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

State Demonstrations Group

April 27, 2020

Beth Kidder
Deputy Secretary for Medicaid
Florida Agency for Health Care Administration
2727 Mahan Drive, Mail Stop 8
Tallahassee, FL 32308

Dear Ms. Kidder:

The Centers for Medicare & Medicaid Services (CMS) has approved the evaluation design for Florida's section 1115 demonstration entitled, "Managed Medical Assistance" (Project Number 11-W00206/4), and effective through June 30, 2022. We sincerely appreciate the state's commitment to a rigorous evaluation of your demonstration.

CMS has added the approved evaluation design to the demonstration's Special Terms and Conditions (STC) as Attachment D. A copy of the STCs, which includes the new attachment, is enclosed with this letter. The approved evaluation design may now be posted to the state's Medicaid website within thirty days, per 42 CFR 431.424(c). CMS will also post the approved evaluation design as a standalone document, separate from the STCs, on Medicaid.gov.

Please note that an interim evaluation report, consistent with the approved evaluation design is due to CMS one year prior to the expiration of the demonstration, or at the time of the renewal application if the state chooses to extend the demonstration. Likewise, a summative evaluation report, consistent with this approved design, is due to CMS within 18 months of the end of the demonstration period.

We look forward to our continued partnership with you and your staff on the Florida Managed Medical Assistance demonstration. If you have any questions, please contact your CMS project officer, Mr. Jack Nocito. Mr. Nocito may be reached by email at Jack.Nocito@cms.hhs.gov.

Sincerely,

Danielle Daly -S
Digitally signed by Danielle Daly -S
Date: 2020.04.27 08:51:28 -04'00'

Danielle Daly
Director
Division of Demonstration Monitoring and Evaluation

Angela D. Garner -S
Digitally signed by Angela D. Garner -S
Date: 2020.05.21 09:15:38 -04'00'

Angela D. Garner
Director
Division of System Reform Demonstrations

cc: Tandra Hodges, State Monitoring Lead, CMS Medicaid and CHIP Operations Group

Florida's Managed Medical Assistance (MMA) Program Demonstration Waiver Evaluation: Design Update 2017-2022

Presented to:

Centers for Medicare and Medicaid Services

Prepared by:

Florida Agency for Health Care Administration

and

Department of Health Outcomes & Biomedical Informatics
College of Medicine
University of Florida

and

Department of Behavioral Sciences and Social Medicine
College of Medicine
Florida State University

March 2, 2020

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A. General Background Information

1. Issues Addressed by This Demonstration

Under the MMA demonstration, Florida seeks to continue building upon the following objectives that have been fundamental to Florida's Medicaid improvement efforts over the past 15 years:

- Improving outcomes through care coordination, patient engagement in their own health care, and maintaining fiscal responsibility. The demonstration seeks to improve care for Medicaid beneficiaries by providing care through nationally accredited managed care plans with broad networks, expansive benefits packages, top-quality scores, and high rate of customer satisfaction. The state will provide oversight focused on improving access and increasing quality of care.
- Improving program performance, particularly improved scores on nationally recognized quality measures (such as Healthcare Effectiveness Data and Information Set [HEDIS] scores), through expanding key components of the Medicaid managed care program statewide and competitively procuring plans on a regional basis to stabilize plan participation and enhance continuity of care. A key objective of improved program performance is to increase patient satisfaction.
- Improving access to coordinated care, continuity of care, and continuity of coverage by enrolling all Medicaid enrollees in managed care in a timely manner, except those specifically exempted. Increasing access to, stabilizing, and strengthening providers that serve uninsured, low- income populations in the state by targeting LIP funding to reimburse uncompensated care costs for services provided to low-income uninsured patients at hospitals and federally qualified health care centers (FQHC) and rural health clinics (RHC) that are furnished through charity care programs that adhere to the Healthcare Financial Management Association (HFMA) principles.[1] Improving continuity of coverage and care and encouraging uptake of preventive services, or encouraging individuals to obtain health coverage as soon as possible after becoming eligible, as applicable, as well as promoting the fiscal sustainability of the Medicaid program, through the waiver of retroactive eligibility.
- Improving integration of all services, increased care coordination effectiveness, increased individual involvement in their care, improved health outcomes, and reductions in unnecessary or inefficient use of health care.

Florida's motivation for improving its Medicaid program stems from two factors: (1) the nationwide concerns about ensuring continued access to high quality care for its Medicaid enrollees while (2) simultaneously addressing the rapid increases in Medicaid costs that have propelled the Medicaid program to the very top of states' budget priorities nationwide.

2. Name of the Demonstration, Approval Date, and Time Period

Managed Medical Assistance 1115 Waiver Demonstration Extension, Project No. 11-W-00206/4, August 3, 2017 through June 30, 2022.

[1] Healthcare Financial Management Association, "Valuation and Financial Statement Presentation of Charity Care and Bad Debts by Institutional Healthcare Providers," Principles and Practices Board Statement 15, December 2012. http://www.hfma.org/WorkArea/DownloadAsset.aspx?id=14589 , accessed on 11/27/17

3. Description of the Demonstration and History of the Implementation

The Centers for Medicare and Medicaid Services (Federal CMS) initially approved Florida's 1115 Research and Demonstration Waiver, "Medicaid Reform", on October 19, 2005. Florida initially implemented the program in Broward and Duval counties on July 1, 2006 and expanded to Baker, Clay, and Nassau counties on July 1, 2007.

On June 30, 2010, the Agency for Health Care Administration (Agency) submitted a three-year waiver extension request to maintain and continue operations of the Medicaid Reform program. Federal CMS approved the three-year waiver extension request on December 15, 2011 for the period December 16, 2011 through July 31, 2014.

On August 1, 2011, Florida submitted an amendment request to Federal CMS to change the name of the demonstration and implement the Managed Medical Assistance (MMA) program as specified in Part IV of Chapter 409, Florida Statutes (F.S.). The amendment allowed the state to implement a new statewide managed care delivery system without increasing costs and to continue the Low-Income Pool (LIP) program. On June 14, 2013, Federal CMS approved the amendment, along with amended Special Terms and Conditions (STCs), waiver and expenditure authorities. MMA program implementation began May 1, 2014 and was fully implemented in all regions by August 2014. On July 31, 2014, CMS approved the State's request for a three-year extension to the MMA 1115 waiver demonstration, along with newly amended STCs and waiver and expenditure authorities, through June 30, 2017.

The Agency contracted with the University of Florida (UF) to conduct an independent evaluation of the MMA program. UF subcontracted with two other universities to conduct some components of the evaluation (Florida State University and University of Alabama at Birmingham). The Agency provided the evaluators with a description of the objectives of the MMA program and the approved evaluation design.

UF submitted a Final Comprehensive Evaluation Report for DY9 (SFY 2014-15) to the Agency in September 2017. Targeted evaluation questions about the MMA program covered 18 unique domains of focus and were organized into the following five projects:

1. The effect of customized benefit plans and having separate plans for LTC and acute care services on beneficiaries' choice of plans, access to care, quality of care, and cost of care;
2. Healthy Behaviors Programs offered by the MMA plans;
3. MMA program's ability to deter fraud and abuse;
4. The effect of LIP on uncompensated care provided through hospital charity care programs; effect on access, quality and timeliness of care and emergency department usage for the uninsured; and, impact on costs for treating uninsured patients; and,
5. Outcomes for dual-eligible individuals enrolled in a Medicare Advantage Plan and a MMA plan.

The evaluation of the MMA program for DY9 (SFY 2014-15) yielded the following high-level findings:

- In the MMA period, there were sizable declines in service utilization compared to the pre-MMA period for the following:
    - Inpatient stays
    - Outpatient visits
    - Emergency Department visits
    - Professional (physician) visits
- Out of a subset of 26 HEDIS measures, approximately 65 percent (17 measures) of the statewide weighted means improved and 27 percent (7 measures) stayed the same after implementation of MMA. Only 8% (2 measures) declined after implementation.
- Per member per month (PMPM) costs adjusted for age, race, gender, and Chronic Illness and Disability Payment System (CDPS) scores (case-mix) for MMA services are 32.9 percent lower for comprehensive plans (serving both LTC and MMA enrollees) compared to PMPM costs for enrollees who are in separate LTC and MMA plans ($206 PMPM comprehensive vs. $306 PMPM separate).
- While the Florida transition to statewide managed care in 2014 was not without challenges, the overall success in implementing such a broad transformation in the span of a few short months, while reducing per member per month (PMPM) costs and maintaining or improving quality measures, stands as a considerable accomplishment.

  More details about DY9 findings, as well as for additional demonstration years, will be included in the Interim Draft Evaluation Report (available January 2022).

4. MMA Program Description and Objectives

Federal CMS approved a second extension of the MMA 1115 waiver demonstration (Project No. 11-W-00206/4) for a period of five years beginning August 3, 2017 through June 30, 2022. For the extension, CMS funded the LIP at approximately $1.5 billion annually based on the most recent available data on hospitals' charity care costs to ensure continuing support for safety-net providers that furnish uncompensated care to the Medicaid, uninsured, and underinsured populations. The STCs for the demonstration were modified to simplify and streamline reporting requirements and to remove requirements that are no longer applicable. All future references to the STCs in this document relate to the March 26, 2019 amended STCs unless otherwise indicated. Florida's 1115 demonstration allows the state to operate a capitated Medicaid managed care program. Under the demonstration, most Medicaid eligibles are required to enroll in one of the managed care plans contracted with the State. Several populations may also voluntarily enroll in managed care through the MMA program. The managed care plans in the MMA program are divided into "standard" and "specialty" plans. Specialty plans serve populations with distinct characteristics, diagnoses or chronic conditions. These plans are tailored to meet the specific needs of the specialty population.

Applicants for Medicaid are given the opportunity to select a managed care plan prior to receiving a Florida Medicaid eligibility determination. If they do not choose a plan, they are auto-assigned into a managed care plan upon an affirmative eligibility determination and subsequently provided with information about their choice of plans. Once an enrollee has selected or been assigned an MMA plan, the enrollee shall be enrolled for a total of 12 months,

until the next open enrollment period. The 12-month period includes a 120-day period to change or voluntarily disenroll from a plan without cause and select another plan.

Managed care plans may provide customized benefits to their members that differ from, but cannot be more restrictive than, the state plan benefits. Participating Medicaid eligibles also have access to Healthy Behaviors programs that provide incentives for adopting healthy behaviors.

4.1 Populations Covered in the MMA Program

MMA program enrollees include individuals eligible under the approved state plan or as a demonstration-only group, and who are described below as "mandatory enrollees" or as "voluntary enrollees." Mandatory enrollees are required to enroll in a MMA plan as a condition of receipt of Medicaid benefits. Voluntary enrollees are exempt from mandatory enrollment, but have the option to enroll in a demonstration MMA plan to receive Medicaid benefits.

1. **Mandatory Managed Care Enrollees** – Individuals who belong to the categories of Medicaid eligibles listed in Table *1* (and who are not listed as excluded from mandatory participation) are required to be MMA program enrollees.

Table 1. Mandatory and Optional State Plan Eligibility Group

Mandatory State Plan Eligibility Groups	Population Description	Funding Stream	CMS-64 Eligibility Group Reporting
Infants under age 1	No more than 206% of the Federal Poverty Level (FPL).	Title XIX	TANF & Related Group
Children 1-5	No more than 140% of the FPL.	Title XIX	TANF & Related Group
Children 6-18	No more than 133% of the FPL.	Title XIX	TANF & Related Group
Blind/Disabled Children	Children eligible under Supplemental Security Income (SSI), or deemed to be receiving SSI.	Title XIX	Aged/Disabled

Mandatory State Plan Eligibility Groups	Population Description	Funding Stream	CMS-64 Eligibility Group Reporting
IV-E Foster Care and Adoption Subsidy	Children for whom IV-E foster care maintenance payments or adoption subsidy payments are received – no Medicaid income limit.	Title XIX	TANF & Related Group
Pregnant women	Income not exceeding 191% of FPL.	Title XIX	TANF & Related Group
Section 1931 parents or other caretaker relatives	No more than Aid to Families with Dependent Children (AFDC) Income Level (Families whose income is no more than about 31% of the FPL or $486 per month for a family of 3.)	Title XIX	TANF & Related Group
Aged/Disabled Adults	Persons receiving SSI, or deemed to be receiving SSI, whose eligibility is determined by the Social Security Administration (SSA).	Title XIX	Aged/Disabled
Former foster care children up to age 26	Individuals who are under age 26 and who were in foster care and receiving Medicaid when they aged out.	Title XIX	TANF & Related Group

Optional State Plan Groups	Population Description	Funding Stream	CMS-64 Eligibility Group Reporting
State-funded Foster Care or Adoption assistance under age 18	Who receive a state Foster Care or adoption subsidy, not under title IV-E.	Title XIX	TANF & Related Group

Optional State Plan Groups	Population Description	Funding Stream	CMS-64 Eligibility Group Reporting
Individuals eligible under a hospice-related eligibility group	Up to 300% of SSI limit. Income of up to $2,130 for an individual and $4,260 for an eligible couple.	Title XIX	Aged/Disabled
Institutionalized individuals eligible under the special income level group specified at 42 CFR 435.236	This group includes institutionalized individuals eligible under this special income level group who do not qualify for an exclusion, or are not included in a voluntary participant category in STC 20(c).	Title XIX	Aged/Disabled
Institutionalized individuals eligible under the special home and community based waiver group specified at 42 CFR 435.217	This group includes institutionalized individuals eligible under this special HCBS waiver group who do not qualify for an exclusion, or are not included in a voluntary participant category in STC 20(c).	Title XIX	Aged/Disabled

Demonstration Only Groups	Population Description	Funding Stream	CMS-64 Eligibility Group Reporting
Aged or Disabled Individuals	*Income at or below 88% FPL *Assets that do not exceed $5,000 (individual) or $6,000 (couple) *Medicaid-only eligibles not receiving hospice, HCBS, or institutional care services	Title XIX	MEDS AD
Aged or Disabled Individuals	*Income at or below 88% FPL *Assets that do not exceed $5,000 (individual) or $6,000 (couple) *Medicaid-only eligibles receiving hospice, HCBS, or institutional care services	Title XIX	MEDS AD
Aged or Disabled Individuals	*Income at or below 88% FPL *Assets that do not exceed $5,000 (individual) or $6,000 (couple)	Title XIX	MEDS AD

Demonstration Only Groups	Population Description	Funding Stream	CMS-64 Eligibility Group Reporting
	*Medicare eligible receiving hospice, HCBS, or institutional care services		
Individuals diagnosed with AIDS	*Have an income at or below 222% of the federal poverty level (or 300% of the benefit rate) *Have assets that do not exceed $2,000 (individual) or $3,000 (couple) and *Meet hospital level of care, as determined by the State of Florida	Title XIX	AIDS CNOM

Medicare-Medicaid Eligible Participants – Individuals fully eligible for both Medicare and Medicaid are required to enroll in an MMA plan for covered Medicaid services. These individuals will continue to have their choice of Medicare providers as this program will not impact individuals' Medicare benefits. Medicare-Medicaid beneficiaries will be afforded the opportunity to choose an MMA plan. However, to facilitate enrollment, if the individual does not elect an MMA plan, then the individual will be assigned to an MMA plan by the state using the criteria outlined in STC 25.

