Medicaid Postpartum Extension: Financial Impact Analysis
February 2022
Background and Objective

The American Rescue Plan (ARPA) allows States to file a State Plan Amendment (SPA) to extend Medicaid coverage for postpartum women to 12 months after birth. Currently, in Missouri, coverage under the MO HealthNet for Pregnant Women (MPW) and Show-Me Healthy Babies (SMHB) programs ends 60 days postpartum. If Missouri were to extend coverage, women in both programs would qualify for the extension.

States that take up the option would be required to provide full Medicaid benefits during pregnancy and through the extended postpartum period. Missouri offers slightly-enriched* benefits to pregnant women compared to standard adult coverage and would be required to provide this package for the duration of the coverage extension. This new option becomes available on April 1, 2022, and the federal government permits States to implement it for five years.

Missouri Foundation for Health engaged an independent analysis of the financial impact to estimate potential costs and benefits of Missouri exercising this option to extend Medicaid coverage to 12 months post-delivery.

* For example, the slightly-enriched benefits include dental care and other ancillary benefits..
Key Findings

Overall, this analysis showed that postpartum extension is a low-cost intervention ($194 Per Member Per Month) that can decrease morbidity and mortality for the 4,600 eligible women.

The base model estimates that $2.6M is the total annual cost to the State of Missouri. Additional costs of $4.6M are covered by the federal government as part of the usual match from Centers for Medicare and Medicaid Services.

Increased access to primary and behavioral health care will save $326K annually. Near-term cost savings can be realized through better management of diabetes, cardiomyopathy, and mental health conditions.

This estimate does not take into consideration the substantial infant-related cost savings related to better pre-conception management of these conditions in subsequent pregnancies.

$525K in pregnancy-related medical care for mothers is delayed or prevented by reducing the frequency of pregnancy during the postpartum extension period (which reduces higher-risk short interval births). The estimate does not consider the substantial downstream infant-related cost-savings related to longer birth intervals and fewer preterm / low birth weight deliveries.
Methodology

In building the forecast, the team estimated 4,600 women would be eligible for the postpartum extension annually. This includes those women on MPW while pregnant who would not qualify for Medicaid expansion due to being above 138% FPL, and those enrolled in SMHB while pregnant, residing between 196%-300% FPL. The number of eligible women aligns with the fiscal note for SB 639 and SB 698.

A number of assumptions were made to predict enrollment cadence, program drop-off, costs of continued care, and prevalence of the most common and/or serious postpartum complications that could be affected by continued coverage. These assumptions are detailed on the following pages.

In an effort to focus on the near-term impact of postpartum extension, this analysis does not take into consideration implications and related cost savings beyond maternal medical costs incurred during the postpartum expansion period. The analysis excludes the medical costs of subsequent births (for mothers and infants) and societal impact related to worker productivity, quality of life and long-term health status. Since the analysis was focused on costs, a reduction in mortality was not estimated.
Eligibility and Enrollment:

- **4,600 women** would qualify. This number aligned with estimates by OMB/DSS in the development of the fiscal note for the associated statute.

- MO HealthNet members become eligible **60 days after the birth event**; after one year of postpartum extension activation, all women who had delivered within the past 12 months would be participating. Results are presented for one full year after activation, referred to as the “steady-state situation”.

Per Member Per Month - Total Cost of Care (PMPM):

- The total cost of care for a woman on Medicaid for Pregnant Women in Missouri is estimated to be **$540 PMPM**, per published data by CMS.

- The PMPM during the postpartum extension period (Day 61 to Day 365) is **$194**, or **64% less than $540**. A study by Laliberté et al. (2014) estimates that 64% of the total cost of care for women enrolled in Medicaid is attributable to obstetrical care, including pregnancy-related complications. Women in the postpartum extension period are not pregnant and would therefore have no costs related to obstetrical care. *(This study combined Medicaid claims data from Missouri, Florida, Iowa, Kansas, and New Jersey.)*
Disenrollment

What causes disenrollment in the postpartum extension?

