**$9**	**4.0%**	**$9**

Appendix I.B – SFY 2020-2021 Biennium Projection Build-Up

Managed Care Populations – Capitated Expenditures

		SFY 2019		SFY 2020				SFY 2021			
		Lower Bound	Upper Bound	Lower Bound		Upper Bound		Lower Bound		Upper Bound	
COA	Adj. CY 2017 MMs	PMPM	PMPM	Projected Growth	PMPM	Projected Growth	PMPM	Projected Growth	PMPM	Projected Growth	PMPM
Adults	13,614,766	$510	$515	3.5%	$528	5.4%	$543	3.6%	$547	5.6%	$574
Children	13,955,625	$225	$228	2.7%	$231	4.6%	$238	2.8%	$238	4.8%	$249
Disabled	2,346,439	$1,411	$1,425	3.1%	$1,455	5.0%	$1,497	3.1%	$1,500	5.2%	$1,574
Dual	1,284,548	$1,851	$1,869	3.1%	$1,909	5.1%	$1,965	3.1%	$1,968	5.2%	$2,067
Other											
Total	**31,201,378**	**$506**	**$511**	**3.2%**	**$522**	**5.1%**	**$537**	**3.3%**	**$539**	**5.3%**	**$565**

Managed Care Populations – Combined Expenditures

		SFY 2019		SFY 2020				SFY 2021			
		Lower Bound	Upper Bound	Lower Bound		Upper Bound		Lower Bound		Upper Bound	
COA	Adj. CY 2017 MMs	Blended PMPM	Blended PMPM	Projected Growth	PMPM	Projected Growth	PMPM	Projected Growth	PMPM	Projected Growth	PMPM
Adults	13,614,766	$516	$521	3.5%	$534	5.4%	$549	3.6%	$554	5.6%	$580
Children	13,955,625	$232	$234	2.7%	$238	4.6%	$245	2.7%	$245	4.7%	$257
Disabled	2,346,439	$1,445	$1,459	3.1%	$1,489	5.1%	$1,533	3.2%	$1,537	5.2%	$1,612
Dual	1,284,548	$1,851	$1,869	3.1%	$1,909	5.1%	$1,965	3.1%	$1,968	5.2%	$2,067
Other											
Total	**31,201,378**	**$514**	**$519**	**3.2%**	**$530**	**5.1%**	**$545**	**3.3%**	**$548**	**5.3%**	**$574**

Appendix I.C – Biennium Projection with Historical Inclusions

SFY 2019 Projection PMPM		
SFY	Lower Bound	Upper Bound
2019 - Optumas	$674	$681

	PMPM		Trend	
SFY	Lower Bound	Upper Bound	Lower Bound	Upper Bound
2020	$692	$710	2.7%	4.2%
2021	$712	$742	2.8%	4.4%
2019 - 2021			2.7%	4.3%

PMPMs are reflective of including Hospital Pass Through Payments and HIC Franchise and Premium Tax expenditures

Appendix I.D – Biennium Projection without Nursing Facility Market Basket Impact

SFY 2019 Projection PMPM		
SFY	Lower Bound	Upper Bound
2019 - Optumas	$639	$647

	PMPM		Trend	
SFY	Lower Bound	Upper Bound	Lower Bound	Upper Bound
2020	$655	$673	2.4%	4.0%
2021	$671	$701	2.5%	4.2%
2019 - 2021			2.5%	4.1%

PMPMs are reflective of excluding Nursing Facility Market Basket Increase

Appendix I.E – Highest to Lowest Cost PMPM – SFY 2019

FFS Populations – FFS Expenditures

COA	Adj. CY 2017 MMs	Lower Bound SFY 2019 PMPM	Upper Bound SFY 2019 PMPM
Disabled	621,560	$3,672	$3,723
Dual	1,681,781	$2,149	$2,182
Adults	931,357	$374	$379
Children	629,535	$225	$228
Other	1,789,259	$57	$58
Total	**5,653,492**	**$1,147**	**$1,165**

Appendix I.E – Highest to Lowest Cost PMPM – SFY 2019

Managed Care Populations – FFS Expenditures

COA	Adj. CY 2017 MMs	Lower Bound SFY 2019 PMPM	Upper Bound SFY 2019 PMPM
Disabled	2,346,439	$33	$34
Children	13,955,625	$7	$7
Adults	13,614,766	$6	$6
Dual	1,284,548	$0	$0
Other	-	$0	$0
Total	**31,201,378**	**$8**	**$8**