2. **Voluntary Enrollees –** The following individuals are excluded from mandatory enrollment into the MMA program under subparagraph (a) but may choose to voluntarily enroll under the demonstration, in which case the individual would be a voluntary participant in an MMA plan and would receive its benefits:

a) Individuals who have other creditable health care coverage, excluding Medicare;

b) Individuals age 65 and over residing in a mental health treatment facility meeting the Medicare conditions of participation for a hospital or nursing facility;

c) Individuals in an intermediate care facility for individuals with intellectual disabilities (ICF-IID);

d) Individuals with developmental disabilities enrolled in the home and community- based waiver pursuant to state law, and Medicaid recipients waiting for waiver services;

e) Children receiving services in a Prescribed Pediatric Extended Care (PPEC) facility; and

f) Medicaid-eligible recipients residing in group home facilities licensed under section(s) 393.067 F.S.

3. **Excluded from MMA Program Participation** - The following groups of Medicaid eligibles are excluded from enrollment in managed care plans:

a) Individuals eligible for emergency services only due to immigration status;

b) Family planning waiver eligible;

c) Individuals eligible as women with breast or cervical cancer; and,

d) Services for individuals who are residing in residential commitment facilities operated through the Department of Juvenile Justice, as defined in state law. (These individuals are inmates not eligible for covered services under the state plan, except as inpatients in a medical institution).

B. Evaluation Questions and Hypotheses

This section presents each evaluation component and its associated research questions. Note that for research questions focusing on cost and utilization, the pre-MMA period will include recipients enrolled in fee-for-service (FFS) Medicaid in addition to recipients enrolled in Reform and 1915b waiver plans. A driver diagram based on the components and their research questions is included at the end of this section (Figure 1) along with a logic model (Figure 2) for Component 9 that depicts hypothesized causes/effects associated with the changes in Florida's retroactive enrollment policy and a logic model for Component 10 (Figure 3) that depicts hypothesized causes/effects associated with the implementation of a Housing Assistance Pilot for enrollees with serious mental illness and/or substance abuse who are homeless or at risk of homelessness.

The state of Florida established the MMA program with the goal to improve the quality, access, and costs of care for Florida's Medicaid enrollees. The Agency's specific goal for the managed care plans has been for the plans to reach the National Medicaid 75th percentile on HEDIS measures. The managed care plans' HEDIS rates each year are compared to the previous year National Medicaid percentiles to measure the plans' (and MMA program's) progress toward reaching the 75th percentile. The state's overall goal to improve the quality, access, and costs of care dictates that examining the changes in quality, access, and costs are key to gauging the success of the MMA program. The state therefore seeks a combination of (1) statistically significant beneficial changes in key measures (e.g., cost reductions, access improvements, quality increases) while (2) maintaining performance in those areas where statistically significant beneficial changes are not detected (i.e., not incurring statistically significant cost increases, access reductions, and quality decreases). Given the multitude of measures of cost, access, and quality and the varied populations served by Medicaid, it would be unrealistic to expect across-the-board improvements in every measure of performance for every population.

In keeping with the goals of the MMA demonstration, the State expects the demonstration to have an overall positive impact on Florida's efforts to improve its Medicaid program under a capitated managed care program.

All hypotheses in this report are stated in null form (i.e., hypothesizing no change). Each null hypothesis will be tested against a two-tailed alternative hypothesis (i.e., hypothesizing a non-zero, positive or negative change) using $\alpha \leq 0.05$.

Component 1. The effect of managed care on access to care, quality and efficiency of care, and the cost of care

Research Questions:

1A. *What barriers do enrollees encounter when accessing primary care and preventive services?*

Question 1A will be answered descriptively using AHCA complaint, grievance, and appeal data and the Client Information & Registration Tracking (CIRTS) database from the MMA period, and to the extent possible, Medicaid Fair Hearing data. Hence, no hypotheses will be tested.

1B. *What changes in the accessibility of services occur with MMA implementation, comparing accessibility in pre-MMA implementation plans (Reform plans and 1915(b) waiver plans) to MMA plans?*

Hypothesis 1B. *There will be no changes in the accessibility of services in MMA plans compared to pre-MMA implementation plans (Reform plans and 1915(b) waiver plans).*

1C. *What changes in the utilization of services for enrollees are evident post-MMA implementation, comparing: 1) utilization of services in the pre-MMA period (FFS, Reform plans and pre-MMA 1915(b) waiver plans) to utilization of services in post-MMA implementation; 2) utilization of services in specialty MMA plans versus standard MMA plans for enrollees eligible for enrollment in a specialty plan (e.g., enrollees with HIV or SMI) who are enrolled in standard MMA plans versus enrollees in the specialty plans?*

Hypothesis 1C. *1) There will be no change in the use of services for enrollees in the MMA period compared to the pre-MMA period. 2) There will be no difference in use of services by enrollees in specialty MMA plans compared to use of services by enrollees eligible for enrollment in a specialty plan (e.g. enrollees with HIV or SMI) who are in standard MMA plans.*

1D. *What changes in quality of care for enrollees are evident post-MMA implementation, comparing: 1) quality of care in pre-MMA implementation plans (Reform plans and 1915(b) waiver plans) to quality of care in MMA plans in the MMA period; 2) quality of care in specialty MMA plans versus standard MMA plans for enrollees eligible for enrollment in a specialty plan (e.g. enrollees with HIV or SMI) who are enrolled in standard plans versus enrollees in the specialty plans (to the extent possible)?*

Hypothesis 1D. *(1) There will be no change in the quality of care for enrollees in MMA plans compared to quality of care for enrollees in pre-MMA implementation plans (Reform plans and 1915(b) waiver plans); and 2) There will be no difference in the quality of care for enrollees eligible for enrollment in a specialty plan (e.g. enrollees with HIV or SMI) in standard plans versus enrollees in specialty plans.*

1E. *What strategies are standard MMA and specialty MMA plans using to improve quality of care? Which of these strategies are most effective in improving quality and why?*

This question will be addressed using qualitative methods (no hypothesis).

1F. *What changes in timeliness of services occur with MMA implementation, comparing timeliness of services in pre-MMA implementation plans (Reform plans and 1915(b) waiver plans) to post-MMA implementation plans?*

Hypothesis 1F. *There will be no change in the* timeliness of services in MMA plans compared to pre-MMA implementation plans (Reform plans and 1915(b) waiver plans).

1G. *What is the difference in per-enrollee cost by eligibility group pre-MMA implementation (FFS, Reform plans and pre-MMA 1915(b) waiver plans) compared to per-enrollee costs in the MMA period (MMA plans as a whole, standard MMA plans and specialty MMA plans)?*

Hypothesis 1G. *There will be no difference in* the per-enrollee cost by eligibility group in MMA plans compared to pre-MMA implementation (FFS, Reform, and 1915 (b) waiver plans).

Component 2. The effect of customized benefit plans on beneficiaries' choice of plans, access to care, or quality of care

Since the MMA plans do not offer customized benefit plans, the State will evaluate the effect of expanded benefits on enrollees' utilization of services, access to care, and quality of care.

Research Questions:

2A. *What is the difference in the types of expanded benefits offered by standard MMA and specialty MMA plans? How do plans tailor the types of expanded benefits to particular populations?*

2B. *How many enrollees utilize expanded benefits and which ones are most commonly used?*

Research questions 2A and 2B were included to provide context (description of plans with expanded benefits) for the analyses for this Component. Therefore, there are no hypotheses to test for these research questions.

2C. *How does Emergency Department (ED) and inpatient hospital utilization differ for those enrollees who use expanded benefits (e.g. additional vaccines, physician home visits, extra outpatient services, extra primary care and prenatal/perinatal visits, and over-the-counter drugs/supplies) vs. those enrollees who do not?*

Hypothesis 2C. *There will be no differences in ED and inpatient hospital utilization for users versus non-users of expanded benefits.*

The following question will be addressed beginning with the evaluation of DY14 (SFY 2019-20):

2D. *How do enrollees rate their experiences and satisfaction with the expanded benefits that are offered by their health plan?*

This research question will employ qualitative methods (no hypotheses).

Component 3. Participation in the Healthy Behaviors programs and its effect on participant behavior or health status

Research Questions:

Research Questions 3A-3D are included to provide context (description and number of Healthy Behaviors programs provided by plan as well as associated incentives and rewards) to analyses for this Component. Therefore, there are no hypotheses to be tested for these research questions.

3A. *What Healthy Behaviors programs do MMA plans offer? What types of programs and how many are offered in addition to the three required programs (medically approved smoking cessation program, the medically directed weight loss program, and the medically approved alcohol or substance abuse treatment program)?*

3B. *What incentives and rewards do MMA plans offer to their enrollees for participating in Healthy Behaviors programs?*

3C. *How many enrollees participate in each Healthy Behaviors program? How many enrollees complete Healthy Behaviors programs? Which types of Healthy Behaviors programs attract higher numbers of participants?*

3D. *How does participation in Healthy Behaviors programs vary by gender, age, race/ethnicity and health status of enrollees (DY13 and beyond)?*[2]

3E. *What differences in service utilization occur over the course of the demonstration for enrollees participating in Healthy Behaviors programs versus enrollees not participating (DY13 and beyond)?*

> ***Hypothesis 3Ei.*** *There will be no difference in utilization of 1) preventive services and 2) outpatient services between enrollees participating in Healthy Behaviors programs and enrollees not participating in Healthy Behaviors programs.*
>
> ***Hypothesis 3Eii.*** *There will be no change in the utilization of ER, inpatient and outpatient hospital and physician specialty services for treatment of conditions that these programs are designed to prevent or manage for enrollees after enrolling in the Healthy Behaviors program.*

Component 4. The impact of LIP funding on hospital charity care programs

For DY10, the State will evaluate the impact of LIP funding on access to care for Medicaid uninsured and underinsured recipients. Beginning with DY11, the state will evaluate the impact of LIP funding on access to care for uncompensated charity care recipients.

[2] Questions 3D and 3E will be answered when individual-level Healthy Behaviors data for DY13 (SFY 2018-19) and subsequent years become available.

Research Questions:

The following questions will be addressed in the evaluation of DY10 (SFY 2015-16):

4A. *What is the impact of LIP funding on access to care for Medicaid, uninsured, and underinsured recipients served in hospitals? That is, how many Medicaid, uninsured, and underinsured recipients receive services in LIP funded hospitals?*

> ***Hypothesis 4A.*** *There will be no impact of LIP funding on access to care for Medicaid, uninsured, and underinsured recipients served in hospitals.*

4B. *What types of services are being provided to Medicaid, uninsured, and underinsured recipients receiving care in LIP funded hospitals?*

> This research question is included to provide context (description of types of services being provided thorough LIP) for this component. Therefore, there is no hypothesis to test for this research question.

The following questions will be addressed beginning with the evaluation of DY11 (SFY 2016-17):

4C. *What is the impact of LIP funding on access to care for uncompensated charity care recipients served in hospitals? That is, how many uncompensated charity care recipients receive services in LIP funded hospitals? How does this compare among hospitals in different tiers of LIP finding?*

> ***Hypothesis 4C.*** *There will be no difference in 1) the number of uncompensated charity care patients served or 2) their expenditures based on 1) hospital access to LIP funding and 2) different tiers of LIP funding.*

4D. *What types of services are being provided to uncompensated charity care recipients receiving care in LIP funded hospitals?*

> This research question is included to provide context (description of types of services being provided through LIP) for this component. Therefore, there is no hypothesis to test for this research question.

