

DEPARTMENT OF HEALTH & HUMAN SERVICES  
Centers for Medicare & Medicaid Services  
7500 Security Boulevard, Mail Stop S2-25-26  
Baltimore, Maryland 21244-1850



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## State Demonstrations Group

November 3, 2021

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

Dear Ms. Kimsey:

The Centers for Medicare & Medicaid Services (CMS) completed its review of Virginia's Evaluation Design, which is required by the Special Terms and Conditions (STCs) of the Commonwealth section 1115 demonstration "FAMIS MOMS and FAMIS Select" (Project No: 21-W-00058/3), effective through June 30, 2029. CMS has determined that the Evaluation Design, which was first submitted on June 18, 2020 and subsequently revised with a final version submitted on October 4, 2021, meets the requirements set forth in the STCs, and therefore, approves the Commonwealth's FAMIS MOMS and FAMIS Select Evaluation Design.

In accordance with 42 C.F.R. §431.424, the approved Evaluation Design may now be posted to the Commonwealth's website within thirty days. CMS will also post the approved Evaluation Design on Medicaid.gov.

CMS appreciates the Commonwealth's commitment to a robust evaluation of the FAMIS MOMS and FAMIS Select section 1115 demonstration. Please note that three interim evaluation reports, in alignment with the approved Evaluation Design, are due to CMS per the expectations and timeline outlined in this approved Evaluation Design. Additionally, if the Commonwealth is seeking to extend the demonstration, the draft of the third Interim Evaluation Report (for the demonstration period covering June 2019 – June 2027) is due at the time of the extension application. Likewise, a Summative Evaluation Report, consistent with this approved Evaluation Design, is due to CMS within 18 months of the end of the demonstration period. In accordance with 42 C.F.R. §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,

*Danielle Daly*  
Director  
Division of Demonstration Monitoring and Evaluation  
State Demonstration Group

**Danielle**  
**Daly -S** Digitally signed by  
Danielle Daly -S  
Date: 2021.11.03  
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cc: Margaret Kosherzenko, State Monitoring Lead, CMS Medicaid and CHIP Operations Group

DEMONSTRATION EVALUATION PLAN  
Virginia DMAS FAMIS MOMS and FAMIS Select CHIP Section 1115 Demonstration  
Demonstration Period: July 1, 2019 - June 30, 2029

### **General Background**

Consisting of two components, Virginia’s Title XXI Section 1115 Demonstration expands Title XXI coverage to uninsured pregnant women with family income up to 200% FPL who are not eligible for Medicaid, through a program known as FAMIS MOMS, and uses Title XXI funds to support a health insurance premium assistance program known as FAMIS Select. Children must first be found eligible and enroll in FAMIS before electing to receive coverage through FAMIS Select.

#### *FAMIS MOMS Background*

The intent of the FAMIS MOMS program expansion is to provide prenatal care to uninsured women living within the Title XXI income range and likely to give birth to FAMIS-eligible children. Virginia implemented the FAMIS MOMS program incrementally beginning August 1, 2005; stage one expanded eligibility to pregnant women with family income above the Medicaid limit of 133% FPL but less than or equal to 150% FPL, while the second stage, implemented September 1, 2006, covered pregnant women with incomes through 166% FPL. Subsequent stages covered pregnant women at 185% FPL (July 1, 2007) and currently 200% FPL (July 1, 2009).

Effective July 1, 2010, eligibility requirements were amended to allow enrollment of pregnant women with income below 133% FPL who do not meet eligibility requirements for full Medicaid coverage but do meet the FAMIS MOMS requirements. In addition, infants born to FAMIS children and FAMIS MOMS are deemed eligible for Medicaid or CHIP coverage, as appropriate, on the date of birth and remain eligible until attaining the age of one, unless, after a reasonable opportunity period, the state fails to obtain satisfactory documentation of citizenship and identity.

In 2013, the Virginia General Assembly adopted an amendment to the biennial budget that directed DMAS to phase out and eliminate the FAMIS MOMS program. Following approval by the Centers for Medicare and Medicaid Services (CMS) of an amendment to the Demonstration, administrative efforts were taken to implement this phase-out by ceasing new enrollment (effective January 1, 2014), while maintaining current cases throughout their benefit period (two months postpartum). The 2014 General Assembly restored funding to support enrollment in FAMIS MOMS. The amended state budget for state fiscal year 2015 was passed and signed in late June 2014. An amendment to the Demonstration, reinstating enrollment at an upper income level of 200% FPL (plus a 5% income disregard), was subsequently submitted to CMS and

approved effective November 1, 2014. The Department began enrolling women in FAMIS MOMS again starting December 1, 2014.

DMAS did not accept new applications for FAMIS MOMS between December 31, 2013 and November 30, 2014; for women already enrolled, FAMIS MOMS coverage continued throughout their pregnancy and postpartum periods. FAMIS MOMS enrollment dropped from close to 1,600 on July 1, 2013, to 1,363 on January 1, 2014, and to single digits at its lowest point in late 2014. After the December 1, 2014 reinstatement of FAMIS MOMS, enrollment began to climb again, reached 1,156 by August 2015, and currently remains stable. Monthly enrollment as of April 2020 was 1,642.

