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## State Demonstrations Group

July 31, 2023

Karen Kimsey  
Director  
Virginia Department of Medical Assistance Services  
600 East Broad Street, Suite 1300  
Richmond, VA 23219

Dear Director Kimsey:

The Centers for Medicare & Medicaid Services (CMS) completed its review of the Virginia FAMIS MOMS and FAMIS Select revised Evaluation Design, which is required by the Special Terms and Conditions (STCs), specifically, STC #32, of the state's section 1115 demonstration, "Virginia FAMIS MOMS and FAMIS Select" (Project No: 21-W-00058/3 and 11-W-00381/3), effective through June 30, 2029. CMS has determined that the Evaluation Design, which was amended on May 17, 2022 to integrate the 12-month continuous post-partum coverage extension component, and further revised on May 23, 2023, meets the requirements set forth in the STCs and our evaluation design guidance, and therefore approves the state's Evaluation Design.

CMS has added the approved updated Evaluation Design to the demonstration's STCs as Attachment D. A copy of the STCs, which includes the new attachment, is enclosed with this letter. In accordance with 42 CFR 431.424, the approved Evaluation Design may now be posted to the state's Medicaid website within 30 days. CMS will also post the approved Evaluation Design as a standalone document, separate from the STCs, on Medicaid.gov.

Please note that three Interim Evaluation Reports, in alignment with the approved Evaluation Design, are due to CMS per the expectation and timeline as outlined in STC#36. Likewise, a Summative Evaluation Report, consistent with this approved design, is due to CMS within 18 months of the end of the demonstration period. In accordance with 42 CFR 431.428 and the STCs, we look forward to receiving updates on evaluation activities in the demonstration monitoring reports.

We appreciate our continued partnership with Virginia on the FAMIS MOMS and FAMIS Select section 1115 demonstration. If you have any questions, please contact your CMS demonstration team.

Sincerely,

Paula M. Kazi -S  
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Date: 2023.07.31 22:55:49 -04'00'

Paula Kazi  
Acting Director  
Division of Demonstration Monitoring and Evaluation

cc: Margaret Kosherzenko, State Monitoring Lead, CMS Medicaid and CHIP Operations Group

**CENTERS FOR MEDICARE & MEDICAID SERVICES  
EXPENDITURE AUTHORITY**

**NUMBER:** 21-W-00058/3 and 11-W-00381/3

**TITLE:** Virginia FAMIS MOMS and FAMIS *Select* Section 1115  
Demonstration

**AWARDEE:** Virginia Department of Medical Assistance Services

**Expenditure Authority**

All requirements of Medicaid and the Children’s Health Insurance Program (CHIP) shall apply to the demonstration populations and expenditures listed below, except those identified below as “not applicable.” All Medicaid and CHIP rules not expressly waived or identified as not applicable in this document shall apply to the demonstration. These expenditure and “non-applicable” authorities, as well as the associated Special Terms and Conditions (STCs), are in effect as of November 18, 2021, the date on the accompanying CMS approval letter, through June 30, 2029, except where otherwise noted in these expenditure authorities.

Under the authority of section 1115(a)(2) of the Social Security Act (the Act), expenditures made by the Commonwealth of Virginia for the items identified below (which are not otherwise included as expenditures under section 1903 or section 2107(e)(2)(A)) shall, for the period of this demonstration in accordance with the STCs, be regarded as matchable expenditures under Virginia’s title XXI and title XIX state plan:

**Title XXI Expenditure Authority:**

1. Expenditures for extending health insurance coverage through CHIP to uninsured pregnant individuals with income up to and including 200 percent of the federal poverty level (FPL), who are not otherwise Medicaid eligible. This includes those pregnant individuals who are lawfully residing in the United States and those with access to state employees’ health benefit coverage. These expenditures are authorized for the “FAMIS MOMS” component of the demonstration.

Should the Commonwealth freeze enrollment or otherwise discontinue coverage of the CHIP pregnant woman population, the title XXI expenditure authority will terminate and will not be subject to extension.

2. Expenditures for extending health insurance coverage to children in families with income up to and including 200 percent of the FPL, who are eligible for Virginia’s separate title XXI CHIP coverage but choose to elect a monthly premium assistance subsidy for private or employer-sponsored insurance coverage. These expenditures are authorized for the “FAMIS *Select*” component of the demonstration.



To permit the Commonwealth to offer a benefit package that does not meet the requirements of section 2103 at 42 CFR section 457.4 10(b)(1) for the demonstration populations.

## **5. Federal Matching Payment and Family Coverage Limits Section 2105**

Federal matching payment in excess of the 10-percent cap for expenditures related to the demonstration population and limits on family coverage are not applicable to the demonstration population.

### **Title XIX Expenditure Authority:**

1. Expenditures for extending the postpartum eligibility period for pregnant and postpartum individuals enrolled in any Medicaid state plan eligibility group from the end of the month in which the 60<sup>th</sup> postpartum day occurs to the end of the 12<sup>th</sup> month following the end of the pregnancy. These expenditures are authorized for the “postpartum extension” component of the demonstration.

This expenditure authority is limited to a five-year period starting on April 1, 2022 through March 31, 2027 for Medicaid “lawfully residing” pregnant individuals as described in STC 17.

2. Expenditures for pregnant and postpartum individuals to be continuously eligible without regard to changes in circumstances through the end of the 12-month extended postpartum eligibility period as set forth in STC 17.

This expenditure authority is limited to a five-year period starting on April 1, 2022 through March 31, 2027 for Medicaid “lawfully residing” pregnant individuals as described in STC 17.

**CENTERS FOR MEDICARE & MEDICAID SERVICES  
SPECIAL TERMS AND CONDITIONS (STCs)**

**DEMONSTRATION NUMBERS:** 21-W-00058/3 and 11-W-00381/3

**TITLE:** FAMIS MOMS and FAMIS *Select*

**AWARDEE:** Virginia Department of Medical Assistance Services

**I. PREFACE**

The following are Special Terms and Conditions (STCs) for the Virginia FAMIS MOMS and FAMIS *Select* section 1115 demonstration program. The parties to this agreement are the Virginia Department of Medical Services (Commonwealth) and the Centers for Medicare & Medicaid Services (CMS). These STCs set forth in detail the nature, character, and extent of federal involvement in the demonstration and the Commonwealth's obligations to CMS during the approved demonstration period specified in these STCs. All previously approved STCs, waivers, and expenditure authorities are superseded by the STCs set forth below. These STCs are effective November 18, 2021, the date of the CMS approval letter that accompanied these STCs, through June 30, 2029.

The STCs have been arranged into the following subject areas:

- II. Program Description and Historical Context
- III. General Program Requirements
- IV. Eligibility and Enrollment
- V. Benefits
- VI. Cost Sharing
- VII. Delivery System
- VIII. General Reporting Requirements
- IX. Monitoring
- X. Evaluation of the Demonstration
- XI. General Financial Requirements
- XII. Monitoring Allotment Neutrality
- XIII. Monitoring Budget Neutrality

Attachment A: Developing the Evaluation Design

Attachment B: Preparing the Interim and Summative Evaluation Reports

Attachment C: CMS Approved Demonstration Evaluation Plan

Attachment D: Proxy Methodology for the Title XIX New Adult Group (*reserved for CMS approval*)

## II. PROGRAM DESCRIPTION AND HISTORICAL CONTEXT

### **Demonstration Description**

Virginia's FAMIS MOMS and FAMIS *Select* demonstration has three components.

The first component of the demonstration entitled, “FAMIS MOMS” provides coverage to uninsured pregnant individuals, including lawfully residing pregnant individuals, in families with income up to and including 200 percent of the federal poverty level (FPL) who are not otherwise eligible for Medicaid. “FAMIS MOMS” also provides coverage to pregnant individuals with access to state employees’ health benefit coverage (in accordance with the hardship exception as provided in section 2110(b)(6)(C) of the Social Security Act (the Act)); thereby aligning the Commonwealth’s coverage of pregnant individuals with the expansion of CHIP coverage to children of state employees. FAMIS MOMS coverage is the same as that provided to pregnant individuals under the Medicaid state plan. Under the demonstration, Virginia is also authorized to deem infants born to FAMIS MOMS to be eligible for Medicaid or CHIP coverage, as appropriate, consistent with 42 CFR 435.117 and 457.360. These infants are deemed eligible on the date of birth and remain eligible until attaining the age of 1.

The second component of the demonstration entitled, the “FAMIS *Select*” program, provides premium assistance for private or employer-sponsored insurance to uninsured children, ages 0 through 18, in families with income up to and including 200 percent of the FPL, who are eligible for direct CHIP state plan coverage. These individuals are provided the option to receive premium assistance for private employer-sponsored insurance and supplemental immunization benefits in lieu of receiving coverage under the CHIP state plan. However, these individuals still retain the right to elect to receive direct CHIP coverage at any time.

The third component of the demonstration, effective as of the date of these amended STCs, extends the postpartum eligibility period from the end of the month in which the 60<sup>th</sup> postpartum day occurs to the end of the 12<sup>th</sup> month following the end of the pregnancy, for the “FAMIS MOMS” population and pregnant individuals in any Medicaid state plan eligibility group. As described in STC 17, individuals who are within 12 months postpartum but whom are outside of the state plan 60-day postpartum coverage period (including those who were not enrolled in Virginia Medicaid or CHIP while pregnant), have household income up to and including 200 percent of the FPL, and meet all other Medicaid or CHIP eligibility criteria may receive extended postpartum coverage.

### **Demonstration History**

The Virginia FAMIS MOMS and FAMIS *Select* demonstration was initially approved on June 30, 2005 and implemented August 1, 2005.

#### **FAMIS MOMS**

Virginia implemented the FAMIS MOMS program incrementally beginning August 1, 2005. The intent of this demonstration program component is to provide prenatal care to uninsured

individuals within the title XXI income range and likely to give birth to FAMIS-eligible (i.e., CHIP state plan) children. The first stage expanded eligibility to pregnant individuals with family income above the Medicaid limit of 133 percent of the FPL but less than or equal to 150 percent of the FPL. The second stage, implemented September 1, 2006, covered pregnant individuals with incomes through 166 percent of the FPL. Subsequent stages covered pregnant individuals through 185 percent of the FPL (July 1, 2007) and through 200 percent of the FPL (July 1, 2009). Effective July 1, 2010, CMS approved an amendment to eligibility requirements to allow enrollment of pregnant individuals with income below 133 percent of the FPL who do not meet eligibility requirements for full Medicaid coverage but do meet the FAMIS MOMS requirements.

During the period January 1, 2014 through November 30, 2014, this demonstration component was phased-out because the Virginia General Assembly adopted an amendment to the Commonwealth's biennial budget directing the Commonwealth to phase-out and eliminate the FAMIS MOMS program when health insurance coverage under the Federally Facilitated Marketplace (FFM) became available on January 1, 2014. New applications for FAMIS MOMS coverage were not accepted after December 31, 2013. However, individuals enrolled in FAMIS MOMS on or prior to December 31, 2013 retained eligibility for the duration of their coverage period. Any application received for pregnancy coverage beginning January 1, 2014 through November 30, 2014, was screened for Medicaid under pregnant individuals eligibility and for CHIP. If the applicant was ineligible for Medicaid or CHIP, the application was transferred to the FFM. Beginning on December 1, 2014, enrollment was reopened and new applications accepted for uninsured pregnant individuals with income up to and including 200 percent of the FPL. This income eligibility threshold aligns with children's coverage levels under the CHIP state plan.

On April 3, 2015, CMS approved a demonstration amendment to add coverage for dental services to the FAMIS MOMS program component, consistent with the addition of these benefits for pregnant individuals under Medicaid. This demonstration amendment also allowed eligibility to be expanded to include pregnant individuals with access to subsidized health insurance through state employee benefits.

The title XXI goals and objectives of the FAMIS MOMS program are as follows:

- Facilitate access to prenatal care for FAMIS MOMS participants; and,
- Improve selected birth outcomes of FAMIS MOMS participants and their newborns.

### FAMIS Select

Virginia implemented the FAMIS Select program beginning August 1, 2005. FAMIS Select replaced Virginia's former employer-sponsored health insurance program and provides an alternative for families with children enrolled in FAMIS (i.e., the CHIP state plan) and who have access to private or employer-sponsored coverage. The Commonwealth provides a set monthly premium assistance subsidy for health insurance coverage for children with family income up to 200 percent of the FPL who are eligible for direct coverage in FAMIS. All children are first enrolled in FAMIS. Parents may then choose the premium assistance subsidy in lieu of direct FAMIS coverage for their child(ren). Premium assistance payments are paid directly to the

family based on verified payroll withholding amounts; with the maximum subsidy not to exceed a family's total share of the total monthly premium.

Parents that choose FAMIS Select are responsible for all cost-sharing associated with the private or employer-sponsored plan. Virginia does not wrap benefits with the exception of immunizations if the family's chosen plan does not provide such coverage.

The title XXI goals and objectives of the FAMIS Select program is as follows:

- Facilitate access to affordable private and employer-sponsored health insurance for low-income families through premium assistance;
- Monitor and ensure member satisfaction with the FAMIS Select program; and,
- Assure the aggregate cost-effectiveness of the FAMIS Select program.

#### Postpartum Extension for FAMIS MOMS and Medicaid State Plan Pregnant Individuals

On November 18, 2020, Virginia Governor Ralph Northam signed into law the 2020 Special Session I Virginia Acts of Assembly, Chapter 56, directing the Department of Medical Assistance Services (DMAS) to seek federal approval to cover pregnant individuals for up to 12-months postpartum. Accordingly, Virginia submitted this section 1115 amendment request on March 31, 2021, and following the effective date of these STCs and an operational ramp-up period, will begin to implement the extension of postpartum coverage to provide a full 12-month period following the end of pregnancy. The 12-month postpartum period will be implemented statewide and made available to pregnant and postpartum individuals as detailed in STC 17.

This program component will support the demonstration's goal of facilitating access to prenatal, obstetric, and postpartum care, particularly for those in the Commonwealth facing the highest rates of maternal and infant mortality and morbidity. This amendment is expected to improve continuity of coverage and access to care for Medicaid and CHIP enrolled individuals during the postpartum period and will be evaluated on whether 12-months postpartum coverage reduces maternal and infant mortality and morbidity, improves health outcomes for both the mother and the infant, and advances health equity.

### **III. GENERAL PROGRAM REQUIREMENTS**

- 1. Compliance with Federal Non-Discrimination Statutes.** The Commonwealth must comply with applicable federal statutes relating to non-discrimination. These include, but are not limited to, the Americans with Disabilities Act of 1990 (ADA), Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973 (Section 504), the Age Discrimination Act of 1975, and Section 1557 of the Affordable Care Act (Section 1557).
- 2. Compliance with Medicaid and CHIP Law, Regulation, and Policy.** All requirements of Medicaid and CHIP expressed in law, regulation, and policy statement, not expressly waived or identified as not applicable in the waiver and expenditure authority documents (of which these terms and conditions are part), must apply to the demonstration.

**3. Changes in Medicaid and CHIP Law, Regulation, and Policy.** The Commonwealth must, within the timeframes specified in law, regulation, or policy statement, come into compliance with any changes in federal law, regulation, or policy affecting the Medicaid or CHIP programs that occur during this demonstration approval period, unless the provision being changed is expressly waived or identified as not applicable. In addition, CMS reserves the right to amend the STCs to reflect such changes and/or changes as needed without requiring the state to submit an amendment to the demonstration under STC 7. CMS will notify the state 30 days in advance of the expected approval date of the amended STCs to allow the state to provide comment. Changes will be considered in force upon issuance of the approval letter by CMS. The state must accept the changes in writing.

**4. Impact of Changes in Federal Law, Regulation, and Policy on the Demonstration.**

- a. To the extent that a change in federal law, regulation, or policy requires either a reduction or an increase in federal financial participation (FFP) for expenditures made under this demonstration, the Commonwealth must adopt, subject to CMS approval, a modified budget and/or allotment neutrality agreement for the demonstration as necessary to comply with such change. The modified budget and/or allotment neutrality agreement will be effective upon the implementation of the change. Further, the Commonwealth reserves the right to seek an amendment to the demonstration (as per STC 7) as a result of the change in FFP.
- b. If mandated changes in the federal law requires legislation by the Commonwealth, unless otherwise prescribed by the terms of the federal law, the changes must take effect on the day such legislation enacted by the Commonwealth becomes effective, or on the last day such legislation was required to be in effect under federal law, whichever is sooner.

**5. State Plan Amendments.** The Commonwealth will not be required to submit title XIX or title XXI state plan amendments for changes affecting any populations made eligible solely through the demonstration. If a population eligible through the Medicaid or CHIP state plan is affected by a change to the demonstration, a conforming amendment to the appropriate state plan may be required, except as otherwise noted in these STCs. In all such instances, the Medicaid and CHIP state plans governs.

**6. Changes Subject to the Amendment Process.** Changes related to demonstration features, such as eligibility, enrollment, enrollee rights, benefits, beneficiary rights, delivery systems, cost-sharing, sources of non-federal share of funding, allotment neutrality, and other comparable program elements must be submitted to CMS as amendments to the demonstration. All amendment requests are subject to approval at the discretion of the Secretary in accordance with section 1115 of the Act. The Commonwealth must not implement or begin operational changes to these elements without prior approval by CMS of the amendment to the demonstration. In certain instances, companion amendments to the Medicaid or CHIP state plan may be required as well. Amendments to the demonstration are not retroactive and no FFP of any kind, including for administrative or service-based

expenditures, will be available for changes to the demonstration that have not been approved through the amendment process set forth in STC 7, except as provided in STC 3.

- 7. Amendment Process.** Requests to amend the demonstration must be submitted to CMS for approval no later than 120 days prior to the planned date of implementation of the change and may not be implemented until approved. CMS reserves the right to deny or delay approval of a demonstration amendment based on non-compliance with these STCs, including but not limited to failure by the Commonwealth to submit required elements of a viable amendment request as specified in this STC and submission of required deliverables specified in these STCs in accordance with the deadlines specified herein. Amendment requests must include, but are not limited to, the following:
- a. *Demonstration Amendment Summary and Objectives.* The Commonwealth must provide a detailed description of the amendment, including what Virginia intends to demonstrate via this amendment as well as the impact on beneficiaries, with sufficient supporting documentation, the objective of the change and desired outcomes including a conforming title XIX and/or title XXI state plan amendment, if necessary;
  - b. *Allotment Neutrality Worksheet* (for changes impacting title XXI funding). The Commonwealth must provide an up-to-date CHIP allotment neutrality worksheet that identifies the impact of the proposed amendment on the Commonwealth's available title XXI allotment;
  - c. *Budget Neutrality Worksheet* (for changes impacting title XIX funding). The Commonwealth must provide an up-to-date data analysis which identifies the specific "with waiver" impact of the proposed amendment on the current budget neutrality agreement. Such analysis must include current total computable "with waiver" and "without waiver" status on both a summary and detailed level through the current approval period using the most recent actual expenditures, as well as summary and detailed projections of the change in the "with waiver" expenditure total as a result of the proposed amendment, which isolates (by Eligibility Group) the impact of the amendment.
  - d. *Waiver and Expenditure Authorities.* The Commonwealth must provide a list of waivers and expenditure authorities that are being requested or terminated, along with the programmatic description of why these waivers and expenditure authorities are being requested for the amendment;
  - e. *Evaluation.* The Commonwealth must provide updates to existing demonstration reporting and quality and evaluation plans. This includes a description of how the evaluation design and annual progress reports will be modified to incorporate the amendment provisions, as well as the oversight, monitoring, and measurement of the provisions; and,

- f. *Public Notice.* An explanation of the public process used by Virginia, consistent with the requirements of STC 13. Such explanation must include a summary of any public feedback received and identification of how this feedback was addressed by the Commonwealth in the final amendment request submitted to CMS.
- 8. Extension of the Demonstration.** States that intend to request an extension of the demonstration must submit an application to CMS from the Governor of the state in accordance with the requirements of 42 CFR 431.412(c). States that do not intend to request an extension of the demonstration beyond the period authorized in these STCs, must submit a phase-out plan consistent with the requirements of STC 9.
- 9. Demonstration Phase-Out.** The Commonwealth may only suspend or terminate this demonstration in whole, or in part, consistent with the following requirements.
  - a. *Notification of Suspension or Termination.* The Commonwealth must promptly notify CMS in writing of the reason(s) for the suspension or termination, together with the effective date and a transition and phase-out plan. The Commonwealth must submit its notification letter and a draft transition and phase-out plan to CMS no less than six months before the effective date of the demonstration's suspension or termination. Prior to submitting the draft transition and phase-out plan to CMS, the Commonwealth must publish on its website the draft transition and phase-out plan for a 30-day public comment period. In addition, the Commonwealth must conduct tribal consultation in accordance with STC 13. Once the 30-day public comment period has ended, the Commonwealth must provide a summary of each public comment received, the Commonwealth's response to the comment, and how the Commonwealth considered the comments received when developing the revised transition and phase-out plan.
  - b. *Transition and Phase-out Plan Requirements.* The Commonwealth must minimally include in its phase-out plan the process by which it will notify affected beneficiaries; the content of said beneficiary notices (including information on the beneficiary's appeal rights); the process by which the Commonwealth will conduct administrative reviews of Medicaid or CHIP eligibility prior to the termination of the demonstration for the affected beneficiaries; the process by which the Commonwealth will ensure ongoing coverage for eligible beneficiaries; and undertake any community outreach activities to notify affected beneficiaries (including any community resources that are available).
  - c. *Transition and Phase-out Plan Approval:* The Commonwealth must obtain CMS approval of the transition and phase-out plan prior to the implementation of transition and phase-out activities. Implementation of transition and phase-out activities must be no sooner than 14 calendar days after CMS approval of the transition and phase-out plan.

- d. *Transition and Phase-out Procedures.* The Commonwealth must comply with applicable notice requirements found in 42 CFR, part 431 subpart E, including sections 431.206, 431.210, and 431.213. In addition, the state must assure all applicable and hearing rights are afforded to beneficiaries in the demonstration as outlined in 42 CFR, part 431 subpart E, including 431.220 and 431.221. If a beneficiary in the demonstration requests a hearing before the date of action, the Commonwealth must maintain benefits as required in 431.230. In addition, the Commonwealth must conduct administrative renewals for all affected beneficiaries in order to determine if they qualify for Medicaid or CHIP eligibility under a different eligibility category prior to termination, as discussed in the October 1, 2010 State Health Official letter #10-008 and as required under 42 CFR 435.916(f)(1). For individuals determined ineligible for Medicaid, the Commonwealth must determine potential eligibility for other insurance affordability programs and comply with the procedures set forth in 42 CFR 435.1200(e).
- e. *Exemption from Public Notice Procedures per 42 CFR Section 431.416(g).* CMS may expedite the federal and state public notice requirements under circumstances described in 42 CFR 431.416(g).
- f. *Enrollment Limitation during Demonstration Phase-Out.* If the Commonwealth elects to suspend, terminate, or not extend this demonstration, during the last six months of the demonstration, enrollment of new individuals into the demonstration must be suspended. The limitation of enrollment into the demonstration does not impact the Commonwealth's obligation to determine Medicaid or CHIP eligibility in accordance with the approved Medicaid or CHIP state plans.
- g. *Federal financial participation (FFP).* If the demonstration project is terminated or any relevant waivers suspended by the state, FFP shall be limited to normal closeout costs associated with the termination or expiration of the demonstration, including services, continued benefits as a result of beneficiaries' appeals, and administrative costs of disenrolling beneficiaries.

**10. Close-out Report.** Within 120 calendar days after the end of the demonstration (i.e., upon expiration or early termination), the Commonwealth must submit a draft Close-out Report to CMS for comments.

- a. The draft report must comply with the most current guidance from CMS.
- b. The state will present to and participate in a discussion with CMS on the Close-out report.
- c. The state must take into consideration CMS' comments for incorporation into the final Close-out Report.

- d. The final Close-out Report is due to CMS no later than 30 calendar days after receipt of CMS' comments.
- e. A delay in submitting the draft or final version of the Close-out Report may subject the state to penalties described in STC 26.

**11. Withdrawal of Waiver or Expenditure Authority.** CMS reserves the right to withdraw waivers and/or expenditure authorities at any time it determines that continuing the waivers or expenditure authorities would no longer be in the public interest or promote the objectives of titles XIX and/or XXI. CMS will promptly notify the Commonwealth in writing of the determination and the reasons for the withdrawal, together with the effective date, and must afford the Commonwealth an opportunity to request a hearing to challenge CMS' determination prior to the effective date. If a waiver or expenditure authority is withdrawn, FFP is limited to normal closeout costs associated with terminating the waiver or expenditure authorities, including services, continued benefits as a result of beneficiary appeals, and administrative costs of disenrolling participants.

**12. Adequacy of Infrastructure.** The Commonwealth must ensure the availability of adequate resources for implementation and monitoring of the demonstration, including education, outreach and enrollment; maintaining eligibility systems; compliance with cost-sharing requirements; and reporting on financial and other demonstration components.