4E. *What is the difference in the type and number of services offered to uncompensated charity care patients in hospitals receiving LIP funding?*

> ***Hypothesis 4E.*** *There will be no change in the types of services or the number of services offered to uncompensated charity care patients in hospitals receiving LIP funding.*

The following question will be addressed beginning with the evaluation of DY12 (SFY 2017-18):

4F. *What is the impact of LIP funding on the number of uncompensated charity care patients served and the types of services provided in FQHCs, RHCs, and medical school physician*

practices?

> ***Hypothesis 4F.*** *LIP funding will have no effect on the number of uncompensated charity care patients served and the types of services provided in FQHCs, RHCs, and medical school physician practices.*

Component 5. The effect of having separate managed care programs for acute care and LTC services on access to care, care coordination, quality, efficiency of care, and the cost of care[3]

This component will sunset after the evaluation of DY12 (SFY 2017-18) because there will no longer be separate programs for acute (medical) care and LTC services beginning with the evaluation of DY13 (SFY 2018-19). All LTC enrollees will be in a plan that offers both acute (medical) care and LTC services.

Research Questions:

5A. *How many enrollees are enrolled in separate Medicaid managed care programs for acute (medical) care and LTC services?*

5B. *How many enrollees are enrolled in comprehensive plans for both acute (medical) care and LTC services?*

Research Questions 5A and 5B were included to provide context (descriptive information about enrollment of this population across plan types) for this Component. Therefore, there are no hypotheses associated with these research questions.

5C. *Are there differences in service utilization, as well as in the appropriateness of service utilization (to the extent this can be measured), between enrollees who are in a comprehensive plan for both MMA and LTC services versus those who are enrolled in separate MMA and LTC plans?*

> ***Hypothesis 5C.*** *There will be no difference in service utilization or in the appropriateness of service utilization between enrollees in comprehensive plans and enrollees in separate plans.*

Component 6. The impact of efforts to align with Medicare and improving beneficiary experiences and outcomes for dual eligible individuals

The State has elected to evaluate this component by focusing on the experiences of dual eligibles in receiving behavioral health services and non-emergency transportation services because these services are covered by Medicaid.

Research Questions:

6A. *How many MMA enrollees are also Medicare recipients (dual-eligibles) and to what extent do dual-eligible enrollees utilize behavioral health and non-emergency transportation*

[3] Component 5 will sunset following the evaluation of DY12 (SFY 2017-18).

services?

Research Question 6A is included to provide context (descriptive information) for this Component, so there is no hypothesis to be tested for this question.

***6B.** What specific care coordination strategies and practices are most effective for ensuring access to and quality of care for behavioral health services and non-emergency transportation services for dual-eligible enrollees?*

***6C.** How do dual-eligible enrollees rate their experience and satisfaction with delivery of care they received related to behavioral health and non-emergency transportation services?*

Research Questions 6B and 6C will be answered using qualitative methods; they are exploratory and descriptive in nature so there are no hypotheses to be tested.

Component 7. The effectiveness of enrolling individuals into a managed care plan upon eligibility determination in connecting beneficiaries with care in a timely manner

Research Questions:

These research questions will produce descriptive results comparing the time to service for enrollees (1) in general, (2) under auto-enrollment, and (3) who switch plans within 120 days. There are no hypotheses associated with these questions.

These research questions will produce descriptive results comparing the time to service for

***7A.** How quickly do new enrollees access services, including expanded benefits in excess of State Plan covered benefits, after becoming Medicaid eligible and enrolling in a health plan?*

***7B.** Among new enrollees, what is the time to access services for enrollees who are enrolled under Express Enrollment compared to enrollees who were enrolled prior to the implementation of Express Enrollment?*

Component 8. The effect the Statewide Medicaid Prepaid Dental Health Program has on accessibility, quality, utilization, and cost of dental health care services.

The research questions for this component will be addressed beginning with the evaluation of Demonstration Year 14 (SFY 2019-20).

Research Questions:

***8A.** How does enrollee utilization of dental health services vary by age, gender, race/ethnicity, and geographic area?*

Research Question 8A is included to provide context (descriptive information) for this component, so there is no hypothesis to be tested for this question.

***8B.** What changes in dental health service utilization occur with the implementation of the*

Statewide Medicaid Prepaid Dental Health Program?

> ***Hypothesis 8B.*** *There will be no change in dental health service utilization with the implementation of the Statewide Medicaid Prepaid Dental Health Program.*

8C. *What changes in quality of dental health services occur with the implementation of the Statewide Medicaid Prepaid Dental Health Program?*

> ***Hypothesis 8C.*** *There will be no change in quality of dental health services with the implementation of the Statewide Medicaid Prepaid Dental Health Program.*

8D. *What changes in the accessibility of dental services occur with the implementation of the Statewide Medicaid Prepaid Dental Health Program?*

> ***Hypothesis 8D.*** *There will be no change in accessibility of dental services with the implementation of the Statewide Medicaid Prepaid Dental Health Program.*

8E. *What barriers do enrollees encounter when accessing dental health services?*

8F. *How many enrollees utilize expanded benefits provided by the dental health plans and which ones are most commonly used?*

> Research Questions 8E and 8F will be answered descriptively. Hence, no hypotheses will be tested.

8G. *How does enrollee utilization of dental health services impact dental-related hospital events (e.g., Emergency Department, Inpatient hospitalization)? How does utilization of expanded benefits offered by the dental health plans impact dental-related hospital events?*

> ***Hypothesis 8G.*** *There will be no impact on dental-related hospital events (e.g., Emergency Department, Inpatient Hospitalization) resulting from enrollee utilization of dental health services or utilization of expanded benefits offered by dental health plans.*

8H*. What changes in per-enrollee cost for dental health services occur with the implementation of the Statewide Medicaid Prepaid Dental Health Program?*

> ***Hypothesis 8H.*** *There will be no change in per-enrollee cost for dental health services with the implementation of the Statewide Medicaid Prepaid Dental Health Program.*

8I. *How do enrollees rate their experiences and satisfaction with dental health services, including timeliness of dental health services, provided by their dental health plans?*

8J. *How do enrollees rate their experiences and satisfaction with the expanded benefits offered by their dental health plans?*

> Research Questions 8I and 8J will be answered descriptively based on a random telephone survey of Medicaid enrollees who have used the expanded benefits offered by their dental plan. These questions are exploratory and descriptive in nature so there are no hypotheses to be tested.

Component 9. The impact of the waiver of retroactive eligibility on beneficiaries and providers.

The research questions for this component will be addressed beginning in January of 2020 when the initial encounter data reflective of the waiver of retroactive eligibility become available.

Research Questions:

9A. *How will eliminating retroactive eligibility change enrollment continuity?*

Hypothesis 9A. *Eliminating retroactive eligibility will have no effect on enrollment continuity.*

9B. *How will eliminating retroactive eligibility change the enrollment of eligible people when they are healthy relative to those eligible people who have the option of retroactive eligibility?*

Hypothesis 9B. *Eliminating retroactive eligibility will have no effect on the health status of those subject to the new policy compared to those not subject to the new policy.*

9C. *How will eliminating retroactive eligibility affect new enrollee financial burden?*

Hypothesis 9C. *Eliminating retroactive eligibility will have no effect on new enrollee financial burden.*

9D*. How will eliminating retroactive eligibility affect provider uncompensated care amounts?*

Hypothesis 9D. *Eliminating retroactive eligibility will have no effect on provider uncompensated care amounts.*

9E. *How will eliminating retroactive eligibility affect provider financial performance (income after expenses)?*

Hypothesis 9E. *Eliminating retroactive eligibility will have no effect on provider financial performance (income after expenses).*

9F. *How will eliminating retroactive eligibility affect the net financial impact of uncompensated care (UCC – LIP payments)?*

Hypothesis 9F. *Eliminating retroactive eligibility will have no effect on the net financial impact of uncompensated care (UCC – LIP payments).*

9G. *Do beneficiaries subject to the retroactive eligibility waiver understand that they will not be covered during enrollment gaps?*

9H. *What are common barriers to timely renewal for those subject to the retroactive eligibility waiver?*

Research Questions 9G and 9H will be answered descriptively based on a random telephone survey of men and non-pregnant women subject to the new retroactive

enrollment policy. These questions are exploratory and descriptive in nature so there are no hypotheses to be tested.

Component 10. The impact of the behavioral health and supportive housing assistance pilot on beneficiaries who are 21 and older with serious mental illness (SMI), substance use disorder (SUD) or SMI with co-occurring SUD, and are homeless or at risk of homelessness due to their disability.

Research Questions:

10A. How many MMA plans participate in the Housing Assistance Pilot program? How many enrollees are participating in the Housing Assistance Pilot, by plan? How does participation in the Housing Assistance Pilot vary by gender, age, race/ethnicity and health status of enrollees? How did MMA plans implement the Pilot programs?

Hypothesis 10A. These questions are included to provide context and descriptive information about how the Pilot is being implemented by the MMA plans; therefore, there is no hypothesis to test.

10B. What is the frequency and duration of use for the specific services (transitional housing services, mobile crisis services, peer support, tenancy services) offered by the housing assistance program by plan? What is the proportion of enrollees who are successfully discharged from the Pilot but subsequently become homeless again and resume using services?

Hypothesis 10B. This question is included to provide context and descriptive information about how the Pilot is being implemented by the MMA plans; therefore, there is no hypothesis to test.

10C. Based on Medicaid data submitted by the MMA plans, do enrollees in the study population have fewer avoidable hospitalizations and emergency department visits than they did prior to receiving housing assistance services?

Hypothesis 10C. There will be no difference in avoidable hospitalizations and emergency department visits among enrollees with SMI who receive supportive housing assistance compared to enrollees who were placed on the waiting list and did not receive supportive housing assistance.

10D. Are there changes in utilization of MMA services (specifically PCP visits, Outpatient visits, pharmacy services and behavioral health services) in the study population compared to their service utilization prior to participation in the Pilot program?

Hypothesis 10D. There will be no difference in use of MMA services r among enrollees with SMI who receive supportive housing assistance compared to enrollees who were placed on the waiting list and did not receive supportive housing assistance.

10E. Is care coordination more effective for the study population as a result of the Pilot program?

Hypothesis 10E. This research question will first be addressed using qualitative methods; it is exploratory and descriptive in nature so there is no hypothesis to be tested. However, the qualitative interviews will be used to understand how plans measure care coordination, and once these measures are obtained, they will be related to relevant study outcomes using quantitative methods.

10F. What are enrollee experiences with the Pilot program, including whether service needs were met, their experiences with integration of services, involvement in their care, and satisfaction with the services provided?

Hypothesis 10F. This question is included to provide context and descriptive information about enrollee experiences; therefore, there is no hypothesis to test.

10G. What are the costs of the Pilot program, including the costs of services provided to enrollees and the costs to administer the program?

Hypothesis 10G. This question is included to provide context and descriptive information about the cost of the Pilot program, therefore there is no hypothesis to test.

Driver Diagram and Component 9 and Component 10 Logic Models

The Driver Diagram below presents the overarching goal of the demonstration and provides readers with a visual aid for understanding the rationale behind the cause and effect of the variants behind the demonstration's aim to improve health outcomes for Florida Medicaid recipients while maintaining fiscal responsibility. As depicted in the diagram, the overall goal is to utilize all financial and stakeholder resources to improve the access and quality of care in a cost effective manner for Florida Medicaid recipients.