Managed Care Populations – Capitated Expenditures

COA	Adj. CY 2017 MMs	Lower Bound SFY 2019 PMPM	Upper Bound SFY 2019 PMPM
Dual	1,284,548	$1,851	$1,869
Disabled	2,346,439	$1,445	$1,459
Adults	13,614,766	$516	$521
Children	13,955,625	$232	$234
Other	-	$0	$0
Total	**31,201,378**	**$514**	**$519**

Managed Care Populations – Combined Expenditures

COA	Adj. CY 2017 MMs	Lower Bound SFY 2019 PMPM	Upper Bound SFY 2019 PMPM
Dual	1,284,548	$1,851	$1,869
Disabled	2,346,439	$1,411	$1,425
Adults	13,614,766	$510	$515
Children	13,955,625	$225	$228
Other	-	$0	$0
Total	**31,201,378**	**$506**	**$511**

Appendix I.F – Highest to Lowest Total Cost – SFY 2019

FFS Populations – FFS Expenditures

COA	Adj. CY 2017 MMs	Lower Bound SFY 2019 Expenditures	Upper Bound SFY 2019 Expenditures
Dual	1,681,781	$3,613,400,000	$3,669,500,000
Disabled	621,560	$2,282,100,000	$2,314,100,000
Adults	931,357	$347,900,000	$353,100,000
Children	629,535	$141,400,000	$143,500,000
Other	1,789,259	$102,000,000	$103,500,000
Total	**5,653,492**	**$6,486,800,000**	**$6,583,700,000**

*Note: Total dollars above are **NOT** intended to reflect estimated expenditures in SFY 2019 but are intended to provide a view of the magnitude of total spend by each population, relative to each-other using a constant membership mix. These dollars are calculated by multiplying projected PMPM by the adjusted CY 2017 MMs used to develop the aggregate PMPM. Total estimated expenditures will vary depending on the number of member months experienced in SFY 2019, as well as to the extent that additional programmatic changes outside of current policy go into effect through the duration of SFY 2019.*

Appendix I.F – Highest to Lowest Total Cost – SFY 2019

Managed Care Populations – FFS Expenditures

COA	Adj. CY 2017 MMs	Lower Bound SFY 2019 Expenditures	Upper Bound SFY 2019 Expenditures
Children	13,955,625	$92,000,000	$93,400,000
Adults	13,614,766	$82,300,000	$83,500,000
Disabled	2,346,439	$78,200,000	$79,400,000
Dual	1,284,548	$0	$0
Other	-	$0	$0
Total	**31,201,378**	**$252,500,000**	**$256,300,000**

Managed Care Populations – Capitated Expenditures

COA	Adj. CY 2017 MMs	Lower Bound SFY 2019 Expenditures	Upper Bound SFY 2019 Expenditures
Adults	13,614,766	$6,948,800,000	$7,014,000,000
Disabled	2,346,439	$3,311,900,000	$3,343,800,000
Children	13,955,625	$3,145,500,000	$3,175,400,000
Dual	1,284,548	$2,378,200,000	$2,401,100,000
Other	-	$0	$0
Total	**31,201,378**	**$15,784,400,000**	**$15,934,300,000**

Note: The sum of each category may not equal the totals above, as dollars have been rounded to the nearest $100,000.

Managed Care Populations – Combined Expenditures

COA	Adj. CY 2017 MMs	Lower Bound SFY 2019 Expenditures	Upper Bound SFY 2019 Expenditures
Adults	13,614,766	$7,031,100,000	$7,097,500,000
Disabled	2,346,439	$3,390,200,000	$3,423,200,000
Children	13,955,625	$3,237,600,000	$3,268,800,000
Dual	1,284,548	$2,378,200,000	$2,401,100,000
Other	-	$0	$0
Total	**31,201,378**	**$16,037,100,000**	**$16,190,600,000**

All Populations – All Expenditures

COA	Lower Bound SFY 2019 Expenditures	Upper Bound SFY 2019 Expenditures
FFS	$6,486,800,000	$6,583,700,000
MC Enrollment – FFS Spend	$252,500,000	$256,300,000
MC Enrollment – MC Spend	$15,784,500,000	$15,934,300,000
Total - Medical Expenditures	$22,523,700,000	$22,774,300,000
Additional Payments[1]	$1,037,800,000	$1,056,100,000
Total Expenditures	**$23,561,500,000**	**$23,830,400,000**