**13. Public Notice, Tribal Consultation, and Consultation with Interested Parties.** The Commonwealth must comply with the state notice procedures as required in 42 CFR 431.408 prior to submitting an application to extend the demonstration. For applications to amend the demonstration, the Commonwealth must comply with the state notice procedures set forth in 59 Fed. Reg. 49249 (September 27, 1994) prior to submitting such request. The Commonwealth must also comply with the public notice procedures set forth in 42 CFR 447.205 for changes in statewide methods and standards for setting payment rates.

The Commonwealth must also comply with tribal and Indian Health Program/Urban Indian Organization consultation requirements at section 1902(a)(73) of the Act, 42 CFR 431.408(b), State Medicaid Director Letter #01-024, or as contained in the state's approved Medicaid or CHIP state plan, when any program changes to the demonstration, either through amendment as set out in STC 7 or extension, are proposed by the state

**14. Federal financial participation (FFP).** No federal matching for expenditures for this demonstration, including administrative and medical assistance expenditures, will be available until the effective date identified in the CMS demonstration approval letter that accompanied these STCs.

**15. Administrative Authority.** When there are multiple entities involved in the administration of the demonstration, the Single State Medicaid Agency must maintain authority, accountability, and oversight of the program. The State Medicaid Agency must exercise oversight of all delegated functions to operating agencies, managed care organizations

(MCOs), and any other contracted entities. The Single State Medicaid Agency is responsible for the content and oversight of the quality strategies for the demonstration.

**16. Common Rule Exemption.** The Commonwealth must ensure that the only involvement of human subjects in research activities that may be authorized and/or required by this demonstration is for projects which are conducted by or subject to the approval of CMS, and that are designed to study, evaluate, or otherwise examine the Medicaid or CHIP program – including public benefit or service programs, procedures for obtaining Medicaid or CHIP benefits or services, possible changes in or alternatives to Medicaid or CHIP programs or procedures, or possible changes in methods or levels of payment for Medicaid benefits or services. CMS has determined that this demonstration as represented in these approved STCs meets the requirements for exemption from the human subject research provisions of the Common Rule set forth in 45 CFR 46.104(b)(5).

#### IV. ELIGIBILITY AND ENROLLMENT

**17. Eligibility Groups Affected by the Demonstration.** The following populations are eligible under this demonstration as described therein:

- a. **FAMIS MOMS.** Coverage is provided to uninsured pregnant individuals in families with income up to and including 200 percent of the FPL who are not eligible for Medicaid, including lawfully present (CHIPRA 214) individuals. FAMIS MOMS coverage is also provided to pregnant individuals with access to state employee’s health benefit coverage (in accordance with the hardship exception as provided in section 2110(b)(6)(C) of the Act), thereby aligning the Commonwealth’s coverage of pregnant individuals with the expansion of CHIP coverage to children of state employees. FAMIS MOMS coverage is the same as that provided to pregnant individuals under the Medicaid state plan.

Under the demonstration, Virginia is also authorized to deem infants born to FAMIS MOMS to be eligible for Medicaid or CHIP coverage, as appropriate, consistent with 42 CFR 435.117 and 457.360. These infants are deemed eligible on the date of birth and remain eligible until attaining the age of 1.

- b. **FAMIS *Select* Premium Assistance.** Children eligible for and enrolled in Virginia’s separate CHIP program, may elect to enroll in FAMIS *Select* and receive CHIP premium assistance payments to purchase private or employer sponsored health insurance coverage. Such enrollment is voluntary and based on informed choice regarding all implications of choosing premium assistance in lieu of direct CHIP state plan coverage, including the possibility of reduced benefits and increased cost-sharing, and that the CHIP cost-sharing limit of five percent on annual, aggregate cost sharing will not apply.

The Commonwealth will ensure that enrollees are annually notified that they may choose direct CHIP state plan coverage at any time. The Commonwealth will inform families that all age-appropriate immunizations in accordance with the

recommendations of the Advisory Committee on Immunization Practices (ACIP) are covered by CHIP if their private or employer sponsored health insurance coverage does not provide for such immunizations. Families will continue to be told that this coverage is a factor to consider in choosing premium assistance in lieu of direct CHIP state plan coverage. The Commonwealth shall provide information as to where children may receive immunizations, well-baby, and well-child services in the event these services are not covered in the private or employer-sponsored health plan in which they are enrolled. In the case where title XXI eligibles are enrolled in private or employer-sponsored health insurance that does not include immunizations, the Commonwealth has an established mechanism in effect to reimburse providers for the cost of immunizations.

- c. **Postpartum Extension.** The Commonwealth will extend continuous postpartum coverage for Medicaid and CHIP pregnant individuals from the end of the state plan 60-day postpartum benefit period to the end of the 12<sup>th</sup> month following the end of the pregnancy (including individuals enrolled while pregnant during a period of retroactive eligibility and/or for individuals who did not have enrollment in Medicaid or CHIP while pregnant). Eligible populations will be provided 12-month continuous extended postpartum coverage as follows:
- i. Individuals enrolled in the “FAMIS MOMS” population as described in subparagraph a, with exception for individuals whose program eligibility is derived by section 1903(v)(4) or 2107(e)(1)(O) of the Act as described in subpart c.iv below.
  - ii. Pregnant and postpartum individuals in any Medicaid state plan eligibility group, with exception for individuals whose program eligibility is derived by section 1903(v)(4) or 2107(e)(1)(O) of the Act as described in subpart c.iv below.
  - iii. Individuals who are within 12 months postpartum but beyond the state plan 60-day postpartum coverage period (including those who were not enrolled in Medicaid or CHIP while pregnant), have household income up to and including 200 percent of the FPL, and meet all other Medicaid or CHIP eligibility criteria, with exception for individuals whose program eligibility is derived by section 1903(v)(4) or 2107(e)(1)(O) of the Act as described in subpart c.iv below.
  - iv. Lawfully present (CHIPRA 214) Individuals – Individuals determined to be “lawfully residing” in the United States for the purpose of establishing Medicaid or CHIP eligibility in accordance with section 1903(v)(4) or 2107(e)(1)(O) of the Act are only eligible for continuous 12-month postpartum coverage in accordance with sections 9812 and 9822 of the American Rescue Plan Act of 2021 (ARP) (Pub. L. 117-2), for a five-year period starting April 1, 2022 through March 31, 2027. During this time-limited 5-year coverage period, lawfully present pregnant individuals are

eligible to receive full Medicaid or CHIP state plan benefits for the duration of the pregnancy and the 12-month continuous postpartum period.

- d. **Enrollment upon the Effective Date of the Postpartum Extension Period:** Upon the effective date of this approval, individuals who are within 12 months postpartum, but whom are outside of the state plan 60-day postpartum coverage period, may be enrolled or reenrolled in Medicaid or CHIP for the purpose of receiving extended postpartum coverage for the period of time that equates to the end of the 12<sup>th</sup> month following the end of the pregnancy. These individuals enrolled in the extended postpartum coverage period, not immediately following pregnancy but at a later point in time within the 12-month coverage period, are only eligible for the period of time that remains prior to the end of the 12<sup>th</sup> month following the end of the pregnancy. For example, an eligible individual who is enrolled in the fourth month following pregnancy, will only be eligible to receive eight additional months of continuous postpartum coverage.
- e. **Redetermination of Eligibility after the Postpartum Extension Period:** The Commonwealth will conduct any required redetermination or renewal of eligibility at the end of the extended postpartum period consistent with 42 CFR 435.916 and 42 CFR 457.343. This includes determining Medicaid eligibility on all bases consistent with 42 CFR 435.916(f)(1) prior to determining an individual ineligible. Individuals determined eligible on another basis at the end of the postpartum period will be moved to the appropriate group at that time. Individuals determined ineligible for Medicaid on all bases will be provided advance notice of termination in accordance with 42 CFR 435.917 and 42 CFR Part 431, Subpart E and assessed for potential eligibility for other insurance affordability programs in accordance with 42 CFR 435.916(f)(2). Separate CHIP enrollees no longer eligible for CHIP must be screened for eligibility in other insurance affordability programs in accordance with 42 CFR 457.350(b), and receive timely written notice of termination in accordance with 42 CFR 457.340(e).

**18. Screening for Medicaid.** Applicants for the demonstration will continue to be screened for Medicaid eligibility. Demonstration applicants eligible for Medicaid will be enrolled in Medicaid and receive the full Medicaid benefit package.

**19. Enrollment Limits.** There is no enrollment cap for any component of this demonstration. Enrollment in an individual or employer-sponsored plan under FAMIS *Select* is voluntary and the child may continue to elect to switch to direct CHIP state plan coverage at any time.

**20. Applicability of title XXI Maintenance of Effort to Demonstration Populations.** The maintenance of effort provision at section 2105(d)(3)(A) of the Act applies to title XXI eligible children enrolled in FAMIS *Select*. This provision requires that, with certain exceptions, as a condition of receiving federal financial participation for Medicaid, states must maintain CHIP “eligibility standards, methodologies, and procedures” for children that are no more restrictive than those in effect on March 23, 2010. See STCs 49 and 50 related

to title XXI funding limits and shortfalls.

Section 2105(d)(3) of the Act is not applicable to pregnant individuals enrolled under the FAMIS MOMS component of the demonstration.

## V. BENEFITS

**21. Demonstration Benefits.** There are three distinct benefit packages offered under this demonstration:

- a. **FAMIS MOMS** – Individuals enrolled in FAMIS MOMS as described in STC 17.a receive the same package of benefits as provided to pregnant individuals covered by Virginia’s Medicaid program. The benefit package includes comprehensive health and dental benefits, including orthodontics (orthodontics benefit is limited to individuals under the age of 21). All dental services must be received through the Commonwealth's contracted *Smiles for Children* service provider.

If changes are made in the benefit package that would cause FAMIS MOMS to no longer receive the same benefits provided to pregnant individuals under the Medicaid state plan, the Commonwealth must submit the proposed change to CMS for review and approval, as outlined in STC 7, before modifications can be implemented by the Commonwealth.

- b. **FAMIS *Select Premium Assistance***. For families with CHIP eligible children who choose to receive premium assistance for private or employer-sponsored health insurance coverage, benefits are limited to premium assistance subsidies and immunizations as described in STC 17.b.

Consistent with 2105(c)(3) of the Social Security Act, cost-effectiveness for the purchase of employer-sponsored insurance shall be determined relative to the amount of expenditures (determined on an individual or aggregate basis) under the state child health plan, including administrative expenditures, that the state would have made to provide comparable coverage to the targeted low-income child or family involved (as applicable).

- c. **Postpartum Extension** – Individuals who are eligible for the 12-month extended postpartum coverage period as described in STC 17.c will receive full state plan benefits during the pregnancy and postpartum period.

**22. Minimum Essential Coverage (MEC).** In accordance with CMS’ February 12, 2016 correspondence to the Virginia Department of Medicaid Assistance Services' Director, Cynthia Jones, the Commonwealth's benefit package provided to uninsured pregnant individuals and newborn children under the FAMIS MOMS component of the demonstration is equivalent to CHIP state plan coverage. Accordingly, CMS has determined coverage provided to these individuals and children under this demonstration is recognized as MEC.

CMS also concluded that the Commonwealth's coverage provided under the FAMIS Select component of the demonstration does not meet the comprehensive criteria for MEC. The FAMIS Select program does not provide premium assistance enrollees with wrap-around services or cost-sharing assistance that is comparable to CHIP state plan out-of-pocket limits, thus, this is a lesser benefit than coverage afforded to children who are eligible for CHIP state plan coverage. Accordingly, CMS has determined that the coverage provided to these children under the FAMIS Select demonstration component is not recognized as MEC.

For the 12-month postpartum extension, effective as of the date of these amended STCs, CMS also concluded that the Commonwealth's benefit package provided to postpartum individuals is equivalent to Medicaid and CHIP state plan coverage. Accordingly, CMS has determined the postpartum coverage provided to these individuals under this demonstration is recognized as MEC.

## VI. COST SHARING

**23. Cost Sharing.** The cost-sharing requirements for this demonstration are outlined below:

- a. **FAMIS MOMS** - The cost-sharing requirements for the FAMIS MOMS component of the demonstration are consistent with those described in the Medicaid state plan. There are no monthly premiums or enrollment fees associated with participation in the demonstration.

Co-payments for services received by FAMIS MOMS are identical to co-payments required of pregnant individuals covered by Medicaid. By policy, there are no co-payments required for pregnancy related services or for medical conditions that may complicate the pregnancy, including dental services. Also, it is a contractual requirement that Managed Care Organization (MCO) not charge pregnant individuals co-payments for any services. Therefore, the only co-payments that may be charged to a pregnant individual receiving services through Medicaid or FAMIS MOMS would be for non-pregnancy related services delivered through fee-for-service.

- b. **Postpartum Extension** – There is no cost-sharing requirement associated with services received during the 12-month extended postpartum coverage period.
- c. **FAMIS *Select* Premium Assistance.** For families with CHIP eligible children who choose to receive premium assistance for private or employer-sponsored insurance and supplemental immunization benefits in lieu of receiving coverage under the CHIP state plan, cost-sharing requirements will continue to be set by their private or employer-sponsored insurance plan.

## VII. DELIVERY SYSTEM

**24. Demonstration Delivery System.** The demonstration delivery system varies by population as described below:

- a. **FAMIS MOMS and Postpartum Extension** - Health care services are delivered primarily through one of the Managed Care Organizations (MCOs) contracted by DMAS to provide Medicaid and FAMIS (CHIP) benefits. Initially, benefits are provided on a fee-for-service basis until the pregnant individual is enrolled in an MCO. Dental services are provided by the contracted *Smiles for Children* service provider.
- b. **FAMIS Select Premium Assistance.** For families who select premium assistance, health care services are delivered through the private or employer-sponsored plan of choice.

## VIII. GENERAL REPORTING REQUIREMENTS

**25. Deferral for Failure to Submit Timely Demonstration Deliverables.** CMS may issue deferrals in accordance with 42 CFR part 430 subpart C, in an amount up to \$1,000,000 per deliverable (federal share) when items required by these STCs (e.g., required data elements, analyses, reports, design documents, presentations, and other items specified in these STCs) (hereafter singly or collectively referred to as “deliverable(s)”) are not submitted timely to CMS or are found to not be consistent with the requirements approved by CMS. A deferral shall not exceed the value of the federal amount for the current demonstration period. The Commonwealth does not relinquish its rights provided under 42 CFR part 430 subpart C to challenge any CMS finding that the state materially failed to comply with the terms of this agreement.

The following process will be used: 1) Thirty days after the deliverable was due if the state has not submitted a written request to CMS for approval of an extension as described in subsection (b) below; or 2) Thirty days after CMS has notified the Commonwealth in writing that the deliverable was not accepted for being insufficient, or inconsistent with the requirements of this agreement and the information needed to bring the deliverable into alignment with CMS requirements:

- a. CMS will issue a written notification to the state providing advance notification of a pending deferral for late or non-compliant submissions of required deliverable(s).
- b. For each deliverable, the Commonwealth may submit to CMS a written request for an extension to submit the required deliverable that includes a supporting rationale for the cause(s) of the delay and the Commonwealth’s anticipated date of submission. Should CMS agree to the Commonwealth’s request, a corresponding extension of the deferral process can be provided. CMS may agree to a corrective action plan submitted by the Commonwealth as an interim step before applying the deferral, if the Commonwealth proposes a corrective action plan in the state’s written extension request.

- c. If CMS agrees to an interim corrective plan in accordance with subsection (b), and the Commonwealth fails to comply with the corrective action plan or, despite the corrective action plan, still fails to submit the overdue deliverable(s) with all required contents in satisfaction of the terms of this agreement, CMS may proceed with the issuance of a deferral against the next Quarterly Statement of Expenditures reported in Medicaid Budget and Expenditure System/State Children's Health Insurance Program Budget and Expenditure System (MBES/CBES) following a written deferral notification to the Commonwealth.
- d. If the CMS deferral process has been initiated for the Commonwealth's non-compliance with the terms of this agreement with respect to required deliverable(s), and the state submits the overdue deliverable(s), and such deliverable(s) are accepted by CMS as meeting the requirements specified in these STCs, the deferral(s) will be released.

As the purpose of a section 1115 demonstration is to test new methods of operation or service delivery, the Commonwealth's failure to submit all required reports, evaluations and other deliverables will be considered by CMS in reviewing any application for an extension, amendment, or for a new demonstration.

**26. Submission of Post-Approval Deliverables.** The Commonwealth must submit all deliverables as stipulated by CMS and within the timeframes outlined within these STCs.

**27. Compliance with Federal Systems Updates.** As federal systems continue to evolve and incorporate additional section 1115 demonstration reporting and analytics functions, the state will work with CMS to:

- a. Revise the reporting templates and submission processes to accommodate timely compliance with the requirements of the new systems;
- b. Ensure all section 1115, Transformed Medicaid Statistical Information System (T-MSIS), and other data elements that have been agreed to for reporting and analytics are provided by the Commonwealth; and,
- c. Submit deliverables to the appropriate system as directed by CMS.

## **IX. MONITORING**

**28. Monitoring Reports.** The Commonwealth must submit one Semi-Annual Monitoring Report and one Annual Monitoring Report each demonstration year. The Semi-Annual Reports are due no later than 90 calendar days following the end of the six-month period from July through December (semi-annual report will be due by March 31 each year). The compiled Annual Report is due no later than 90 calendar days following the end of the demonstration year (i.e., the July–June compiled annual report will be due by September 28 each year). The reports will include all required elements as per 42 CFR 431.428 and should not direct readers to links outside the report. Additional links not referenced in the document may be listed in a reference/bibliography section. The Monitoring Reports must follow the

framework provided by CMS, which is subject to change as monitoring systems are developed/evolve, and must be provided in a structured manner that supports federal tracking and analysis.

- a. Operational Updates. The operational updates will focus on progress toward meeting the demonstration's milestones. Additionally, per 42 CFR 431.428, the Monitoring Reports must document any policy or administrative difficulties in operating the demonstration. The reports shall provide sufficient information to document key challenges, underlying causes of challenges, how challenges are being addressed, as well as key achievements and to what conditions and efforts successes can be attributed. The discussion should also include any issues or complaints identified by beneficiaries; lawsuits or legal actions; unusual or unanticipated trends; legislative updates; and descriptions of any public forums held. The Monitoring Report should also include a summary of all public comments received through post-award public forums conducted in accordance with required by 42 CFR 431.420(c) regarding the progress of the demonstration.
- b. Performance Metrics. The performance metrics will provide data to demonstrate how the Commonwealth is progressing towards meeting the demonstration's goals, and must cover all key policies under this demonstration. Additionally, per 42 CFR 431.428, the Monitoring Reports must document the impact of the demonstration in providing insurance coverage to beneficiaries and the uninsured population, as well as outcomes of care, quality and cost of care, and access to care. This may also include the results of beneficiary satisfaction surveys, if conducted, and any grievances and appeals. The requiring monitoring and performance metrics must be included in writing in the Monitoring Reports, and will follow the framework provided by CMS to support federal tracking and analysis.
- c. Budget and Allotment Neutrality and Financial Reporting Requirements. Per 42 CFR 431.428, the Monitoring Reports must document the financial performance of the demonstration. The Commonwealth must provide an updated budget and allotment neutrality workbook with every Monitoring Report that meets all the reporting requirements for monitoring allotment neutrality set forth in the General Financial Requirements section of these STCs, including the submission of corrected budget and allotment neutrality data upon request. In addition, the Commonwealth must report quarterly expenditures associated with the populations affected by this demonstration on the appropriate Form CMS 64.9 or CMS-21. No later than six months after the end of each demonstration year, or as soon thereafter as data are available, the Commonwealth will calculate and report to CMS annual demonstration expenditures for the completed year. Administrative costs should be reported separately.
- d. Evaluation Activities and Interim Findings. Per 42 CFR 431.428, the Monitoring Reports must document any results of the demonstration to date per the evaluation hypotheses. Additionally, the Commonwealth shall include a summary of the progress of evaluation activities, including rapid cycle evaluation assessments, key milestones accomplished, and any challenges encountered and how they were addressed.

- 29. Corrective Action Plan Related to Monitoring.** If monitoring indicates that demonstration features are not likely to assist in promoting the objectives of Medicaid or CHIP, CMS reserves the right to require the Commonwealth to submit a corrective action plan to CMS for approval. A corrective action plan could include a temporary suspension of implementation of demonstration programs, in circumstances where monitoring data indicate substantial and sustained directional change inconsistent with demonstration goals, such as substantial and sustained trends indicating increased difficulty accessing services. This may be an interim step to withdrawing waiver or expenditure authorities as outlined in STC 11. CMS will withdraw an authority, as described in STC 11, when metrics indicate substantial and sustained directional change inconsistent with the Commonwealth's demonstration goals, and the Commonwealth has not implemented corrective action. CMS further has the ability to suspend implementation of the demonstration should corrective actions not effectively resolve these concerns in a timely manner.
- 30. Monitoring Calls.** CMS and the Commonwealth will hold monitoring calls no later than 60 calendar days after submission of the Monitoring Reports described in STC 28 to discuss the program update provided in the reports and any issues associated with the continued operation of the demonstration. The purpose of these calls is to discuss any significant actual or anticipated developments affecting the demonstration. Examples include implementation activities, trends in reported data on metrics and associated mid-course adjustments, enrollment and access, allotment neutrality, and progress on evaluation activities. CMS will provide updates on any pending actions, as well as federal policies and issues that may affect any aspect of the demonstration. The Commonwealth and CMS will jointly develop the agenda for the calls.
- 31. Post Award Forum.** As required by 42 CFR 431.420(c), within six months of the demonstration's implementation, and annually thereafter, the Commonwealth must afford the public with an opportunity to provide meaningful comment on the progress of the demonstration. At least 30 days prior to the date of the planned public forum, the state must publish the date, time, and location of the forum in a prominent location on its website. The Commonwealth must also post the most recent annual report on its website with the public forum announcement. Pursuant to 42 CFR 431.420(c), the Commonwealth must include a summary of the comments in the Monitoring Report associated with the demonstration period in which the forum was held, as well as in its compiled Annual Report.

## **X. EVALUATION OF THE DEMONSTRATION**

- 32. Evaluation Design Approval and Subsequent Updates.** The Commonwealth's CMS-approved evaluation design is incorporated into these STCs as Attachment C. A revised draft evaluation design addressing the postpartum extension component of the demonstration shall be submitted for CMS approval by no later than 180 calendar days after the approval of the demonstration. The revised draft Evaluation Design must be developed in accordance with Attachment A (Developing the Evaluation Design) of these STCs as well as any additional evaluation guidance provided by CMS specific to any program component being tested under this demonstration. Any CMS feedback on modifications needed to the revised draft Evaluation Design must be addressed within 60 calendar days after receipt of CMS'

comments. Upon CMS approval of the revised Evaluation Design, the document will be included as an updated Attachment C to these STCs.

Per 42 CFR 431.424(c), the Commonwealth will publish the approved revised Evaluation Design on the Commonwealth's website within 30 calendar days of CMS approval. The Commonwealth must implement the Evaluation Design and submit a description of its evaluation implementation process in each of the Monitoring Reports, including any required rapid cycle assessments specified in these STCs. If the Commonwealth wishes to make additional changes to the CMS-approved evaluation design, it must submit a revised evaluation design with the proposed changes to CMS for approval.

Failure to comply with this STC may result in a deferral being issued as outlined in STC 25.

- 33. Cooperation with Federal Evaluators.** As required under 42 CFR 431.420(f), the Commonwealth must cooperate fully and timely with CMS and its contractors in any federal evaluation of the demonstration or any component of the demonstration. This includes, but is not limited to, commenting on design and other federal evaluation documents and providing data and analytic files to CMS, including entering into a data use agreement that explains how the data and data files will be exchanged, and providing a technical point of contact to support specification of the data and files to be disclosed, as well as relevant data dictionaries and record layouts. The Commonwealth must include in its contracts with entities who collect, produce, or maintain data and files for the demonstration, that they must make such data available for the federal evaluation as is required under 42 CFR 431.420(f) to support federal evaluation. The Commonwealth may claim administrative match for these activities. Failure to comply with this STC may result in a deferral being issued as outlined in STC 25.
- 34. Evaluation Budget.** A budget for the evaluation must be provided with the draft Evaluation Design. It will include the total estimated cost, as well as a breakdown of estimated staff, administrative and other costs for all aspects of the evaluations, such as any survey and measurement development, quantitative and qualitative data collection and cleaning, analyses and report generation. A justification of the costs may be required by CMS if the estimates provided do not appear to sufficiently cover the costs of the design or if CMS finds that the designs are not sufficiently developed, or if the estimates appear to be excessive.
- 35. Evaluation Questions and Hypotheses.** Consistent with Attachments A and B (Developing the Evaluation Design and Preparing the Interim and Summative Evaluation Reports) of these STCs, the evaluation documents must include a discussion of the evaluation questions and hypotheses that the Commonwealth intends to test. Each demonstration component should have at least one evaluation question and hypotheses. The evaluation must outline and address well-crafted hypotheses and research questions for all key demonstration policy components that support understanding the demonstration's impact and also its effectiveness in achieving the goals. The Commonwealth must also investigate cost outcomes for the demonstration as a whole, including but not limited to: administrative costs of demonstration implementation and operation and Medicaid/CHIP health service expenditures.