Figure 1. Florida Managed Medical Assistance Program Goals: Driver Diagram

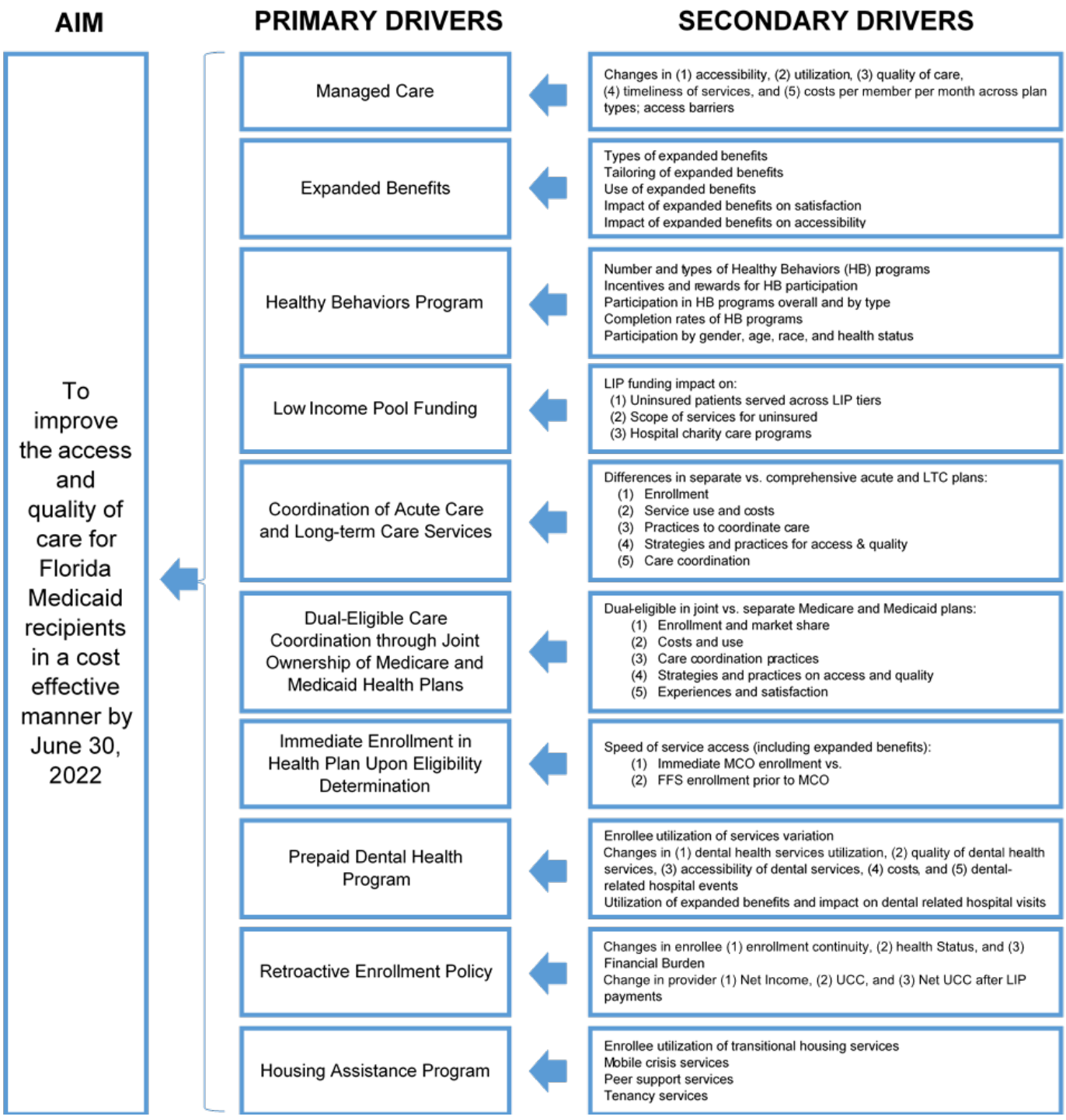
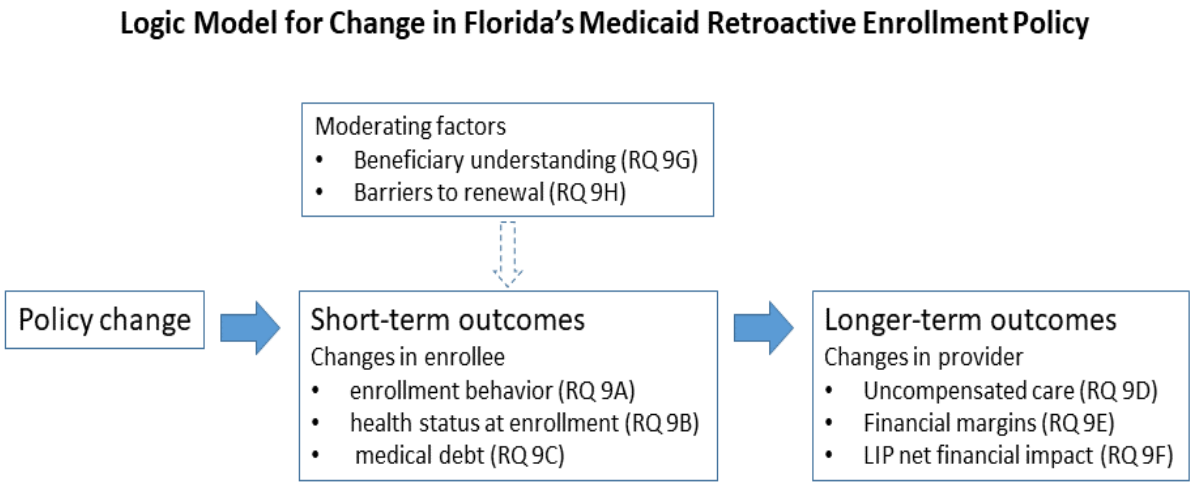


Figure 2 presents the logic model for Component 9 that depicts the hypothesized causes/effects associated with the change in Medicaid retroactive enrollment policy in Florida. The figure starts with the policy change as the intervention that drives the observed changes and lists both short-term outcomes and longer-term outcomes along with moderating factors. Short-term outcomes in Figure 2 include enrollment behavior (RQ 9A), health status at enrollment (RQ 9B), and medical debt (RQ 9C) while longer-term outcomes include uncompensated care (RQ 9D), financial margins (RQ 9E), and LIP net financial impact (RQ 9F). Moderating factors include both beneficiary understanding of the policy change (RQ 9G) and enrollee barriers to timely renewal (RQ 9H).

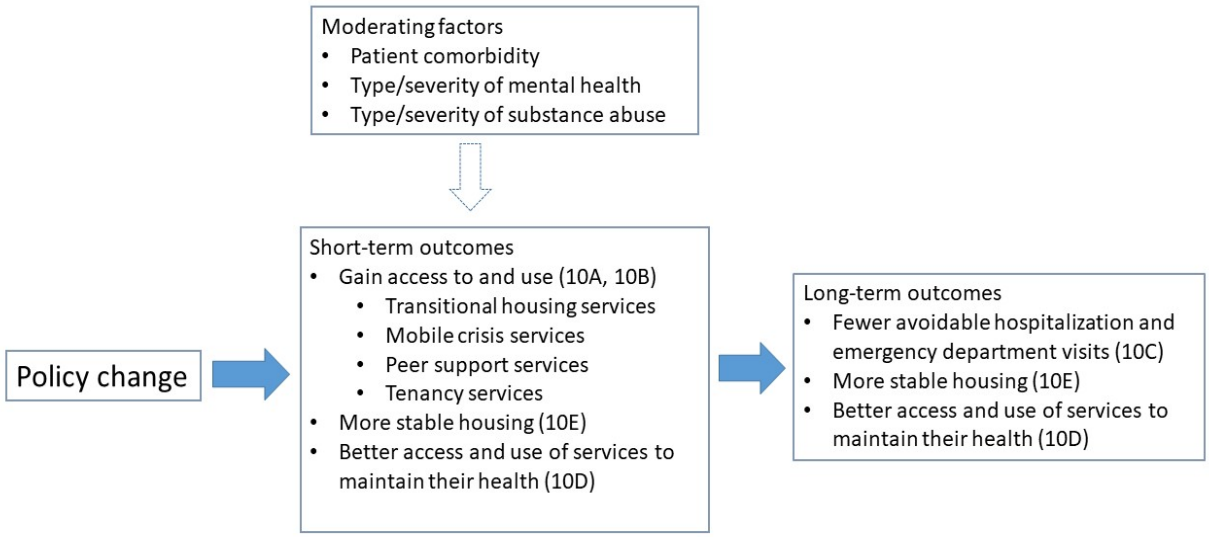
Figure 2. Logic Model for Change in Florida's Medicaid Retroactive Enrollment



Logic Model for Component 10: Housing Assistance Pilot Program

The logic model (Figure 3) for Component 10, which examines the addition of supportive housing services for individuals with mental health or substance abuse conditions who are homeless or at risk of homelessness, assumes that by making these services available in combination with care coordination services (10E), enrollees will gain access to and use transitional housing services, mobile crisis services, peer support services, and tenancy services (10A and 10B). Gaining access and using these services will lead to more stable housing (10E), which in turn will help enrollees better be able to access and use services to maintain their health, such as PCP visits, behavioral health services, and pharmacy services (10D). Use of these services will lead to fewer avoidable hospitalizations and emergency department visits (10C).

Figure 3. Logic Model for Housing Assistance Pilot Program



C. Methodology

This evaluation will employ a variety of quantitative and qualitative methods to answer its research questions and test its hypotheses. Quantitative methods will involve pre-post and post-only comparisons depending on whether the research question is focused on (1) comparing Medicaid performance following MMA implementation to Medicaid performance in the pre-MMA period or (2) the operations of the MMA program following implementation, respectively. Qualitative methods will involve (1) surveys and semi-structured interviews of MMA plan personnel and dual-eligible Medicaid enrollees and (2) content analyses of MMA plan policies and procedures. The remainder of this section provides more detail on the (1) evaluation design, (2) target and comparison populations, (3) evaluation period, (4) evaluation measures, (5) data sources, and (6) analytic methods.

A useful summary of the methodologies employed in this evaluation can be found in Table 6 "Design Table for the Evaluation of the Demonstration," at the end of this methodology section. Table 6 lists each research question within each component along with the outcome measures, sample or population subgroups to be compared, data sources, and analytic methods used for that research question.

Numerous research questions in this MMA evaluation have associated null statistical hypotheses. Null hypotheses are typically expressed as involving no change in the variable under study, e.g., "There will be no change in costs when moving from FFS to managed care." Such null hypotheses are tested against either one-tailed or two-tailed alternative hypotheses. One-tailed alternative hypotheses (e.g., "Costs will go up in moving from FFS to

managed care" or "Costs will go down in moving from FFS to managed care") are appropriate when there is an expected direction of change in the variable under study, such as when quantitative program targets have been established (e.g., "Health care costs will decrease by 5%"). By contrast, two- tailed alternative hypotheses (i.e., "The change in cost in moving from FFS to managed care will not equal zero.") are appropriate to test for changes that could be either positive or negative.

This evaluation employs two-tailed alternative hypotheses because the direction of change induced by the MMA program is not always clear a priori. Also, evaluation results for DY9 demonstrated that some specific measures (e.g., some categories of costs) may increase while other specific measures may decrease. When changes occur in the opposite direction to what is expected using one-tailed alternative hypotheses, statistical testing can only result in a failure to reject the null hypothesis of zero change. Statistically speaking, this is an inconclusive result. By contrast, two-tailed alternative hypotheses allow rejection of the null hypothesis of zero change in favor of the alternative hypothesis of non-zero change.

1. Evaluation Design

This evaluation employs both pre-post and post-only analyses as appropriate for the research question under examination. For example, for Research Question 1G, "What is the difference in per-enrollee cost by eligibility group pre-MMA implementation (Fee For Service (FFS), Reform plans and pre-MMA 1915(b) waiver plans) compared to per enrollee costs post-MMA implementation (MMA plans as a whole, standard MMA plans and specialty MMA plans)?", a pre-post perspective is required.

The qualitative design is discussed in the context of specific research questions in "Analytic Methods" below.

2. Target and Comparison Populations

The target and comparison populations vary across the research questions and are driven by (1) the pre-post or post-only focus of the research question, and (2) the specific population focus of the research question, e.g., enrollees in standard MMA plans vs. enrollees in specialty MMA plans. The population foci of individual research questions are listed in **Table 6** below.

3. Evaluation Period

The evaluation period began with SFY 2014-15 (Demonstration Year 9 (DY9)) and extends through SFY 2021-22 (DY16). SFY 2011-12 (DY6) and SFY 2012-13 (DY7) comprise the pre- MMA period and are used as a baseline for this evaluation, while SFY 2014-15 (DY9) through SFY 2021-22 (DY16) comprise the MMA period. SFY 2013-14 (DY8) was the implementation year for the MMA program and was excluded from this evaluation in order to avoid any data issues created by the transition from claims reporting to encounter reporting.

As of November 2017, the first MMA evaluation report compared quality, access, and cost measures during the pre-MMA period (SFY 2011-12 and SFY 2012-13) to the first complete year of the MMA period (SFY 2014-15). Subsequent evaluation reports will incorporate additional years from the MMA period as data become available and will focus on the evolution of the MMA program impacts across time.

4. Evaluation Measures

This evaluation uses a wide variety of measures of quality, access, and costs. ***Table 2*** and

Table *3*, below, list the CAHPS and HEDIS measures, and Table 4 lists additional measures used in this evaluation.

Table 2. CAHPS Measures Used in the Evaluation

Measure	CAHPS Version 5 Adult & Child Questions for MMA Evaluation
Getting Needed Care (Adult and Child)	Percentage of respondents reporting it is usually or always easy to get needed care (vs. sometimes or never)
Getting Care Quickly (Adult and Child)	Percentage of respondents reporting it is usually or always easy to get care quickly (vs. sometimes or never)
Rate the Number of Doctors(Adult and Child)	Percentage of respondents rating the number of doctors to choose from as excellent or very good (vs. good, fair, or poor)
Health Plan Information and Customer Service (Adult and Child)	Percentage of respondents reporting they usually or always get the help/information needed from their plan's customer service staff (vs. sometimes or never)
Overall Rating of Health Plan (Adult and Child)	Percentage of respondents rating their plan an 8, 9 or 10 on a scale of 0 (worst) – 10 (best)
Overall Rating of Health Care (Adult and Child)	Percentage of respondents rating their health care an 8, 9 or 10 on a scale of 0 (worst)- 10 (best)
Shared Decision-Making (Adult and Child)	Percentage of respondents reporting there is shared decision-making between the provider and respondent (Yes vs. No)
Overall Rating of Personal Doctor (Adult and Child)	Percentage of respondents rating their doctor an 8, 9, or 10 on a scale of 0 (worst)-10 (best)
Overall Rating of Specialist	Percentage of respondents rating their specialist an 8, 9, or 10 on a scale of 0 (worst)-10 (best)

Measure	Patient Experience Measures for the CAHPS Dental Plan Survey* Note – The dental plans are only collecting CAHPS data for children; therefore, the evaluation will focus solely on child dental CAHPS results until such time adult dental CAHPS data become available.
Care from Dentists and Staff	Percentage of respondents reporting their regular dentist usually or always explains things in a way that is easy to understand (vs. sometimes or never) Percentage of respondents reporting their regular dentist usually or always listens to them carefully (vs. sometimes or never) Percentage of respondents reporting their regular dentist usually or always treats them with courtesy and respect (vs. sometimes or never) Percentage of respondents reporting their regular dentist usually or always spends enough time with them (vs. sometimes or never) Percentage of respondents reporting dentists or dental staff usually or always do everything they can to help them feel as comfortable as possible during their dental work (vs. sometimes or never) Percentage of respondents reporting that their dentists or dental staff usually or always explain what they are doing while treating them (vs. sometimes or never)

