Financial Modernization and Risk Analysis (MARA) Study: Medicaid Module Summary

MARA Study Overview

As directed by HB 330, the Financial Modernization and Risk Analysis Committee (MARA) has undertaken a study of the long-term financial needs of the state and local governments, while considering changes in demographics, technology, and the economy. The MARA committee relies on a data-driven approach to identify potential financial concerns for the state and local governments. As such, the MARA committee has developed a forecasting model based on econometric data and is capable of identifying future financial risks to the state’s revenues and expenditures, as well as considering impacts on local governments’ revenues and expenditures. This approach has a medium- to long-term time focus, from present to 2040.

MARA Medicaid Module Overview

The 2040 MARA model is broken into “modules”. The modules reflect different aspects of the revenues and expenditures of state government, local government, and school districts. The adjacent diagram shows the components. Healthcare expenditures will be developed in the Medicaid module, which includes expenditures for traditional Medicaid and Medicaid expansion.

Key Takeaways: MARA Health Module

- Increased expenditures in Medicaid are driven by increases in the average annual cost per enrollee over time
- As compared to FY 2022, Medicaid spending is projected to double by 2035
- Medicaid enrollment is driven largely by macroeconomic conditions, but the state does have some level of control over future Medicaid expenditures

MARA Medicaid Module – Data Sources

Data for the Medicaid module is sourced from the Montana Statewide Accounting, Budgeting and Human Resources Systems (SABHRS), eREMI and IHS-Markit population projections, and CMS (Centers for Medicare and Medicaid Services) Medicaid per-user cost inflation projections.
MARA Medicaid Module – Assumptions and Methodology

The present-2040 expenditure impact of health programs (like Medicaid) is calculated with the following simple formula:

In a given year, total expenditures in a program = cost per enrollee * number of enrollees

Cost per enrollee is calculated by examining historic cost per enrollee (by type of enrollee – child, aged, disabled, etc.) and inflating this cost going forward with some type of inflation mechanism. For Medicaid, this inflator is the CMS per-user Medicaid inflation metric published here.

The number of enrollees in a given year is calculated by assuming that some percentage of Montana’s population will be enrolled in a particular program in a given year and applying that percentage to an existing projection (either IHS or eREMI) of Montana’s future population, accounting for demographic characteristics. For example, for Medicaid, we assume that 39.7% of children in Montana will enroll in Medicaid in years 2022-2040 (this is the five-year average of 2017-2021). Similar calculations are made for traditional Medicaid adults (2.7% will enroll), aged (7.3%), disabled (1.7%), and Medicaid Expansion adults (15.4%). This methodology leads to the enrollment projection discussed in the findings section below.

State costs and federal costs are then disaggregated based on the financing structure of the particular program. FMAP (Federal Medical Assistance Percentage) for traditional Medicaid is calculated in the out years by comparing the projected per-capita income (PCI) for Montana to the projected PCI for the US. Montana’s FMAP has been steadily declining over the last five years. The matching rate for Medicaid expansion is expected to remain 90.0% federal/10.0% state.

MARA Medicaid Module – Stakeholder Awareness and Participation

The Legislative Fiscal Division (LFD) staff shared and developed the health module assumptions and calculations with staff from the Department of Public Health and Human Services. LFD and MARA committee members considered information from the National Academy for State Health Policy, National Rural Health Association, Manatt Health, and scholars from the American Enterprise Institute and Harvard.

MARA Medicaid Module: Program-level projections and “beige” projections

- Many of the expenditures of state and local government in the MARA forecasting model are inflated with a “status quo”-based methodology which assumes “business as normal” or “beige” continues into 2040. An example would be the administrative functions of DPHHS

- In the module, “non-baseline” projections are made for Medicaid (2/3rds of all DPHHS expenditures). All other DPHHS expenditures are projected as “beige”
MARA Medicaid Module – Findings

1. Enrollment

The graphs below show enrollment projections for different groups of Medicaid enrollees. These projections assume some percentage of a demographic cohort will enroll in Medicaid over time – for example, 39.7% of children will enroll in Medicaid in any given year. The difference in these projections is due to the variation in Montana’s demographic structure projected by IHS and eREMI in the 2022-2040 period. Variations in enrollment are notable in both the “Child” and “ExpAdult” categories. In both cases, rapid increases in enrollment are due to policy changes (I-155 Healthy Montana Kids ballot initiative of 2008; HELP Act of 2015). Both populations declined during the strong economic growth of CY 2019 before rising during the COVID-19 pandemic. Both populations are projected to decline over the next two fiscal years as the state redetermines the eligibility of its Medicaid enrollees when permitted by the federal government.

Enrollment – IHS Population Projection
2. Per-User Cost
Cost per enrollee is calculated by examining historic cost per enrollee (by type of enrollee – child, aged, disabled, etc.) and inflating this cost going forward with the CMS per-user Medicaid inflation metric. This measure is projected by CMS out to 2030 and is illustrated in the graph below. The long-term CMS projection for per-user growth in Medicaid is higher than Montana’s typical per-user Medicaid cost growth. The compounded
growth (at 4.9% annually from 2029-2040) over time drives significant Medicaid expenditure increases over time, as discussed in the following section. The following graph shows per-user cost projections over time for each of the major types of Medicaid enrollees. Elderly and disabled enrollees are significantly higher cost on average than children, traditional Medicaid adults, and Medicaid expansion adults.

3. Total Expenditures
Total Medicaid expenditures for a given year are calculated by multiplying the projected number of enrollees in each type of enrollment group by the projected per-user cost for that enrollment group in that year. The image below illustrates expenditure projections for the four types of traditional Medicaid enrollees and Medicaid expansion enrollees. This graph utilizes IHS population projections; eREMI projections are similar but slightly higher.
Combining expenditures for both types of Medicaid (traditional and expansion) leads to the projection below, in which the impact of compound growth on expenditures over time is very clear.

**MARA Medicaid Module – Limitations & Areas of Future Research**

There are several ways in which the MARA Medicaid module can be improved. First, creating estimates/forecasts for health programs other than Medicaid: child welfare, Children’s Health Insurance Program (CHIP), Supplemental Nutrition Assistance Program (SNAP), Temporary Assistance for Needy Families (TANF), and state-run facilities could be projected separately, which would take them out of the “beige” category.

The current forecast assumes a fixed percentage of each population group will enroll in Medicaid based on the average of the last five years – that methodology could be refined if one assumes (for example) that the state will grow, on average, wealthier (or less wealthy) over time.

Use of the CMS per-user annual cost growth projection is reasonable, but the state does have a significant amount of control over the way in which Medicaid costs can change over time. States can impact the number of
people enrolled, the number of services provided, and the price paid to providers for those services. The development of alternative per-user cost growth projections, perhaps based on medical/health CPI or similar measures, maybe a worthwhile addition.

The current projection uses a fixed ratio of federal funds:state funds for traditional Medicaid when projecting out to 2040. If the state is projected to become more or less wealthy on average over time it might be useful to calculate the projected FMAP out to 2040. FMAP is calculated by comparing the per capita income for a given state to the per capita income for the United States over a period of time. A higher FMAP means that the state is responsible for financing a lower proportion of traditional Medicaid expenditures. FMAPs range from 50.0% to about 77.0% across the 50 states.

Finally, the current forecast assumes state special revenue (SSR) growth over time (see graph below) in order to provide part of the state share for Medicaid. It may be useful to review the feasibility of additional availability of SSR dollars for Medicaid given that a significant portion of these SSR funds are tied to tobacco, which is a declining revenue source.