In April 2015, CMS approved an amendment to the Demonstration adding coverage for dental services to the FAMIS MOMS program, consistent with the addition of these benefits for pregnant women under Medicaid. This amendment also allowed eligibility to be expanded to include pregnant women with access to subsidized health insurance through state employee benefits.

### *FAMIS Select Background*

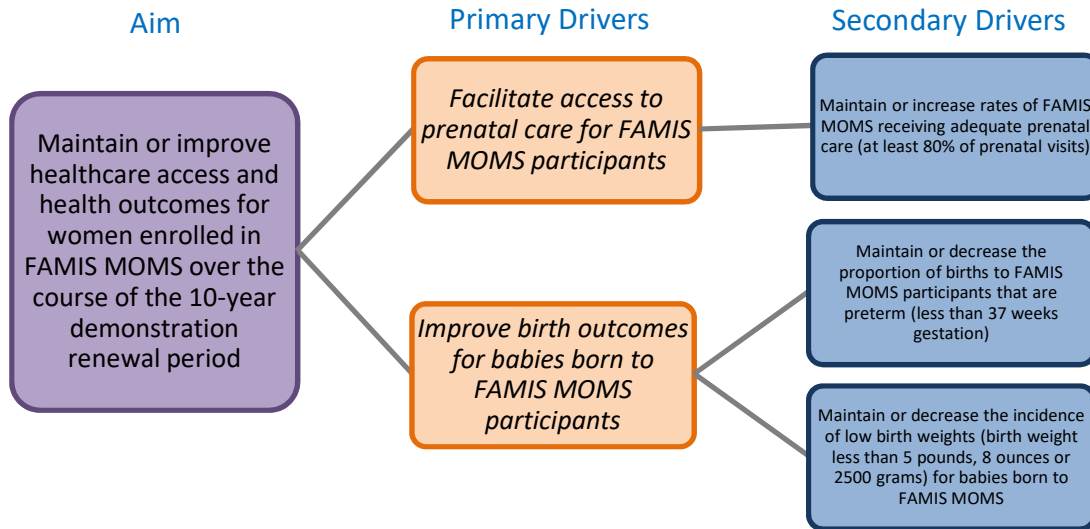
The FAMIS Select program was implemented in Virginia on August 1, 2005, replacing the former employer-sponsored health insurance (ESHI) program. FAMIS Select provides an alternative for families with children enrolled in FAMIS who have access to private or employer-sponsored coverage. All children are first enrolled in FAMIS. In some cases, the FAMIS Select payment may make health coverage affordable for the entire family; in other cases, it may allow a child to continue to see a doctor or dentist that may not accept FAMIS.

FAMIS Select has enrolled more families and proven to be easier to administer than the former ESHI program. In August 2005, 66 children transferred from the ESHI to FAMIS Select. Enrollment in FAMIS Select has been marked by periods of growth and decline. At the end of the first year of operation, there were 266 children enrolled, more than double the highest ever enrollment in ESHI; enrollment peaked in year four at 480 children. Average monthly enrollment for SFY2018 was 102. (Enrollment reflects the number of FAMIS-eligible children directly enrolled in FAMIS Select. Totals do not include incidentally enrolled family members such as adults and non-FAMIS-eligible children in the family.) The decline in participation is likely attributable to changes in employer-sponsored health insurance offerings; in Virginia and nationwide, employer-sponsored health insurance is becoming less widely available and more expensive, with higher employee cost-sharing, making family coverage a less affordable option for lower-income workers.

**Driver Diagrams**

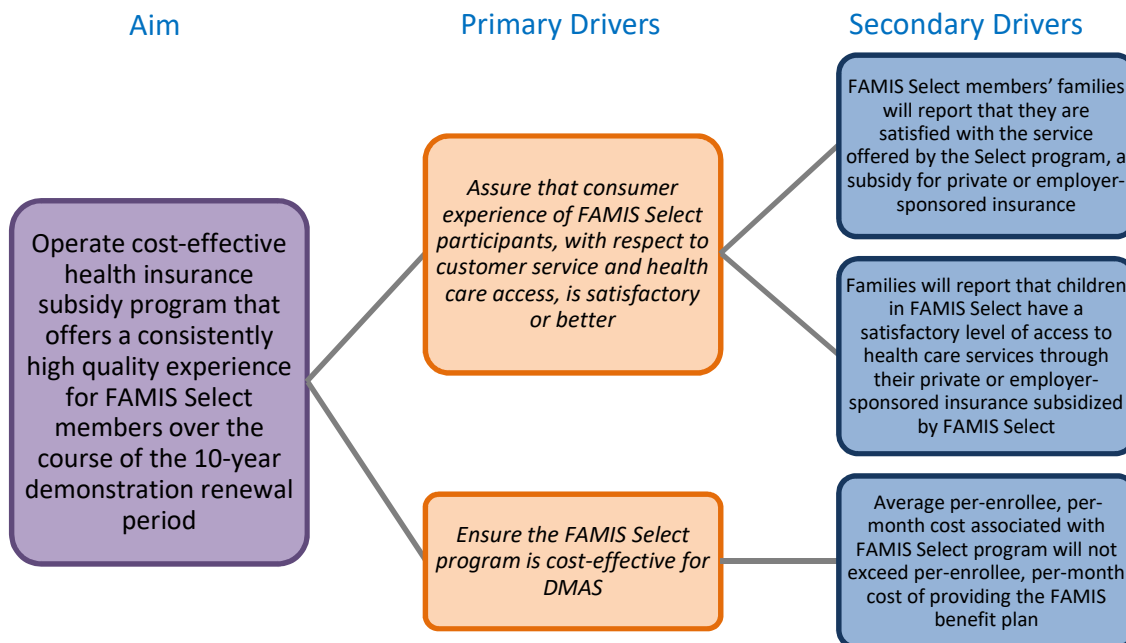
**FAMIS MOMS:** The demonstration will maintain or improve healthcare access and health outcomes for women enrolled in FAMIS MOMS over the course of the 10-year demonstration renewal period by:

- Facilitating access to prenatal care for FAMIS MOMS participants
- Improving selected birth outcomes of FAMIS MOMS participants and their newborns



**FAMIS Select:** The demonstration will operate a cost-effective health insurance subsidy program that offers a consistently high quality experience for FAMIS Select members over the course of the 10-year demonstration renewal period by:

- Assuring that consumer experience of FAMIS Select participants, with respect to customer service and health care access, is satisfactory or better
- Ensuring the FAMIS Select program is cost-effective for DMAS



## **Demonstration Populations**

The FAMIS MOMS and FAMIS Select demonstration populations include:

### A. Demonstration Population I – FAMIS MOMS

FAMIS MOMS provides coverage to uninsured pregnant women in families with income up to and including 200 percent (plus a five percent income disregard) of the federal poverty level (FPL) who are not otherwise eligible for Medicaid. FAMIS MOMS also provides coverage to lawfully residing pregnant women and pregnant women 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)), thereby aligning the Commonwealth's coverage of pregnant women with the expansion of CHIP coverage to children of state employees. FAMIS MOMS coverage is the same as that provided to pregnant women 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. FAMIS MOMS beneficiaries receive health care services primarily through one of the managed care organizations (MCOs) contracted by the Commonwealth to provide Medicaid and FAMIS (CHIP state plan) benefits.

### B. Demonstration Population II – FAMIS Select

FAMIS Select provides premium assistance for private or employer-sponsored insurance to uninsured children, from birth through age 18, in families with income up to and including 200 percent (plus a five percent income disregard) of the FPL, who are eligible for direct CHIP coverage. These individuals are provided the option to receive premium assistance for private or 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 instead at any time. FAMIS Select beneficiaries receive health care services through the private or employer-sponsored plan of choice.

## **Demonstration Objectives to be Evaluated**

During the renewal period, the objectives of the demonstration to be evaluated are as follows:

### *FAMIS MOMS (Demonstration Population I):*

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

### *FAMIS Select (Demonstration Population II):*

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

**Table 1. FAMIS MOMS and FAMIS Select Demonstration Evaluation Design**

<i>FAMIS MOMS</i>					
<b><i>Hypothesis I: The proportion of pregnant women enrolled in FAMIS MOMS who are receiving adequate or better prenatal care will be maintained or will increase from SFY 2019 to SFY 2029.</i></b>					
Research Question:	Outcome Measures:	Population:	Data Sources and Analytic Methods:	Benchmarks:	Subgroups:
Is enrollment in FAMIS MOMS enabling pregnant women to obtain better access to adequate prenatal care?	Births with Early and Adequate Prenatal Care— Percentage of births with an Adequacy of Prenatal Care Utilization (APNCU) Index score greater than or equal to 80 percent	Live, singleton births to FAMIS MOMS during a given calendar year	Deterministic and probabilistic data matching are used to create dataset of linked fee-for-service claims, managed care encounters, enrollment records, and birth registry records. Chi-square tests used to assess statistical significance of year-over-year changes.	Healthy People 2030 goal <i>Increase the proportion of pregnant women who receive early and adequate prenatal care – MICH-08</i>	-Age -Race/ -Ethnicity -Region
<b><i>Hypothesis II: The proportion of FAMIS MOMS enrolled in the FAMIS MOMS program with preterm births (less than 37 weeks gestation) will remain the same or will decrease from SFY 2019 to SFY 2029.</i></b>					
Research Question:	Outcome Measures:	Population:	Data Sources and Analytic Methods:	Benchmarks:	Subgroups:
Is enrollment in FAMIS MOMS improving birth outcomes of FAMIS MOMS participants?	Preterm Births (< 37 Weeks Gestation)— Percentage of births that occurred before 37 completed weeks of gestation	Live, singleton births to FAMIS MOMS during a given calendar year	Deterministic and probabilistic data matching are used to create dataset of linked fee-for-service claims, managed care encounters, enrollment records, and birth registry records. Chi-square tests used to assess statistical significance of year-over-year changes.	Healthy People 2030 goal <i>Reduce preterm births – MICH-07</i>	-Age -Race/ -Ethnicity -Region

***Hypothesis III: The rate of low birth weight births (birth weight less than 5 pounds, 8 ounces [2,500 grams]) among FAMIS MOMS will decline or remain the same over the demonstration period.***