- A pregnancy would result in a member moving back to the traditional program (MPW or SMHB); the model assumes an annual birth rate of 77 per 1,000 women (or 0.64% pregnancy incidence per month).
- Employment with an employer-paid insurance plan; the model assumes no members gain third-party commercial insurance.
- Moves out of state or dies; the model assumes no members move out of state or die during the postpartum extension period.
Savings Associated with Access to Medical Care During the Extended Postpartum Period

While many health conditions could benefit from improved access to primary and specialty care during the postpartum extension period, four were selected for their prevalence, serious morbidity, and/or effect on future health outcomes of women or their subsequent pregnancies.

i. **Diabetes:** *10% reduction* in the estimated total cost of care for 363 members with diabetes (7.9% of the population)

ii. **Cardiomyopathy:** *25% reduction* in postpartum hospitalization risk for 115 members with cardiomyopathy (2.5% of cases)

iii. **Maternal Mental Health:** *10% reduction* in the estimated annual total cost of non-ob care attributable to untreated mental health conditions for 767 women (17% of cases)

iv. **Increased Birth Interval:** *reduce pregnancy rate by 50%* during the postpartum period through improved access to primary care. The PMPM for a pregnant member is $356 more ($540 vs. $194). Reducing the frequency of pregnancy during the postpartum extension period also reduces higher-risk short interval births, resulting in additional savings.

NOTE: Details of how these assumptions were developed can be found in the author commentary.
Cost Savings for Chronic Conditions

The Chronic Conditions outlined here were selected due to their prevalence, serious morbidity, and/or effect on future health outcomes of women or their subsequent pregnancies.

Diabetes:
Gestational diabetes (GD) can play a significant role in pregnancy morbidities and outcomes for both women and infants. In Missouri from 2012 – 2014, 7.4% of women were diagnosed with GD.

Cardiomyopathy:
From 2014-2018, 26% of pregnancy-related deaths in Missouri were due to cardiomyopathy, a medical condition which makes it more difficult for a person’s heart to pump blood to the rest of the body. Most cardiomyopathy cases are diagnosed postpartum.

Maternal Mental Health:
In 2018, mental health conditions were identified as the leading cause of pregnancy-related death in Missouri. 14.6% of recent mothers in 2019 reported experiencing postpartum depression, which can occur any time during the baby’s first year of life. Substance Use Disorders (SUDS) are a public health crisis in Missouri.
The standard Medicaid match rate (65% federal, 35% state) would apply to the postpartum extension. Therefore, total costs to the State are approximated to be $2.6M annually when the extension is fully implemented.*

Given the small number of eligible women, the relatively low PMPM, and the associated cost savings, this extension is a low-cost intervention that has also been demonstrated to decrease mortality. ARPA has provided the procedural mechanism to implement this. The surplus of GR funds for the current fiscal year also facilitates its implementation.

By accepting the ARPA incentives, Missouri is expected to receive more than $1.15 billion in federal funding over the next two years. These federal dollars can be used to free up other state funds necessary to extend postpartum coverage.

*(This analysis differs from the state fiscal note for SB 639 and SB 698 in that it considers the majority of health care related costs during the postpartum time frame to not be related to obstetrical costs, which account for 64% of costs in the fiscal note model.)
DETAILED RESULTS
### Results Summary

**Women can exit the new program by becoming pregnant, which makes them eligible for established MO HealthNet coverage. The fertility rate of 77 per 1,000 is based on the overall Missouri rate, adjusted for higher rates for lower-income women. The monthly fertility rate is assumed to be constant during the postpartum extension period.**

**Cost savings are short-term and do not consider the long-term benefits of better health status on longevity or lowering the risk of preterm labor, birth defects, or maternal morbidity in a subsequent pregnancy.**

**Calculated PMPM across the whole MO HealthNet membership base (1.1M covered lives): net incremental cost divided by total member-months of covered lives.**