Measure	Patient Experience Measures for the CAHPS Dental Plan Survey* Note – The dental plans are only collecting CAHPS data for children; therefore, the evaluation will focus solely on child dental CAHPS results until such time adult dental CAHPS data become available.
Access to Dental Care	Percentage of respondents reporting their dental appointments are usually or always as soon as they want (vs. sometimes or never) Percentage of respondents reporting they usually or always get an appointment with their dental specialist as soon as they want (vs. sometimes or never) Percentage of respondents reporting they usually or always spend 15 minutes or less in the waiting room before seeing someone for their appointment (vs. sometimes or never) Percentage of respondents reporting someone usually or always tells them why there is a delay or how long the delay will be if they have to wait more than 15 minutes in the waiting room before being seen for an appointment (vs. sometimes or never) Percentage of respondents answering "somewhat yes" or "definitely yes" when asked whether they get to see a dentist as soon as they want if they have a dental emergency (vs. "somewhat no" or "definitely no")
Dental Plan Coverage and Services	Percentage of respondents reporting their dental plan usually or always covers all of the services they think are covered (vs. sometimes or never) Percentage of respondents reporting that the 800 number, written materials, or website usually or always provides the information they want (vs. sometimes or never) Percentage of respondents reporting their dental plan's customer service usually or always gives them the information they want or the help they need (vs. sometimes or never) Percentage of respondents reporting their dental plan's customer service staff usually or always treats them with courtesy and respect (vs. sometimes or never) Percentage of respondents answering "somewhat yes" or "definitely yes" when asked whether their dental plan covers what they and their family need to get done (vs. "somewhat no" or "definitely no") Percentage of respondents answering "somewhat yes" or "definitely yes" when asked whether information from their dental plan helps them find a dentist they are happy with (vs. "somewhat no" or "definitely no")
Patients' Rating	Percentage of respondents rating their regular dentist an 8, 9, or 10 on a scale of 0 (worst) to 10 (best) Percentage of respondents rating all dental care they personally received in the last 12 months an 8, 9, or 10 on a scale of 0 (worst) to 10 (best) Percentage of respondents rating how easy it was to find a dentist an 8, 9, or 10 on a scale of 0 (extremely difficult) to 10 (extremely easy) Percentage of respondents rating their dental plan an 8, 9, or 10 on a scale of 0 (worst dental plan possible) to 10 (best dental plan possible)

Measure	Patient Experience Measures for the CAHPS Dental Plan Survey* Note – The dental plans are only collecting CAHPS data for children; therefore, the evaluation will focus solely on child dental CAHPS results until such time adult dental CAHPS data become available.
Dental Plan Expanded Benefits	Percentage of respondents who rated their dental expanded benefits as an 8, 9, or 10 on a scale of 1 to 10 Percentage of respondents who rated their access to dental expanded benefits an 8, 9, or 10 on a scale of 1 to 10

*Many of the dental survey items will be grouped into one overarching composite measure

Table 3. HEDIS and Other Performance Measures Used in the Evaluation

Measure	Components	Steward/ Source	CMS Adult/Child Core Measure?	NQF #
Adolescent Well-Care Visits	--	NCQA HEDIS	Child	--
Adults' Access to Preventive/Ambulatory Health Services	20-44 years 45-64 years 65+ years Total	NCQA HEDIS	--	--
Breast Cancer Screening	--	NCQA HEDIS	Adult	2372
Cervical Cancer Screening	--	NCQA HEDIS	Adult	0032
Childhood Immunization Status	Combo 2 Combo 3	NCQA HEDIS	Child	0038
Children and Adolescents' Access to Primary Care Practitioners	12-24 months 25 mos –6 yrs 7-11 years 12-19 years	NCQA HEDIS	Child	--
Chlamydia Screening in Women	16-20 years 21-24 years Total	NCQA HEDIS	Child and Adult	0033
HIV-Related Outpatient Medical Visits	≥ 2 visits (182 days apart)	Agency-defined	--	--

Measure	Components	Steward/ Source	CMS Adult/Child Core Measure?	NQF #
(Note – This measure will not be reported after CY 2016 data)				
Immunizations for Adolescents	Combination 1	NCQA HEDIS	Child	1407
Lead Screening in Children	--	NCQA HEDIS	--	--
Prenatal and Postpartum Care	Prenatal Postpartum	NCQA HEDIS	Child (Prenatal) and Adult (Postpartum)	1517
Frequency of Ongoing Prenatal Care/Prenatal Care Frequency	≥ 81% of expected visits	NCQA HEDIS/Agency-defined	Child	1391
Transportation Availability (Note – This measure will not be reported after CY 2016 data)		Agency-defined	--	--
Well-Child Visits in the First 15 Months of Life	0 visits 6+ visits	NCQA HEDIS	Child	1392
Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life	--	NCQA HEDIS	Child	1516
Adult BMI Assessment		NCQA HEDIS	Adult	--
Antidepressant Medication Management	Acute; Continuation	NCQA HEDIS	Adult	0105
Comprehensive Diabetes Care	HbA1C Testing	NCQA HEDIS	Adult	0057
Comprehensive Diabetes Care	HbA1c Good Control	NCQA HEDIS	--	0575
Comprehensive Diabetes Care	HbA1c Poor Control	NCQA HEDIS	Adult	0059
Comprehensive Diabetes Care	Eye Exam	NCQA HEDIS	--	0055
Comprehensive Diabetes Care	Nephropathy	NCQA HEDIS	--	0062

Measure	Components	Steward/ Source	CMS Adult/Child Core Measure?	NQF #
Comprehensive Diabetes Care	LDL-C Screening	NCQA HEDIS	Adult	0063
Comprehensive Diabetes Care	LDL-C Control	NCQA HEDIS	Adult	0064
Controlling High Blood Pressure		NCQA HEDIS	Adult	0018
Follow-up After Hospitalization for Mental Illness	7-day 30-day	NCQA HEDIS	Adult	0576
Follow-up Care for Children Prescribed ADHD Medication	Continuation and Maintenance	NCQA HEDIS	Child	0108
Highly Active Anti-Retroviral Treatment		Agency-defined	--	
Mental Health Readmission Rate		Agency-defined	--	
Medication Management for People with Asthma		NCQA HEDIS	--	1799
Transportation Timeliness		Agency-defined	--	
Dental Performance Measures				
Annual Dental Visit	Total	NCQA HEDIS		1388
Preventive Dental Services		CMS Medicaid & CHIP Child Core Set	Child	__
Dental Treatment Services		Agency-defined/CMS-416 Data	Child	__
Sealants for 6-9 Year-old Children at Elevated Caries Risk		CMS Medicaid & CHIP Child Core Set/Dental Quality Alliance (DQA)	Child	2508
Oral Evaluation		DQA/NQF	Child	2517
Topical Fluoride for Children at Elevated Caries Risk		DQA/NQF	Child	2528

Measure	Components	Steward/ Source	CMS Adult/Child Core Measure?	NQF #
Ambulatory Care Sensitive Emergency Department Visits for Dental Caries in Children		DQA/NQF	Child	2689
Follow-up after Emergency Department Visits for Dental Caries in Children		DQA/NQF	Child	2695

The following provides descriptions and numerators/denominators for the seven Agency-defined measures shown in

Table 3, above:

HIV-Related Outpatient Medical Visits – (HIVV)

Description: The percentage of enrollees who were seen on an outpatient basis with HIV/AIDS as the primary diagnosis by a physician, Physician Assistant or Advanced Registered Nurse Practitioner for an HIV-related medical visit within the measurement year.

Eligible Population: Enrollees with HIV/AIDS as identified by at least one encounter with an ICD-9-CM diagnosis code 042, 079.53, 795.71, or V08 during the first six months of the measurement year.
Denominator: The eligible population.

Numerator: Four separate numerators are calculated:

a. Enrollees who were seen twice in measurement year, >= 182 days apart.
b. Enrollees who were seen twice or more in measurement year.
c. Enrollees who were seen exactly once in the measurement year.
d. Enrollees who were not seen during the measurement year.

***Note:** Numerators a and b are not mutually exclusive.

Prenatal Care Frequency (PCF)

Description: The percentage of Medicaid deliveries between November 6 of the year prior to the measurement year and November 5 of the measurement year that received greater than or equal to 81 percent of expected visits.
Administrative/Hybrid Specifications: Follow the specifications for the HEDIS measure, *Frequency of Ongoing Prenatal Care (FPC),* most recent edition, with the following modification:

For those enrollees whose number of expected prenatal care visits is greater than 10, per Table FPC-A, the health plan should consider the enrollee having met the threshold for the greater than or equal to 81 percent of expected visits category if she received at least 10 visits. Report only the greater than or equal to 81 percent category.

Transportation Availability (TRA)

Description: The percentage of requests for transport that resulted in a transport.

Denominator: The number of requests for a transport to a Medicaid service made within the required time frames.

Numerator: The number of transports delivered.

Highly Active Anti-Retroviral Treatment – (HAART)

Description: The percentage of enrollees with a HIV/AIDS diagnosis that have been prescribed Highly Active Anti-Retroviral Treatment.

Eligible Population: Enrollees with HIV/AIDS as identified by at least one encounter with ICD-10-CM diagnosis code B20, B97.35, or Z21 during the first six months of the measurement year.

Denominator: Number of enrollees in the plan diagnosed with HIV/AIDS.

Numerator: Number of enrollees who were prescribed a HAART* regimen within the measurement year.

Mental Health Readmission Rate (RER)

Description: The percentage of acute care facility discharges for enrollees who were hospitalized for a mental health diagnosis that resulted in a readmission for a mental health diagnosis within 30 days.

Age: 6 years and older as of the date of discharge.

Denominator: Discharges to the community from an acute care facility (inpatient or crisis stabilization unit) with a principal diagnosis of mental illness and that met continuous enrollment criteria. Please refer to the Mental Illness Value Set in the most recent edition of the HEDIS Technical Specifications for Health Plans for the FUH measure and follow the steps found in the HEDIS Technical Specifications to identify acute inpatient discharges.

Numerator: Discharges that result in a readmission to an acute care facility (inpatient or crisis stabilization unit) with a principal diagnosis of mental illness and that met continuous enrollment criteria. Please refer to the Mental Illness Value Set in the most recent edition of the HEDIS Technical Specifications for Health Plans for the FUH measure and follow the steps found in the HEDIS Technical Specifications to identify acute inpatient discharges.

Transportation Timeliness (TRT)

Description: The percentage of transports where the enrollee was delivered to the service provider prior to the scheduled appointment time.

Denominator: The number of transports scheduled for an appointment for a Medicaid service.

Numerator: The number of transports where the enrollee was delivered to the service provider prior to or at the exact scheduled appointment time.

Dental Treatment Services

Description: The percentage of individuals ages 1 to 20 who are enrolled in the plan for at least 90 continuous days, are eligible for EPSDT services, and who received at least one dental treatment service during the reporting period.

Denominator: The total unduplicated number of individuals ages 1-20 that have been continuously enrolled in Medicaid or CHIP Medicaid Expansion programs for at least 90 days and are eligible to receive EPSDT services.

Numerator: The unduplicated number of individuals receiving at least one dental treatment service by or under the supervision of a dentist, as defined by HCPCS codes D2000-D9999 (CDT codes D2000-D9999) or equivalent CPT codes, that is, only those CPT codes that involved periodontics, maxillofacial prosthetics, implants, oral and maxillofacial surgery, orthodontics, adjunctive general services.

Table 4 lists the additional measures used in this evaluation beyond the HEDIS and CAHPS measures presented in Tables 2 and 3. These additional measures deal with

- Enrollee grievances and complaints,
- Service use,
- PCP appointment wait times,
- Mean costs by type of service,
- Expanded benefit types,
- Common themes from plan interviews,
- Types of Health Behaviors programs and incentives, and
- Enrollee participation and completion rates in Healthy Behaviors programs.

Measures of costs and utilization in Table 4 will vary depending on the research question and the type of care (e.g., inpatient or outpatient) under study. When enrollee encounter cost and utilization data are employed, the units of measurement for utilization will depend upon the definition of utilization reported in the encounter data. While cost data will be measured in dollars, the measurement of costs will differ depending on (1) whether the focus is on overall program efficiency where claim amounts and capitation payments will be used for the pre-MMA and MMA periods, respectively, or (2) the focus in on the cost of individual services where claims amounts and amounts paid by the MCO to the provider will be used for the pre-MMA and MMA periods, respectively.