Research Question:	Outcome Measures:	Population:	Data Sources and Analytic Methods:	Benchmarks:	Subgroups:
Is enrollment in FAMIS MOMS improving birth outcomes of FAMIS MOMS participants?	Newborns with Low Birth Weight (<2,500 grams)—The percentage of newborns weighing less than 2,500 grams at birth. This includes birth weights in the very low birth weight category (birth weights less than 1,500 grams) and the low birth weight category (birth weights between 1,500 and 2,499 grams).	Live, singleton births to FAMIS MOMS during a given calendar year	Deterministic and probabilistic data matching are used to create dataset of linked fee-for-service claims, managed care encounters, enrollment records, and birth registry records. Chi-square tests used to assess statistical significance of year-over-year changes.	CMS Child Core Set measure <i>Newborns with Low Birth Weight (&lt;2,500 grams)</i> . Median and mean for state Medicaid programs in the most recent federal fiscal year	-Age -Race/ -Ethnicity -Region

***FAMIS Select***

***Hypothesis IV: FAMIS Select members’ families will report that they are satisfied with the service offered by the FAMIS Select program, a subsidy for private/employer-sponsored insurance.***

Research Question:	Outcome Measures:	Population:	Data Sources:	Analytic Methods:
Is the self-reported consumer experience of participants in FAMIS Select satisfactory? What do participants report can be improved?	Analysis of responses to focus group questions used to assess level of overall satisfaction	Parents/guardians of current FAMIS Select enrollees	Responses to focus group questions about consumers’ experiences with DMAS-operated components of the program, such as customer service, responsiveness to customer inquiries, and timely processing of subsidy payments.	Qualitative analysis of focus group material



***Hypothesis V: FAMIS Select families will report that they are able to access preventive services, use specialty healthcare services, and schedule timely appointments with preferred providers.***

Research Question:	Outcome Measures:	Population:	Data Sources:	Analytic Methods:
Do families report that children in FAMIS Select have a satisfactory level of access to health care services through their private or employer-sponsored insurance subsidized by FAMIS Select?	Analysis of responses to focus group questions used to assess level of access to health care services	Parents/guardians of current FAMIS Select enrollees	Responses to focus group questions about consumers’ perception of their child’s level of access to health care services and providers under their private or employer-sponsored health insurance plan, including access to preventive services and specialty healthcare services, and ability to schedule timely appointments with preferred providers.	Qualitative analysis of focus group material

***Hypothesis VI: The FAMIS Select program will be cost-effective as compared to the FAMIS program over the course of the demonstration year (state fiscal year)***

Research Question:	Outcome Measures:	Population:	Data Sources:	Analytic Methods:
Is the FAMIS Select program cost-effective?	Cost-effectiveness analysis (FAMIS Select-FAMIS comparison)	FAMIS Select enrollees during state fiscal year	Fee-for-service claims, managed care encounters and capitation payments, and enrollment records	Average per-enrollee, per-month cost and administrative expense associated with the FAMIS Select population, compared to the per-enrollee, per-month cost of providing the FAMIS benefit plan

## **Demonstration Evaluation Design**

### **FAMIS MOMS (Demonstration Population I)**

#### **Methodology**

For the FAMIS MOMS demonstration evaluation, Virginia will employ the dataset from the annual Birth Outcomes Study conducted by DMAS’ contractor.<sup>1</sup> The dataset is created by the contractor and DMAS subject matter experts using deterministic and probabilistic data linking to match FAMIS MOMS 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. The eligible population included in the demonstration evaluation dataset will consist of FAMIS MOMS who gave birth during a given calendar year. A birth will be included if the member was enrolled in FAMIS MOMS on the date of delivery, regardless of whether the birth occurred in Virginia. The birth registry contains records of live births; other pregnancy outcomes will be excluded from the dataset used to calculate the evaluation measures. Since multiple gestation births are subject to different clinical guidelines, results will be limited to singleton births, defined using the Plurality field in the birth registry data.

For each of the three FAMIS MOMS evaluation measures, DMAS will report year over year comparisons. Chi-square tests will be used to determine whether statistically significant differences are observed between the prior year and current year’s measures. For national benchmark comparisons of measures I and II (Births with Early and Adequate Prenatal Care and Preterm Births), DMAS proposes to use baseline and target data from the Healthy People 2030 goals. (Baselines are drawn from nationwide vital statistics from the Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS) National Vital Statistics System (NVSS)).<sup>2</sup> For the Newborns with Low Birth Weight measure, DMAS proposes to use the CMS Core Set benchmark for the federal fiscal year that corresponds to the calendar year of the Birth Outcomes Study (e.g., FFY2019 Child Core Set benchmark for CY2019 Birth Outcomes Study measure).<sup>3</sup> In annual and semiannual monitoring reports, DMAS will present additional supplemental analysis as appropriate to provide context for the reported outcomes, such as data on key maternal demographic characteristics (race/ethnicity, geographic region) and other relevant information (managed care vs. fee-for-service enrollment, timing and duration of enrollment).

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<sup>1</sup> Currently the Birth Outcomes Study is conducted by DMAS’ External Quality Review Organization (EQRO).

<sup>2</sup> Healthy People 2030, “Pregnancy and Childbirth.” U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Available at <https://health.gov/healthypeople/objectives-and-data/browse-objectives/pregnancy-and-childbirth>. Accessed January 4, 2021.