The hypothesis testing should include, where possible, assessment of both process and outcome measures. Proposed measures should be selected from nationally-recognized sources and national measures sets, where possible. Measures sets could include CMS' Core Set of Health Quality Measures for Children in Medicaid and CHIP, Consumer Assessment of Health Care Providers and Systems (CAHPS), the Initial Core Set of Health Quality Measures for Medicaid-Eligible Adults and/or measures endorsed by the National Quality Forum (NQF). The findings from each evaluation component must be integrated to help inform whether the Commonwealth met the overall demonstration goals, with recommendations for future efforts regarding all components.

**36. Interim Evaluation Report.** The Commonwealth must submit an Interim Evaluation Report for the completed years of the demonstration, and for each subsequent extension of the demonstration, as outlined in 42 CFR 431.412(c)(2)(vi). When submitting an application for extension, the Evaluation Report should be posted to the Commonwealth's website with the application for public comment.

- a. The Interim Evaluation Report will discuss evaluation progress and present findings to date as per the approved evaluation design.
- b. For any demonstration authority that expires prior to the overall demonstration's expiration date, the Interim Evaluation Report must include an evaluation of the authority as approved by CMS.
- c. The Commonwealth must provide a draft Interim Evaluation Report for the corresponding years, no longer than one year after completion of the measurement period, as follows. The Commonwealth must submit a final Interim Evaluation Report for each measurement period 60 calendar days after receiving CMS comments on the draft Interim Evaluation Report and post the documents to the Commonwealth's website.
  - i. An Interim Evaluation Report for the period of July 2019 through June 2022 will be due by no later than June 30, 2023.
  - ii. An Interim Evaluation Report for the period of July 2019 – June 2024 will be due by no later than June 30, 2025.
  - iii. An Interim Evaluation Report for the period of July 2019 – June 2027 will be due by no later than June 30, 2028.
- d. If the Commonwealth is seeking to extend the demonstration, the draft Interim Evaluation Report is due when the application for extension is submitted. If the Commonwealth made changes to the demonstration in its application for extension, the research questions and hypotheses, and how the design was adapted should be included. If the Commonwealth is not requesting a demonstration extension, an Interim Evaluation report is due one year prior to the end of the demonstration. For demonstration phase-out prior to the expiration of this demonstration approval period, the draft Interim Evaluation Report is due to CMS on the date that will be specified in the notice of termination or suspension.

- e. The Commonwealth must submit a revised Interim Evaluation Report 60 calendar days after receiving CMS comments on the draft Interim Evaluation Report. The Commonwealth must post the final Interim Evaluation Report to the Commonwealth's website within 30 calendar days of approval by CMS.
- f. The Interim Evaluation Report must comply with attachment B (Preparing the Interim and Summative Evaluation Reports) of these STCs.

**37. Corrective Action Plan Related to Evaluation.** If evaluation findings indicate that demonstration features are not likely to assist in promoting the objectives of Medicaid, CMS reserves the right to require the Commonwealth to submit a corrective action plan to CMS for approval. These discussions may also occur as part of an extension process when associated with the Commonwealth's Interim Evaluation Report, or as part of the review of the Summative Evaluation Report. A corrective action plan could include a temporary suspension of implementation of demonstration programs, in circumstances where evaluation findings indicate substantial and sustained directional change inconsistent with demonstration goals, such as substantial and sustained trends indicating increased difficulty accessing services. A corrective action plan may be an interim step to withdrawing waivers or expenditure authorities, as outlined in STC 11. CMS further has the ability to suspend implementation of the demonstration should corrective actions not effectively resolve these concerns in a timely manner.

**38. Evaluation Outcomes.** CMS may exercise its rights as described in STC 11 to not reauthorize any demonstration program authority for which there are no evaluation findings to support the conclusion that the state is making progress in achieving the goals of the demonstration program component in accordance with the CMS approved evaluation design for the demonstration. If CMS makes such determination, the Commonwealth must submit a phase-out plan for that demonstration component in accordance with STC 9.

**39. Summative Evaluation Report.** The draft Summative Evaluation Report must be developed in accordance with attachment B (Preparing the Interim and Summative Evaluation Reports) of these STCs. The Commonwealth must submit a draft Summative Evaluation Report for the demonstration approval period specified in these STCs within 18 months of the end of the approval period represented by these STCs. The Summative Evaluation Report must include the information in the approved Evaluation Design.

- a. Unless otherwise agreed upon in writing by CMS, the Commonwealth shall submit the final Summative Evaluation Report within 60 calendar days of receiving comments from CMS on the draft.
- b. The final Summative Evaluation Report must be posted to the Commonwealth's website within 30 calendar days of approval by CMS.

- 40. State Presentations for CMS.** CMS reserves the right to request that the Commonwealth present and participate in a discussion with CMS on the Evaluation Design, the interim evaluation, and/or the summative evaluation.
- 41. Public Access.** The Commonwealth shall post the final documents (e.g., Monitoring Reports, Close-out Report, approved Evaluation Design, Interim Evaluation Report, and Summative Evaluation Report) on its website within 30 calendar days of approval by CMS.
- 42. Additional Publications and Presentations.** For a period of 12 months following CMS approval of the final reports, CMS will be notified prior to presentation of these reports or their findings, including in related publications (including, for example, journal articles), by the Commonwealth, contractor, or any other third party directly connected to the demonstration over which the Commonwealth has control. Prior to release of these reports, articles or other publications, CMS will be provided a copy including any associated press materials. CMS will be given ten business days to review and comment on publications before they are released. CMS may choose to decline to comment or review some or all of these notifications and reviews. This requirement does not apply to the release or presentation of these materials to state or local government officials.

## **XI. GENERAL FINANCIAL REQUIREMENTS**

This project is approved for title XXI and title XIX expenditures applicable to services rendered during the demonstration period. This section describes the general financial requirements for these expenditures.

- 43. Extent of Federal Financial Participation (FFP) for the Demonstration.** Subject to CMS approval of the source(s) of the non-federal share of funding, CMS will provide FFP only for the medical assistance services and premium assistance payments as described in STC 21 and associated administrative expenditures. CMS will provide FFP at the applicable federal matching rate for the demonstration as outlined below, subject to the Commonwealth's title XXI allotment limit and the title XIX total computable expenditure limit set forth in STC 55:
- a. Medicaid or CHIP program administrative costs, including those associated with the administration of the demonstration.
  - b. Net expenditures and prior period adjustments of the Medicaid or CHIP program that are paid in accordance with the approved state plans.
  - c. Medical assistance expenditures made under section 1115 demonstration authority, including those made in conjunction with the demonstration, net of enrollment fees, cost sharing, pharmacy rebates, and all other types of third party liability or CMS payment adjustments.
- 44. Sources of Non-Federal Share.** The Commonwealth must certify that the matching non-federal share of funds for the demonstration are state/local monies. The Commonwealth further certifies that such funds shall not be used as the match for any other federal grant or

contract, except as permitted by law. All sources of non-federal funding must be compliant with section 1903(w) of the Act and applicable regulations. In addition, all sources of the non-federal share of funding are subject to CMS approval.

- a. CMS may review the sources of the non-federal share of funding for the demonstration at any time. The state agrees that all funding sources deemed unacceptable by CMS shall be addressed within the time frames set by CMS.
- b. Any amendments that impact the financial status of the program shall require the state to provide information to CMS regarding all sources of the non-federal share of funding.
- c. The Commonwealth assures that all health care-related taxes comport with section 1903(w) of the Act and all other applicable federal statutory and regulatory provisions, as well as the approved Medicaid or CHIP state plan.
- d. Certification of Funding Conditions. The Commonwealth must certify that the following conditions for non-federal share of demonstration expenditures are met:
  - i. Units of government, including governmentally operated health care providers, may certify that state or local tax dollars have been expended as the non-federal share of funds under the demonstration.
  - ii. To the extent the Commonwealth utilizes certified public expenditures (CPEs) as the funding mechanism for title XXI or title XIX (or under section 1115 authority) payments, CMS must approve a cost reimbursement methodology. This methodology must include a detailed explanation of the process by which the Commonwealth would identify those costs eligible under title XXI or title XIX (or under section 1115 authority) for purposes of certifying public expenditures.
  - iii. To the extent the Commonwealth utilizes CPEs as the funding mechanism to claim federal match for payments under the demonstration, governmental entities to which general revenue funds are appropriated must certify to the Commonwealth the amount of such tax revenue (state or local) used to satisfy demonstration expenditures. The entities that incurred the cost must also provide cost documentation to support the Commonwealth's claim for federal match.
- e. The Commonwealth may use intergovernmental transfers to the extent that such funds are derived from state or local tax revenues and are transferred by units of government within the Commonwealth. Any transfers from governmentally operated health care providers must be made in an amount not to exceed the non-federal share of title XXI or title XIX payments.

- f. Under all circumstances, health care providers must retain 100 percent of the reimbursement amounts claimed by the Commonwealth as demonstration expenditures. Moreover, no pre-arranged agreements (contractual or otherwise) may exist between the health care providers and the state and/or local government to return and/or redirect any portion of Medicaid or CHIP payments. This confirmation of Medicaid/CHIP payment retention is made with the understanding that payments that are the normal operating expenses of conducting business (such as payments related to taxes - including health care provider-related taxes - fees, and business relationships with governments that are unrelated to Medicaid or CHIP, and in which there is no connection to Medicaid or CHIP payments) are not considered returning and/or redirecting a Medicaid or CHIP payment.

**45. Program Integrity.** The state must have a process in place to ensure that there is no duplication of federal funding for any aspect of the demonstration.

## **XII. MONITORING ALLOTMENT NEUTRALITY**

**46. Reporting Expenditures Subject to the Title XXI Allotment Neutrality Agreement.** The following describes the reporting of expenditures subject to the allotment neutrality agreement for this demonstration:

- a. Tracking Expenditures: In order to track expenditures under this demonstration, the Commonwealth must report demonstration expenditures through the Medicaid and State Children's Health Insurance Program Budget and Expenditure System (MBES/CBES), following routine CMS-21 reporting instructions as outlined in section 2115 of the State Medicaid Manual.
- b. Use of Waiver Forms: Title XXI demonstration expenditures will continue to be reported on separate Forms CMS-21 Waiver and/or CMS-21P Waiver, identified by the demonstration project number assigned by CMS (including project number extension, which indicates the demonstration year in which services were rendered or for which capitation payments were made). The Commonwealth must submit separate forms CMS-21 Waiver and/or CMS-21P Waiver for each demonstration population (i.e., FAMIS MOMS, FAMIS Select, and Postpartum Extension).
- c. Premiums: Premium contributions under the demonstration shall be reported to CMS on Form CMS-21 Waiver, line 29, in order to assure that the demonstration is properly credited with premium collections.
- d. Claiming Period: All claims for expenditures related to the demonstration (including any cost settlements) must be made within two years after the calendar quarter in which the Commonwealth made the expenditures. Furthermore, all claims for services during the demonstration period (including cost settlements) must be made within two years after the conclusion or termination of the demonstration. During the latter two-year period, the Commonwealth must continue to identify separately, on the Form CMS-21 Waiver, net

expenditures related to dates of service during the operation of the demonstration.

- 47. Standard CHIP Funding Process.** The standard CHIP funding process will continue to be used during the demonstration. Virginia will continue to estimate matchable CHIP expenditures on the quarterly Form CMS-21B. On a separate CMS-21B, the Commonwealth shall provide updated estimates of expenditures for the demonstration populations. CMS will make federal funds available based upon the Commonwealth's estimate, as approved by CMS. Within 30 days after the end of each quarter, the Commonwealth must submit the Form CMS-21 quarterly CHIP expenditure report. CMS will reconcile expenditures reported on the Form CMS-21 with federal funding previously made available to the Commonwealth, and include the reconciling adjustment in the finalization of the grant award to the Commonwealth.
- 48. Title XXI Administrative Costs.** Administrative costs will not be included in the allotment neutrality limit, but the Commonwealth must separately track and report additional administrative costs that are directly attributable to the demonstration, using Forms CMS-64.10 Waiver and/or 64.10P Waiver, with waiver name "ADM".
- 49. Limit on Title XXI Funding.** Virginia will be subject to a limit on the amount of federal title XXI funding that the Commonwealth may receive on current eligible CHIP state plan populations and the demonstration populations described in STC 17 during the demonstration period. Federal title XXI funds for the Commonwealth's CHIP program (i.e., the approved title XXI state plan and this demonstration) are restricted to the Commonwealth's available allotment and reallocated funds. Title XXI funds (i.e., the allotment or reallocated funds) must first be used to fully fund costs associated with CHIP state plan populations. Demonstration expenditures are limited to remaining funds.
- 50. Exhaustion of Title XXI Funds.** If the Commonwealth exhausts the available title XXI federal funds in a federal fiscal year during the period of the demonstration, the Commonwealth must continue to provide coverage to the approved title XXI state plan separate child health program population and the demonstration populations described in STC 17 with Commonwealth funds.

### **XIII. MONITORING BUDGET NEUTRALITY**

- 51. Expenditures Subject to the Budget Neutrality Agreement.** For the purpose of this section, the term "expenditures subject to the budget neutrality limit" will include all medical assistance expenditures made on behalf of Medicaid pregnant and postpartum individuals enrolled in the 12-month postpartum extension component of the demonstration.
- 52. Title XIX Administrative Costs.** Administrative costs will not be included in the budget neutrality limit, but the Commonwealth must separately track and report additional administrative costs that are directly attributable to the demonstration, using separate CMS-64.10 waiver and 64.10 waiver forms, with waiver name "ADM".
- 53. Calculation of the Budget Neutrality Limit and How It Is Applied.** For the purpose of

calculating the overall budget neutrality limit for the demonstration, a separate annual budget limit will be calculated for each demonstration year on a total computable basis, by multiplying the predetermined “per member, per month” (PMPM) cost for the (title XIX) “Postpartum Extension” eligibility group by the corresponding actual member months total, and summing the results of that calculation. The federal share of this limit will represent the maximum amount of FFP that the Commonwealth may receive during the demonstration period for the types of demonstration expenditures described below. The federal share will be calculated by multiplying the total computable budget neutrality limit by the Composite Federal Share, which is defined in STC 57 below. The demonstration expenditures subject to the budget neutrality limit are those reported using the assigned waiver name - “Postpartum Extension.”

**54. Reporting Member Months.** The following describes the reporting of member months for the demonstration:

- a. For the purpose of calculating the budget neutrality expenditure limit, the state must provide to CMS, as part of the Annual Monitoring Report required per STC 28, the actual number of eligible member months for all demonstration enrollees. The state must submit a statement accompanying the Annual Monitoring Report certifying the accuracy of this information.
- b. The term “eligible member months” refers to the number of months in which persons enrolled in the demonstration are eligible to receive services. For example, a person who is eligible for three months contributes three eligible member months to the total. Two individuals who are each eligible for two months, each contribute two eligible member months, for a total of four eligible member months.

**55. Budget Neutrality Annual Expenditure Limits.** For each demonstration year (reflected as “DY” in the below table), an annual budget limit will be calculated for the demonstration. For the purposes of this demonstration, the state’s demonstration cycle is based on the state fiscal year which starts July 1 through June 30 of each year. Virginia will report expenditures in accordance with the annual demonstration cycles outlined as follows:

Demonstration Year 17 – July 1, 2021 – June 30, 2022  
Demonstration Year 18 – July 1, 2022 – June 30, 2023  
Demonstration Year 19 – July 1, 2023 – June 30, 2024  
Demonstration Year 20 – July 1, 2024 – June 30, 2025  
Demonstration Year 21 – July 1, 2025 – June 30, 2026  
Demonstration Year 22 – July 1, 2026 – June 30, 2027  
Demonstration Year 23 – July 1, 2027 – June 30, 2028  
Demonstration Year 24 – July 1, 2028 – June 30, 2029

PMPM Cost. The following table provides the PMPM (total computable) cost ceiling for each demonstration year represented in this demonstration approval period. The PMPM cost ceilings were constructed based on the state’s historical expenditures from July 1, 2015 through June 30, 2020 and increased by a 5.2 percent rate of

growth; which is the trend rate included in the President’s Medicaid Budget for federal fiscal year 2022 for the same period of time that represents demonstration year 17 through demonstration year 24. The PMPM cost ceiling for each demonstration year represents the medical assistance payments for up to 12 months of continuous postpartum coverage for eligible individuals.

The budget limit for each demonstration year will be calculated using the below PMPM cost multiplied by the actual number of member months (as calculated in accordance with STC 54) and the Composite Federal Share.

Demonstration Year (DY)	Per Member Per Month (PMPM) Limit	Demonstration Year (DY)	Per Member Per Month (PMPM) Limit
DY17	\$648.88	DY21	\$794.50
DY18	\$682.41	DY22	\$835.81
DY19	\$717.90	DY23	\$879.27
DY20	\$755.23	DY24	\$924.99

**56. Hypothetical Budget Neutrality Test.** The title XIX (postpartum extension) component of the demonstration is structured as a “pass-through” or “hypothetical” expenditure test. Therefore, the Commonwealth may not accumulate or access budget neutrality “savings.” A prospective per capita cap on federal financial risk is established based on the costs that eligible individuals are expected to incur under the demonstration.

If total FFP for hypothetical expenditures should exceed the federal share of the Hypothetical Cap, the difference must be reported as a cost against the budget neutrality limit described in STC 55.

**57. Composite Federal Share Ratio.** The Composite Federal Share is the ratio calculated by dividing the sum total of FFP received by the Commonwealth on actual demonstration expenditures during the approval period, as reported through the MBES/CBES and summarized on the Schedule C report, with consideration of additional allowable demonstration offsets such as, but not limited to, premium collections and pharmacy rebates, by total computable demonstration expenditures for the same period as reported on the same forms.

**58. Reporting Expenditures Subject to the Title XIX Budget Neutrality Agreement.**

- a. Tracking Expenditures. In order to track expenditures under this demonstration, the Commonwealth must report demonstration expenditures through the Medicaid and Children’s Health Insurance Program Budget and Expenditure System (MBES/CBES), following routine CMS-64 reporting instructions outlined in section 2500 of the State Medicaid Manual. All demonstration expenditures claimed under the authority of title XIX of the Act and subject to the budget neutrality expenditure limit must be reported

each quarter on separate Forms CMS-64.9 Waiver and/or 64.9P Waiver, identified by the demonstration project number (11-W-00381/3) assigned by CMS, including the project number extension (i.e., 17, 18, 19, etc.) which indicates the demonstration year in which services were rendered.

- b. Use of Waiver Forms. For each demonstration year, separate Forms CMS-64.9 Waiver and/or 64.9P Waiver must be completed, using the waiver name “Postpartum Extension.”
- c. Cost Settlements. For monitoring purposes, cost settlements attributable to the demonstration must be recorded on the appropriate prior period adjustment schedules (Form CMS-64.9P Waiver) for the Summary Sheet Line 10B, in lieu of Lines 9 or 10C. For any cost settlement not attributable to this demonstration, the adjustments should be reported as otherwise instructed in the State Medicaid Manual.
- d. Pharmacy Rebates. When claiming these expenditures the Commonwealth may refer to the July 24, 2014 CMCS Informational Bulletin which contains clarifying information for quarterly reporting of Medicaid Drug Rebates in the Medicaid Budget and Expenditures (MBES) (<http://www.medicaid.gov/Federal-Policy-Guidance/downloads/CIB-07-24-2014.pdf>). The Commonwealth must adhere to the requirement at section 2500.1 of the State Medicaid Manual that all state collections, including drug rebates, must be reported on the CMS-64 at the applicable Federal Medical Assistance Percentage (FMAP) or other matching rate at which related expenditures were originally claimed. Additionally, we are specifying that states unable to tie drug rebate amounts directly to individual drug expenditures may utilize an allocation methodology for determining the appropriate federal share of drug rebate amounts reported quarterly. This information identifies the parameters that states are required to adhere to when making such determinations.

**59. Postpartum Coverage for the New Adult Group.** The Commonwealth must submit to CMS a proxy methodology for state expenditures to qualify for the newly eligible FMAP under section 1905(y) of the Act, consistent with requirements provided in 42 CFR 433.206(d). This methodology must be approved by CMS and incorporated as Attachment D to these STCs, prior to the Commonwealth claiming enhanced newly eligible FMAP. The proxy methodology must identify the proportion of claimed expenditures for beneficiaries receiving post-partum benefits who are reasonably estimated to meet the definition of newly eligible under section 1905(y)(2)(A) of the Act for whom enhanced newly eligible FMAP may be claimed, and the proportion claimed for beneficiaries who do not meet this definition for whom the regular FMAP must be claimed.

**60. Budget Neutrality Monitoring Tool.** The Commonwealth and CMS will jointly develop a budget neutrality monitoring tool (using a mutually agreeable spreadsheet program) for the Commonwealth to use for quarterly budget neutrality status updates. The tool will

incorporate the “Schedule C Report” for monitoring actual expenditures subject to budget neutrality.

- 61. Risk.** The Commonwealth will be at risk for the per capita cost (as determined by the method described below) for state plan and demonstration populations enrolled in the demonstration for the 12-month postpartum extension, but not at risk for the number of participants enrolled in the demonstration. By providing FFP without regard to enrollment for all demonstration populations, CMS will not place the Commonwealth at risk for changing economic conditions. However, by placing the Commonwealth at risk for the per capita costs of the demonstration populations, CMS assures that the demonstration expenditures do not exceed the levels that would have been realized had there been no demonstration.
- 62. Impermissible DSH, Taxes, or Donations.** CMS reserves the right to adjust the budget neutrality ceiling to be consistent with enforcement of laws and policy statements, including regulations and letters regarding impermissible provider payments, health care related taxes, or other payments (if necessary adjustments must be made). CMS reserves the right to make adjustments to the budget neutrality limit if any health care related tax that was in effect during the base year, or provider-related donation that occurred during the base year, is determined by CMS to be in violation of the provider donation and health care related tax provisions of section 1903(w) of the Social Security Act. Adjustments to annual budget targets will reflect the phase out of impermissible provider payments by law or regulation, where applicable.
- 63. Enforcement of Budget Neutrality.** If the Commonwealth exceeds the calculated cumulative target limit by the percentage identified below for any of the demonstration years (DYs), the Commonwealth must submit a corrective action plan to CMS for approval.

Year	Cumulative target definition	Percentage
DY17	DY 17 budget limit amount	+1.75 percent
DY18	DY 17 through DY 18 combined budget limit amount	+1.50 percent
DY19	DY 17 through DY 19 combined budget limit amount	+1.25 percent
DY20	DY 17 through DY 20 combined budget limit amount	+1.00 percent
DY21	DY 17 through DY 21 combined budget limit amount	+.75 percent
DY22	DY 17 through DY 22 combined budget limit amount	+.50 percent
DY23	DY 17 through DY 23 combined budget limit amount	+0.25 percent
DY24	DY 17 through DY 24 combined budget limit amount	+0.00 percent

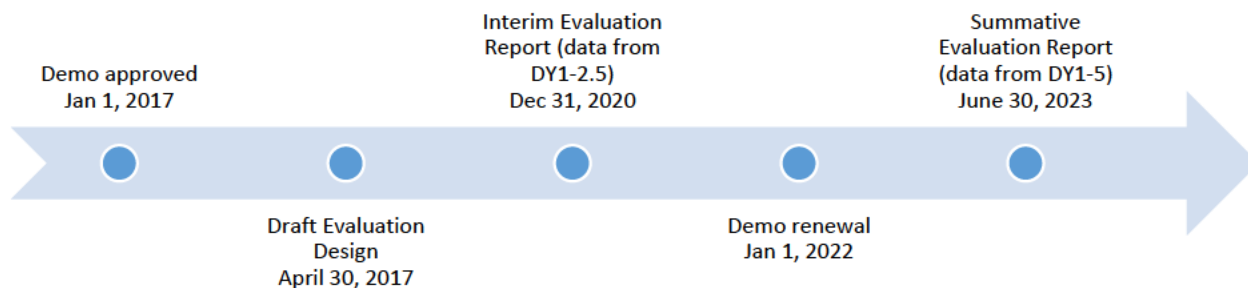
## Attachment A Developing the Evaluation Design

### Introduction

Both state and federal governments need rigorous quantitative and qualitative evidence to inform policy decisions. To that end, for states that are testing new approaches and flexibilities in their Medicaid programs through section 1115 demonstrations, evaluations are crucial to understand and disseminate information about these policies. The evaluations of new initiatives seek to produce new knowledge and direction for programs and inform Medicaid policy for the future. While a narrative about what happened during a demonstration provides important information, the principal focus of the evaluation of a section 1115 demonstration should be obtaining and analyzing data. Evaluations should include findings about the process (e.g., whether the demonstration is being implemented as intended), outcomes (e.g., whether the demonstration is having the intended effects on the target population), and impacts of the demonstration (e.g., whether the outcomes observed in the targeted population differ from outcomes in similar populations not affected by the demonstration).