Table 4. Additional Measures used in the Evaluation

Measure	Description	Research Question(s)
Plan Reported Enrollee Issues/Grievances	Number of grievances and appeals by type	1A

Measure	Description	Research Question(s)
Access to care issues/complaints (by plan type)	Extract from Agency's Client Information & Registration Tracking database. Type of complaint (e.g. access, quality of care)	1A
Service Utilization. Use Claims and encounter data		
Inpatient	Per Member Per Month (PMPM) average number of visits that a Medicaid enrollee had in a month	1C
Outpatient	PMPM average number of visits that a Medicaid enrollee had in a month	1C
ED	PMPM average number of visits that a Medicaid enrollee had in a month	1C
Professional Physician	PMPM average number of visits that a Medicaid enrollee had in a month	1C
Specialist	PMPM average number of visits that a Medicaid enrollee had in a month	1C
Service Use per Enrollee per Year. Service utilization is per actual enrollee year. Statistical analysis of use to rely on binomial regression models of service use by the type of service		
Hospital Inpatient Admissions	Mean Service Use	5C
Hospital Inpatient Days	Mean Service Use	5C
Hospital Outpatient Visits	Mean Service Use	5C, 10D
Physician Primary Care Visits	Mean Service Use	5C, 10D
Physician Specialist Visits	Mean Service Use	5C
Pharmacy Claims	Mean Service Use	5C, 10D
Emergency Dept. Visits	Mean Service Use	5C
LTC Services	Mean Service Use	5C
Assisted Living	Mean Service Use	
HCBS	Mean Service Use	5C
Home Health	Mean Service Use	5C
Hospice	Mean Service Use	5C
Nursing Home	Mean Service Use	5C
Transitional Housing Services	Mean Service Use	10B
Mobile Crisis Services	Mean Service Use	10B
Peer Support Services	Mean Service Use	10B
Tenancy Services	Mean Service Use	10B
Potentially Preventable Hospitalizations	Mean Service Use	10C
Potentially Preventable Emergency Department Visits	Mean Service Use	10C
Behavioral Health Services	Mean Service Use	10D
Average PCP Appointment Wait Times. Average appointment wait times. Data Source: Timely Access PCP Wait Times Report		
Urgent Care	Days	1F
Routine Sick	Days	1F
Wellcare Visit	Days	1F
Mean Costs. Cost of specific MMA services will be obtained from the amount paid by the MMA plan to the provider in the encounter record. For MMA period comparisons to the pre-MMA periods, MMA capitation payments will be used as a measure of the cost to Medicaid under MMA.		

Measure	Description	Research Question(s)
Total MMA and LTC Costs Combined	Per Member Per Month Mean Cost	1G
Total MMA	Per Member Per Month Mean Cost	1G
Hospital Inpatient	Per Member Per Month Mean Cost	1G
Hospital Outpatient	Per Member Per Month Mean Cost	1G
Physician Primary Visit	Per Member Per Month Mean Cost	1G
Physician Specialist Visit	Per Member Per Month Mean Cost	1G
Pharmacy Cost	Per Member Per Month Mean Cost	1G
Emergency Dept. Cost	Per Member Per Month Mean Cost	1G
Total LTC Costs	Per Member Per Month Mean Cost	1G
Assisted Living Costs	Per Member Per Month Mean Cost	1G
HCBS Costs	Per Member Per Month Mean Cost	1G
Home Health Costs	Per Member Per Month Mean Cost	1G
Hospice Costs	Per Member Per Month Mean Cost	1G
Nursing Home Costs	Per Member Per Month Mean Cost	1G
Supportive Housing Service Costs	Per Member Per Month Mean Cost	10G
Expanded Benefits Offered by Plans		
Adult Dental Services	Presence or Absence and Summary Counts	2A
Adult Influenza Vaccine	Presence or Absence and Summary Counts	2A
Adult Pneumonia Vaccine	Presence or Absence and Summary Counts	2A
Adult Shingles Vaccine	Presence or Absence and Summary Counts	2A
Art Therapy	Presence or Absence and Summary Counts	2A
Equine Therapy	Presence or Absence and Summary Counts	2A
Hearing Services	Presence or Absence and Summary Counts	2A
Home Health (non-pregnant adults)	Presence or Absence and Summary Counts	2A
Medically Related Lodging & Food	Presence or Absence and Summary Counts	2A
Newborn Circumcisions	Presence or Absence and Summary Counts	2A
Nutritional Counseling	Presence or Absence and Summary Counts	2A
Extra Outpatient Services	Presence or Absence and Summary Counts	2A
Over-The Counter Drugs/ Supplies Aid	Presence or Absence and Summary Counts	2A
Pet Therapy	Presence or Absence and Summary Counts	2A
Physician Home Visits	Presence or Absence and Summary Counts	2A
Post-Discharge Meals	Presence or Absence and Summary Counts	2A
Extra Prenatal/ Perinatal Visits	Presence or Absence and Summary Counts	2A
Extra Primary Care Visits	Presence or Absence and Summary Counts	2A
Vision Services	Presence or Absence and Summary Counts	2A
Waived Co-payments	Presence or Absence and Summary Counts	2A
Total Number of Expanded Benefits	Presence or Absence and Summary Counts	2A

Plan Interviews – Most Common Themes (Subsequent year themes to be determined)		
Quality of Care	% of content	1E
Behavioral Health	% of content	6B
Non-emergency Transportation	% of content	6B
Housing Assistance Pilot implementation	% of content	10A
Housing Services Care Coordination	% of content	10E
Types of Healthy Behaviors Programs and Incentives **Data Source: Quarterly Healthy Behaviors Summary Reports**		
Medically Approved Smoking Cessation Program	#, incentives and value	3A, 3B, 3C
Medically Directed Weight Loss Program	#, incentives and value	3A, 3B, 3C
Medically Approved Alcohol or Substance Abuse Recovery Program	#, incentives and value	3A, 3B, 3C
Preventive Well Child Care	#, incentives and value	3A, 3B, 3C
Prenatal, Maternity, & Postpartum Visits	#, incentives and value	3A, 3B, 3C
Preventive Adult Care (PCP visits)	#, incentives and value	3A, 3B, 3C
Mammograms	#, incentives and value	3A, 3B, 3C
Cervical Cancer Screening	#, incentives and value	3A, 3B, 3C
Enrollee Participation and Completion Rates in Healthy Behaviors Programs (Mandatory and Optional)		

Number currently enrolled	#	3C
Enrollees who completed program	#	3C
Plans Offering Program	#	3C
Plan with Most Participants	#	3C
By Gender	# (Male, Female)	3D
By Age Group	# (Age Grp 0-20, 21-40, 41-60, over 60)	3D

5. Data Sources

This evaluation will collect both quantitative and qualitative data from a variety of sources as outlined below in Table 5, "Quantitative and Qualitative Data Sources for Florida MMA Evaluation". Quantitative data will be collected predominantly from secondary sources (e.g., claims and encounter data, HEDIS performance reports, state MCO performance reports, etc.). The sole exception involving collecting primary quantitative data will involve collecting dual- eligible care coordination experiences via telephone surveys using closed-end questions.

Qualitative data will be collected using both semi-structured interviews and review of policies and procedures documents. Fully coded transcriptions of qualitative interviews will be analyzed through iterations of content analysis and grounded theory to identify salient themes.

The cleaning of Medicaid eligibility, enrollment, encounter, and claims data is done by both the Agency and the evaluation team. The eligibility, enrollment, encounter, and claims data used in his evaluation comes from the Agency's Special Feed database. These data are more extensively error-checked by the Agency upon receipt to ensure that the data are complete and error-free. The evaluation team conducts additional checks related to data integrity upon receipt of the Special Feed data. "Filler" codes for character variables are checked (e.g., "####" or "****") and detected filler values are set to missing. Range-checking for both numeric and character variables as well as logical consistency checks are made among age, sex, diagnosis and procedure codes. Missingness rates are calculated for each variable in each dataset and compared to missingness rates in previous years of similar data. Voided claims (detail status = V) are removed, as are preliminary records that have been superseded by subsequent revised entries.

These additional checks routinely produce questions from the evaluation team for the Agency data team concerning errors and anomalies. Answers given by the Agency data team are documented for future reference. Questions that cannot be readily answered are resolved by the involvement of additional data personnel and/or the transmittal of corrected data as needed. The HEDIS and CAHPS data used in this evaluation are independently audited prior to being submitted to the Agency. Similarly, Florida hospital discharge, emergency department, and ambulatory surgery center data are cleaned and error-checked by the Florida Health Data Center upon receipt.

Table 5. Quantitative and Qualitative Data Sources for Florida MMA Evaluation

Data Source	Time Period*	Variables
Medicaid claims, eligibility, enrollment and encounter data	Pre-MMA MMA	Pre-MMA Inclusion criteria ▪ All eligibility categories that are mandated to enroll in a MMA health plan and received services through any delivery system for at least one month during the pre-MMA time period. Note that enrollees gradually transitioned to MMA health plans beginning May 1, 2014, thus some data during the implementation period will be coded as MMA during months where the enrollee was enrolled in a MMA health plan; ▪ All claims and encounter data for drugs and services that are required to be covered by MMA plans; and ▪ All voluntary MMA participants who received services through any delivery system. Exclusion criteria ▪ All groups explicitly excluded from MMA program participation. Demographic and health status characteristics MMA Inclusion criteria ▪ All eligibility categories that are mandated to enroll in a MMA plan and were enrolled in a MMA plan for at least one (1) month during May 1, 2014 – June 30, 2017. ▪ All voluntary MMA participants; and ▪ All claims and encounter data for drugs and services that are required to be covered by MMA plans. Exclusion criteria ▪ All groups explicitly excluded from MMA program participation. Demographic and health status characteristics
Consumer Assessment of Health Care Providers and Systems (CAHPS)	Pre-MMA MMA	See Table 2 above for a complete listing of the proposed CAHPS measures for this evaluation.
CAHPS Dental Plan Survey	MMA	See Table 2 above for a complete listing of the proposed dental CAHPS measures for this evaluation. Note – The dental plans are only collecting CAHPS data for children; therefore, the evaluation will focus solely on child dental CAHPS results until such time adult dental CAHPS data become available.

Data Source	Time Period*	Variables
HEDIS & Agency-defined performance measures, including CMS Child and Adult Core Measures	Pre-MMA (where available): Annual Means CYs 2011-2013 MMA: Annual Means CY 2015 through latest date when complete data is available	See Table 3 above for a complete listing of the proposed HEDIS and Agency-defined performance measures for this evaluation.
Dental Performance Measures	MMA	See Table 3 above for a complete listing of the proposed dental performance measures for this evaluation.
Managed Care Plans' Enrollee Complaint, Grievance, and Appeals Reports	MMA	Number of grievances and appeals by type
Agency Complaints, Issues, Resolutions & Tracking System (CIRTS) Data	Pre-MMA MMA	Enrollee demographic information Type of complaint (e.g., access, quality of care, etc.) Plan enrollment
Medicaid Fair Hearing data	MMA	Date hearing requested Date hearing held Plan Name Service in Question Petitioner's Favor/Respondent's Favor
Managed Care Plans' Performance Improvement Projects (PIPs) and External Quality Review Organization (EQRO) Reports	MMA	Description and overall analyses of plan performance improvement projects (improvement strategies and data analyses) to improve HEDIS/Agency defined measures.
Managed Care Plans' Choice Materials and Managed Care Span	Pre-MMA	Plan benefit data

Data Source	Time Period*	Variables
	MMA	
Agency Quarterly and Annual Reports to CMS	MMA	Review of expanded services
Managed Care Plans' policies and procedures related to care coordination	Pre-MMA MMA	Review of policies and procedures related to care coordination
Timely Access PCP Wait Times Report	MMA	Average appointment wait times
Long-Term Care Case Management and Monitoring Reports	MMA	Case file audit reviews to determine the timeliness of enrollee assessments performed by case managers Reviews of the consistency of enrollee service authorizations performed by case managers Development and implementation of continuous improvement strategies to address identified deficiencies
Medicaid Choice Counseling Data	Pre-MMA MMA	Medicaid choice counseling data will be used to determine auto-enrollment, plan selection, and length of plan enrollment.
Florida Center for Health Information and Transparency Encounter Data	Pre-MMA MMA	All variables available in the inpatient hospital discharge, emergency department, and ambulatory surgery discharge data
MMA Managed Care Plans' reports on Healthy Behaviors programs	MMA	All available data related to each Healthy Behaviors program Caseloads (new and ongoing) for each Healthy Behaviors program at the individual recipient level Amount and type of rewards/incentives provided for each Healthy Behaviors program
Annual Milestone Statistics and Findings Report Data	MMA	LIP Payments by provider (hospital and non-hospital) Number of individuals served (hospital providers) including Medicaid, Uninsured, Total all unduplicated, Inpatient, Outpatient, and Inpatient/ Outpatient combined Average number of individuals served (hospital providers) Growth in the number of individuals served (hospital

Data Source	Time Period*	Variables
		providers) Number of encounters for specific services (hospital providers) including Medicaid, Uninsured/Underinsured, Hospital discharges, Hospital inpatient (days), Emergency care (encounters), ER visits, Hospital outpatient, Affiliated services (encounters), Prescription drugs `(number of prescriptions filled)
Florida Hospital Uniform Reporting System	DY11-DY16	This report collects financial and utilization statistics each year from Florida Hospitals.
Disproportionate Share Hospital Data	DY11-DY16	This data will be utilized as needed for uninsured and uncompensated care analyses. Note: There is presently a three-year lag in the availability of annual DSH survey data.
Medicare Cost Reports	DY11-DY16	This report includes descriptive, financial, and statistical data on hospitals and may be helpful with identifying facility characteristics, costs and charity care
Information on charity care programs including policies and criteria for all LIP funded hospitals.	DY11-DY16	Descriptive data on hospital charity care programs.
Qualitative data from interviews with health plan care coordination experts	MMA	Themes from qualitative interviews, specifically addressing: (1) care coordination strategies for enrollees needing behavioral health or non-emergency transportation services; (2) the most effective strategies for ensuring access to services; and (3) strategies for coordinating these services specifically for dual-eligible members; (4) strategies that standard MMA and Specialty MMA plans are using to improve quality of care and the strategies that are most effective; and (5) perceived care coordination effectiveness for enrollees who are homeless are at-risk for homeless
Enrollee satisfaction surveys: - behavioral health and non-emergency transportation services; - expanded benefits; - dental health services, including expanded dental health benefits. - Housing assistance Services	MMA	Telephone surveys covering sociodemographic characteristics, health and functional status/needs, and experience and satisfaction with behavioral health services, non-emergency transportation services, expanded benefits, dental health services, expanded dental health service benefits, and supportive housing services.