#### Annual Costs

<table>
<thead>
<tr>
<th></th>
<th>Base Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Members</td>
<td>4,600</td>
</tr>
<tr>
<td>Member Months</td>
<td>46,000</td>
</tr>
<tr>
<td>- Less Exits from New Program</td>
<td>(3,033)</td>
</tr>
<tr>
<td>Net</td>
<td>42,967</td>
</tr>
<tr>
<td>PMPM</td>
<td>$194</td>
</tr>
<tr>
<td>Total Incremental Cost</td>
<td>$8,353,000</td>
</tr>
</tbody>
</table>

#### Attributable Short-term Cost Savings (Postpartum Period Only)

<table>
<thead>
<tr>
<th>Cost Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes management</td>
<td>$(134,000)</td>
</tr>
<tr>
<td>Cardiomyopathy</td>
<td>$(46,000)</td>
</tr>
<tr>
<td>Maternal mental health conditions</td>
<td>$(146,000)</td>
</tr>
<tr>
<td>Birth interval</td>
<td>$(525,000)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$(851,000)</td>
</tr>
</tbody>
</table>

#### Diabetes key assumptions

1. Total cost of care for a person with diabetes is 1.9x average, or ~$3,700 per member with diabetes during the 10-month postpartum extension period.
2. 363 delivering mothers have diabetes (or 7.9% of the members)
3. Basic access to primary care may reduce the average total cost of care for members with diabetes by 10% via lower hospitalizations and emergency room visits.

#### Cardiomyopathy key assumptions

1. While 2.5% of members have some sort of cardiomyopathy, only 0.25% (or 12 members) have a serious condition that requires hospitalization during the postpartum extension period.
2. Basic access to primary care may reduce the count of hospitalizations by 3 (or a 25% reduction); the average total cost per hospitalization episode is $16,000.

#### Maternal mental health conditions key assumptions

1. 1 in 6 women have a maternal mental health condition; which translates to 767 women in the cohort.
2. Average annual medical additional cost of an unmanaged mental health condition is $1,909 based on national estimates from Mathematica study.
3. Access to primary care and behavioral health services may reduce the average cost of care for an affected member by 20% (or $382).

#### Birth interval key assumptions

1. Access to primary care and related family planning support services may impact the frequency of short interpregnancy intervals. The base model assumes a 50% reduction in fertility rate during the postpartum extension.
2. The PMPM cost difference for pregnant vs. non-pregnant members is $356, so reducing subsequent pregnancy during the postpartum extension period saves money.
### Results Summary

#### Scenario 1
- The PMPM premium is increased by 50% (to $292 PMPM) to model the possibility that the study by Laliberté et al. (2014) has overestimated how much of the total cost of care is attributable to pregnancy.

#### Scenario 2
- The model increases the cost-saving potential across all sources by modifying the effectiveness of primary care and behavioral health services to prevent costly near-term hospitalizations and emergency room visits.
  - Diabetes – from 10% (Base) to 20%
  - Cardiomyopathy – from 25% (Base) to 50%
  - Maternal mental health - from 10% (Base) to 25%
  - Birth interval – from 50% (Base) to 75%

#### Scenario 3
- The model decreases the cost-saving potential across all sources by modifying the effectiveness of primary care and behavioral health services.
  - Diabetes – from 10% (Base) to 5%
  - Cardiomyopathy – from 25% (Base) to 10%
  - Maternal mental health - from 10% (Base) to 5%
  - Birth interval – from 50% (Base) to 0% [no impact]
Fertility rate: The overall fertility rate in Missouri is 64 per 1,000 per CDC. This rate is adjusted by a factor of 1.2 to reflect the increased fertility of women who live in poverty.