### Submission Timelines

There is a specified timeline for the state’s submission of its draft Evaluation Design and subsequent evaluation reports. The graphic below depicts an example of this timeline for a 5-year demonstration. In addition, the state should be aware that section 1115 evaluation documents are public records. The state is required to publish the Evaluation Design to the state’s website within thirty (30) calendar days of CMS approval, as per 42 CFR 431.424(e). CMS will also publish a copy to the Medicaid.gov website.



### Expectations for Evaluation Designs

CMS expects Evaluation Designs to be rigorous, incorporate baseline and comparison group assessments, as well as statistical significance testing. Technical assistance resources for constructing comparison groups and identifying causal inferences are available on Medicaid.gov: <https://www.medicaid.gov/medicaid/section-1115-demonstrations/1115-demonstration-monitoring-evaluation/1115-demonstration-state-monitoring-evaluation-resources/index.html>. If the state needs technical assistance using this outline or developing the Evaluation Design, the state should contact its demonstration team.

All states with section 1115 demonstrations are required to conduct Interim and Summative Evaluation Reports, and the Evaluation Design is the roadmap for conducting these evaluations.

The roadmap begins with the stated goals for the demonstration, followed by the measurable evaluation questions and quantifiable hypotheses, all to support a determination of the extent to which the demonstration has achieved its goals. When conducting analyses and developing the evaluation reports, every effort should be made to follow the approved methodology. However, the state may request, and CMS may agree to, changes in the methodology in appropriate circumstances.

The format for the Evaluation Design is as follows:

- A. General Background Information;
- B. Evaluation Questions and Hypotheses;
- C. Methodology;
- D. Methodological Limitations;
- E. Attachments.

**A. General Background Information** – In this section, the state should include basic information about the demonstration, such as:

1. The issue/s that the state is trying to address with its section 1115 demonstration and/or expenditure authorities, the potential magnitude of the issue/s, and why the state selected this course of action to address the issue/s (e.g., a narrative on why the state submitted an 1115 demonstration proposal).
2. The name of the demonstration, approval date of the demonstration, and period of time covered by the evaluation.
3. A description of the population groups impacted by the demonstration.
4. A brief description of the demonstration and history of its implementation, and whether the draft Evaluation Design applies to an amendment, extension, renewal, or expansion of, the demonstration.
5. For renewals, amendments, and major operational changes: a description of any changes to the demonstration during the approval period; the primary reason or reasons for the change; and how the Evaluation Design was altered or augmented to address these changes.

**B. Evaluation Questions and Hypotheses** – In this section, the state should:

1. Identify the state's hypotheses about the outcomes of the demonstration, and discuss how the evaluation questions align with the hypotheses and the goals of the demonstration.
2. Address how the hypotheses and research questions promote the objectives of Titles XIX and/or XXI.
3. Describe how the state's demonstration goals are translated into quantifiable targets for improvement, so that the performance of the demonstration in achieving these targets can be measured.
4. Include a Driver Diagram to visually aid readers in understanding the rationale behind the cause and effect of the variants behind the demonstration features and intended outcomes. A driver diagram, which includes information about the goals and features of the demonstration, is a particularly effective modeling tool when working to improve

health and health care through specific interventions. A driver diagram depicts the relationship between the aim, the primary drivers that contribute directly to achieving the aim, and the secondary drivers that are necessary to achieve the primary drivers for the demonstration. For an example and more information on driver diagrams: <https://innovation.cms.gov/files/x/hciatwoaimsdvr.rs.pdf>.

**C. Methodology** – In this section, the state is to describe in detail the proposed research methodology. The focus is on showing that the evaluation meets the prevailing standards of scientific and academic rigor, that the results are statistically valid and reliable, and that it builds upon other published research, using references where appropriate.

This section also provides evidence that the demonstration evaluation will use the best available data. The state should report on, control for, and make appropriate adjustments for the limitations of the data and their effects on results, and discuss the generalizability of results. This section should provide enough transparency to explain what will be measured and how, in sufficient detail so that another party could replicate the results. Table A below is an example of how the state might want to articulate the analytic methods for each research question and measure. Specifically, this section establishes:

1. *Methodological Design* – Provide information on how the evaluation will be designed. For example, whether the evaluation will utilize pre/post data comparisons, pre-test or post-test only assessments. If qualitative analysis methods will be used, they must be described in detail.
2. *Target and Comparison Populations* – Describe the characteristics of the target and comparison populations, incorporating the inclusion and exclusion criteria. Include information about the level of analysis (beneficiary, provider, or program level), and if populations will be stratified into subgroups. Additionally, discuss the sampling methodology for the populations, as well as support that a statistically reliable sample size is available.
3. *Evaluation Period* – Describe the time periods for which data will be included.
4. *Evaluation Measures* – List all measures that will be calculated to evaluate the demonstration. The state also should include information about how it will define the numerators and denominators. Furthermore, the state should ensure the measures contain assessments of both process and outcomes to evaluate the effects of the demonstration during the period of approval. When selecting metrics, the state shall identify opportunities for improving quality of care and health outcomes, and controlling cost of care. The state also should incorporate benchmarking and comparisons to national and state standards, where appropriate. The state also should include the measure stewards (i.e., the organization(s) responsible for the evaluation data elements/sets by “owning”, defining, validating, securing, and submitting for endorsement, etc.) Proposed health measures could include CMS’s Core Set of Health Care Quality Measures for Children in Medicaid and CHIP, Consumer Assessment of Health Care Providers and Systems (CAHPS), the Initial Core Set of Health Care Quality Measures for Medicaid-Eligible

Adults and/or measures endorsed by National Quality Forum. Proposed performance metrics can be selected from nationally recognized metrics, for example from sets developed by the Center for Medicare and Medicaid Innovation or for meaningful use under Health Information Technology.

5. *Data Sources* – Explain from where the data will be obtained, describe any efforts to validate and clean the data, and discuss the quality and limitations of the data sources. If the state plans to collect primary data (i.e., data collected specifically for the evaluation), include the methods by which the data will be collected, the source of the proposed questions and responses, and the frequency and timing of data collection. Additionally, copies of any proposed surveys must be provided to CMS for approval before implementation.
6. *Analytic Methods* – This section includes the details of the selected quantitative and/or qualitative analysis measures that will adequately assess the effectiveness of the demonstration. This section should:
  - a. Identify the specific statistical testing which will be undertaken for each measure (e.g., t-tests, chi-square, odds ratio, ANOVA, regression).
  - b. Explain how the state will isolate the effects of the demonstration from other initiatives occurring in the state at the same time (e.g., through the use of comparison groups).
  - c. Include a discussion of how propensity score matching and difference-in-differences designs may be used to adjust for differences in comparison populations over time, if applicable.
  - d. Consider the application of sensitivity analyses, as appropriate.
7. *Other Additions* – The state may provide any other information pertinent to the Evaluation Design for the demonstration.

**Table A. Example Design Table for the Evaluation of the Demonstration**

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data Sources	Analytic Methods
<b>Hypothesis 1</b>				
Research question 1a	-Measure 1 -Measure 2 -Measure 3	-Sample e.g. All attributed Medicaid beneficiaries -Beneficiaries with diabetes diagnosis	-Medicaid fee-for-service and encounter claims records	-Interrupted time series
Research question 1b	-Measure 1 -Measure 2 -Measure 3 -Measure 4	-Sample, e.g., PPS patients who meet survey selection requirements (used services within the last 6 months)	-Patient survey	Descriptive statistics
<b>Hypothesis 2</b>				
Research question 2a	-Measure 1 -Measure 2	-Sample, e.g., PPS administrators	-Key informants	Qualitative analysis of interview material

**D. Methodological Limitations** – This section provides more detailed information about the limitations of the evaluation. This could include limitations about the design, the data sources or collection process, or analytic methods. The state should also identify any efforts to minimize these limitations. Additionally, this section should include any information about features of the demonstration that effectively present methodological constraints that the state would like CMS to take into consideration in its review.

CMS also recognizes that there may be certain instances where a state cannot meet the rigor of an evaluation as expected by CMS. In these instances, the state should document for CMS why it is not able to incorporate key components of a rigorous evaluation, including comparison groups and baseline data analyses. For example, if a demonstration is long-standing, it may be difficult for the state to include baseline data because any pre-test data points may not be relevant or comparable. Other examples of considerations include:

1. When the demonstration is:
  - a. Non-complex, unchanged, or has previously been rigorously evaluated and found to be successful; or
  - b. Could now be considered standard Medicaid policy (CMS published regulations or guidance).
2. When the demonstration is also considered successful without issues or concerns that would require more regular reporting, such as:
  - a. Operating smoothly without administrative changes;
  - b. No or minimal appeals and grievances;

- c. No state issues with CMS-64 reporting or budget neutrality; and
- d. No Corrective Action Plans for the demonstration.

## E. Attachments

1. **Independent Evaluator.** This includes a discussion of the state’s process for obtaining an independent entity to conduct the evaluation, including a description of the qualifications that the selected entity must possess, and how the state will assure no conflict of interest. Explain how the state will assure that the Independent Evaluator will conduct a fair and impartial evaluation and prepare objective Evaluation Reports. The Evaluation Design should include a “No Conflict of Interest” statement signed by the independent evaluator.
2. **Evaluation Budget.** A budget for implementing the evaluation shall be provided with the draft Evaluation Design. It will include the total estimated costs, as well as a breakdown of estimated staff, administrative, and other costs for all aspects of the evaluation. Examples include, but are not limited to: the development of all survey and measurement instruments; quantitative and qualitative data collection; data cleaning and analyses; and reports generation. A justification of the costs may be required by CMS if the estimates provided do not appear to sufficiently cover the costs of the draft Evaluation Design, if CMS finds that the draft Evaluation Design is not sufficiently developed, or if the estimates appear to be excessive.
3. **Timeline and Major Milestones.** Describe the timeline for conducting the various evaluation activities, including dates for evaluation-related milestones, including those related to procurement of an outside contractor, if applicable, and deliverables. The final Evaluation Design shall incorporate milestones for the development and submission of the Interim and Summative Evaluation Reports. Pursuant to 42 CFR 431.424(c)(v), this timeline should also include the date by which the Final Summative Evaluation Report is due.

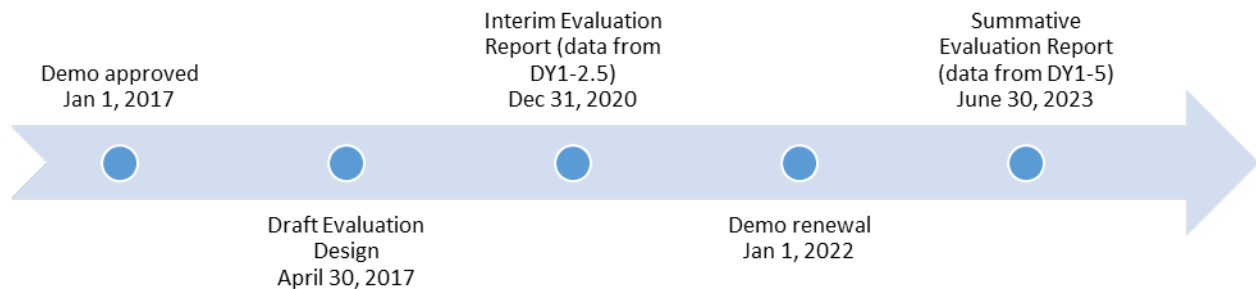
## **Attachment B: Preparing the Interim and Summative Evaluation Reports**

### **Introduction**

Both state and federal governments need rigorous quantitative and qualitative evidence to inform policy decisions. To that end, for states that are testing new approaches and flexibilities in their Medicaid programs through section 1115 demonstrations, evaluations are crucial to understand and disseminate information about these policies. The evaluations of new initiatives seek to produce new knowledge and direction for programs and inform Medicaid policy for the future. While a narrative about what happened during a demonstration provides important information, the principal focus of the evaluation of a section 1115 demonstration should be obtaining and analyzing data. Evaluations should include findings about the process (e.g., whether the demonstration is being implemented as intended), outcomes (e.g., whether the demonstration is having the intended effects on the target population), and impacts of the demonstration (e.g., whether the outcomes observed in the targeted population differ from outcomes in similar populations not affected by the demonstration).

### **Submission Timelines**

There is a specified timeline for the state's submission of Evaluation Designs and Evaluation Reports. These dates are specified in the demonstration Special Terms and Conditions (STCs). The graphic below depicts an example of a deliverables timeline for a 5-year demonstration. In addition, the state should be aware that section 1115 evaluation documents are public records. In order to assure the dissemination of the evaluation findings, lessons learned, and recommendations, the state is required to publish the Interim and Summative Evaluation Reports to the state's website within thirty (30) calendar days of CMS approval, as per 42 CFR 431.424(d). CMS will also publish a copy to the Medicaid.gov website.



### **Expectations for Evaluation Reports**

All states with Medicaid section 1115 demonstrations are required to conduct evaluations that are valid (the extent to which the evaluation measures what it is intended to measure), and reliable (the extent to which the evaluation could produce the same results when used repeatedly). The already-approved Evaluation Design is a map that begins with the demonstration goals, then transitions to the evaluation questions, and to the specific hypotheses, which will be used to investigate whether the demonstration has achieved its goals. When conducting analyses and developing the evaluation reports, every effort should be made to follow

the methodology outlined in the approved Evaluation Design. However, the state may request, and CMS may agree to, changes in the methodology in appropriate circumstances.

When submitting an application for renewal, the Interim Evaluation Report should be posted on the state's website with the application for public comment. Additionally, the Interim Evaluation Report must be included in its entirety with the application submitted to CMS.

CMS expects Interim and Summative Evaluation Reports to be rigorous, incorporate baseline and comparison group assessments, as well as statistical significance testing. Technical assistance resources for constructing comparison groups and identifying causal inferences are available on Medicaid.gov: <https://www.medicaid.gov/medicaid/section-1115-demonstrations/1115-demonstration-monitoring-evaluation/1115-demonstration-state-monitoring-evaluation-resources/index.html>. If the state needs technical assistance using this outline or developing the evaluation reports, the state should contact its demonstration team.

### **Intent of this Attachment**

Title XIX of the Social Security Act (the Act) requires an evaluation of every section 1115 demonstration. In order to fulfill this requirement, the state's evaluation report submissions must provide comprehensive written presentations of all key components of the demonstration, and include all required elements specified in the approved Evaluation Design. This Attachment is intended to assist states with organizing the required information in a standardized format and understanding the criteria that CMS will use in reviewing the submitted Interim and Summative Evaluation Reports.

### **Required Core Components of Interim and Summative Evaluation Reports**

The Interim and Summative Evaluation Reports present research and findings about the section 1115 demonstration. It is important that the reports incorporate a discussion about the structure of the Evaluation Design to explain the goals and objectives of the demonstration, the hypotheses related to the demonstration, and the methodology for the evaluation. The evaluation reports should present the relevant data and an interpretation of the findings; assess the outcomes (what worked and what did not work); explain the limitations of the design, data, and analyses; offer recommendations regarding what (in hindsight) the state would further advance, or do differently, and why; and discuss the implications on future Medicaid policy.

The format for the Interim and Summative Evaluation reports is as follows:

- A. Executive Summary;
- B. General Background Information;
- C. Evaluation Questions and Hypotheses;
- D. Methodology;
- E. Methodological Limitations;
- F. Results;
- G. Conclusions;
- H. Interpretations, and Policy Implications and Interactions with Other State Initiatives;
- I. Lessons Learned and Recommendations; and,
- J. Attachment(s).

- A. Executive Summary** – A summary of the demonstration, the principal results, interpretations, and recommendations of the evaluation.
- B. General Background Information about the Demonstration** – In this section, the state should include basic information about the demonstration, such as:
1. The issue/s that the state is trying to address with its section 1115 demonstration and/or expenditure authorities, how the state became aware of the issue, the potential magnitude of the issue, and why the state selected this course of action to address the issues.
  2. The name of the demonstration, approval date of the demonstration, and period of time covered by the evaluation.
  3. A description of the population groups impacted by the demonstration.
  4. A brief description of the demonstration and history of the implementation, and if the evaluation is for an amendment, extension, renewal, or expansion of, the demonstration.
  5. For renewals, amendments, and major operational changes: A description of any changes to the demonstration during the approval period; whether the motivation for change was due to political, economic, and fiscal factors at the state and/or federal level; whether the programmatic changes were implemented to improve beneficiary health, provider/health plan performance, or administrative efficiency; and how the Evaluation Design was altered or augmented to address these changes. Additionally, the state should explain how this Evaluation Report builds upon and expands earlier demonstration evaluation findings (if applicable).
- C. Evaluation Questions and Hypotheses** – In this section, the state should:
1. Identify the state’s hypotheses about the outcomes of the demonstration, and discuss how the goals of the demonstration align with the evaluation questions and hypotheses.
  2. Address how the research questions / hypotheses of this demonstration promote the objectives of titles XIX and XXI.
  3. Describe how the state’s demonstration goals were translated into quantifiable targets for improvement, so that the performance of the demonstration in achieving these targets could be measured.
  4. The inclusion of a Driver Diagram in the Evaluation Report is highly encouraged, as the visual can aid readers in understanding the rationale behind the demonstration features and intended outcomes.
- D. Methodology** – In this section, the state is to provide an overview of the research that was conducted to evaluate the section 1115 demonstration, consistent with the approved Evaluation Design. The Evaluation Design should also be included as an attachment to the report. The focus is on showing that the evaluation builds upon other published research, (using references), meets the prevailing standards of scientific and academic rigor, and the results are statistically valid and reliable.

An Interim Evaluation Report should provide any available data to date, including both quantitative and qualitative assessments. The Evaluation Design should assure there is appropriate data development and collection in a timely manner to support developing an Interim Evaluation Report.

This section provides the evidence that the demonstration evaluation used the best available data and describes why potential alternative data sources were not used. The state also should report on, control for, and make appropriate adjustments for the limitations of the data and their effects on results, and discusses the generalizability of results. This section should provide enough transparency to explain what was measured and how, in sufficient detail so that another party could replicate the results. Specifically, this section establishes that the approved Evaluation Design was followed by describing:

1. *Methodological Design* – Whether the evaluation included an assessment of pre/post or post-only data, with or without comparison groups, etc.
2. *Target and Comparison Populations* – Describe the target and comparison populations, describing inclusion and exclusion criteria.
3. *Evaluation Period* – Describe the time periods for which data will be collected.
4. *Evaluation Measures* – List the measures used to evaluate the demonstration and their respective measure stewards.
5. *Data Sources* – Explain from where the data were obtained, and efforts to validate and clean the data.
6. *Analytic Methods* – Identify specific statistical testing which was undertaken for each measure (t-tests, chi-square, odds ratio, ANOVA, regression, etc.).
7. *Other Additions* – The state may provide any other information pertinent to the evaluation of the demonstration.

**E. Methodological Limitations** – This section provides sufficient information for discerning the strengths and weaknesses of the study design, data sources/collection, and analyses.

**F. Results** – In this section, the state presents and uses the quantitative and qualitative data to demonstrate whether and to what degree the evaluation questions and hypotheses of the demonstration were addressed. The findings should visually depict the demonstration results, using tables, charts, and graphs, where appropriate. This section should include findings from the statistical tests conducted.

**G. Conclusions** – In this section, the state will present the conclusions about the evaluation results. Based on the findings, discuss the outcomes and impacts of the demonstration and identify the opportunities for improvements. Specifically, the state should answer the following questions:

1. In general, did the results show that the demonstration was/was not effective in achieving the goals and objectives established at the beginning of the demonstration?

2. If the state did not fully achieve its intended goals, why not?
3. What could be done in the future that would better enable such an effort to more fully achieve those purposes, aims, objectives, and goals?

**H. Interpretations, Policy Implications and Interactions with Other State Initiatives** – In this section, the state will discuss the section 1115 demonstration within an overall Medicaid context and long-range planning. This should include interrelations of the demonstration with other aspects of the state’s Medicaid program, interactions with other Medicaid demonstrations, and other federal awards affecting service delivery, health outcomes and the cost of care under Medicaid. This section provides the state with an opportunity to provide interpretations of the data using evaluative reasoning to make judgments about the demonstration. This section should also include a discussion of the implications of the findings at both the state and national levels.

**I. Lessons Learned and Recommendations** – This section of the evaluation report involves the transfer of knowledge. Specifically, it should include potential “opportunities” for future or revised demonstrations to inform Medicaid policymakers, advocates, and stakeholders. Recommendations for improvement can be just as significant as identifying current successful strategies. Based on the evaluation results, the state should address the following questions:

1. What lessons were learned as a result of the demonstration?
2. What would you recommend to other states which may be interested in implementing a similar approach?

**ATTACHMENT C**  
**CMS APPROVED DEMONSTRATION EVALUATION PLAN**

**Demonstration Period: July 1, 2019 - June 30, 2029**

## **A. General Background Information**

**1. Demonstration Background and Evaluation Period.** On October 25, 2019, the Centers for Medicare and Medicaid Services (CMS) approved a ten-year extension of Virginia’s Section 1115 Children’s Health Insurance Program (CHIP) demonstration (“Demonstration”), Virginia Family Access to Medical Insurance Security (FAMIS) MOMS and FAMIS Select (Project No. 21-W-00058/3).<sup>1</sup> At the time of the extension, the Demonstration included the two programs/populations authorized since approval of the original Demonstration in 2005: FAMIS MOMS and FAMIS Select. The FAMIS MOMS program provides CHIP coverage to uninsured pregnant women with family income up to 200 percent of the federal poverty level (FPL).<sup>2,3</sup> Pregnant women who are eligible for this coverage include those who are lawfully residing immigrants and those with access to state employees’ health benefit coverage. The Demonstration also authorizes FAMIS Select, private or employer-sponsored insurance (ESI) premium assistance for families with children in FAMIS, Virginia’s CHIP program. On November 3, 2021, CMS approved Virginia’s evaluation design for these two components of the Demonstration.

While the approved evaluation design for the FAMIS MOMS and FAMIS Select components of the Demonstration remains the same, this document updates the evaluation plan to reflect the 12 months postpartum coverage amendment to the Demonstration, approved November 18, 2021. This document provides background and context for the amendment; outlines additional evaluation goals, research questions, hypotheses, and measures; and describes analytic methods, data sources, and other aspects of the methodology for the 12 months postpartum coverage Demonstration evaluation. Because the postpartum coverage component of the Demonstration was approved as an amendment after the initial renewal was granted, the evaluation time-period for this component began later than the start of the Demonstration approval period. The evaluation time-period for the 12 months postpartum coverage Demonstration component began July 1, 2022. On this date, final systems and operational changes went into effect and full implementation of the postpartum coverage extension was complete for all populations. The end date of the evaluation time-period for all components of the Demonstration is the close of the Demonstration approval period, June 30, 2029.

**Virginia’s 12 Months Postpartum Demonstration Amendment.** There is broad agreement among researchers, providers, and policymakers that extending eligibility for Medicaid and CHIP enrolled pregnant women from 60 days postpartum to 12 months postpartum is an

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<sup>1</sup> Virginia FAMIS MOMS and FAMIS Select Section 1115 Demonstration (effective through June 30, 2029). Available at <https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/va/va-famis-moms-famis-select-ca.pdf>.

<sup>2</sup> 200 percent FPL plus 5 percent income disregard.

<sup>3</sup> FAMIS MOMS coverage is the same as that provided to pregnant women under the Medicaid state plan (i.e., the Medicaid prenatal benefit package).

important step toward improving maternal health outcomes. Notably, the Centers for Disease Control and Prevention (CDC) defines the postpartum period as 12 months after delivery; and the American Medical Association, the American Academy of Family Physicians, the Society for Maternal Fetal Medicine, state maternal mortality review committees, health plans, and consumer advocacy groups, alike, recommend extending Medicaid coverage to 12 months postpartum.<sup>4</sup> In 2018, the American College of Obstetricians and Gynecologists issued guidance calling for the extension of postpartum care into the “fourth trimester” and the provision of certain postpartum services, such as management of chronic conditions, screening for mental health disorders, and breastfeeding support.<sup>5</sup> In response to increasing recognition of this important public health issue, on November 18, 2020, then-Governor Ralph Northam signed into law the 2020 Special Session I Virginia Acts of Assembly, Chapter 56, directing the Department of Medical Assistance Services (DMAS) to seek federal approval to extend Medicaid and FAMIS MOMS coverage from 60 days to 12 months postpartum.<sup>6</sup>

In accordance with state statute, the Commonwealth of Virginia (“the Commonwealth”) sought and received approval from CMS on November 18, 2021 for an amendment to the Demonstration to provide continuous coverage through 12 months postpartum for pregnant individuals in Medicaid and FAMIS MOMS. Through this amendment, Virginia will have the opportunity to evaluate whether 12 months postpartum coverage reduces maternal and infant mortality and morbidity, improves health outcomes for both the mother and the infant, and advances health equity.