Enrollee roster reports submitted by MMA plans to identify housing assistance services	MMA	Number of enrollees using transitional housing services, number of enrollees using mobile crisis services, number of enrollees using peer support services, number of enrollees using tenancy services, housing status, Housing Pilot enrollment and disenrollment date,

*Unless otherwise noted, Pre-MMA time period refers to SFYs 2011-12 and 2012-13. MMA time period refers to May 1, 2014 through the latest date when complete data is available.

6. Analytic Methods

This evaluation will employ both quantitative and qualitative methods in answering the research questions outlined above. The quantitative methods will include both simple descriptive methods and multivariable statistical methods while the qualitative methods will include analysis of structured administrative interview data and thematic analyses of semi-structured interview data (using content analyses and grounded theory).

The remainder of this section describes these methods in greater detail. Table 6 following these descriptions lists each research question along with the associated analytic method to be used in answering that question.

Overall Analytic Design Issues

Pre-post comparisons have well-known limitations concerning the influence of intervening factors beyond the intervention under study that can bias the observed treatment effect. Similarly, post-only comparisons face the challenge of unobserved heterogeneity between the treatment and comparison groups that influence both outcomes and selection into the treatment vs. comparison groups.

Unfortunately, evaluation designs such as difference-in-differences and propensity-score matching that address the limitations of pre-post and post-only designs are not ideally suited for evaluating Florida's MMA program, with the exception of selected questions in (1) the Housing Assistance Pilot (Component 10) and (2) the impact of Florida's retroactive enrollment policy change on new enrollee financial burden (Component 9). Florida's statewide transition to the MMA program took place over a three-month period[4] and included over 90 percent of Florida's Medicaid enrollees. This poses special challenges for employing evaluation designs such as difference-in- differences and propensity-score matching since no suitable comparison groups were available within Florida Medicaid following MMA implementation. Employing comparison groups outside of Florida Medicaid is problematic because such comparison groups will differ in systematic ways from Florida Medicaid enrollees. Such systematic differences will likely generate large pre-period treatment-comparison differences that will likely violate the parallel time trends assumption of difference-in-differences.

However, because there are limits to the number of enrollees who can participate in the Housing Assistance Pilot, individuals who are placed on a waiting list for the program can serve as controls, which will allow for standard and/or modified difference-in-differences analysis of the Housing Assistance Pilot.

Furthermore, evaluating the impact of Florida's retroactive enrollment policy change on new enrollee financial burden poses special challenges to traditional pre-post and post-only research designs. The large number of new Florida Medicaid enrollees each month will likely convey sufficient statistical power to detect even minute differences across groups in financial burden as statistically significant. In addition, because financial burden can change due to a myriad of factors beyond unpaid medical bills (e.g., job loss, unexpected financial losses, and non-health family emergencies), the potential for intervening time factors to create history bias is very high.

For these reasons, we are proposing to use modified difference-in-differences designs to

assess new enrollee financial burden associated with the February 2019 retroactive enrollment policy change. The modified difference-in-differences designs relax the stringent parallel time trends assumption of standard difference-in-differences designs. These designs are discussed in detail in Attachment 6 of this document.

The remainder of the MMA evaluation questions will employ pre-post- and post-only comparisons as dictated by the research question under study. In general, a pre-post perspective will be used when the focus is on the overall impact of the MMA intervention on costs and utilization. A post- only perspective will be used when the research question is focused on some aspect of the MMA program operation, such as separate vs. comprehensive MMA and LTC service organization. Multivariable statistical models will be used whenever feasible to control for other factors that might influence the outcome.

[4] This three-month period covered virtually the full transition to the MMA program, although one MMA plan (Freedom) began operations in January 2015.

Statistical Testing and Modeling

Basic statistical tests (e.g., t-tests and chi-square tests) will be employed wherever possible to ensure that observed differences are not simply the results of random variation. However, such testing will not always be feasible since distributional measures for the data, standard deviation or variance, and enrollee sample sizes will not always be available from the statewide and plan-level data provided for various years. In such cases, it will not be possible to calculate the standard errors necessary for making statistical inferences, and therefore, the data will be presented as simple descriptive comparisons with brief comments.

Multivariable statistical models will be used when analyzing individual enrollee encounter cost and utilization data to control for factors that influence costs and utilization and isolate the effect of the characteristic under study (e.g., the MMA intervention and separate vs. comprehensive MMA and LTC services). The impact of factor under study (e.g., the MMA program) will be assessed using a two-part mixture model which first assesses the odds of having any expenditure or use using a random effects logit model (Equation 1) that accounts for clustering by month and by individual, and then uses a random effects log-linear generalized least squares regression (Equation 2) that also accounted for clustering by month and by individual. Both models assess the impact of the MMA program by including an indicator for whether or not the observation was from an individual enrolled in an MMA plan during the MMA study period. This shows the shift in the intercept associated with the MMA program (i.e., the average difference in PMPM expenditures or use between the pre-MMA and MMA periods). The two equations estimated used the following specifications:

$$\ln\left(\frac{(any\ \$ = 1)}{p(any\ \$ = 0)}\right)_{it} = MMA \cdot \beta 1 + \text{Age} \cdot \beta 2 + \text{Gender} \cdot \beta 3 + \text{Race} \cdot \beta 4 + \text{RiskScore} \cdot \beta 5 + \varepsilon it$$

$$\ln(PMPM\ \$)_{it} = MMA \cdot \beta 1 + \text{Age} \cdot \beta 2 + \text{Gender} \cdot \beta 3 + \text{Race} \cdot \beta 4 + \text{RiskScore} \cdot \beta 5 + \varepsilon it$$

given month, while ln(PMPM $) is the natural log of expenditures by an individual in any given month given that they incurred any expenditures. To obtain an estimate of the likely difference in expenditures due to the MMA program, average PMPM expenditures were predicted assuming all enrollees continued in the pre-MMA program using the multivariate models, and then average PMPM expenditures were calculated again to determine what PMPM expenditures would have been if the trend in expenditures had instead followed the trend observed in the MMA program.

The multivariate model specifications for the comparison of pre-MMA to specialty MMA plans and pre-MMA to standard MMA plans was essentially the same except only observations from specialty MMA plan enrollees were used to assess expenditures during the MMA period for the specialty MMA analysis while only observations from standard MMA plan enrollees during the MMA period were used for the standard MMA plan analysis.

As discussed above, the multivariate model comparing service utilization associated with participation in the Housing Assistance Pilot will use a standard or modified difference-in-difference approach, where changes in utilization from the year prior to implementation of the Pilot to utilization in the year after implementation for participating enrollees will be compared to changes in utilization over the same time period for enrollees who were placed on the waiting list for participation in the Housing Assistance Pilot. A modified difference-in-differences approach will also be employed to study the impact of the retroactive enrollment policy change on new enrollee financial burden (see Research Question 9C).

Qualitative Analyses

Qualitative research questions in this evaluation are found in Components 1, 2, 6, 8, 9, and 10:

- ***RQ1E**: What strategies are standard MMA and specialty MMA plans using to improve quality of care? Which of these strategies are most effective in improving quality and why?*

- ***RQ 2D**: How do enrollees rate their experience and satisfaction with the expanded benefits that are offered by their health plan?*
- ***RQ 6B**: What specific care coordination strategies and practices are most effective for ensuring access to and quality of care for behavioral health services and non-emergency transportation services for dual-eligible enrollees?*
- ***RQ 6C:** How do dual-eligible enrollees rate their experience and satisfaction with* the *delivery of care they receive related to behavioral health and non-emergency transportation services?*
- ***RQ 8J**: How do enrollees rate their experiences and satisfaction with the expanded benefits offered by their dental health plans?*
- ***RQ 9A**: How will eliminating retroactive eligibility change enrollment continuity?*
- ***RQ 9G:** Do beneficiaries subject to the retroactive eligibility waiver understand that they will not be covered during enrollment gaps?*

- ***RQ 9H.*** *What are common barriers to timely renewal for those subject to the retroactive eligibility waiver?*
- ***RQ 10A****. How did MMA plans implement the Pilot program?*
- ***RQ 10E****: Is care coordination more effective for the study population as a result of the Housing Assistance Pilot Program?*

Methods

Qualitative interviews with MMA plan experts. Experts in quality of care (RQ1E), care coordination (RQ6B, RQ10E), and program implementation (10A) at each of the MMA plans will be identified to participate in in-depth interviews. Each plan's contract manager will assist the investigators in identifying and contacting the appropriate experts. Identified experts will receive an introductory email that includes: the purpose of the study, contact information of qualitative team personnel who can answer questions about the study or the request and assist with any technical issues. In addition, the email will notify experts that we would like to schedule a 30- to 60-minute telephone interview with them. To assist the evaluation team in preparing for the interview, the introductory email will include a form-fillable PDF document with preliminary questions addressing the topics to be covered in the interviews (described below). The MMA plan experts will be asked to prepare written responses to these questions and email the completed PDF form to the study team prior to their scheduled interview.

The research teams will develop qualitative interview guides with a list of questions relevant to Research Questions 1E, 6B, 10A and 10E, respectively, which will be asked of all MMA plans for RQ1E and RQ6B, and for MMA plans participating in the Housing Pilot for RQ10A and RQ10E. All data collection tools will be reviewed by the Agency prior to administration. The interview guides will include questions for plans that also participate in the LTC program to address the role LTC case managers (RQ6B) have in addressing the respective topics. Before each MMA plan's scheduled telephone interview, the research teams will review: (1) the MMA plan's updated Policy and Procedure document(s) provided by the Agency related to quality of care and performance improvement (RQ1E) or coordination of behavioral health services and non- emergency transportation services (RQ6B); and (2) the MMA plan's written responses to the preliminary questions in PDF format. These reviews may generate follow-up questions and points of clarification tailored to each specific health plan, which will be added to the plan's telephone interview guide prior to the plan's scheduled interview. They also will help to streamline the interview process and minimize respondent burden.

Follow-up telephone interviews will be conducted with the same experts who were initially contacted and who provided the written PDF responses, or appropriate delegated individuals who are knowledgeable in the areas of interest. In addition, participants may include other health plan experts in the interviews. Interviews will follow a qualitative, semi-structured format. Interviews will be conducted by trained qualitative interviewers by telephone (lasting 30 to 60 minutes), audio recorded and transcribed for coding and analysis.

The qualitative team that comprises researchers from UF, UAB and FSU will administer the interviews that are specific to their component areas.

Qualitative interview analysis. Qualitative research teams will use Atlas.ti (V8) or Nvivo to analyze interview transcripts produced for research questions RQ1E and RQ6C, following iterations of content analysis and grounded theory. For each research question, an initial

codebook of priori themes will be developed based on the interview guide. Coding of transcripts will be conducted concurrently with data collection and reviewed in team meetings to ensure inter-rater reliability. Following grounded theory methods, reviewers will define codes for new themes that emerge in the analysis; as new codes are produced, the codebook will be updated and previously-coded transcripts will be back-coded to capture the new themes. After all MMA plan interviews have been completed and their transcripts coded, the research teams will conduct a content analysis to determine the most common themes and relevant co-occurrences among the themes. Based on findings of the content analysis, the research teams will conduct targeted queries to identify patterns in responses and exemplary quotes.

Member surveys. The research teams will design structured telephone surveys to be administered to MMA plan members, addressing experiences and satisfaction with expanded health plan benefits (RQ2D), coordination of behavioral health and non-emergency transportation for dual-eligible members (RQ6C), expanded benefits offered by prepaid dental health plans (RQ8J), new enrollee health status (RQ9B), enrollee understanding of retroactive enrollment changes and barriers to enrollment renewal (RQ9G and RQ9H), and enrollee experiences with whether their services needs were met, integration of services, involvement in care, and satisfaction with services provided through the Housing Pilot program (RQ10F). The surveys will be administered to MMA and prepaid dental plan members (RQ2D, RQ8J), dual-eligible MMA plan members (RQ6C) who were enrolled in an MMA standard or MMA specialty plan in the last 12 months, MMA new enrollees (RQ9B), MMA enrollees subject to the new retroactive enrollment policy (RQ9G and RQ9H), and plan members who participated in the Housing Assistance Pilot (RQ10F). Sources of survey questions are specific to the research questions and described in the sections below. Additional questions may be developed by the research teams upon written approval of the Agency.

Telephone surveys will be conducted by trained interviewers by phone. Participants will have the option to complete the surveys in English or Spanish. Telephone survey data will be analyzed by the research teams using SPSS V23, SAS, or Stata.

Qualitative issues and approaches for specific questions.

Research Question 1E

In addition to plan document reviews and interviews with plan experts, this component will review the *2015-2016 Florida Annual Performance Improvement Project Validation Summary Report* produced by the Health Services Advisory Group to identify specific performance improvement projects (PIPs) offered by health plans. During the in-depth interviews, experts will be specifically asked about their own performance improvement projects, including associated indicator rates. In addition, during the in-depth interviews experts will be asked to comment on which projects are most effective at improving quality and why they are effective.

Research Question 2D

A random sample of MMA enrollees who used at least one expanded benefit during the previous 12 months will be included in this study.