[1] *Includes Buy-in and Part D Clawback*

*Note: Total dollars shown on this page are **NOT** intended to reflect estimated total dollar expenditures in SFY 2019 but are intended to provide the magnitude of total spend by each population, relative to each-other using a constant membership mix. These dollars are calculated by multiplying projected PMPM by the adjusted CY 2017 MMs used to weight the program-wide PMPM. Total estimated expenditures will vary depending on the number of member months actually experienced in SFY 2019, as well as to the extent that additional programmatic changes outside of current policy go into effect throughout SFY 2019.*

Appendix I.G – Distribution of Cost – SFY 2019

FFS Populations – FFS Expenditure Distribution

COA	Lower Bound SFY 2019 Expenditures
Dual	16.0%
Disabled	10.1%
Adults	1.5%
Children	0.6%
Other	0.5%
Total	**28.8%**

Managed Care Populations – Capitated Expenditure Distribution

COA	Lower Bound SFY 2019 Expenditures
Adults	30.9%
Disabled	14.7%
Children	14.0%
Dual	10.6%
Other	0.0%
Total	**70.1%**

Managed Care Populations – FFS Expenditure Distribution

COA	Lower Bound SFY 2019 Expenditures
Children	0.4%
Adults	0.4%
Disabled	0.3%
Dual	0.0%
Other	0.0%
Total	**1.1%**

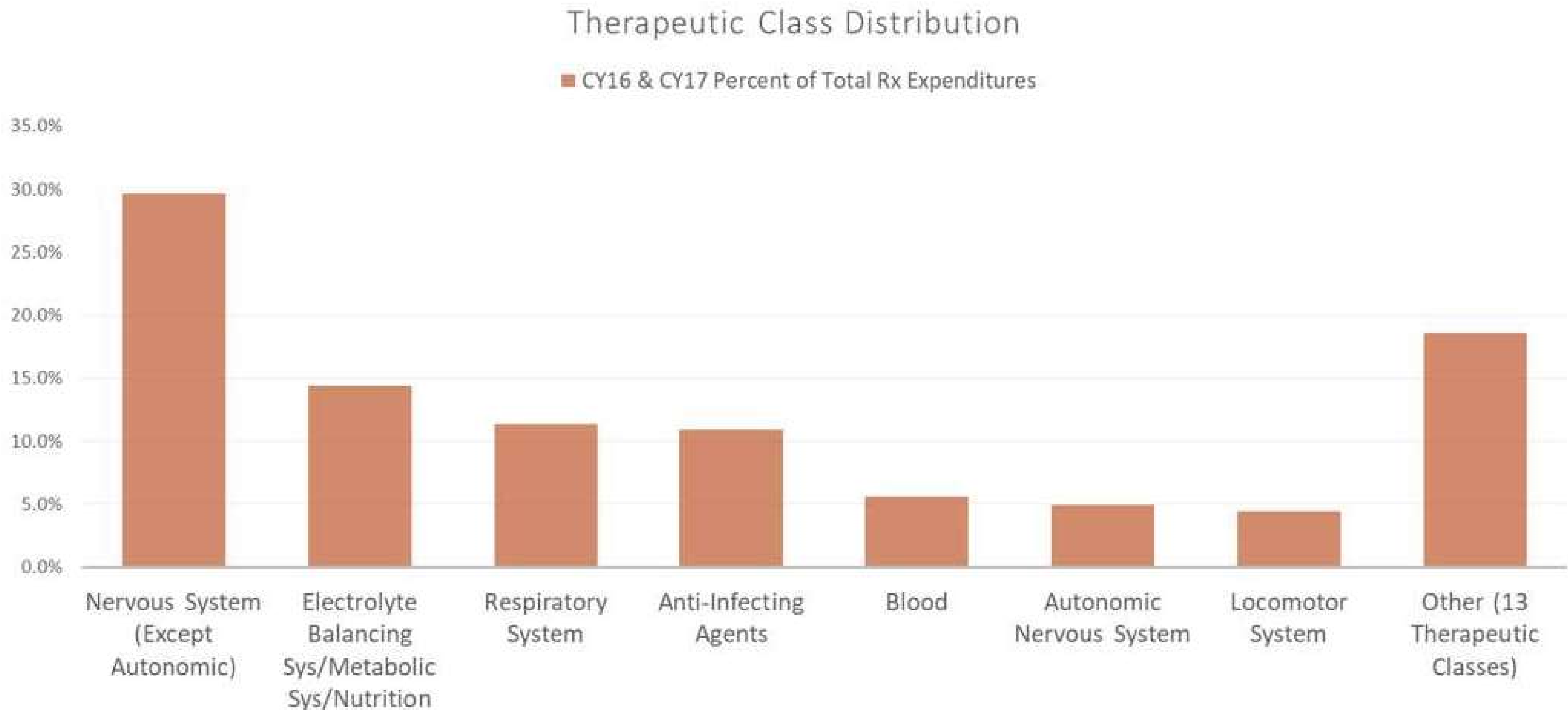
Managed Care Populations – Combined Expenditure Distribution