**2. Demonstration Goals.** With CMS approval, the Commonwealth amended the Demonstration to provide state plan benefits to postpartum individuals in Medicaid and CHIP with income below 200 percent of the FPL<sup>7</sup> for a total of 12 months. The Commonwealth provides continuous eligibility for these individuals during the entire postpartum period. In doing so, Virginia seeks to achieve the following goals:

1. Promote continuous coverage and continuity of care for women in the postpartum period.
2. Increase access to medical and behavioral health care services and treatments for women in the postpartum period.
3. Improve health and address health-related social needs for postpartum Medicaid and CHIP enrolled women.
4. Improve health access and health outcomes for infants of postpartum Medicaid and CHIP enrolled women.
5. Advance health equity by reducing racial/ethnic and other disparities in maternal coverage, access, and health outcomes as well as infant health outcomes among postpartum Medicaid

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<sup>4</sup> CDC. Pregnancy Mortality Surveillance System. Available at <http://www.cdc.gov/reproductivehealth/maternal-mortality/pregnancy-mortality-surveillance-system.htm>; and Making the Case for Extending Medicaid Coverage Beyond 60 Days Postpartum: A Toolkit for State Advocates. Available at <https://static1.squarespace.com/static/5ed4f5c9127dab51d7a53f8e/t/5ee12b312ecd4864f647fe67/1591814991589/State+White+Paper+061020-V6.pdf>.

<sup>5</sup> The American College of Obstetricians and Gynecologists. Optimizing Postpartum Care. Available at <https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2018/05/optimizing-postpartum-care>.

<sup>6</sup> 2020 Special Session I Virginia Acts of Assembly, Chapter 56. Available at <https://budget.lis.virginia.gov/get/budget/4283/HB5005/>.

<sup>7</sup> 200 percent FPL plus 5 percent income disregard.

and CHIP enrolled women and their infants.

The Commonwealth has designed this Demonstration amendment to promote the objectives of the Medicaid program by improving the health and well-being of low-income individuals and families in the state.

**3. Demonstration Implementation and Design.** The Commonwealth is continuing all existing features of the Section 1115 Demonstration for FAMIS MOMS and FAMIS Select. The Commonwealth has applied all current Medicaid state plan covered services for pregnant women to individuals in the Demonstration amendment populations for the duration of the 12 months postpartum. This waiver extends the time all pregnant individuals receive benefits, until 12 months postpartum, but does not change the benefits offered for any pregnant individual. On July 1, 2022, final systems and operational changes took effect for full implementation of the postpartum coverage extension for all populations. Virginia’s implementation was statewide rather than a staged regional rollout, limiting geographical comparisons. As discussed below, the timing and contextual factors of implementation limit within-state comparisons among Medicaid and CHIP populations.

**4. Demonstration Population Groups and Covered Services.** The eligibility groups affected by the Demonstration are as follows:

- a. **FAMIS MOMS.** This includes uninsured pregnant individuals in families with income up to and including 200 percent of the FPL<sup>8</sup> who are not eligible for Medicaid, including lawfully present (ICHIA/CHIPRA 214) individuals. This also includes pregnant individuals with access to state employee health benefit coverage (in accordance with the hardship exception as provided in section 2110(b)(6)(C) of the Social Security Act [“the Act”]).

Under the demonstration, Virginia is also authorized to deem infants born to FAMIS MOMS to be eligible for Medicaid or CHIP coverage, as appropriate, consistent with 42 CFR 435.117 and 457.360. These infants are deemed eligible on their date of birth and remain eligible until attaining the age of 1.

- b. **FAMIS Select Premium Assistance.** Children eligible for and enrolled in Virginia’s separate CHIP program may elect to enroll in FAMIS Select and receive CHIP premium assistance payments to purchase private or employer-sponsored health insurance coverage. Such enrollment is voluntary and based on informed choice regarding all implications of choosing premium assistance in lieu of direct CHIP state plan coverage, including the possibility of reduced benefits and increased cost-sharing, and that the CHIP cost-sharing limit of five percent on annual aggregate cost-sharing will not apply.
- c. **Postpartum Extension.** This demonstration extends continuous postpartum coverage for Medicaid and CHIP pregnant individuals from the end of the state plan 60-day postpartum benefit period to the end of the 12th month following the end of the pregnancy (including individuals enrolled while pregnant during a period of retroactive

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<sup>8</sup> 200 percent FPL plus 5 percent income disregard.

eligibility and/or for individuals who did not have enrollment in Medicaid or CHIP while pregnant). Eligibility for the extended postpartum period is determined by the date the birth takes place. After the conclusion of the continuous 12-month postpartum period, the Commonwealth will redetermine eligibility. There is no enrollment limit under this proposal. Eligible populations are provided 12 months continuous extended postpartum coverage as follows:

- i. Individuals enrolled in the FAMIS MOMS population as described in subparagraph 4a above, with exception for individuals whose program eligibility is derived by section 1903(v)(4) or 2107(e)(1)(O) of the Act. This includes individuals who enroll after giving birth and are in the postpartum period.
- ii. Pregnant and postpartum individuals in any Medicaid state plan eligibility group, with exception for individuals whose program eligibility is derived by section 1903(v)(4) or 2107(e)(1)(O) of the Act as described in subpart 4(c)iv below. This includes individuals who enroll in Medicaid after giving birth and are in the postpartum period.
- iii. Individuals who are within 12 months postpartum but beyond the state plan 60-day postpartum coverage period (including those who were not enrolled in Medicaid or CHIP while pregnant), have household income up to and including 200 percent of the FPL,<sup>9</sup> and meet all other Medicaid or CHIP eligibility criteria, with exception for individuals whose program eligibility is derived by section 1903(v)(4) or 2107(e)(1)(O) of the Act. Additionally, if an individual's income or eligibility changes during the 12 months postpartum they will not be disenrolled. Instead, their eligibility will be re-evaluated at 12 months postpartum.
- iv. Lawfully present (ICHIA/CHIPRA 214) Individuals – Individuals determined to be “lawfully residing” in the United States for the purpose of establishing Medicaid or CHIP eligibility in accordance with section 1903(v)(4) or 2107(e)(1)(O) of the Act. At the time of Virginia's demonstration approval, these individuals' eligibility for 12-months postpartum coverage was only authorized for a five-year period starting April 1, 2022, through March 31, 2027, in accordance with sections 9812 and 9822 of the American Rescue Plan Act of 2021 (ARP) (Pub. L. 117-2). The 2023 Consolidated Appropriations Act permanently extended this group's eligibility for 12 months postpartum coverage in states electing the option.

This document describes the evaluation design for the Postpartum Extension component of the Demonstration, item 4.c. above.

**Covered Services.** FAMIS MOMS coverage is the same as that provided to pregnant women under the Medicaid state plan. Under the Demonstration amendment, the Medicaid for pregnant

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<sup>9</sup> Plus 5% income disregard.

women and FAMIS MOMS benefit packages remain aligned. All individuals eligible for the 12-month extended postpartum coverage period receive full state plan benefits during the pregnancy and the 12 months postpartum. The benefit package includes comprehensive health and dental benefits (including orthodontics for individuals under the age of 21) for the duration of the 12 months postpartum. Dental services are through the Commonwealth’s contracted Smiles for Children service provider. No cost-sharing is imposed, as pregnant women are exempt from such requirements.

**5. Other Relevant Contextual Factors.** There are several critical contextual factors relevant to the evaluation, namely changes in eligibility policy in the years preceding the evaluation period for the Demonstration amendment that may make it more difficult to find valid comparison groups for quasi-experimental study designs for this evaluation. These considerations are summarized below and will be further explored in the Methodological Limitations section. The recent changes in eligibility for postpartum Medicaid coverage are important to document as they affect the populations that fall under this demonstration amendment and subsequently may make it difficult to isolate the effects of extending postpartum coverage.

**Virginia’s 2019 Medicaid Expansion.** As of January 1, 2019, Virginia expanded Medicaid eligibility to the new adult group (adults age 19-64 with income up to 138% of the FPL). Under Medicaid expansion, more women became eligible for full coverage before and after pregnancy, while previously they may not have been eligible except when qualifying on the basis of the pregnancy. Women enrolled in the Medicaid for Pregnant Women group during their pregnancy were reevaluated for eligibility at 60 days postpartum and often qualified for Medicaid expansion coverage at that time.

However, the postpartum coverage gains achieved with Medicaid expansion and the 12 months postpartum continuous coverage that will be provided under the Demonstration amendment differ from each other in two key ways:

1. Under the Demonstration amendment, coverage will be provided to all pregnant/postpartum individuals regardless of eligibility group up to 200% FPL.<sup>10, 11</sup>
2. Under the Demonstration amendment, continuous coverage will be guaranteed through 12 months postpartum, regardless of changes in income or household size/composition. Eligibility will no longer be reevaluated at 60 days postpartum.

The income eligibility limit for the Medicaid expansion adult group is 138% of the FPL, and Virginia’s Medicaid for Pregnant Women income eligibility limit is 148% of the FPL. Virginia’s FAMIS MOMS income eligibility limit is 200% of the FPL.<sup>12</sup> Because of the differences in upper income limits across eligibility categories, and because eligibility was reassessed at 60 days postpartum when the pregnant person’s household income might have increased, some individuals enrolled in Medicaid for Pregnant Women during their pregnancy—and many women enrolled in FAMIS MOMS during their pregnancy—were above the income limit for Medicaid expansion when reassessed at 60 days postpartum. These members may have qualified

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<sup>10</sup> 200 percent FPL plus 5% income disregard

<sup>11</sup> With the exception of the FAMIS Prenatal Coverage or “unborn child” population

<sup>12</sup> 200 percent FPL plus 5% disregard

for Virginia’s limited benefit family planning program, Plan First, or were closed out of coverage after their postpartum period ended.

In September 2019, DMAS implemented processes to automate the movement of individuals receiving coverage on the basis of pregnancy at 60 days postpartum into the Medicaid expansion group or other appropriate eligibility group, if they met criteria. While this change led to more seamless transitions for eligible postpartum individuals and reduced administrative burden and churn, eligibility for the Medicaid expansion group was still limited to 138% FPL and there was no guarantee of continuous coverage if family income increased during the pregnancy and the first 60 days postpartum.

Prior research demonstrates that in Virginia and other states, Medicaid expansion has provided a significant pathway for continued coverage after the first two months postpartum, increased health care utilization in the postpartum period,<sup>13, 14</sup> and decreased mortality in the postpartum period.<sup>15</sup> Not only have outcomes improved, but Medicaid expansion has also been an important mechanism in reducing disparities in health outcomes for both birthing individuals and infants. For example, from 2010-2016, the infant mortality rate declined more in expansion compared to non-expansion states. Importantly, declines in infant mortality rates among Black/African American infants in expansion states were more than twice as large as those in non-expansion states.<sup>16</sup> As of May 2023, over 750,000 adult Virginians were enrolled in Medicaid expansion, making it an increasingly important tool to improve maternal and infant mortality and morbidity.<sup>17</sup>

**COVID-19 Public Health Emergency Maintenance of Effort in effect beginning March 2020.** To promote stability of coverage during the COVID-19 pandemic, the Families First Coronavirus Response Act (FFCRA) provided a 6.2 percentage point increase in the federal share of certain Medicaid spending tied to a requirement for states to ensure continuous coverage for current Medicaid enrollees.<sup>18</sup> This Maintenance of Effort (MOE) required states to ensure that all individuals enrolled in full-benefit Medicaid on March 18, 2020 remained enrolled until the end of the COVID-19 Public Health Emergency (PHE). This applied to members enrolled in Medicaid who reached the end of the 60-day postpartum period. Under the MOE, these individuals remained enrolled in Medicaid under the pregnancy eligibility group. The 2023 Consolidated Appropriations Act de-linked the continuous coverage requirement from the PHE and set out a period of phased “unwinding” for states to return to regular renewal operations.

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<sup>13</sup> Gordon SH, Sommers BD, Wilson IB, Trivedi AN. Effects Of Medicaid Expansion On Postpartum Coverage And Outpatient Utilization. *Health Aff (Millwood)*. 2020;39(1):77-84.

<sup>14</sup> Dunlop AL, Joski P, Strahan AE, Sierra E, Adams EK. Postpartum Medicaid Coverage and Contraceptive Use Before and After Ohio’s Medicaid Expansion Under the Affordable Care Act. *Womens Health Issues*. 2020;30(6):426-435.

<sup>15</sup> Eliason EL. Adoption of Medicaid Expansion Is Associated with Lower Maternal Mortality. *Womens Health Issues*. 2020;30(3):147-152.

<sup>16</sup> Bhatt CB, Beck-Sagué CM. Medicaid Expansion and Infant Mortality in the United States. *Am J Public Health*. 2018;108(4):565-567. doi:10.2105/AJPH.2017.304218

<sup>17</sup> Medicaid Expansion Enrollment. Accessed April 2022. <https://www.dmas.virginia.gov/data/medicaid-expansion-enrollment/>

<sup>18</sup> Dolan, Musumeci, Tolbert, Rudowitz. Medicaid Maintenance of Eligibility Requirements: Issues to Watch. Accessed April 2022. <https://www.kff.org/medicaid/issue-brief/medicaid-maintenance-of-eligibility-moe-requirements-issues-to-watch/>

Starting on March 1, 2023, Virginia began to resume Medicaid coverage redeterminations, meaning the first terminations occurred in May of 2023.<sup>19</sup> Notably, the MOE did not apply to the FAMIS MOMS population, so eligibility redeterminations at 60 days postpartum continued for these members during the PHE. The MOE also did not apply to the lawfully residing (ICHIA/CHIPRA 214) populations.

Final systems changes took effect July 1, 2022 for full implementation of the 12 months guaranteed continuous postpartum coverage, including for these populations. Although there may be opportunities for limited comparisons between Medicaid groups—who have had greater access to extended postpartum coverage prior to the Demonstration implementation—and the FAMIS MOMS and CHIPRA 214 populations, such comparisons should be approached with caution. Unobserved differences between the populations might confound expected changes in utilization and outcomes related to the Demonstration, such as how income and residency status influence health-related behaviors and health care utilization.

For example, members enrolled in FAMIS MOMS generally have higher household incomes than those enrolled in Medicaid expansion or other Medicaid eligibility categories. Individuals with higher incomes tend to experience lower maternal morbidity and better infant health outcomes than those with lower incomes.<sup>20,21</sup> Data from the FAMIS MOMS demonstration to date indicate that birth outcomes for this population compare favorably to those for Virginia’s Medicaid populations.<sup>22</sup> Similarly, with regard to the CHIPRA 214 populations, prior research suggests that women who are immigrants may experience lower maternal and infant mortality but less utilization of recommended care in the perinatal period.<sup>23,24,25</sup>

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<sup>19</sup> Unwinding the Medicaid Continuous Coverage Requirement. April 28, 2023. Center on Budget and Policy Priorities. <https://www.cbpp.org/research/health/unwinding-the-medicaid-continuous-coverage-requirement>

<sup>20</sup> Wishart D, Cruz Alvarez C, Ward C, Danner S, O’Brian CA, Simon M. Racial and Ethnic Minority Pregnant Patients with Low-Income Experiences of Perinatal Care: A Scoping Review. *Health Equity*. 2021;5(1):554-568. Published 2021 Sep 3

<sup>21</sup> Singh GK. *Maternal and Child Health Bureau*. Rockville, MD: U.S. Department of Health and Human Services; 2010. [Accessed 15 September, 2020]. Maternal Mortality in the United States 1935-2007: Substantial Racial/Ethnic Socioeconomic, and Geographic Disparities Persist. A 75th Anniversary Publication. Health Resources and Services Administration. <https://www.hrsa.gov/sites/default/files/ourstories/mchb75th/mchb75maternalmortality.pdf>

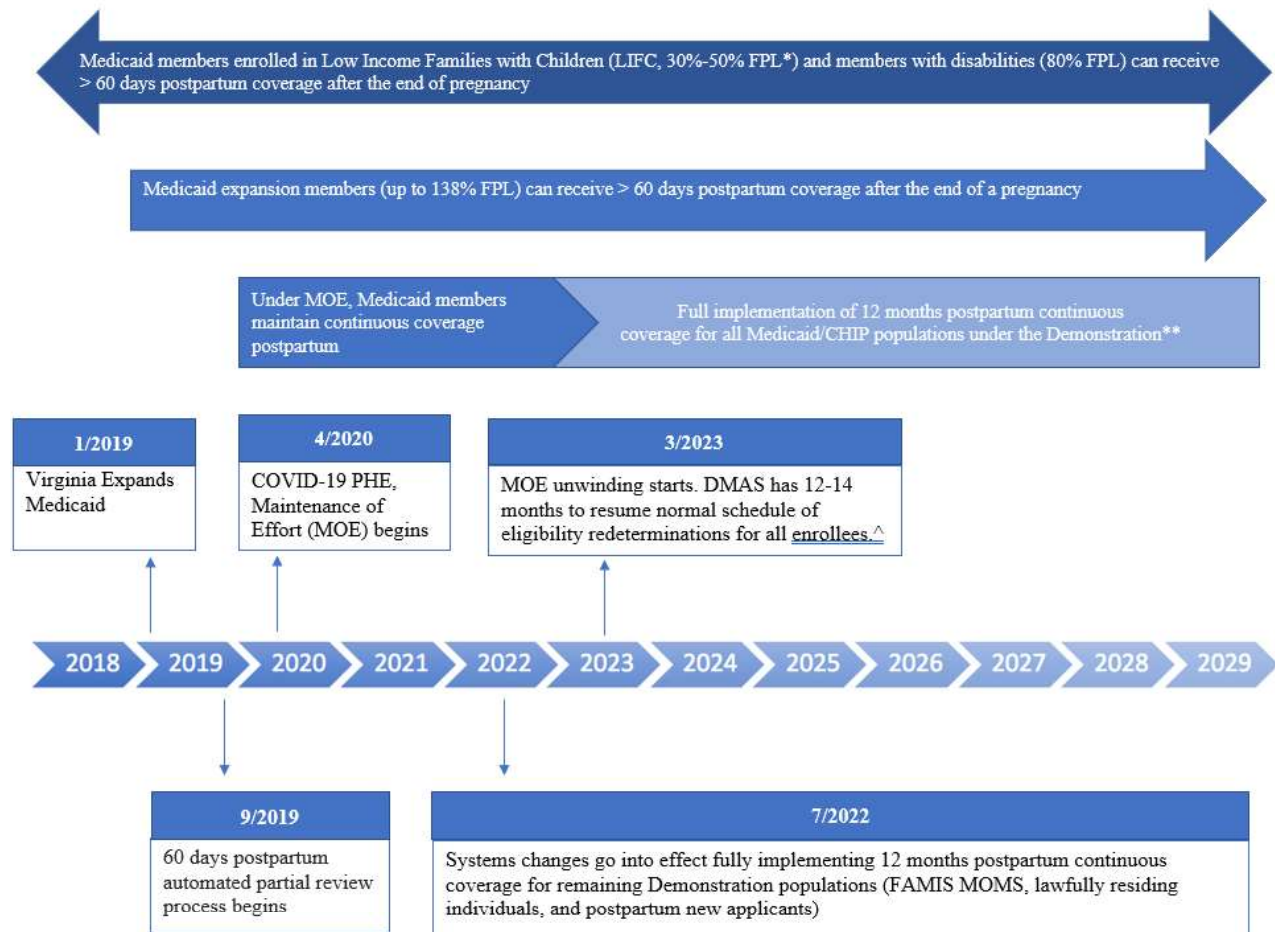
<sup>22</sup> See, for example, Commonwealth of Virginia Department of Medical Assistance Services, 2021-22 Medicaid and CHIP Maternal and Child Health Focus Study Report, January 2023.

<sup>23</sup> Singh GK. Trends and Social Inequalities in Maternal Mortality in the United States, 1969-2018. *Int J MCH AIDS*. 2021;10(1):29-42. doi:10.21106/ijma.444

<sup>24</sup> Maru, S., Glenn, L., Belfon, K. *et al.* Utilization of Maternal Health Care Among Immigrant Mothers in New York City, 2016–2018. *J Urban Health* **98**, 711–726 (2021). <https://doi.org/10.1007/s11524-021-00584-5>

<sup>25</sup> Miller LS, Robinson JA, Cibula DA. Healthy Immigrant Effect: Preterm Births Among Immigrants and Refugees in Syracuse, NY. *Matern Child Health J*. 2016;20(2):484-493.

**Figure 1: Timeline of changes in eligibility for extended postpartum coverage**



**Notes:** \* Amount varies by locality but is approximately 30-50% FPL on average.

\*\* With the exception of FAMIS Prenatal Coverage.

△ The Public Health Emergency expired on May 11, 2023. The 2023 Consolidated Appropriations Act de-linked the PHE from the maintenance of effort/continuous coverage requirement, and set out a period of phased “unwinding,” which began for Virginia on March 1, 2023, with the first terminations occurring in May 2023.

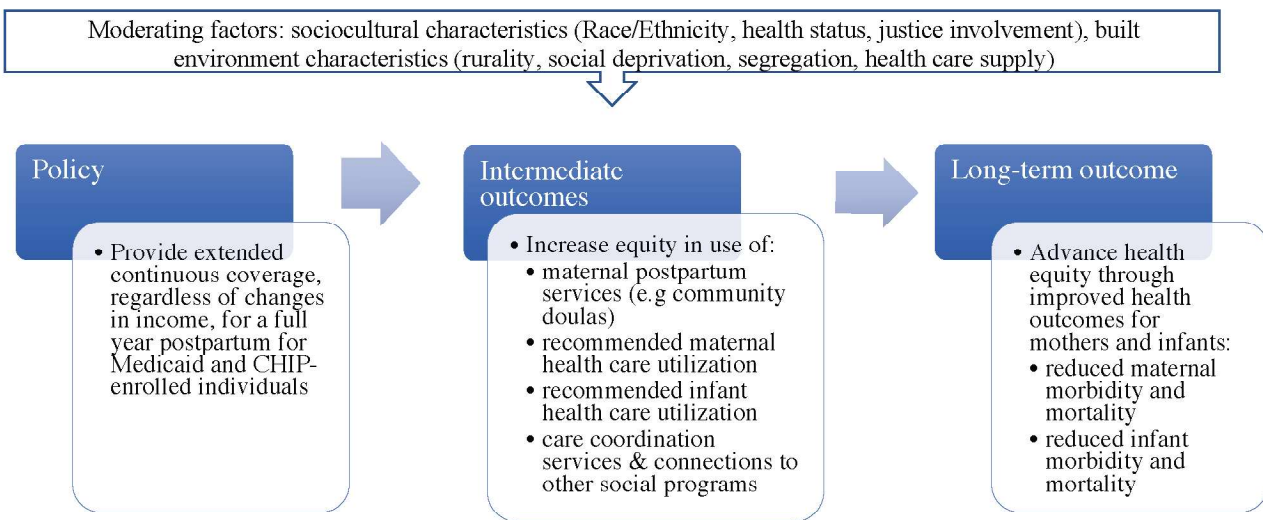
## B. Evaluation Hypotheses and Research Questions

The overarching goals of this demonstration are to improve continuity of coverage, increase access to medical and behavioral health care services, reduce maternal and infant mortality and morbidity, and advance health equity. We will first discuss our logic model, followed by the research questions and outcome measures.

**1. Logic Model.** Our logic model is depicted below and addresses intermediate and long-term outcomes of the policy changes as well as the moderating factors that may drive the effects of the Demonstration (Figure 2). Potential moderators of the effect of the policy on both intermediate and long-term outcomes are adapted from the National Institute on Minority Health and Health

Disparities Research Framework<sup>26</sup> and include sociocultural (member race/ethnicity, health status, justice involvement) and built environment factors (geographic region, urban/rural, residential segregation, social deprivation, health care systems supply). Although factors such as race/ethnicity and health status have often been considered confounding variables, we believe that these factors are likely to affect many aspects of the lived experience of the individual and should be operationalized as moderators instead of confounders. We first articulate the policy change that we will be evaluating: Provide extended continuous coverage, regardless of changes in income, for a full year postpartum for Medicaid and CHIP-enrolled individuals. We then articulate intermediate outcome: increase equity in the use of recommended services for both mother and child in the postpartum period. We believe that the increased utilization of recommended medical and behavioral health care services will help achieve the long-term goals of reduced mortality and morbidity.

**Figure 2: Logic Model**



**2. Hypotheses and Research Questions.** Table 1 below describes the specific research questions, hypotheses, and performance metrics that will be used to assess whether the extended postpartum coverage demonstration has achieved the goals as described above. These metrics and hypotheses are grouped into five overarching research questions:

1. Does the Demonstration promote continuous coverage and continuity of care for postpartum women?
2. Does the Demonstration increase use of recommended medical and behavioral health care services (e.g., follow-up on referrals to specialist, use of preventive screenings, and use of recommended primary care visits) for postpartum women and their infants?
3. Does the Demonstration improve the health outcomes and outcomes related to health-related social needs for postpartum women?

<sup>26</sup> Alvidrez J, Castille D, Laude-Sharp M, Rosario A, Tabor D. The National Institute on Minority Health and Health Disparities Research Framework. *Am J Public Health.* 2019;109(S1):S16-S20.

4. Does the Demonstration increase the use of recommended health care services (e.g., well-child visits and vaccinations) and improve health outcomes for infants born to these women?
5. Does the Demonstration reduce racial/ethnic and other disparities and advance health equity for postpartum women and their infants?