<sup>3</sup> See, for example, “Performance on the Child Core Set Measures, FFY 2019.” Child Health Care Quality Measures, Centers of Medicare & Medicaid Services, Oct. 2020. Available at <https://www.medicare.gov/medicaid/quality-of-care/performance-measurement/adult-and-child-health-care-quality-measures/childrens-health-care-quality-measures/index.html>.

**Limitations**

Analysis requires matching two data sources without a common unique identifier: 1) Medicaid enrollment data, and 2) birth records. Using this methodology enables DMAS to monitor outcomes not present in claims data such as gestational age, more comprehensive prenatal records, and birth weight. However, we may be underestimating the impact from mothers without Social Security numbers, the most common unique identifier in a deterministic match. DMAS has conducted analysis to determine likelihood of capturing a delivery through birth records and has confirmed that the match is sufficient for generalization.

Another limitation of our data is the limited sample size of the FAMIS MOMS population, which is typically no more than 1,650 members. Small sample sizes create challenges when conducting more complex models, or conducting analyses on subgroups, such as comparing women across race/ethnicities. Therefore, DMAS has concluded that all subpopulations should be grouped into the largest meaningful category and statistical tests limited to chi-squares.

Measure specifications and benchmarks for each measure are described in detail below.

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**Demonstration Goal:** *Facilitate access to prenatal care for FAMIS MOMS participants.*

**Research Question:** *Is enrollment in FAMIS MOMS enabling pregnant women to obtain better access to adequate prenatal care?*

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**Hypothesis I:** The proportion of pregnant women enrolled in FAMIS MOMS who are receiving adequate or better prenatal care will be maintained or will increase from SFY 2019 to SFY 2029.

**Measure I:** Births with Early and Adequate Prenatal Care—The percentage of births with an Adequacy of Prenatal Care Utilization (APNCU) Index score greater than or equal to 80 percent (i.e., births scoring in the “Adequate” or “Adequate Plus” categories)

Measure 1	Percentage of FAMIS MOMS Participants Receiving Adequate or Adequate Plus Prenatal Care as Defined by APNCU Index
Numerator	Number of Births to FAMIS MOMS Participants Who Received Adequate or Adequate Plus Prenatal Care
Denominator	Number of FAMIS MOMS Participants with Births During the Calendar Year*

\* Numerator and denominator are limited to live, singleton births during the calendar year.

**Measure I Description, Specifications and Benchmarks:** Data for Measure I will come from fee-for-service claims, managed care encounters, enrollment records, and birth registry data to determine eligibility group and prenatal visit utilization. As described above, the dataset will include live, singleton births to FAMIS MOMS during a given calendar year.

Adequate prenatal care will be defined using the Adequacy of Prenatal Care Utilization (APNCU) Index, also known as the Kotelchuck Index. The adequacy of prenatal care received during pregnancy has been associated with lower incidence of poor birth outcomes, such as preterm delivery and low-birth-weight births.<sup>4</sup> The APNCU Index uses birth certificate information to assess prenatal care in relation to two separate and distinct components. First, it measures at what point in the pregnancy a mother initiated prenatal care. Second, the index considers the number of prenatal visits throughout the pregnancy. The two components are combined into a single prenatal care utilization composite score. Higher composite scores on the APNCU Index are assigned to women who initiate prenatal care early in pregnancy and complete at least 80 percent of the visits expected based on the time frame, adjusted for gestational age at prenatal care initiation and the infant’s gestational age at delivery.<sup>5</sup>

The table below shows the composite score categories and criteria defining each category.

#### APNCU Index Criteria for Adequacy of Prenatal Care

APNCU Index Category	Index Criteria
Adequate Plus	Prenatal care initiated by the fourth month of pregnancy and 110% or more of expected visits received
Adequate	Prenatal care initiated by the fourth month of pregnancy and 80% to 109% of expected visits received
Intermediate	Prenatal care initiated by the fourth month of pregnancy and 50 to 79% of expected visits received
Inadequate	Prenatal care initiated after the fourth month of pregnancy or less than 50% of expected visits received

DMAS will use the annual baseline identified in the Healthy People 2030 goal “Increase the proportion of pregnant women who receive early and adequate prenatal care – MICH-08”—which uses data derived from the CDC, NCHS, NVSS, for the Births with Early and Adequate Prenatal Care measure—for each year corresponding to the calendar year of the Birth Outcomes Study. Healthy People 2030 published a national baseline in which 76.4 percent of women received early and adequate prenatal care during 2018, with an initial goal of 80.5 percent and a

<sup>4</sup> Krueger PM, Scholl TO. Adequacy of prenatal care and pregnancy outcome. *The Journal of the American Osteopathic Association*. 2000; 100(8):485–492.

<sup>5</sup> Kotelchuck M. An evaluation of the Kessner Adequacy of Prenatal Care Index and a proposed Adequacy of Prenatal Care Utilization Index. *American Journal of Public Health*. 1994; 84(9):1414–1420.

1 percentage point improvement for each year.<sup>6</sup> DMAS will compare study indicator findings for 2018 to the Healthy People 2030 baseline goal of 76.4 percent and will adjust the target goal on an annual basis.

Virginia has been using the APNCU to measure adequacy of prenatal care for pregnant women across the Medicaid programs. Using this index as one of the measures for the FAMIS MOMS evaluation will enable DMAS to compare adequacy of prenatal care rates to other pregnant women’s aid categories and identify disparities that may exist across programs, or findings from the strengths of one program that can be implemented in other programs.