Diabetes: The prevalence of diabetes in pregnancy is 7.9%. The total cost of care for people with diabetes is 2.3x higher than non-diabetes; the total cost for women with diabetes is 5% higher than the population average. We combined these factors and then reduced the factor by 20% (to be conservative) to derive a cost factor of 1.9x which was used to estimate the PMPM cost of diabetes care during the postpartum extension period. PMPM = $194 * 2.3 * 1.05 * 0.2 = $369.

Cardiomyopathy: The prevalence of severe cardiomyopathy which requires hospitalization in the postpartum extension period is rare. The model assumes the cost of a hospitalization to be $16,000.

Maternal Mental Health Conditions: Annual medical expenditures average $1,909 more per mother with an untreated maternal mental health condition, based on 2017 “health expenditures” per the Mathematica report and applying 3% annual inflation adjustment.
We are grateful for the opportunity to explore the costs associated with extending health insurance coverage for women after the birth of their children. When our team began this project, we researched the published literature and government publications for guidance on how much medical care may cost during this 10-month period. Very little has been published, even though Medicaid expansion occurred in many states.

We uncovered a few important studies about how costly the Healthcare.gov (aka, exchange) and Medicaid expansion populations were, but those populations were not comparable to women who were already enrolled in Medicaid. Using published data by CMS, we were very confident in the accuracy of our estimate of the average PMPM cost for a pregnant woman ($540). Intuition and prior experience with health plan claims data led us to hypothesize that a large proportion of medical costs for young, healthy women were related to pregnancy and pregnancy-related complications. The multi-state study by Laliberté et al. (2014) affirmed this hypothesis and allowed our team to estimate with moderate confidence the proportion of PMPM costs attributable to pregnancy (64%). It is important to recognize that pregnancy involves many outpatient visits, routine diagnostics (e.g., ultrasound) and the eventual delivery is almost certainly a 2-day hospitalization (or 4 days for C-section).

Every woman in the cohort will incur these costs. In very rare cases, pregnancy-related complications for the mother occur and longer hospitalizations, diagnostic tests or surgical procedures are needed. Since babies are covered by Medicaid at the time of birth, we did not have to consider any medical costs related to premature birth or neonatal intensive care, which can be astronomical. After the standard postpartum period ends (at Day 60), the average PMPM cost is, by definition, care that involves no pregnancy at all.

Given our health care system perspective for the analysis, we considered savings that would be accrued by the system if the woman had continued access to primary care, specialty care, and pharmacy during the postpartum extension period. As part of our commitment to being conservative in our approach to estimating cost savings, we considered only four sources: (1) cardiomyopathy, (2) diabetes, (3) maternal mental health, (4) birth interval. There may be more sources, many more sources. In the absence of published data about the postpartum period, we relied on professional judgment to make conservative estimates about the potential effectiveness of access to care in the near-term — for only 10 months after delivery. We did not consider savings that could occur later. The assumptions are summarized on page X.

While the actual effectiveness of primary care may differ considerably from the base model assumptions, we are confident that access to primary care will allow the healthcare system to reduce risk for costly preventable hospitalizations and emergency room visits, especially in the near-term. Many research studies have demonstrated the effectiveness of primary care models for Medicaid populations, such as Zhai et al. (2019), so we have high confidence that directionality is correct (savings will occur), even while the magnitude of the effect is uncertain. For example, the base model assumes 10% cost savings is possible for women with diabetes; the less effective primary care model (Scenario 3) cuts that assumption in half.

Overall, cost-savings combined from all four sources in the base model reduce the total cost of care by only 10%...and by 2% in Scenario 3. While the savings do not amount to much, our team felt it was important to highlight the cost-savings benefit to the health system (e.g., fewer hospitalizations of uninsured women) via the provision of health insurance coverage. More analysis is possible using actual claims data from Medicaid health plans in Missouri and other states that provided a form of postpartum extension during the Covid19 pandemic. There exists an opportunity for additional analysis using actual claims data from Medicaid health plans in Missouri and other states that provided a form of postpartum extension during the Covid19 public health emergency.

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Author Commentary