## C. Methodology

**1. Evaluation Methodology Summary.** To answer the research questions posed above, this evaluation will use mixed methods that include both qualitative and quantitative components. Quantitative data sources will include administrative Medicaid inpatient, outpatient, and pharmacy claims and enrollment data, vital records for births and deaths linked to Medicaid administrative data, corrections data linked to Medicaid administrative data, and Medicaid member survey data. We will supplement Medicaid data with the following sources to provide information in the pre-demonstration period: 1) Pregnancy Risk Assessment Monitoring Systems (PRAMS), 2) Virginia All Payer Claims Database (APCD), and 3) Virginia Health Information Hospital Discharge data. Qualitative data will be obtained from open-ended survey responses during the member survey and qualitative interviews will be conducted with providers and other stakeholders to better understand the successes and challenges of the demonstration implementation, education and outreach efforts. Ultimately, we will use both quantitative and qualitative methods to understand how members' access, utilization, and outcomes change in response to this demonstration.

Understanding how this demonstration addresses disparities across racial groups (e.g., Black/African American compared to White members) in health access, use of services, and outcomes across sociocultural and built environment characteristics is of particular importance. To do this, we will focus on both individual-level factors and community-level factors across multiple domains known to influence health disparities to advance our understanding of the equity impacts of postpartum coverage extensions.

**2. Evaluation Period.** The evaluation period for the postpartum coverage Demonstration component began on July 1, 2022 and continues through June 30, 2029. However, data from January 1, 2017 to June 30, 2022 will be used to establish pre-demonstration trends. Including 2017 and 2018 data is important to establish a pre-Medicaid expansion baseline. Prior to January 1, 2019, although pregnant individuals in Virginia were guaranteed continuous coverage during pregnancy and through 60 days postpartum, once they reached 60 days postpartum these groups found few coverage groups where they could gain eligibility. Some very low-income adults with children qualified for the Low-Income Families with Children (LIFC) coverage group, and individuals could also qualify for Medicaid coverage on the basis of a disability. Therefore, data from 2017 and 2018 provide information about individuals before any changes in eligibility occurred prior to the postpartum extension that may influence outcomes.

In addition to expansion, the maintenance of effort (MOE) requirement resulting from the COVID-19 public health emergency was in effect starting in March 2020. As a result, members who were enrolled in Medicaid pregnancy eligibility from this time until redeterminations resumed in March 2023 were not disenrolled after 60 days postpartum regardless of their current eligibility status. In effect, the MOE has functioned in a similar manner as the postpartum

extension for a significant majority of Virginia’s eligible population, making it difficult to disentangle differences between the MOE and Demonstration-related postpartum coverage extensions.

All DMAS administrative data is available to the independent evaluator with a 3-6 month delay, making all measures that are derived only from administrative data (inpatient, outpatient, pharmacy claims and enrollment data) available for the 2025 interim report, future evaluation reports, and the summative report. Publicly available data such as the Segregation Index, Maternity Care Deserts, and Social Deprivation Index are readily available, making all measures derived from these data available for the 2025 interim report, future evaluation reports, and the summative report. The most recent year of data for these publicly available data sources will be linked to the Medicaid enrollment file using members’ census tract.

DMAS administrative data is linked to Virginia Department of Corrections data. This allows us to identify the date of release or incarceration to a state facility for any Medicaid-enrolled individual. Therefore, we will be able to identify a subsample of women who were incarcerated in the perinatal period and examine particular outcomes.

DMAS administrative data that is linked with the Virginia Department of Health (birth and death records) may have lags in the data due to the additional steps of joining data sources. This may mean that for measures derived from these sources (maternal morbidity, infant outcomes) there may be a delay in the availability of the information for inclusion in Demonstration reports. Further, additional quantitative data typically lags 1-2 years (e.g., All Payers Claims Database; Virginia Health Information Hospital Discharge Data), affecting the inclusion of these data in some reports. Additionally, the initial survey data will be collected in late 2024/early 2025, allowing for 12 months of full implementation of the Demonstration *after the PHE expires* prior to fielding the surveys. Preliminary data will be available for the interim report in 2025 and the summative report in 2030. We anticipate repeating member surveys bi-annually thereafter for the remainder of the Demonstration period (i.e., 3 separate survey field periods, each 2 years apart) to monitor trends in utilization and outcomes related to postpartum coverage extension.

### **3. Populations of Interest.**

This demonstration amendment prevents individuals who experience income and household composition changes that would have led to termination of eligibility from losing eligibility during the 12-month postpartum period. We are particularly interested in changes in the outcomes of the eligibility groups that were not generally eligible for postpartum coverage for more than 2 months after delivery prior to the demonstration. These groups include (1) FAMIS MOMS (CHIP pregnant women with incomes below 200% of the FPL)<sup>27</sup>, who typically are above income for Medicaid expansion and who do not qualify for continuous coverage beyond 60 days postpartum under the MOE, (2) lawfully residing (CHIPRA 214) individuals who qualify on the basis of pregnancy, are covered through 60 days postpartum, and to date have not qualified for coverage under Medicaid expansion and also have not been subject to the MOE, and (3) Medicaid pregnant women with household income above the cutoff for Medicaid expansion (138-148% FPL)—these individuals did not qualify for continued coverage in the

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<sup>27</sup> 200 percent FPL plus 5 percent income disregard

Medicaid expansion group pre- and post- MOE, but they do qualify under the MOE to continue in the Medicaid for Pregnant women coverage group for the duration of the PHE.

Among pregnant/postpartum individuals in Medicaid, we expect the Demonstration to improve outcomes in the years following implementation as compared to the years prior. We expect the Demonstration to have a greater impact on FAMIS MOMS, CHIPRA 214 individuals, and Medicaid pregnant women with household income above the cutoff for Medicaid expansion as these individuals had limited access to extended postpartum coverage prior to the Demonstration implementation. While we expect improvements, changes in the third group, for which the MOE was applied, may be more difficult to identify because these individuals experienced continuous coverage similar to the Demonstration under the MOE. A more plausibly valid approach to understand the effect of the Demonstration may be to compare the pre-COVID years (2017, 2018, and 2019) and the years after the Demonstration was fully implemented.

In addition to the eligibility groups discussed, we want to evaluate the efficacy of this demonstration across both sociocultural and built environments across the Commonwealth. We want to focus on individuals from minoritized backgrounds, including from communities that lack sufficient health care supply and social resources. First, we will focus on differences in outcomes across racial groups due to national and statewide disparities in maternal and infant health outcomes. The maternal mortality and morbidity crisis disproportionately impacts women of color, with non-Hispanic Black/African American women 2.5 times more likely to suffer a pregnancy-related death than non-Hispanic White women, and 3.1 times more likely to suffer a pregnancy-related death than Hispanic women.<sup>28</sup> Similarly, non-Hispanic Black/African American and American Indian/Alaska Native women experience significantly higher rates of severe maternal morbidity than non-Hispanic white women.<sup>29</sup> In Virginia, reports by the Virginia Department of Health found that Black/African American women in the state are more than twice as likely to die from pregnancy-related causes compared to White women, largely tracking trends at the national level.<sup>30</sup> Virginia faces unacceptable racial inequities in maternal mortality and morbidity that the Commonwealth aims to address through the Demonstration; to achieve this goal, these racial disparities must be analyzed in the evaluation. The COVID-19 pandemic has further exacerbated existing health disparities and is expected to contribute—both directly and indirectly—to increased rates of mortality and morbidity for mothers and infants of color.<sup>31</sup>

This evaluation also focuses on women with a chronic behavioral or physical health condition as well as women who experience a high-risk event during labor and delivery. In addition, this evaluation will focus on women whose infants experienced a health event. Individuals with multiple chronic health conditions are more likely to experience preterm delivery, cesarean delivery, severe maternal morbidity and mortality and have a longer length of stay during

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<sup>28</sup> CDC. Maternal Mortality in the United States: Changes in Coding, Publication, and Data Release, 2018. Available at <https://www.cdc.gov/nchs/data/nvsr/nvsr69/nvsr69-02-508.pdf>.

<sup>29</sup> Racial and Ethnic Disparities in the Incidence of Severe Maternal Morbidity in the United States, 2012-2015. Available at <https://pubmed.ncbi.nlm.nih.gov/30303912/>.

<sup>30</sup> Governor Northam Announces Goal to Eliminate Racial Disparity in Virginia Maternal Mortality Rate by 2025. Available at <https://www.governor.virginia.gov/newsroom/all-releases/2019/june/headline-840941-en.html>; and House Bill 2546. Available at <https://lis.virginia.gov/cgi-bin/legp604.exe?191+sum+HB2546>.

<sup>31</sup> CDC. COVID-19 Cases, Hospitalizations, and Deaths, by Race/Ethnicity. Available at <https://www.cdc.gov/coronavirus/2019-ncov/downloads/covid-data/hospitalization-death-by-race-ethnicity.pdf>

delivery than those with no chronic condition or with one chronic condition.<sup>32</sup> The Virginia Maternal Mortality Review Team found that 70% of women who experienced a pregnancy-associated death had at least one chronic condition with a median of two conditions.<sup>33</sup> Importantly, the Maternal Mortality Review Team noted missed opportunities for care coordination and referrals to specialists in these cases of maternal mortality. Only 25% of women with a chronic condition received a referral to a specialist during their pregnancy.<sup>29</sup> This missed opportunity for care coordination may be contributing to significant racial disparities in maternal mortality as Black/African American women with at least one chronic condition had a mortality rate over twice that of their White counterparts. Last, the Virginia Maternal Mortality Review Team urged better care coordination to help reduce both the overall rate of maternal mortality and racial disparities in outcomes.<sup>29</sup>

Postpartum individuals with substance use disorders are another population of interest. The postpartum period represents a particularly vulnerable time for those with a substance use disorder. For example, among women with opioid use in the year prior to delivery, the highest overdose rate occurred 7-12 months after delivery.<sup>34</sup> However, receiving pharmacotherapy for opioid use disorder was associated with reduced overdose rates in the early postpartum period, suggesting that evidence-based substance use treatment can reduce morbidity.<sup>35</sup> Additionally, women experiencing any substance use disorders in pregnancy have higher odds of not receiving appropriate prenatal or postpartum care.<sup>36</sup>

Further, individuals experiencing a “high-risk pregnancy event” or who have an infant who experienced a high-risk event may need additional follow-up from medical services, including mental health as well as social services. To assess whether postpartum women and their infants are receiving these necessary services is a focal point of the surveys deployed in this evaluation. Ultimately, the postpartum period is a potentially vulnerable time for all individuals but may exacerbate conditions existing prior to pregnancy or that were developed in pregnancy. Ensuring adequate access to and use of care for postpartum women and their infants is a central goal of the Demonstration.

Finally, this evaluation also includes a focus on pregnant and postpartum individuals involved in the justice system. Incarceration among women is increasing as an estimated 210,595 women were incarcerated in 2015 in the U.S., a 645% increase in incarcerated women since 1980.<sup>37</sup>

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<sup>32</sup> Admon LK, Winkelman TNA, Heisler M, Dalton VK. Obstetric Outcomes and Delivery-Related Health Care Utilization and Costs Among Pregnant Women With Multiple Chronic Conditions. *Prev Chronic Dis*. 2018;15:E21. Published 2018 Feb 8.

<sup>33</sup> Rouse. Virginia Pregnancy Associated Deaths, 1999-2012: Need for Coordination of Care. Virginia Maternal Mortality Review Team. August 2019. Available at <https://www.vdh.virginia.gov/content/uploads/sites/18/2019/08/MMRT-Chronic-Disease-Report-FINAL-VERSION.pdf>

<sup>34</sup> Schiff DM, Nielsen T, Terplan M, et al. Fatal and Nonfatal Overdose Among Pregnant and Postpartum Women in Massachusetts. *Obstet Gynecol*. 2018;132(2):466-474.

<sup>35</sup> Schiff DM, Nielsen T, Terplan M, et al. Fatal and Nonfatal Overdose Among Pregnant and Postpartum Women in Massachusetts. *Obstet Gynecol*. 2018;132(2):466-474. doi:10.1097/AOG.0000000000002734

<sup>36</sup> Nidey N, Kair LR, Wilder C, et al. Substance Use and Utilization of Prenatal and Postpartum Care. *J Addict Med*. 2022;16(1):84-92.

<sup>37</sup> Bronson J, Sufrin C. Pregnant Women in Prison and Jail Don't Count: Data Gaps on Maternal Health and Incarceration. *Public Health Rep*. 2019;134(1\_suppl):57S-62S.

While data are extremely sparse on the intersection of pregnancy and justice involvement, it is estimated that about 4% of women in prisons are pregnant at the time of admission to prison and 5% at the time of admission to jail.<sup>38</sup> Importantly, the period of re-entry into the community after release from incarceration is a vulnerable time for all formerly incarcerated individuals as they experience a higher mortality rate compared to non-incarcerated individuals.<sup>39</sup> However, there is limited understanding of health outcomes and health care utilization among formerly incarcerated postpartum individuals. Medicaid's impact on incarcerated individuals is limited as Medicaid cannot pay for outpatient services while an individual is incarcerated. However, Medicaid can be a critical resource for accessing care after an individual is released from incarceration. Evaluating the effects of postpartum coverage extensions on the health and health-related social needs of individuals recently released from incarceration will provide critical information to enable Virginia to reduce disparities among Medicaid members.

Community-level factors can affect the type and amount of resources available to an individual as well as increase health risks, ultimately affecting health care utilization as well as outcomes.<sup>40</sup> For example, individuals from rural communities often report greater access to a usual source of care but fewer health screenings.<sup>41</sup> In addition, individuals living in more highly segregated areas tend to have lower access to health care and utilization as health care supply tends to be lower in these areas of high segregation.<sup>42,43</sup> Community-level factors not only affect the health status of an individual when they are enrolled in Medicaid, but can moderate the effectiveness of Medicaid policies after enrollment. Social deprivation is a measure that reflects an aggregate socioeconomic status of a community.<sup>44</sup> Individuals living in higher social deprivation index communities tend to experience a greater benefit of health policies that expand health care access such as Medicaid expansion. For example, those in more socially deprived communities experienced improved hypertension control after receiving insurance coverage.<sup>45</sup> In addition to general socioeconomic community factors, health care supply can influence health outcomes. For example, individuals who were living in “maternity care deserts,” counties with no hospitals offering obstetric care and no OB/GYN or certified nurse midwife providers, experienced greater pregnancy-associated mortality up to a year postpartum.<sup>46</sup> Understanding how this postpartum

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<sup>38</sup> Maruschak LM. *Medical Problems of Prisoners*. Washington, DC: US Department of Justice, Bureau of Justice Statistics; 2008. <https://www.bjs.gov/content/pub/pdf/mpp.pdf>.

<sup>39</sup> Binswanger IA, Stern MF, Deyo RA, et al. Release from prison--a high risk of death for former inmates [published correction appears in *N Engl J Med*. 2007 Feb 1;356(5):536]. *N Engl J Med*. 2007;356(2):157-165.

<sup>40</sup> Williams DR, Collins C. Racial residential segregation: a fundamental cause of racial disparities in health. *Public Health Rep*. 2001;116(5):404-416.

<sup>41</sup> Caldwell JT, Ford CL, Wallace SP, Wang MC, Takahashi LM. Intersection of Living in a Rural Versus Urban Area and Race/Ethnicity in Explaining Access to Health Care in the United States. *Am J Public Health*. 2016;106(8):1463-1469.

<sup>42</sup> Anderson KF. Racial/Ethnic Residential Segregation, the Distribution of Physician's Offices and Access to Health Care: The Case of Houston, Texas. *Social Sciences*. 2018; 7(8):119. <https://doi.org/10.3390/socsci7080119>

<sup>43</sup> Health Care Disparities in Race-Ethnic Minority Communities and Populations: Does the Availability of Health Care Providers Play a Role?

<sup>44</sup> Butler DC, Petterson S, Phillips RL, Bazemore AW. Measures of social deprivation that predict health care access and need within a rural area of primary care service delivery. *Health Serv Res*. 2013;48(2 Pt 1):539-559

<sup>45</sup> H A, Bb G, K F, et al. Role of health insurance and neighborhood-level social deprivation on hypertension control following the affordable care act health insurance opportunities. *Soc Sci Med*. 2020;265:113439.

<sup>46</sup> Wallace M, Dyer L, Felker-Kantor E, et al. Maternity Care Deserts and Pregnancy-Associated Mortality in Louisiana. *Womens Health Issues*. 2021;31(2):122-129. doi:10.1016/j.whi.2020.09.004

coverage extension demonstration may reduce disparities across pregnant and postpartum members in different communities is critical in advancing the Commonwealth's and CMS's commitment to reducing health inequities.

**4. Data Sources.** As described below, this evaluation will use primary qualitative data sources and primary and secondary quantitative data sources. We will first discuss secondary data sources and then describe primary data sources we will collect for this evaluation.

**Medicaid Administrative Data.** These data include both enrollment data files and encounter data. Enrollment data includes member's date of birth, sex race/ethnicity, census tract of residence, and Medicaid MCO plan and eligibility category. In prior work with Virginia Medicaid populations, we found that 86.9% [83.3%] of individuals identifying as NH Black/African American [NH White] in claims identified as the same racial ethnic group in a member survey, suggesting that it is appropriate to use the claims data assignment of race/ethnicity for this evaluation work.<sup>47</sup> We will use sex identified in the enrollment file. In prior work, 98.9% of individuals identified as women in the claims data identified themselves as women in survey data.<sup>48</sup> Census tract of residence is identified within the enrollment file for the most current residence as well as any address that has been used at the time of Medicaid enrollment. Therefore, we can identify if someone has moved during pregnancy or postpartum. Census tract will be used to link publicly available data on community-level factors such as social deprivation index, segregation index, or rural status.

Virginia Medicaid's claims system is a live database of all claims filed for all Virginia Medicaid members, including members who are fee-for-service (FFS) or managed care. This data includes the claim header, claim detail, claim status (paid or denied), provider code, and any other relevant coding information. It is linked to the Medicaid member by the Medicaid member identification number. These data will be used for most measures involving utilization of services.

**Linked secondary data.** We will link several different secondary data sources to the administrative files described above. First, Virginia will employ the dataset from the annual Birth Outcomes Study conducted by DMAS' contractor. The dataset is created by the contractor and DMAS subject matter experts using deterministic and probabilistic data linking to match Medicaid members with birth registry records, thereby identifying births paid by Virginia Medicaid/CHIP during a given calendar year. Member claims and encounter data files are matched with birth registry data fields for members from each of the data linkage processes. All probabilistically or deterministically linked birth registry records are included in the eligible study population.

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<sup>47</sup> In a sample of 1,622 Medicaid expansion enrollees, we compared how individuals identified their race on a survey and how that individual's race was identified in DMAS's administrative file. The percentages reflect the congruence of identification.

<sup>48</sup> In a sample of 1,622 Medicaid expansion enrollees, we compared how individuals identified their gender on a survey and how that individual's gender was identified in DMAS's administrative file. The percentages reflect the congruence of identification.

Second, we will use several publicly available datasets linked to Medicaid administrative data by census tract. The rural status of the census tract will be established using RUCA codes from the USDA Economic Research Service data source.<sup>49</sup> Social deprivation index data will come from the Robert Graham Center<sup>50</sup> and the segregation index will be calculated from the American Community Service data on population reports.<sup>51</sup> Maternity Care Deserts are noted at the county level and come from the March of Dimes.<sup>52</sup>

**Additional Quantitative Data.** There are three data sources we will use to supplement Medicaid claims data, allowing us to better examine pre-demonstration trends: 1) Pregnancy Risk Assessment Monitoring System (PRAMS), 2) Virginia All Payer Claims Database (APCD), and 3) Virginia Health Information Hospital Discharge data. These three data sources provide data on individuals of various insurance status and have ways of identifying Medicaid individuals, making these datasets relevant to this evaluation.

First, the Pregnancy Risk Assessment Monitoring System is a national survey administered at the state level to a sample of individuals taken from birth certificate data. Importantly, PRAMS is asked of individuals typically between 2-4 months postpartum, a time of interest for this evaluation since this is the time period during which members historically would have faced disenrollment and health coverage transitions. PRAMS is currently available for Virginia for years 2017-2020<sup>53</sup>, making it possible to compare Virginia data across time, including in periods prior to the demonstration. The survey asks detailed questions about income and household composition, enabling us to more finely identify individuals who meet current eligibility criteria for the demonstration. In addition to the income questions, the survey also asks about Medicaid coverage before and during pregnancy, allowing us to identify individuals who delivered while enrolled in Medicaid. The PRAMS questions cover outcomes in demonstration Goal 1, Goal 2, Goal 3, making it a robust data source for our demonstration. While there are many strengths of PRAMS, there are several limitations. For example, the state sample is not necessarily representative and typically has a small pool of respondents (989 for 2019).<sup>54</sup> Despite these limitations, it may be an important dataset to understand changes in coverage trends, outpatient utilization, and health outcomes in the postpartum period. PRAMS data from 2017-2028 for all states that meet the response threshold for the given year will be used for this evaluation to allow demonstration performance in Virginia to be benchmarked among regional and national averages. The final year, 2028, was selected to allow time for the data to be released and analyzed and included in the Draft Summative Evaluation Report due in December 2030.

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<sup>49</sup> Rural-Urban Continuum codes. Accessed April 2022. <https://www.census.gov/topics/housing/housing-patterns/guidance/appendix-b.html>

<sup>50</sup> Social Deprivation Index. Accessed April 2022. <https://www.graham-center.org/maps-data-tools/social-deprivation-index.html>

<sup>51</sup> Housing Patterns: Appendix B: Measures of Residential Segregation. Accessed April 2022. <https://www.census.gov/topics/housing/housing-patterns/guidance/appendix-b.html>

<sup>52</sup> Nowhere to Go: Maternity Care Deserts. Accessed April 2022. <https://www.marchofdimes.org/research/maternity-care-deserts-report.aspx>

<sup>53</sup> Are PRAMS data available to researchers? <https://www.cdc.gov/prams/prams-data/researchers.htm>

<sup>54</sup> 2019 PRAMS Response Rate Table. <https://www.cdc.gov/prams/prams-data/response-rate-tables/2019-response-rate-table.html>

Another important dataset is the Virginia All Payer Claims Database (APCD).<sup>55</sup> Prior work in Arkansas has used the APCD to examine coverage transitions and outpatient utilization among postpartum persons following Medicaid expansion.<sup>56</sup> The APCD is a dataset that contains deidentified claims for inpatient and outpatient care accompanied with limited demographic data (including insurance status, gender, zip code, census tract) for most Virginians. While these data are not identified, individuals are linked across time, allowing us to examine post-birth utilization for individuals. The benefits of the APCD include being able to track claims associated with an individual even when they transition to other insurance coverage and being able to identify outpatient claims. We can adapt research on Medicaid expansion effects among postpartum persons using APCD data in Arkansas to our demonstration evaluation in Virginia, particularly for Goals 1 and 2. A limitation of the APCD is that it does not include claims for individuals who are uninsured. Additionally, the type of Medicaid eligibility, such as FAMIS MOMS versus Medicaid expansion, cannot be distinguished, as the APCD does not include eligibility category. Because of its strengths, the APCD data from 2017-2028 will be used for this evaluation.

Virginia Health Information (VHI) Hospital Discharge data provide inpatient utilization claims for all individuals at all Virginia hospitals regardless of insurance status.<sup>57</sup> These hospital claims can be linked over time at the individual level and identify the insurance of the individual, including Medicaid coverage. This allows us to identify covered Medicaid individuals at their delivery and follow any inpatient use in the year postpartum. Importantly, this dataset includes uninsured individuals, providing information for periods of uninsurance that are not included in Virginia's APCD. Goal 3 includes two additional outcomes to this goal, based upon prior literature examining changes in inpatient use after Medicaid expansion,<sup>58</sup> of 1) any hospitalization in the year after delivery, and 2) pregnancy-related hospitalization in the year after delivery. Similar to the limitations of the APCD, the VHI data does not provide details on the type of Medicaid coverage, so identifying, for example, FAMIS-eligible versus Medicaid expansion eligible individuals is not possible. VHI Hospital Discharge data from 2017-2028 will be used for this evaluation.

Ultimately, we believe that augmenting our Medicaid claims data with other data sources including the PRAMS, APCD, and Virginia Health Information Hospital Discharge data will provide a more robust evaluation plan of this demonstration.