DMAS will conduct additional analysis as appropriate, such as stratification of outcomes by geography, race and ethnicity, managed care enrollment, etc., to better understand and address trends that may disproportionately affect subgroups, and/or collection of additional input from current enrollees, case managers, providers, and managed care organization staff and to identify opportunities for improvement.

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***Demonstration Goal:*** *Improve selected birth outcomes of FAMIS MOMS participants and their newborns.*

***Research Question:*** *Is enrollment in FAMIS MOMS improving birth outcomes of participants?*

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**Hypothesis II:** The proportion of individuals enrolled in the FAMIS MOMS program with preterm births (less than 37 weeks gestation) will remain the same or will decrease from SFY 2019 to SFY 2029.

**Measure II:** Preterm Births (< 37 Weeks Gestation)—The percentage of births that occurred before 37 completed weeks of gestation

Measure 2	Rate of preterm birth for FAMIS MOMS
Numerator	Number of live, singleton births to FAMIS MOMS born prior to 37 completed weeks gestation
Denominator	Total number of live, singleton births to FAMIS MOMS

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<sup>6</sup> Healthy People 2030. “Increase the proportion of pregnant women who receive early and adequate prenatal care – MICH-08.” U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Available at <https://health.gov/healthypeople/objectives-and-data/browse-objectives/pregnancy-and-childbirth/increase-proportion-pregnant-women-who-receive-early-and-adequate-prenatal-care-mich-08>. Accessed on January 5, 2021.

**Measure II Description, Specifications and Benchmarks:** Data for Measure II will come from eligibility and enrollment records along with birth registry records for live births. Eligibility and enrollment records of FAMIS MOMS will be linked with birth registry records through probabilistic and deterministic matching in order to identify births to FAMIS MOMS members during the relevant evaluation year. Preterm births will be defined as any live birth occurring before 37 weeks gestation.

In order to evaluate incidence of preterm births among the FAMIS MOMS population over time, DMAS will monitor year-over-year percentage changes. DMAS will conduct further investigation as appropriate, such as geographic, provider, and co-morbidity analyses. Preterm birth (defined as birth prior to 37 weeks) is a common measure reported not only for other Virginia Medicaid populations, but also by other states’ Medicaid programs and for other comparable populations. This commonality enables Virginia to compare rates seen among the FAMIS MOMS population to other internal and national benchmarks.

DMAS will use the Healthy People 2030 goal “Reduce preterm births—MICH-07” as a national benchmark for the preterm births measure. Healthy People 2030 published a national baseline in which 10.0 percent of live births were preterm in 2018, with an initial goal of no more than 9.4 percent of live births being preterm.<sup>7</sup> DMAS will compare FAMIS MOMS performance on this measure to the Healthy People 2030 goal of 9.4 percent and will reassess the benchmark value on an annual basis.

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**Hypothesis III:** The rate of low birth weight births (birth weight less than 5 pounds, 8 ounces (2,500 grams)) among FAMIS MOMS will decline or remain the same over the demonstration period.

**Measure III:** Newborns with Low Birth Weight (<2,500 grams)—The percentage of newborns weighing less than 2,500 grams at birth. This includes birth weights in the very low birth weight category (birth weights less than 1,500 grams) and the low birth weight category (birth weights between 1,500 and 2,499 grams).

Measure 3	Infants born with low birth weight (weight < 2,500 grams)
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<sup>7</sup> Healthy People 2030. “Reduce preterm births— MICH-07.” U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Available at <https://health.gov/healthypeople/objectives-and-data/browse-objectives/pregnancy-and-childbirth/reduce-preterm-births-mich-07>. Healthy People 2030 baseline is derived from NVSS reports. Martin JA, Hamilton BE, Osterman MJK, et al. Births: Final Data for 2018. National Vital Statistics Reports. 2019; 68(13). Hyattsville, MD: National Center for Health Statistics. 2019. Available at [https://www.cdc.gov/nchs/data/nvsr/nvsr68/nvsr68\\_13-508.pdf](https://www.cdc.gov/nchs/data/nvsr/nvsr68/nvsr68_13-508.pdf).

Numerator	Number of infants born to FAMIS MOMS with a birth weight less than 5 pounds, 8 ounces (2,500 grams)
Denominator	Total number of live, singleton births to FAMIS MOMS

**Measure III Description, Specifications and Benchmarks:** Data for Measure III will come from enrollment records along with birth registry records for live births. Eligibility and enrollment records of FAMIS MOMS will be linked with birth registry records through probabilistic and deterministic matching in order to identify births to FAMIS MOMS members during the relevant evaluation year. Low birth weight will be defined as birth weight less than 2,500 grams.

In order to evaluate incidence of low birth weight infants born to FAMIS MOMS over time, DMAS will monitor year-over-year percentage changes. The number of live births to FAMIS MOMS with a gestational weight less than 2,500g will be compared to the total number of live births to FAMIS MOMS in a given year.

Low birth weight is a common measure reported not only for other Virginia Medicaid populations, but also by other state Medicaid programs and for other comparable populations. This commonality enables Virginia to compare rates seen among the FAMIS MOMS population to other internal and national benchmarks. Virginia will analyze the change in rates of low birth weight births and will conduct further investigation, such as geographic, provider, and co-morbidity analyses as appropriate.