COA	Lower Bound SFY 2019 Expenditures
Adults	31.2%
Disabled	15.1%
Children	14.4%
Dual	10.6%
Other	0.0%
Total	**71.2%**

All Populations – Combined Expenditure Distribution

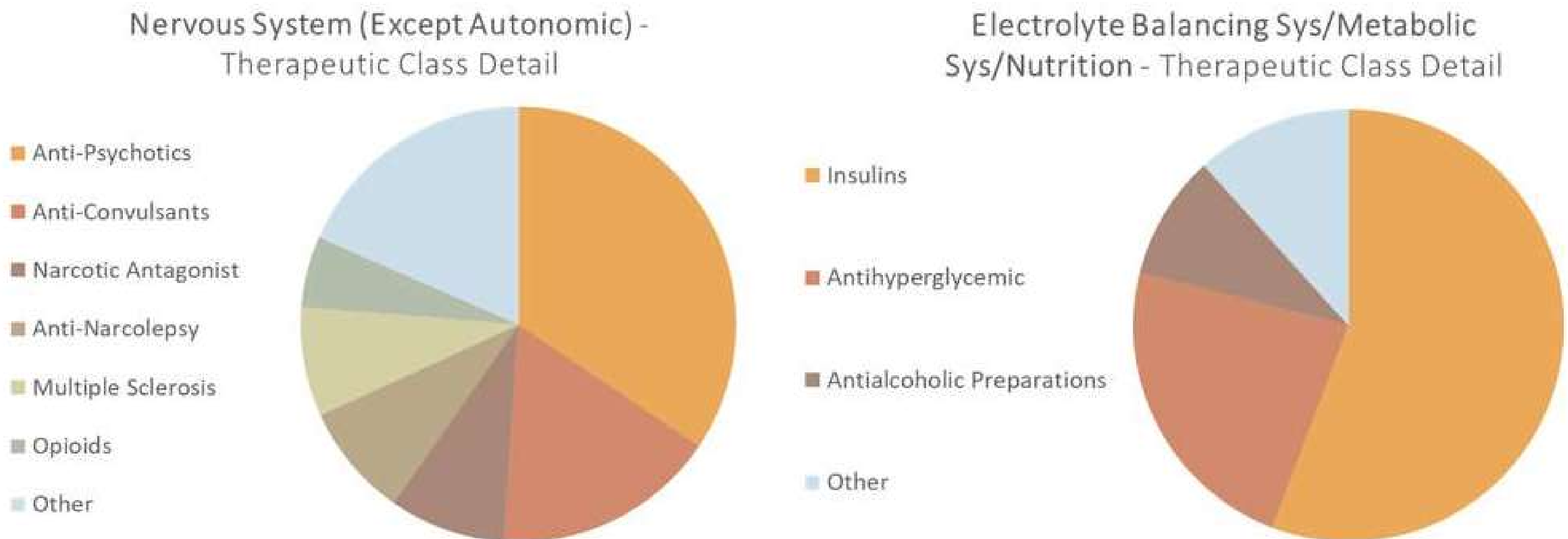
COA	Lower Bound SFY 2019 Expenditures
FFS	28.8%
MC - FFS	1.1%
MC - MC	70.1%
Total - Medical Expenditures	**100.0%**

Appendix I.H – Distribution of Pharmacy Therapeutic Class Expenditures



Percentages based on Medicaid Rx expenditures excluding Dual and 'Other' categories of aid identified as defined in Appendix I.A.

Appendix I.H – Distribution of Pharmacy Therapeutic Class Expenditures



Distribution based on combination of CY16 & CY17 Medicaid Rx expenditures excluding Dual and 'Other' categories of aid as defined in Appendix I.A.