**Survey data.** Primary data will consist of member surveys. Our evaluation team has extensive experience with surveys of Virginia Medicaid members including members newly eligible via Medicaid expansion, members with an opioid use disorder using DMAS' Addiction and Recovery Treatment Services (ARTS), and members enrolled in Commonwealth Coordinated Care Plus (CCC Plus). The postpartum member surveys planned for this evaluation will employ similar methods to leverage our past successes. The initial postpartum member survey will be

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<sup>55</sup> All Payers Claim Database (APCD). <http://www.vhi.org/apcd/>

<sup>56</sup> Steenland MW, Wilson IB, Matteson KA, Trivedi AN. Association of Medicaid Expansion in Arkansas With Postpartum Coverage, Outpatient Care, and Racial Disparities. *JAMA Health Forum*. 2021;2(12):e214167. Published 2021 Dec 17. doi:10.1001/jamahealthforum.2021.4167

<sup>57</sup> Patient Level Data. <https://www.vhi.org/Products/patientleveldata.asp>

<sup>58</sup> Steenland MW, Wherry LR. Medicaid Expansion Led To Reductions In Postpartum Hospitalizations. *Health Aff (Millwood)*. 2023;42(1):18-25. doi:10.1377/hlthaff.2022.00819

fielded in 2024-2025 and include a stratified random sample of Medicaid and FAMIS MOMS members with a live delivery about 12 months prior to the interview, and therefore are able to recall coverage, health, and service utilization experiences in the 12 months after delivery.

We will oversample individuals who experienced a pregnancy-related “high-risk” event at any time during the prenatal period, delivery, or postpartum period (e.g., gestational diabetes, preeclampsia/eclampsia, maternal substance use diagnosis, postpartum depression or psychosis diagnosis, infection, hemorrhage, thrombotic emboli, cardiovascular conditions related to pregnancy, incarceration, prenatal tobacco use).<sup>59</sup> We will also oversample individuals who had an infant with a health-related event (e.g., preterm birth, low-birth weight, neonatal abstinence syndrome). The main objectives of the postpartum extension survey are: (1) to assess member experiences with insurance coverage (including enrollment, continuity of coverage, and barriers to enrollment); (2) to understand how members’ access to and utilization of health care differs by health status (e.g., those with a high-risk event) and sociocultural factors (race/ethnicity, those experiencing food and housing insecurity, social support levels, and experience with the criminal justice system), and built environment factors (community-level residential segregation and social deprivation); (3) to better understand care coordination for individuals following delivery; and 4) to understand members’ perceptions of their own and their infant’s health. The survey will include several open-ended questions to allow for qualitative data concerning utilization and access to care. The first member survey will be fielded in multiple waves over the course of several months (expected field date to begin in late 2024/early 2025) with an accrual goal of ~1,500 completed surveys. We anticipate repeating member surveys bi-annually thereafter for the remainder of the Demonstration period.

All analyses based on the survey data will be weighted to reflect the actual distribution of Medicaid and FAMIS MOMS members with live deliveries at the time of the sample draw. Survey weights will be constructed specifically to make two adjustments: (1) to correct for differences between survey respondents and nonrespondents based on age, sex, race/ethnicity, rural/urban residence, and region; (2) to account for the oversampling of members with a “high risk” event as described above. Our weighting strategy will be similar to that used in our prior surveys of Virginia Medicaid members.<sup>60</sup>

Survey nonresponse may lead to biased estimates to the extent that survey respondents differ from nonrespondents in ways that affect survey estimates. To partially correct for this, survey weights rebalance the sample of respondents to account for differences between respondents and nonrespondents on known characteristics. Because the sample will be obtained from member enrollment data, data for age, sex, race/ethnicity, rural/residence, and region will be available for both survey respondents and nonrespondents. Using these data, an initial weight will be constructed using the propensity cell method.

The weight will be further adjusted to account for the oversampling of members with high-risk events. By comparing the distribution of the sample (corrected for differential nonresponse as described above) with the actual distribution of the target population at the time of sampling, the

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<sup>59</sup> Petersen EE, Davis NL, Goodman D, et al. Vital Signs: Pregnancy-Related Deaths, United States, 2011–2015, and Strategies for Prevention, 13 States, 2013–2017. *MMWR Morb Mortal Wkly Rep* 2019;68:423–429

<sup>60</sup> <https://hbp.vcu.edu/media/hbp/policybriefs/pdfs/ARTSmembersurveyreport.5.5.22.pdf>

inverse of the probability of selection will be computed and applied to the survey weight. This will allow the oversampled group (members with high-risk events) to be weighted less heavily, resulting in survey estimates that reflect their actual representation in the target population. Finally, survey data analyses will be conducted as pooled analyses as well as stratified by whether the member had a “high-risk” event.

Postal addresses are the most consistently reported and accurate contact information in the enrollment data, while telephone numbers are either missing or considered inaccurate for the majority of members. Therefore, the member survey will be conducted by mail. Respondents will be provided with a \$2 incentive in the survey packet that is mailed to them, as well as a stamped envelope with which to return the completed survey.

**Qualitative Interviews.** Qualitative interviews will be conducted in 2025 to better understand the successes and challenges of the early phases of demonstration implementation, education and outreach efforts to members, and the impact on the continuity and “seamlessness” of postpartum services when coverage is extended to 12 months instead of a redetermination and potential termination of benefits at two months. By using in-depth open-ended interviews with major providers and key stakeholders, the qualitative interviews will allow for greater understanding of how the processes of outreach and care delivery through the postpartum period have changed in response to extended continuous coverage.

Qualitative data collection will consist of semi-structured interviews with respondents who work closely with Medicaid-eligible and enrolled pregnant and postpartum individuals. These will include major providers of prenatal and postpartum care to women and families enrolled in Medicaid, including OBGYN/GYN providers, pediatricians, family medicine and primary care. Providers from a diverse range of facilities will be recruited, including the two major academic health centers in the Commonwealth (VCU and UVA health systems), Federally Qualified Health Centers, and private practices. In addition to clinical providers, we will also include representatives of community organizations promoting prenatal and postpartum care for low income women, the managed care organizations that administer services to Medicaid members, and organizations promoting enrollment in Medicaid and other public benefits (for example, the Virginia Health Care Foundation and Virginia Poverty Law Center). We will ensure geographic diversity for qualitative respondents, such as by selecting providers from all Virginia regions, including Northern, Central, Tidewater, Charlottesville, Southwest, and Roanoke Regions. For the over 200 FQHCs in Virginia, we will randomly select 10-12 facilities stratified by region, and excluding clinics that do not provide general maternal and child health services (e.g., dental clinics or those specializing primarily in behavioral health). We will conduct about 20-24 interviews in total.

**Summary.** Using a mixture of both primary and secondary data sources as well as quantitative and qualitative data will illuminate the robust effects of the postpartum coverage extensions as well as the differential effect across individuals. Importantly, this evaluation will explore the equity of postpartum coverage extensions by focusing on how members’ experiences differ across individual and community factors that perpetuate health disparities.

**5. Measures.** The measures for this analysis are summarized in Table 1 and will be used to answer the research questions outlined in Section 2.1 above.

**Table 1: Outcomes, hypotheses, measures, and data sources**

<p><b>Demonstration Goal 1:</b> Promote continuous coverage and continuity of care for women in the postpartum period.  <b>Evaluation Hypothesis 1a:</b> Extending postpartum coverage will increase the months of continuous coverage for postpartum women  <b>Evaluation Hypothesis 1b:</b> Extending postpartum coverage will improve the continuity of care during the postpartum period</p>					
Hyp.	Outcome	Measure steward	Technical operationalization of outcome	Data source	Analytic approach
1a	Percent of individuals continuously enrolled for 12 months postpartum	None	Individuals continuously enrolled for 12 months after their delivery/ Total individuals in the demonstration <sup>1</sup> who gave birth in the corresponding year	Medicaid enrollment data	Interrupted time series
	Median days of continuous enrollment postpartum	None	Enrollment days among all individuals in the demonstration <sup>1</sup> who gave birth in the corresponding year	Medicaid enrollment data	Interrupted time series
	Median days of continuous enrollment in MCO	None	Days enrolled in an MCO among all individuals in the demonstration <sup>1</sup> who gave birth in the corresponding year	Medicaid enrollment data	Interrupted time series
	Time of enrollment in Medicaid to enrollment in MCO	None	Days from enrollment in Medicaid to enrollment in MCO among all individuals in the demonstration <sup>1</sup> who gave birth in the corresponding year	Medicaid enrollment data	Interrupted time series
1b	Barriers to enrollment	None	Questions on the member survey: ‘Did you experience any difficulties enrolling in your Medicaid coverage?’ “Did you experience any difficulties staying enrolled in your Medicaid coverage?” Free response question on the survey about barriers	Survey data	Descriptive
	Number and proportion of beneficiaries reporting a barrier in finding a participating provider	Section 115 Demonstration Postpartum Coverage Demonstration	Did you experience difficulty in finding a doctor to go to in the year after delivery?	Survey data	Descriptive



Use of postpartum outpatient care that follows ACOG	ACOG	Number of deliveries with a visit one month after delivery and a second visit between 1 month and 12 weeks after delivery/ Total individuals in the demonstration <sup>1</sup> who gave birth in the corresponding year	APCD	Controlled interrupted time series
Use of postpartum outpatient care as determined by NCQA HEDIS measure	NQF 1517 (and in Medicaid core set)	The percentage of deliveries in which women had a postpartum visit on or between 7 and 84 days after delivery.	APCD	Controlled interrupted time series
Receipt of respectful care-Delivery	Adapted from Mothers on Respect index (MORi)	During the delivery of my baby, overall I felt (Yes/No): Comfortable asking questions about the labor and delivery care that I received Comfortable declining care that was offered Comfortable accepting the options for care that my provider recommended I was able to choose the care options that I received My providers treated me with respect Satisfied with the labor and delivery care I received	Survey	Descriptive
Respectful Care		While you were in the hospital at the time of your baby's birth, did any of the following things happen? I felt frustrated with the type of care I received during delivery I felt my doctor, nurse or other healthcare workers didn't listen to me I felt that my concerns about my health were not taken seriously I felt my concerns about my baby's health were not taken seriously	Survey	Descriptive

	<p>I felt my opinions about my care, or the care of my baby were not valued</p> <p>I felt like I couldn't ask questions or wasn't given the opportunity to ask questions</p> <p>I felt forced to take treatments or medications that I didn't want to take</p> <p>I left the hospital worried or concerned about my own health</p> <p>I left the hospital worried or concerned about my baby's health</p>		<p>Receipt of respectful care- Postpartum</p>	<p>Adapted from Mothers on Respect index (MORI)</p>	<p>Survey</p>	<p>After the delivery of my baby, overall I felt (Yes/No):</p> <p>Comfortable asking questions about the postpartum care that I received</p> <p>Comfortable declining care that was offered</p> <p>Comfortable accepting the options for care that my provider recommended</p> <p>I was able to choose the care options that I received</p> <p>My providers treated me with respect</p> <p>Satisfied with the labor and delivery care I received</p>	<p>Descriptive</p>	<p>Descriptive</p>	<p>Controlled interrupted time series</p>
	<p>Number of deliveries in which the mother used doula services during labor and in the 12 months after delivery (CPT code 99501)/ Total individuals in the demonstration<sup>1</sup> who gave birth in the corresponding year</p>	<p>None</p>	<p>Use of community doula services during labor and postpartum</p>	<p>None</p>	<p>Medicaid Claims data</p>	<p>Number of deliveries in which lactation consultation occurred in the 12 months after delivery (CPT codes 99341-4, 99347-9, 99201-3, 99212-5)/ Total individuals in the demonstration<sup>1</sup> who gave birth in the corresponding year</p>	<p>Descriptive</p>	<p>APCD</p>	<p>Controlled interrupted time series</p>

Use of any contraception in the postpartum period	Adapted from PRAMS	Use of any kind of birth control postpartum (sterilization; intrauterine device (IUD); contraceptive implant; birth control pills; shots or injections; contraceptive patch; vaginal ring; condoms)/ all deliveries	PRAMS; APCD	Descriptive (PRAMS) Controlled interrupted time series (APCD)
Specific type of contraception in the postpartum period	Adapted from PRAMS	Highly effective: Long-acting reversible contraception (LARC) methods include Intrauterine Device (IUD) or contraceptive implant. Moderately effective methods include birth control pills, shots or injections (e.g., Depo-Provera), contraceptive patch, and vaginal ring.	PRAMS; APCD	Descriptive (PRAMS) Controlled interrupted time series (APCD)
Screening for STI in the postpartum period	Section 1115 Postpartum Demonstration Technical assistance	Percentage of beneficiaries tested for any sexually transmitted diseases (STD)/sexual transmitted infection (STI) (by STD/STI)	APCD	Controlled interrupted time series
Diabetes management	Section 1115 Postpartum Demonstration Technical assistance/HEDIS	PQI 01: Diabetes Short-Term Complications Admission Rate: Age 18 and Older (PQI01-AD)	APCD; VHI	Controlled interrupted time series
Hypertension control	Section 1115 Postpartum Demonstration Technical assistance/HEDIS	Assesses adults 18–85 years of age who had a diagnosis of hypertension and whose blood pressure was adequately controlled (<140/90 mm Hg).	APCD	Controlled interrupted time series
Depression screening	None	Individuals who were screened for depression (CPT 96161/96160, 96127, 96156)	APCD	Controlled interrupted time series

Self-report depression screening	None	Answer to the question “During your postpartum checkup, did a doctor, nurse, or other health care worker do any of the following things?...Ask me if I was feeling down or depressed”	Survey data; PRAMS	Descriptive
Mental health treatment	HEDIS	Percentage of members receiving the following mental health services during the measurement year: inpatient, intensive outpatient or partial hospitalization, outpatient, emergency department, telehealth, any service	APCD; VHI	Controlled interrupted time series
Mental health treatment follow-up	Section 1115 Postpartum Demonstration Technical assistance/ HEDIS	ED visits for individuals with a diagnosis of mental illness and who received a follow-up visit for mental illness within 30 days of the ED visit (31 total days) & within 7 days of the ED visit (8 total days).	APCD	Controlled interrupted time series
Antidepressant Medication	Section 1115 Postpartum Demonstration Technical assistance/ HEDIS	<i>Effective Acute Phase Treatment:</i> Adults who remained on an antidepressant medication for at least 84 days (12 weeks). <i>Effective Continuation Phase Treatment:</i> Adults who remained on an antidepressant medication for at least 180 days (6 months).	APCD	Controlled interrupted time series
Initiation and Engagement of Alcohol and Other Drug Abuse or Dependence Treatment (IET-AD)	Section 1115 Postpartum Demonstration Technical assistance/ HEDIS	<i>Initiation of AOD Treatment:</i> Adolescents and adults who initiated treatment through an inpatient AOD admission, outpatient visit, intensive outpatient encounter or partial hospitalization, telehealth or medication-assisted treatment (MAT) within 14 days of diagnosis. <i>Engagement of AOD Treatment:</i> Adolescents and adults who initiated treatment and had	APCD	Controlled interrupted time series

				two or more additional AOD services or MAT within 34 days of the initiation visit.			
Follow-up for substance abuse treatment	NCQA-FUA-AD		Number of ED visits with a principal diagnosis of SUD/OD that had a follow up visit for treatment with a primary diagnosis of SUD/OD with 7 (and 30) days of the visit/ Number of ED visits with a principal diagnosis of SUD/ OUD	APCD			Controlled interrupted time series
Intimate partner violence	PRAMS		Answer to the question “During your postpartum checkup, did a doctor, nurse, or other health care worker do any of the following things?... Ask me if someone was hurting me emotionally or physically?”	Survey			Descriptive
Intimate partner violence	None		Diagnoses codes for physical, sexual and psychological abuse during pregnancy or the postpartum period (e.g., O9A.3x, O9A.4x and O9A.5x series). These codes are specific to abuse complicating pregnancy, childbirth and the puerperium. And, diagnoses codes for abuse (e.g., T74 and T76) used in conjunction with claims identifying a member as pregnant or in the postpartum period	Medicaid claims data			Descriptive
Annual Dental Visit	NCQA		Percent of members with at least one dental visit during the year postpartum <sup>2</sup>	APCD			Controlled interrupted time series
<p><b>Demonstration Goal 3:</b> Improve health outcomes and reduce health-related social needs for postpartum Medicaid and CHIP enrolled women.</p> <p><b>Hypothesis 3a:</b> After extension of postpartum coverage, women will experience better health outcomes in the postpartum period.</p> <p><b>Hypothesis 3b:</b> After extension of postpartum coverage, individuals will experience fewer health-related social needs in the postpartum period.</p>							
3a	Self-rated health	None	Responses to the question “In general, how would you rate your physical health?” with the possible answers being excellent/very good/good/fair/poor	Survey			Descriptive

Self-rated mental health	None	Responses to the question “In general, how would you rate your mental health, including your mood and ability to think?” with the possible answers being excellent/very good/good/fair/poor”	Survey	Descriptive
Self-reported medical conditions	None	Response to the question with the header “Has a doctor, nurse, or other health professional EVER told you that you had any of the following?” and yes/no/not sure to the following conditions (each a separate question): high blood pressure/hypertension, heart condition, diabetes, cancer, depression/anxiety/other mental health problem, stroke, asthma, COPD, problem using alcohol or drugs, Hep C, HIV/AIDS, other	Survey	Descriptive
Self-rated depression	PRAMS	Since your new baby was born, how often have you felt down, depressed, or hopeless?  Since your new baby was born, how often have you had little interest or little pleasure in doing things you usually enjoyed?	Survey	Descriptive
Tobacco utilization	PRAMS	Have you smoked at least 100 cigarettes in the past 2 years? In the 3 months before you got pregnant, how many cigarettes did you smoke on an average day? In the last 3 months of your pregnancy, how many cigarettes did you smoke on an average day? How many cigarettes do you smoke on an average day now?	Survey	Descriptive

	Any hospitalization in the year after delivery	Steenland et al.	Deliveries with any hospitalizations/all deliveries	VHI	Controlled interrupted time series
	Pregnancy related hospitalization in the year after delivery	Steenland et al.	Deliveries with hospitalizations with a primary diagnosis related to complications of pregnancy, childbirth, and the puerperium/all deliveries	VHI	Controlled interrupted time series
	Inter-birth intervals	Section 1115 Postpartum Demonstration Technical Assistance	Individuals who have a pregnancy less than 12 months after the index pregnancy	APCD	Controlled interrupted time series
	Maternal mortality	CDC	<i>Pregnancy-associated death</i> is defined as the death of a woman while pregnant or within one year of the termination of a pregnancy irrespective of the cause of death or the outcome of the pregnancy	VDH data linked to Medicaid claims	Interrupted time series
3b	Food insecurity	USDA	“In the last 12 months we worried whether our food would run out before we got money to buy more.” With the answers as often true, sometimes true, never true	Survey	Descriptive
	Housing insecurity	North Carolina Medicaid Screening Tool	“Within the past 12 months, have you ever stayed: outside, in a car, in a tent, in an overnight shelter, or temporarily in someone else’s home (i.e. couch-surfing)?”	Survey	Descriptive
	<b>Demonstration Goal 4:</b> Improve health care access and health outcomes for infants of postpartum Medicaid and CHIP enrolled women.				
	<b>Hypothesis 4:</b> After the Demonstration, infants will experience increased utilization of recommended health care services and treatments and better health outcomes				
4	Well-child visits	NCQA, CMS 2022 Maternity Core Set	<i>Well-Child Visits in the First 30 Months of Life:</i> Assesses children who turned 15 months old during the measurement year and had at least six well-child visits with a primary care physician during their first 15 months of life.	Medicaid claims data	Interrupted time series

			Median number of well-child visits in the first 30 months of life			
	AAP Recommended Schedule of Visits		Number of newborns with first visit within 3-5 days after birth		Medicaid claims	Interrupted time series
	Immunizations	None	Rate of appropriate year 1 immunizations (Hep B 2 doses, rotavirus 2 doses, DTAP3 doses, HiB 2 doses, PCV 13 3 doses, polio 2 doses)		Survey	Descriptive
	Mother's perceived health of child	None	Responses to the question "In general, how would you rate your child's physical health?" with the possible answers being excellent/very good/good/fair/poor		Survey	Descriptive
	Preterm births	CDC	Number of preterm (less than 37 weeks gestation) live singleton births divided by total number of singleton live births in the same year		VDH data linked to Medicaid claims	Interrupted time series
	Low-birth weight infants	CDC	Number of singleton (term) live births with birthweight of less than 2,500 grams in a given year, divided by the total number of singleton (term) live births in the same year (very low birth weight and the low birth weight category included)		VDH data linked to Medicaid claims	Interrupted time series
<p><b>Demonstration Goal 5:</b> Advance health equity by reducing racial/ethnic and other disparities in maternal coverage, access, and health outcomes and infant health outcomes among postpartum Medicaid and CHIP enrolled women and their infants.</p> <p><b>Hypothesis 5 (examples):</b> Racial and ethnic, geographic, and other disparities in coverage, utilization of recommended care, and health outcomes will be reduced for mothers and infants in the demonstration.</p>						
5	For measures listed above, stratified by racial and ethnic, geographic and other subpopulations of interest, as feasible	Individual level characteristics <ul style="list-style-type: none"> <li>o Race/ethnicity</li> <li>o Income</li> <li>o Substance Use Diagnosis (SUD)</li> <li>o Chronic condition<sup>3</sup></li> </ul>				Medicaid enrollment data, claims data, survey

	<ul style="list-style-type: none"> <li>○ High-risk pregnancy event</li> <li>○ Individuals re-entering into the community after incarceration</li> </ul> <p>Community level factors (census tracts)</p> <ul style="list-style-type: none"> <li>○ Rurality</li> <li>○ MCO region</li> <li>○ Social Deprivation Index (SDI)</li> <li>○ Segregation Index</li> <li>○ Maternity Care Deserts</li> </ul> <p>Health insurance factors</p> <ul style="list-style-type: none"> <li>○ MCO<sup>4</sup></li> </ul>	data, VDH linked data
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<sup>1</sup> Excludes FAMIS Prenatal Coverage (“unborn child” group) and Emergency-Only births. <sup>2</sup> All pregnant members have access to comprehensive dental services. All Virginia Medicaid members have full dental benefits effective July 1, 2021. <sup>3</sup> Chronic conditions include endocrine disorder, chronic mental illness, chronic substance abuse, cardiovascular, pulmonary disease, neuromuscular disease, hematologic malignancies, neoplasia, gastrointestinal disease, genital disease, collagen-vascular disease, chronic infectious disease, urinary disease (as determined by Virginia Maternal Mortality Review Team report *Chronic Disease in Virginia Pregnancy Associated Deaths, 1999-2012: Need for Coordination of Care* <https://www.vdh.virginia.gov/content/uploads/sites/18/2019/08/MMRT-Chronic-Disease-Report-FINAL-VERSION.pdf>) Notes: information for race will come from enrollment files. Information for SUD will come from claims file. Census tract of an individual will come from enrollment files and be linked to publicly available data at the census tract level. <sup>4</sup> Virginia has six Medicaid managed care organizations at this time. Differences in outcomes will be assessed across MCOs.

## 6. Analytic Methods.

Below we describe the three main analytic approaches—interrupted time series (Approach 2 in CMS Postpartum Coverage Demonstrations: Evaluation Technical Assistance), controlled interrupted time series (Approach 1), and cross-sectional analyses (Approach 4)—that will be used during this postpartum coverage demonstration evaluation.

***Interrupted Time Series Analyses.*** As described above, measures for which we have data only on Virginia Medicaid members (e.g., Goal 1 measures on enrollment and continuity of coverage), including claims-based measures of utilization that are specific to Virginia Medicaid, will rely primarily on summary-level interrupted time series analyses (ITS) with the unit of time measured in quarters to allow for some variation in outcomes prior to the postpartum Demonstration implementation (Q1 2017-Q2 2022, ~22 quarters) and post (Q3 2022-Q2 2029, ~34 quarters). These ITS analyses will be similar to those described as Approach 2 in the CMS Postpartum Coverage Demonstrations: Evaluation Technical Assistance. For these analyses, the unit of analysis is the summary measure (e.g., a ratio or percentage) at a given time period rather than individual’s outcome at the given time period. Assume an outcome of interest  $Y$ , across  $t = 0, \dots, m$  time periods. Let  $Y_t$  represent the outcome at time  $t$ ,  $T$  represents the time elapsed, and  $W_t$  represent an indicator variable specifying whether or not time  $T$  is part of the post-postpartum coverage extension implementation period in Virginia. The interrupted time series model is given by:

$$Y_t = \beta_0 + \beta_1 T + \beta_2 W_t + \beta_3 W_t * T + \varepsilon_t$$

where  $\beta_0$  and  $\beta_1$  represent the pre-postpartum coverage extension intercept and slope respectively, and  $\beta_2$  and  $\beta_3$  represent the change in the intercept and slope respectively during the post-intervention period. The parameter  $\varepsilon_t$  represents random error in the time series at time  $t$ . The estimates  $\beta_2$  and  $\beta_3$  are the parameters of the interest in the model.