As a benchmark for the FAMIS MOMS evaluation’s newborns with low birth weight measure, DMAS will use the CMS Child Core Set measure Newborns with Low Birth Weight (<2,500 grams). An update is released annually and includes data for all states and Washington, D.C., for Medicaid/CHIP populations.<sup>8</sup> DMAS will compare evaluation data with the reported median and mean for state Medicaid programs in the most recent federal fiscal year for which data are available at the time of reporting.

### **FAMIS Select (Demonstration Population II)**

#### **Methodology**

For the FAMIS Select evaluation, DMAS will conduct focus groups with FAMIS Select participants’ adult family members to gain an understanding of how the members’ families believe the program is working for their child. Due to concerns regarding the current public health emergency and social distancing requirements, DMAS believes virtual focus groups will be the most effective and efficient method of gathering input from FAMIS Select members’ family members. Additionally, resources are significantly limited at this time.

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<sup>8</sup> “Performance on the Child Core Set Measures, FFY 2019.” Child Health and Quality Measures, Centers of Medicare & Medicaid Services, Oct. 2020. Available at <https://www.medicaid.gov/medicaid/quality-of-care/performance-measurement/adult-and-child-health-care-quality-measures/childrens-health-care-quality-measures/index.html>.

Questions will be grouped into two categories. One category of questions will aim to understand consumers' experiences with DMAS-operated components of the program, such as customer service, responsiveness to customer inquiries, and timely processing of subsidy payments. Questions will aim to identify customer service issues or other shortcomings or strengths of the DMAS-operated aspects of the FAMIS Select program. The second category of questions will aim to understand consumers' perception of their level of access to health care services and providers under their private or employer-sponsored health insurance plan. For both categories, focus groups will gauge consumer satisfaction and identify challenges encountered by FAMIS Select participants and ways the program could be improved. Focus group structure will also allow members to discuss additional items as introduced by other group members from discussion.

The FAMIS Select evaluation is qualitative in nature due to the limited size of the program. In future years, should the FAMIS Select population grow in size, more complex sampling strategies may be explored. The study population will consist of children enrolled in FAMIS Select for one or more months. DMAS will contact parents/guardians of FAMIS Select participants as part of this evaluation (current enrollment is approximately 50 children) and seek to include the family members in focus groups. Based on past experience with outreach to participants in this program, DMAS anticipates that we will be able to complete two focus groups, representing approximately 20 percent of participating families.

The focus group prompts will be refined in consultation with DMAS subject matter experts. The focus groups will be administered and data compiled and analyzed by DMAS staff following the proposed timeline attached. DMAS staff with training and background in focus group design, evaluation, and analysis will be consulted regarding content and analysis of responses.

### **Limitations**

In SFY2018, there were an estimated 102 enrollees covered under the FAMIS Select demonstration. This falls well short of the criteria for having at least 500 potential enrollees needed to include a comparison group in the evaluation, based on CMS' Modified Evaluation Design for the Section 1115 Demonstration expanding Title XXI coverage. Most recently, the program included 50 children, with enrollment often dipping below even the 30 necessary to draw minimal statistical inferences. Therefore, DMAS will focus our efforts on gathering high quality qualitative data to determine our members' satisfaction with the program and identify potential barriers or areas of improvement.

Descriptions of each measure are provided in detail below.



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***Demonstration Goal:*** Monitor and ensure member satisfaction with the FAMIS Select program.

***Research Questions:***

*Is the self-reported consumer experience of participants in FAMIS Select satisfactory? What do participants report can be improved?*

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**Hypothesis IV:** FAMIS Select members’ families will report that they are satisfied with the service offered by the FAMIS Select program, a subsidy for private/employer-sponsored insurance.

**Measure IV:** Analysis of responses gathered in focus groups with families of current FAMIS Select enrollees

**Measure IV Description:** Data for Measure IV will come from focus groups with FAMIS Select participants conducted by Virginia DMAS staff. Group questions will aim to understand consumers’ experiences with DMAS-operated components of the program, such as customer service, responsiveness to customer inquiries, and timely processing of subsidy payments. Questions will aim to identify customer service issues or other shortcomings or strengths of the DMAS-operated aspects of FAMIS Select.

Focus group responses will be systematically categorized into themes using dynamic methods to determine general satisfaction or dissatisfaction with the FAMIS Select program. Independent coders will determine relevant attributes and synthesize data to assign satisfaction levels as “not satisfied,” “somewhat satisfied,” “satisfied,” and “very satisfied.”

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***Demonstration Goal:*** Monitor and ensure member satisfaction with the FAMIS Select program.

***Research Question:*** Do families report that children in FAMIS Select have a satisfactory level of access to health care services through their private or employer-sponsored insurance subsidized by FAMIS Select?

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**Hypothesis V:** FAMIS Select families will report that they are able to access preventive services, use specialty healthcare services, and schedule timely appointments with preferred providers under their private or employer-sponsored insurance that is subsidized by FAMIS Select.

**Measure V:** Analysis of responses gathered in focus groups with families of current FAMIS Select enrollees

**Measure V Description:** Data for Measure V will come from focus groups with FAMIS Select participants conducted by Virginia DMAS staff. Focus group questions will aim to understand consumers' perception of their child's level of access to health care services and providers under their private or employer-sponsored health insurance plan, including access to preventive services and specialty healthcare services, and ability to schedule timely appointments with preferred providers.

Group responses will be systematically categorized into themes using dynamic methods to determine accessibility of healthcare services for members participating in the FAMIS Select program. Independent coders will determine relevant attributes and synthesize data to assign healthcare service accessibility levels as "not accessible," "somewhat accessible," "accessible," and "very accessible."

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***Demonstration Goal:*** Assure the aggregate cost-effectiveness of the FAMIS Select program

***Research Question:*** Is the FAMIS Select program cost-effective?

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**Hypothesis VI:** The FAMIS Select program will be cost-effective as compared to the FAMIS program over the course of the demonstration year (state fiscal year)

**Measure VI:** Cost-effectiveness analysis (FAMIS Select-FAMIS comparison)

**Measure VI Description:** Data for Measure VI will come from fee-for-service claims, managed care encounters and capitation payments, and enrollment records.

As required in STC #22 and consistent with 2105(c)(3) of the Social Security Act, DMAS monitors FAMIS Select program expenditures to ensure cost effectiveness. Specifically, DMAS compares the agency's cost to subsidize the purchase of employer-sponsored insurance to the amount of expenditures, including administrative expenditures, that the state would have made to provide comparable coverage to the targeted low-income child or family involved under the state child health plan, FAMIS.

Cost-effectiveness will be assessed by calculating the average per-enrollee, per-month cost and administrative expense associated with the FAMIS Select enrolled population, compared to the per-enrollee, per-month cost of providing the FAMIS benefit plan.

## EVALUATION TIMELINE

**FAMIS MOMS Annual Evaluation Timeline for the Demonstration Year**

Task	Date
DMAS and subject matter experts, including EQRO, develop requirements for quantitative analyses of prior calendar year data	April-July
DMAS submits member, eligibility, enrollment, and claims/encounter data through June vendor files to EQRO	July
EQRO processes, loads, and validates data through June vendor files received from DMAS	July
DMAS obtains linked Birth Registry data from prior calendar year and submits files to EQRO	June-August
EQRO and DMAS SMEs conduct file review and resolve any questions or concerns	August
EQRO calculates and validates Birth Outcomes Study indicators and stratification categories	August-September
EQRO generates and validates Birth Outcomes Study analytic tables and figures	October
EQRO generates and validates analytic dataset and corresponding data dictionary	October-December
EQRO submits draft report to DMAS	October-November
DMAS provides feedback and EQRO incorporates into report	November-December
EQRO submits final Birth Outcomes Study report and analytic dataset to DMAS	December-January
DMAS conducts supplemental analysis of the FAMIS MOMS data, such as subgroup analyses, as appropriate	January-April
DMAS delivers semi-annual report to CMS, to include reporting of the FAMIS MOMS evaluation metrics described in this document (drawn from Birth Outcomes Study analysis).  (Example: Semiannual report for April 29, 2021 will incorporate FAMIS MOMS birth outcomes data from Calendar Year 2019)	No later than April 29 of each year

**FAMIS Select Annual Evaluation Timeline for the Demonstration Year**

DMAS proposes that this focus groups be conducted annually with FAMIS Select participating families.

Task	Date
Finalize focus group questions in consultation with CMS and DMAS subject matter experts	January-February
DMAS staff contact parent/caretaker of each child member to request and conduct focus groups (based on member experience over the past year of enrollment)	February-March
Second round of calls to parents/caretakers for second focus group	March-May
DMAS compiles and analyzes results	June-July
DMAS composes update on FAMIS Select Evaluation incorporating results	July-September
DMAS delivers annual report to CMS, to include reporting of the FAMIS Select evaluation metrics described in this document for the prior calendar year	No later than September 28

\* As of end of April 2021, DMAS did not have an approved evaluation design. Therefore, focus group data may not be included and analyzed for September 2021 report due to time constraints.

**FAMIS MOMS and FAMIS Select Demonstration Milestones (per STC 38)**

Task	Date
DMAS delivers Draft Interim Evaluation Report for the period July 2019-June 2022.	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.	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.	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.	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.  (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.	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)	No later than December 30, 2030
DMAS delivers Final Summative Evaluation Report for the demonstration period (July 2019-June 2029)	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	Within 30 calendar days of approval by CMS.

## EVALUATION BUDGET

The data for Measures I through III are collected as part of the process for the annual Birth Outcomes Study conducted by DMAS' External Quality Review Organization (EQRO). Additional analysis as well as monitoring and reporting tasks will be conducted in-house by DMAS staff and are not expected to incur additional costs.

Given the uncertainty posed by the COVID-19 public health emergency, for Measures IV and V DMAS has intentionally limited data collection methods in the draft evaluation plan to virtual focus groups conducted by DMAS staff. In the future, DMAS could potentially revisit this decision and consider hosting in-person interviews and/or focus groups onsite at the DMAS offices, conducted by DMAS staff. We do not expect any additional staffing or contract costs attributable to the evaluation. DMAS will continue to provide updated information regarding program enrollment and will work with CMS to revise the evaluation plan and budget for FAMIS Select if necessary.

Data for Measure VI are gathered and analyzed internally by DMAS Budget and Data Analytics staff.