As discussed above, Medicaid expansion (beginning in January 2019) followed by the prolonged MOE (beginning in March 2020) and unwinding period (beginning in March 2023) will influence access to and use of services in the year following delivery for most members, both before and after implementation of the demonstration. To account for this, the framework above will be extended to examine changes in four time periods in Virginia (i.e., pre-Medicaid expansion [Q1 2017-Q4 2018]; post-expansion but pre-MOE [Q1 2019-Q1 2020]; post-expansion, during MOE/unwinding and preceding and following initial implementation of the post-partum waiver [Q2 2020-Q4 2023];<sup>61</sup> and post-MOE/unwinding, post-postpartum

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<sup>61</sup> Because the resumption of normal eligibility redeterminations after the end of the MOE is not a fixed point in time, but rather an extended unwinding period, it is challenging to choose the transition point between the third period and the fourth period in the framework for our analysis. Virginia has selected Q4 of 2023 as the end date of the third period because, by December of 2023, Virginia’s unwinding will be mostly complete and the Commonwealth will be close to resuming an annual renewal cycle. According to Virginia’s unwinding plan, most individuals in the Demonstration who gained extended postpartum coverage in the initial quarter of Demonstration implementation (Q3 of 2022), along with all individuals enrolled in Q3 of 2022, are on schedule to have initiated a 1-year renewal by the end of Q4 of 2023. In addition, segmenting the time periods in this way enables Virginia to include analysis of two quarters of data from framework’s fourth time period in our July 1, 2025 interim evaluation report, which covers the period ending June 30, 2024.

Demonstration implementation [Q1 2024-Q2 2028]). Note, since the MOE/unwinding and initial implementation of the demonstration overlap and the MOE continued coverage for essentially all pregnant persons on Medicaid, we have combined the during MOE, pre-waiver implementation period [Q2 2020 – Q2 2022] and the during MOE/unwinding and post-waiver implementation period [Q3 2022 – Q4 2023]. In this case, additional parameters for the change in intercept and slope to account for the additional policy periods would also be estimated giving the model the following form:

$$Y_t = \beta_0 + \beta_1 T + \beta_2 W_{1t} + \beta_3 W_{1t} * T + \beta_4 W_{2t} + \beta_5 W_{2t} * T + \beta_6 W_{3t} + \beta_7 W_{3t} * T + \varepsilon_t$$

Where  $W_{1t}$ ,  $W_{2t}$ ,  $W_{3t}$ , are indicators of the second (post-expansion but pre-MOE), third (during MOE/unwinding and pre- and early post-implementation of the postpartum Demonstration), and fourth (post-MOE/unwinding, post-implementation of the postpartum Demonstration) time periods. The coefficients  $\beta_2$  and  $\beta_3$  represent the changes in the second time period relative to the first (post-expansion but pre-MOE versus pre-expansion),  $\beta_4$  and  $\beta_5$  represent the changes in the third time period relative to the first (during MOE/unwinding and pre- and early post-implementation of postpartum Demonstration versus pre-expansion), and  $\beta_6$  and  $\beta_7$  represent the changes in the fourth time period relative to the first (post-MOE/unwinding, post-postpartum Demonstration versus pre-expansion).

**Controlled Interrupted Time Series Analyses.** As described above, measures for which we have data only on Virginia Medicaid members, including claims-based measures of utilization that are specific to Virginia Medicaid, will rely primarily on summary-level controlled interrupted time series analyses (CITS)<sup>62</sup> with the unit of time measured in quarters to allow for some variation in outcomes prior to the postpartum Demonstration implementation (Q1 2017-Q2 2022, ~22 quarters) and post (Q3 2022-Q2 2028, ~30 quarters). These CITS analyses will be similar to those described as Approach 1 in the CMS Postpartum Coverage Demonstrations: Evaluation Technical Assistance. For these analyses, the unit of analysis is the summary measure (e.g., a ratio or percentage) at a given time period rather than individual’s outcome at the given time period. Assume an outcome of interest  $Y$ , across  $t = 0 \dots, m$  time periods. Let  $Y_t$  represent the outcome at time  $t$ ,  $T$  represents the time elapsed since the start of the evaluation period, and  $W_t$  represent an indicator variable specifying whether or not time  $T$  is part of the post-postpartum coverage extension implementation period in Virginia. Let  $G$  be an indicator for whether a person is covered by Medicaid ( $G=1$ ) or private insurance ( $G=0$ ). Note, for hospital outcomes using the VHI Hospital Discharge data set, separate analyses will use the self-pay/uninsured as a comparator. The controlled interrupted time series model is given by:

$$Y_t = \beta_0 + \beta_1 T + \beta_2 W_t + \beta_3 W_t * T + \beta_4 G + \beta_5 G * T + \beta_6 G * W_t + \beta_7 G * W_t * T + \varepsilon_t$$

where  $\beta_0$  and  $\beta_1$  represent the pre-postpartum coverage extension intercept and slope respectively, and  $\beta_2$  and  $\beta_3$  represent the change in the intercept and slope respectively during the post-intervention period.  $\beta_4$  represents the difference in intercept between the intervention and control group at  $T=0$ ,  $\beta_5$  represents the slope difference between the intervention and control group in the pre-intervention period,  $\beta_6$  represents the difference between the change in level in

<sup>62</sup> <https://academic.oup.com/ije/article/47/6/2082/5049576>

the control and intervention group associated with the intervention,  $\beta_7$  represents the difference between the change in slope in the control and intervention group associated with the intervention. The parameter  $\varepsilon_t$  represents random error in the time series at time  $t$ . The estimates  $\beta_6$  and  $\beta_7$  are the parameters of the interest in the model.

As described earlier for the ITS model, the CITS model framework above will be extended to examine changes in four time periods in Virginia (i.e., pre-Medicaid expansion [Q1 2017-Q4 2018]; post-expansion but pre-MOE [Q1 2019-Q1 2020]; post-expansion, during MOE/unwinding and preceding and following initial implementation of the postpartum waiver [Q2 2020-Q4 2023]; and post-MOE/unwinding, post-postpartum Demonstration implementation [Q1 2024-Q2 2028]). Note, since the MOE and initial implementation of the demonstration waiver overlap and the MOE continued coverage for essentially all pregnant persons on Medicaid, we have combined the during MOE, pre-waiver implementation period [Q2 2020 – Q2 2022] and the during MOE/unwinding and post-waiver implementation period [Q3 2022 – Q4 2023]. In this case, additional parameters for the change in intercept and slope to account for the additional policy periods would also be estimated giving the model the following generalized form:

$$Y_t = \beta_0 + \beta_1 T + \beta_w W_w + \beta_h W_w * T + \beta_g G_g + \beta_j G_g * W_w + \beta_k G_g * W_w * T + \varepsilon_t$$

Where  $W_w = W_{2t}, W_{3t}, W_{4t}$ , which are indicators of the second (post-expansion but pre-MOE), third (during MOE/unwinding and pre- and early post-postpartum Demonstration), and fourth (post-MOE/unwinding, post-postpartum Demonstration implementation) time periods.  $G_w = G_{2t}, G_{3t}, G_{4t}$  are the period specific indicators for treatment and control groups. The coefficients  $\beta_j$  and  $\beta_k$  represent the difference in changes in the second, third, or fourth time periods relative to the first between the treatment and control groups. To balance intervention and control groups on the probability of selection into treatment based on observables, propensity score weights will be included in CITS analyses.<sup>63</sup> To account for autocorrelation, Newey-West standard errors will be used in all CITS models.<sup>64</sup>

***Cross-sectional analyses of postpartum member survey data and PRAMS data.*** An example of the cross-sectional analyses the evaluators will conduct from postpartum member survey data follows. Evaluators will assess whether members receiving extended postpartum coverage report receiving care coordination, specifically help with substance use, other health needs, or health-related social needs. As there is no pre-intervention survey data, descriptive (non-experimental) analyses will be required. Examples of cross-sectional analyses that will be leveraged from these data include linear probability models/logistic regressions estimating the adjusted probability/likelihood of whether or not members enrolled in extended postpartum coverage also report receiving assistance with substance use, other health needs, or health-related social needs (outcomes;  $Y_{it}$ ).

$$Y_{it} = \beta_1 X_{it} + YEAR_t + \varepsilon_{it}$$

<sup>63</sup> <https://academic.oup.com/ije/article/47/6/2082/5049576>

<sup>64</sup> Newey, W. K., & West, K. D. (1986). A simple, positive semi-definite, heteroskedasticity and autocorrelation consistent covariance matrix.

These analyses will be adjusted for covariates ( $X_{it}$ ) including member characteristics (sex, race/ethnicity, eligibility group, age), education, psychological distress, polysubstance use, employment, housing and food insecurity, and survey time period ( $YEAR_t$ ), if the survey is repeated in subsequent years.

For PRAMS analyses, we will use annual PRAMS survey data from each state for each year during the period 2017-2028 to compare performance on demonstration outcomes available in PRAMS (see Table 1) to regional and national benchmarks before and after implementation of the demonstration waiver.

$$Y_{it} = \beta_1 X_{it} + YEAR_t + STATE_s + \varepsilon_{it}$$

These analyses will be adjusted for covariates ( $X_{it}$ ) including PRAMS survey participant characteristics (sex, race/ethnicity, age), education, etc., survey year ( $YEAR_t$ ), and state fixed effects ( $STATE_s$ ). For benchmark analyses, we will predict and describe annual outcomes for Virginia, all states (national average), and for states near Virginia (e.g., KY, MD, NC, TN, WV).

***Analyses of equity in the association of Virginia’s postpartum coverage extension with intermediate and long-term outcomes.*** To test for disparities in the parameters described above across groups of Medicaid members, the models described above will be sequentially stratified by race/ethnicity, as well as built environment and health system domains of influence, as there is evidence that sociocultural and place-based factors have distinct and compounding effects on individuals (e.g. NH White members in high SDI census tracts, NH White members in low SDI census tracts, NH Black/African American members in high SDI census tracts, NH Black/African American members in low SDI census tracts).<sup>65</sup> We will compare the adjusted associations between postpartum coverage extension and the outcomes described in Table 1 between, for example, NH Black/African American members in high SDI census tracts and NH Black/African American members in low SDI census tracts as well as the same comparison for NH White members. We will then compare the adjusted associations between NH White members and NH Black/African American members in low SDI census tracts as well as NH White members and NH Black/African American members in high SDI census tracts. Differences in postpartum coverage extension coefficients across stratified models will be tested using parameter stability tests in Stata (e.g., `suest` command). We will repeat the process and stratify models by race/ethnicity plus residential segregation, urbanicity, and maternity care deserts. Importantly, stratification by domains of influence allows these constructs to modify not only the postpartum coverage association with outcomes but with all other covariates as well.<sup>66</sup>

### **Qualitative interview analysis**

An interview guide with open-ended questions will be developed that focuses on the major areas of (1) provider knowledge about Medicaid 12-months postpartum continuous coverage, (2)

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<sup>65</sup> Probst JC, Moore CG, Glover SH, Samuels ME. Person and place: the compounding effects of race/ethnicity and rurality on health. *Am J Public Health*. 2004;94(10):1695-1703.

<sup>66</sup> Yue D, Pourat N, Chen X, et al. Enabling Services Improve Access To Care, Preventive Services, And Satisfaction Among Health Center Patients. *Health Aff (Millwood)*. 2019;38(9):1468-1474.

patient education and knowledge of Medicaid coverage and benefits before and after delivery; (3) provider input on opportunities the 12 months postpartum extension presents for improvements in care, process, and outcomes, and how DMAS and the MCOs can support such efforts; (4) impact on care coordination and continuity of care, including specific benefits such as contraception, behavioral health, addiction treatment services, and services to address health-related social needs; and (5) any specific barriers providers or patients face in using Medicaid benefits in the postpartum period. Interviews will largely be conducted by Zoom and limited to 1 hour. Interviews will be recorded (with the permission of respondents). Notes and transcripts from the interviews will be coded based on fields that correspond to major topics of interest, respondent type, and region, and entered into either a spreadsheet or database used for qualitative analysis, such as Atlas.ti. The analysis will identify common themes based on similar responses to questions across different respondent types and regions, as well as systematic differences in responses based on respondent type and region.

## D. Methodological Limitations

There are several critical methodological limitations to consider. First, it will be difficult to disentangle the effects of Medicaid expansion and the Maintenance of Effort versus the Demonstration, particularly in the early years of the Demonstration. Starting March 2020, the MOE ensured continuous coverage for Medicaid individuals without regard for changes in income, including individuals who enrolled in Medicaid during pregnancy or postpartum, in effect mirroring, for a longer period of time, the policy change that went into effect with the postpartum coverage extension. (Exceptions to the MOE are FAMIS MOMS and CHIPRA 214 lawfully residing populations.) The MOE ended and redeterminations resumed on March 1, 2023. Virginia's "unwinding" process rolls out over the course of the 2023-2024 demonstration year.

In addition, it is difficult to find an appropriate comparison group within and outside of Virginia. The launch of Virginia's 12 months postpartum coverage demonstration is statewide rather than staged by region, limiting the ability to compare outcomes by geographic region. Other timing and contextual factors limit within-state comparisons among Medicaid and CHIP populations. This a particular challenge with the methodology that we have described so far. However, we offer potential solutions below that have been used in prior literature focused on Medicaid expansion and postpartum outcomes.<sup>67,68,69</sup> In particular, the evaluation design includes two non-Medicaid within-state quantitative data sets (APCD, VHI Hospital Discharges) that will allow for comparisons of utilization during the 12-month postpartum period for ALL people giving birth on Medicaid and those with commercial insurance. Given the limitations in DMAS claims data (i.e., we do not observe utilization for the intervention group prior to waiver implementation

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<sup>67</sup> Johnston EM, McMorro S, Alvarez Caraveo C, Dubay L. Post-ACA, More Than One-Third Of Women With Prenatal Medicaid Remained Uninsured Before Or After Pregnancy. *Health Aff (Millwood)*. 2021;40(4):571-578. doi:10.1377/hlthaff.2020.01678

<sup>68</sup> Steenland MW, Wilson IB, Matteson KA, Trivedi AN. Association of Medicaid Expansion in Arkansas With Postpartum Coverage, Outpatient Care, and Racial Disparities. *JAMA Health Forum*. 2021;2(12):e214167. Published 2021 Dec 17. doi:10.1001/jamahealthforum.2021.4167

<sup>69</sup> Gordon SH, Sommers BD, Wilson IB, Trivedi AN. Effects Of Medicaid Expansion On Postpartum Coverage And Outpatient Utilization. *Health Aff (Millwood)*. 2020;39(1):77-84. doi:10.1377/hlthaff.2019.00547

for most of the postpartum period) and limitations in these additional quantitative data sets (i.e., we do not observe the type of Medicaid benefit individuals are covered under, only that they have Medicaid), the intervention group in the statistical models includes all people giving birth on Medicaid, not only those affected by the postpartum coverage waiver. This is an important point as any policy effect detected will be conservative (biased towards zero).

Finally, Virginia is among the first states to begin implementing extended postpartum coverage through this mechanism and among the first to evaluate it. Therefore, we cannot compare our outcomes against states that have conducted similar demonstrations. We do, however, include in this evaluation within-state comparators (e.g., uninsured, commercially insured) using APCD and VHI data and compare pre- and post-demonstration implementation performance in Virginia to regional and national averages using PRAMS.

## E. Attachments

### 1. Timeline and Major Milestones.

Milestone	Date
DMAS delivers Draft Interim Evaluation Report for the period July 2019-June 2022. <sup>1</sup>	No later than June 30, 2023
DMAS delivers Final Interim Evaluation Report for the period July 2019-June 2022; DMAS posts final document and any supporting documents on DMAS website. <sup>1</sup>	No later than 60 days after receiving CMS comments on the Draft Interim Evaluation Report
DMAS delivers Draft Interim Evaluation Report for the period July 2019-June 2024. <sup>2</sup>	No later than June 30, 2025
DMAS delivers Final Interim Evaluation Report for the period July 2019-June 2024; DMAS posts final document and any supporting documents on DMAS website. <sup>2</sup>	No later than 60 days after receiving CMS comments on the Draft Interim Evaluation Report
DMAS delivers Draft Interim Evaluation Report for the period July 2019-June 2027. <sup>2</sup> (Draft Interim Evaluation Report will accompany Application for Demonstration Extension, if applicable, and will be posted to the Commonwealth’s public website, along with the application, for public comment.)	No later than June 30, 2028
DMAS delivers Final Interim Evaluation Report for the period July 2019-June 2027; DMAS posts final document and any supporting documents on DMAS website. <sup>2</sup>	No later than 60 days after receiving CMS comments on the Draft Interim Evaluation Report
DMAS delivers Draft Summative Evaluation Report for the demonstration period (July 2019-June 2029). <sup>2</sup>	No later than December 30, 2030
DMAS delivers Final Summative Evaluation Report for the demonstration period (July 2019-June 2029). <sup>2</sup>	No later than 60 days after receiving CMS comments on the Draft Summative Evaluation Report
DMAS posts Final Summative Evaluation Report to the Commonwealth’s website. <sup>2</sup>	Within 30 calendar days of approval by CMS.

<sup>1</sup> Note this timeline reflects that of STCs. However, data specific to the postpartum coverage demonstration component will not be available for the first interim report due June 30, 2023.

<sup>2</sup> Data specific to the postpartum coverage demonstration component will be available for the second interim report and all subsequent reports.

## **2. Evaluation Budget.**

The total estimated cost of the evaluation of the postpartum coverage waiver for FY 2023 through 2030 (July 2022 through June 2030) is \$1,523,679 (see Table A1). Direct costs include \$1,385,163 in personnel costs, and \$210,180 in nonpersonnel costs. Indirect costs are computed as 10% of the direct costs, for a total of \$138,516. Details of the personnel and nonpersonnel costs are shown in the table below. These include the costs for overseeing and conducting the analysis of Medicaid administrative data, other data sources identified in the evaluation plan, member survey design and data collection, and preparation of reports. Nonpersonnel costs reflect additional costs for conducting member surveys by mail in FY 2025, 2027, and 2029, including printing and mailing of survey questionnaires, postage, letterhead, ink, and \$5 respondent incentives.

Table A2 shows the estimated costs of the evaluation by year. Costs are inflated by 2% per year to account for increases in both personnel and nonpersonnel costs (actual costs may differ if inflation is higher or lower than 2% annually). Both personnel and nonpersonnel costs are higher in FY 2025, 2027, and 2029 than in other years due to the inclusion of member surveys in these years.

**Table A1. Budget for Postpartum Coverage Waiver Evaluation Plan, FY2023 – FY2030**

<b>Total FY 23-FY 30</b>				
<b>Researcher</b>	<b>Role</b>	<b>Responsibilities</b>	<b>% Effort</b>	<b>Cost</b>
Andrew Barnes	Principal Investigator	Overall responsibility for analysis, survey design, and report preparation	15%	235,674
Peter Cunningham	Co-Principal Investigator	Responsibility for overseeing analysis of claims data, assists with survey design and report preparation	7%	152,806
TBN	Graduate Research Assistant	Directs analysis, oversees questionnaire design, preparation of tables for reports, and assistance with report production.	75% survey years; 50% non-survey years	158,980
TBN	2 Graduate Research Assistants	Assists qualitative interviews, quantitative analysis, preparation of tables for reports, and assistance with report production.	25%	128,742
Wilson Lam	Data Analyst	Statistical programming related to the analysis of Medicaid administrative databases.	25%	141,936
Maggie Grant	Survey Manager	Oversees survey design, data collection and data entry	45%	64,768
TBN	Hourly Research Assistant	Assist in qualitative and survey data collection and data entry	50%	47,140
Fringe benefits		40.30% for FT faculty, staff, and postdocs. 8.30% for Hourly staff		244,937
<b>Non-Personnel Costs</b>				
<u>Secondary data</u>				
Virginia All Payers Claims Database	\$2,000 per year for each year 2017-2028			24,000
Virginia Health Information Hospital Discharge Data	\$6,360 per year for each year 2023-2028			38,160
<u>Member surveys in FY 25, 27, and 29</u>				
Survey supplies and incentive payments	Printing, mailing envelopes, letterhead, ink, \$5 respondent incentives			73,551
Postage	Postage estimates based on 9-page survey			74,469

<b>Total Direct Costs</b>	1,385,163
<b>F&amp;A 10%</b>	138,516
<b>Total Costs</b>	1,523,163

**Table A2. Budget for Postpartum Coverage Demonstration Evaluation Plan, by Fiscal Year**

	Total	FY2023	FY2024	FY2025 <sup>1,2</sup>	FY2026	FY2027 <sup>1</sup>	FY2028	FY2029 <sup>1</sup>	FY2030
<b>Personnel costs</b>	1,174,514	117,340	161,641	158,512	168,144	126,995	174,912	132,212	134,758
<b>Nonpersonnel costs</b>	210,180	6,000	8,360	55,022	8,360	56,888	8,360	\$58,830	8,360
<b>Total Direct Costs</b>	1,384,694	123,340	170,001	213,534	176,504	183,883	183,272	191,042	143,118
<b>Indirect Costs (10%)</b>	138,469	12,334	17,000	21,353	17,650	18,388	18,327	19,104	14,312
<b>Total costs</b>	1,523,163	135,674	187,001	234,887	194,154	202,271	201,599	210,146	157,430

<sup>1</sup> Member surveys will be conducted, <sup>2</sup> Qualitative interviews will be conducted

**3. Independent Evaluator.** This Demonstration will be evaluated by an independent party. DMAS has contracted with a separate entity, the Department of Health Behavior and Policy (HBP) at Virginia Commonwealth University School of Medicine, to draft the evaluation plan, conduct analyses, and provide written evaluation reports that DMAS will use as the basis for the evaluation-related portions of the agency’s reports to CMS.

VCU’s HBP department is comprised of 16 faculty from multiple disciplines including health economics, social epidemiology, sociology, and health psychology. HBP addresses the behavioral, social, organizational, and policy factors affecting the health of individuals and populations using rigorous quantitative and qualitative methods. The department includes two doctoral programs – one in Health Care Policy and Research, and a second Ph.D. program in Social and Behavioral Sciences.

Along with the Department of Biostatistics and Division of Epidemiology in the Department of Family Medicine, HBP is one of the core public health departments within the VCU School of Medicine. HBP faculty actively collaborate with faculty in other departments and centers within both the School of Medicine and other VCU departments, including the Department of Health Administration, the Department of Family Medicine and Population Health, the Massey Cancer Center, the Wright Center for Clinical and Translational Research, the Institute for Drug and Alcohol Studies, and the Center for the Study of Tobacco Products.

Drs. Peter Cunningham and Andrew Barnes (Principal Investigator and Co-Principal Investigators for this project, respectively) have been leading evaluations for DMAS since 2017, which is part of a broader collaboration they have established with DMAS. In addition to the evaluation of DMAS’s postpartum coverage extension Demonstration, Drs. Barnes and Cunningham are the university partners for Virginia for the Medicaid Outcomes Distributed Research Network. They have also collaborated with DMAS on a needs assessment for Virginia’s SUPPORT Act grant, and are leading three other state-funded evaluations of Medicaid programs. Through their work with DMAS, they have access to Medicaid enrollment and claims

data that are necessary to complete the evaluation work. As part of the VCU School of Medicine, they are able to draw on the clinical and research expertise of other faculty and researchers within VCU related to substance use disorders. Dr. Cunningham has over 30 years of experience in health services and health policy research, including 19 years at Mathematica Policy Research, Inc., 7 years at the Agency for Healthcare Research and Quality, and 7 years at VCU. Dr. Barnes is a health policy researcher and health economist with 10 years of experience on faculty at VCU. He also has served in advisory roles with AcademyHealth's State Research and Policy Interest Group and AcademyHealth's State-University Partnership Learning Network.

**Conflict of Interest Statement.** HBP agrees that no agency, employment, joint venture, or partnership has been or will be created between DMAS and HBP. HBP further agrees that as an independent entity, it assumes all responsibility for any federal, state, municipal or other tax liabilities along with workers compensation, unemployment compensation, and insurance premiums that may accrue as a result of funds received pursuant to this work. HBP agrees that it is an independent entity for all purposes including, but not limited to, the application of the Fair Labor Standards Act, the Social Security Act, the Federal Unemployment Tax Act, the Federal Insurance Contribution Act, provisions of the Internal Revenue Code, Virginia tax law, Workers Compensation law, and Unemployment Insurance law.

HBP will maintain communication with DMAS staff throughout the evaluation period to better understand policy and program implementation, and to obtain DMAS' assistance with access to administrative data. HBP will make independent decisions about the evaluation itself, including methodology, analytical strategy, analysis of evaluation data, and presentation of results.



# VCU

May 16, 2022

## Conflict of Interest Statement

The Department of Health Behavior and Policy (HBP) at Virginia Commonwealth University agrees that no agency, employment, joint venture, or partnership has been or will be created between the Virginia Department of Medical Assistance Services (DMAS) and HBP. HBP further agrees that as an independent entity, it assumes all responsibility for any federal, state, municipal or other tax liabilities along with workers compensation, unemployment compensation, and insurance premiums that may accrue as a result of funds received pursuant to this work. HBP agrees that it is an independent entity for all purposes including, but not limited to, the application of the Fair Labor Standards Act, the Social Security Act, the Federal Unemployment Tax Act, the Federal Insurance Contribution Act, provisions of the Internal Revenue Code, Virginia tax law, Workers Compensation law, and Unemployment Insurance law.

HBP will maintain communication with DMAS staff throughout the evaluation period to better understand policy and program implementation, and to obtain DMAS' assistance with access to administrative data. HBP will make independent decisions about the evaluation itself, including methodology, analytical strategy, analysis of evaluation data, and presentation of results.

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