Research Question 6B and 10E

Experts in care coordination at the MMA and MMA specialty plans will include individuals at all 11 MMA standard plans and 4 of the MMA specialty plans. Among the MMA standard plans, Amerigroup, Better Health, and Simply are owned by the same parent company (Anthem) and share the same policies and procedures; these three plans will therefore be considered as a single unit for analysis (i.e., only one "Anthem" interview will be conducted, covering Amerigroup, Better Health, and Simply). Among the six MMA specialty plans, two will be excluded because they are specific to children and do not cover the dual-eligible population of interest in this study (Children's Medical Services and Sunshine Child Welfare). The remaining four MMA specialty plans (Clear Health Alliance, Freedom Health, Magellan Complete Care, and Positive Health) will be included in this study. A total of 13 health plan units will be included in the analysis.

Research Question 6C

A stratified random sample of dual-eligible survey respondents will be selected from the populations of adult dual-eligible enrollees (18+ years) who were continuously enrolled in the same MMA standard plan (Group 1) or MMA specialty plan (Group 2) during the 12 months prior to sampling.

The survey tool to be administered for research question 6C may include: (1) items from the CAHPS Health Plan Survey for Medicaid, Version 4.0 supplemental set addressing health plan transportation, (2) the Experience of Care and Health Outcomes (ECHO) Survey – a validated survey tool from the Agency for Healthcare Research and Quality that assesses experiences with behavioral health care, (3) other questions on non-emergency transportation provided in correspondence with AHCA, and (4) questions from the Medicare Health Beneficiary Survey to collect information on self-reported health and functional status for dual-eligible members.
The survey will have the option to be completed by sampled members or (in cases where the member is physically or mentally unable to participate) by proxy respondents (such as family members) who are familiar with the member's health and health care.

Research Question 8J

Sampling and other survey methods specific to RQ 8J will likely be similar to those used for RQs 2D and 6C, and will be determined after more information on the operation and utilization rates of the prepaid dental health program becomes available.

Research Question 9A

RQ 9A proposes to survey hospital and nursing facilities to determine their changes in enrollment application procedures following or in anticipation of the change in retroactive enrollment policy. Sampling and other survey methods for RQ 9A will likely be similar to those used for RQ 1E.

Research Question 9B
RQ 9B will survey new MMA enrollees to measure their health status. Note: The lack of new enrollee health status data prior to the change in retroactive enrollment policy may limit the

ability to conduct analyses of these data.

Research Question 9G

RQ 9G examines enrollee understanding of the change in retroactive enrollment policy and the implications of this change for Medicaid coverage during enrollment gaps. The survey sampling frame for RQ 9G will include men and non-pregnant women as the population most likely to be impacted by the policy change. Both new and existing enrollees will be chosen at random for the survey since the retroactive policy change applies to both groups.

Research Question 9H

RQ 9H examines enrollee perceptions of common barriers to timely renewal of Medicaid coverage following the change in retroactive enrollment policy. The survey sampling frame and inclusion criteria for RQ 9H will be the same as for RQ 9G.

Research Question 10A

RQ 10A examines how participating MMA plans implemented the Housing Assistance Pilot. MMA plan staff with knowledge of the Pilot implementation process will be identified and administered qualitative surveys to assess steps used to implement the Pilot.

Research Question 10E

RQ 10E examines whether care coordination is more effective for the study population as a result of the Housing Pilot program. Care coordinators at each participating MMA plan will be selected to participate in qualitative surveys. Questions will address how plans measure care coordination and to identify relevant outcomes being measured by plans. This information will be subsequently used to assess the association of care coordination activities with relevant study outcomes using quantitative methods.

Table 6. Design Table for the Evaluation of the Demonstration

Research Question	Outcome Measures Used	Sample or Population Subgroups Compared	Data Sources	Analytic Methods
Component 1: The effect of managed care on access to care, quality and efficiency of care, and the cost of care				
1A. What barriers do enrollees encounter when accessing primary care and preventive services?	-Frequencies of complaints, grievances, and appeals related to access to care	-MMA enrollees reporting complaints, and issues to (1) the Agency Complaints, Issues, Resolutions & Tracking System (CIRTS) or (2) individual plan reports of complaints, grievances, and appeals	-Agency Complaints, Issues, Resolutions & Tracking System (CIRTS) data -Plan data on frequencies of complaints, grievances, and appeals related to access to care -Medicaid Fair Hearing data	-Descriptive statistics and t-tests as applicable. Analyze overall ratings variables related to access to primary care and preventive services
1B. What changes in the accessibility of services occur with MMA implementation, comparing accessibility in pre-MMA implementation plans (Reform plans and 1915(b) waiver plans) to MMA plans?	-**Standard measures and composites of the CAHPS survey:** -Getting Needed Care -Getting Care Quickly -Rate the Number of Doctors -Health Plan Information and Customer Service - **MMA program weighted HEDIS means:** -Adolescent Well-Care Visits -Adults' Access to Preventive/Ambulatory Health Services (20-44 years, 45-64 years, 65+ years, Total) -Breast Cancer Screening -Cervical Cancer Screening -Childhood Immunization Status (Combo 2, Combo 3)	-MMA program as a whole compared to Reform and 1915 (b) waiver plans utilizing CAHPS data -MMA program weighted HEDIS means compared to the weighted means for Reform and 1915 (b) waiver plans prior to implementation of the MMA program	-CAHPS, HEDIS, encounter data as necessary	-Descriptive statistics and t-tests as applicable. Analyze overall ratings variables related to accessibility of services

Research Question	Outcome Measures Used	Sample or Population Subgroups Compared	Data Sources	Analytic Methods
	-Children and Adolescents' Access to Primary Care Practitioners (12-24 months, 25 mos-6 years, 7-11 years, 12-19 years) -Chlamydia Screening in Women (16-20 years, 21-24 years, Total) -HIV-Related Outpatient Medical Visits (2 visits ≥182 days apart) -Immunizations for Adolescents (Combo 1) -Lead Screening in Children -Prenatal and Postpartum Care (Timeliness of Prenatal Care, Postpartum Care) -Frequency of Ongoing Prenatal Care/Prenatal Care Frequency (≥ 81% of expected visits) -Transportation Availability -Well-Child Visits in the First 15 Months of Life (0 visits, 6+ visits) -Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life			
1C. What changes in the utilization of services for enrollees are evident post MMA implementation, comparing: 1) utilization of services in the pre-MMA period (FFS, Reform plans, and pre-MMA 1915(b) waiver plans) to	Utilization: - Inpatient -Outpatient -ED -Professional (Physician, Specialist)	-Pre-MMA vs. MMA periods -Enrollees eligible for enrollment in a specialty plan (e.g. enrollees with HIV or SMI) who are enrolled in standard MMA plans versus enrollees in specialty plans	-Medicaid claims, eligibility, enrollment, encounter data	-Univariate analysis -Multivariate analysis. Multivariate controls will include age, gender, health status (to the extent possible), and race/ethnicity

Research Question	Outcome Measures Used	Sample or Population Subgroups Compared	Data Sources	Analytic Methods
utilization of services in post MMA implementation; 2) utilization of services in specialty MMA plans versus standard MMA plans for enrollees eligible for enrollment in a specialty plan (e.g., enrollees with HIV or SMI) who are enrolled in standard MMA plans versus enrollees in the specialty plans?				
1D. What changes in quality of care for enrollees are evident post MMA implementation, comparing: 1) quality of care in pre-MMA implementation plans (Reform plans and 1915(b) waiver plans) to quality of care in MMA plans in the MMA period; and 2) quality of care in specialty MMA plans vs. standard MMA plans for enrollees eligible for enrollment in a specialty plan (e.g., enrollees with HIV or SMI) who are enrolled in standard plans vs. enrollees in specialty plans (to the extent possible)?	-**Standard measures and composites of the CAHPS survey**: -Overall Rating of Health Plan -Overall Rating of Health Care -Shared Decision-Making -Overall Rating of Personal Doctor -Overall Rating of Specialist -**MMA program weighted HEDIS means**: -Adolescent Well-Care Visits -Childhood Immunization Status (Combo 2 , Combo 3) -Children and Adolescents' Access to Primary Care Practitioners (12-24 mos, 25 mos-6 yrs, 7-11 yrs, 12-19 yrs) -Chlamydia Screening	-MMA program as a whole compared to Reform and 1915 (b) waiver plans utilizing CAHPS data -Enrollees eligible for enrollment in a specialty plan (e.g. enrollees with HIV or SMI) who are enrolled in standard MMA plans versus enrollees in specialty plans	-Adult and Child Consumer Assessment of Healthcare Providers and Systems (CAHPS) Survey data -HEDIS, Child and Adult Core Set measures, and Agency-defined performance measures	-Descriptive statistics and t-test. Analyze overall ratings variables related to satisfaction with health care, health plan, shared decision-making, personal doctor, and specialists

Research Question	Outcome Measures Used	Sample or Population Subgroups Compared	Data Sources	Analytic Methods
	in Women (16-20 yrs, 21-24 yrs, Total) -HIV-Related Outpatient Medical Visits (2 visits ≥182 days apart) -Immunizations for Adolescents (Combo 1) -Lead Screening in Children -Well-Child Visits in the First 15 Months of Life (0 visits, 6+ visits) -Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life -Adult BMI Assessment -Antidepressant Medication Management (Acute, Continuation) -Comprehensive Diabetes Care (HbA1c Testing, HbA1c Good Control, HbA1c Poor Control, Eye Exam, Nephropathy, LDL-C Screening, LDL-C Control) -Controlling High Blood Pressure -Follow-up After Hospitalization for a Mental Illness (7 day, 30 day) -Follow-up Care for Children Prescribed ADHD Medication (Continuation, Maintenance) -Highly Active Anti-Retroviral Treatment -Mental Health Readmission Rate -Medication Management for People with Asthma (50% and 75% medication			

Research Question	Outcome Measures Used	Sample or Population Subgroups Compared	Data Sources	Analytic Methods
	compliance)			
1E. What strategies are standard MMA and specialty MMA plans using to improve quality of care? Which of these strategies are most effective in improving quality and why?	-Descriptions of Performance Improvement Projects (PIPs), including their objectives, interventions, and outcomes -Themes from qualitative interviews with plan experts on quality of care	-Standard plan populations -Specialty plan populations -Populations outlined in PIPs - Representatives of MMA and MMA specialty plans	-EQRO reports and plan PIPs as available. -Qualitative Interviews	-Descriptive analyses -Qualitative analyses (interviews with health plan Quality Improvement contacts)
1F. What changes in timeliness of services occur with MMA implementation, comparing timeliness of services in pre-MMA implementation plans (Reform plans and 1915(b) waiver plans) to post-MMA implementation plans?	-Standard measures and composites of the CAHPS survey: -Getting Care Quickly -Average PCP appointment wait times for urgent care, routine sick visits, and well care visits -MMA program weighted HEDIS and other performance measure means: -Prenatal and Postpartum care (Prenatal, Postpartum) -Transportation Timeliness	-MMA program as a whole compared to Reform and 1915 (b) waiver plans for CAHPS timeliness of services data -Pre-MMA implementation plans (Reform plans and 1915(b) waiver plans) and post-MMA implementation plans -Comparison of Florida MMA program weighted means to Medicaid National Means and Percentiles for HEDIS measures	-CAHPS (Adult and Child): Getting Care Quickly survey measure -Timely Access PCP Wait Times report -HEDIS measures related to timeliness of services -Agency defined measure related to transportation timeliness	-Descriptive statistics and t-test. Analyze overall ratings variables related to enrollee perceptions of timeliness of services (e.g., getting care quickly, timeliness of prenatal care, postpartum care and transportation timeliness)
1G. What is the difference in per-enrollee cost by eligibility group pre-MMA implementation (FFS, Reform plans and pre-MMA 1915(b) waiver plans) compared to per-enrollee costs in the MMA period (MMA plans as a whole, standard	-Per-member per-month expenditures as measured by monthly risk-adjusted capitated payment to plans	-Pre-MMA beneficiaries enrolled in FFS, Reform and 1915 (b) waiver plans at any point in time during DY8 -Beneficiaries in MMA plans at any point in time during DY9- DY16	-Medicaid FFS and capitation claims, Medicaid eligibility data	-Univariate analysis -Multivariate regression and interrupted time series analyses (as appropriate) to assess PMPM expenditures before and after implementation of the MMA program as well as across

Research Question	Outcome Measures Used	Sample or Population Subgroups Compared	Data Sources	Analytic Methods
MMA plans and specialty MMA plans)?				standard MMA and specialty MMA plans. Evaluators will examine trends in PMPM expenditures over time. Multivariate controls will include age, gender, risk score, and race/ethnicity
Component 2: The effect of customized benefit plans on beneficiaries' choice of plans, access to care, or quality of care				
2A. What is the difference in the types of expanded benefits offered by standard MMA and specialty MMA plans? How do plans tailor the types of expanded benefits to particular populations?	**-**Descriptive statistics of plan benefits over time, including the number of expanded benefits offered per plan, as well as the average number of expanded benefits across plans, for both specialty and standard MMA plans	-Standard and specialty plans that offer expanded benefits	-Health plan choice materials and Agency quarterly and annual reports to Federal CMS; evaluators will use these data sources to identify any expanded/additional services plans cover -Other health plan benefit data as identified	-Descriptive analyses
2B. How many enrollees utilize expanded benefits and which ones are most commonly used?	-Number of enrollees that use expanded benefits. -Expanded benefits that are used most frequently by enrollees.	-Users of expanded benefits	-Encounter data -Data on the types of expanded benefits offered by each plan.	-Descriptive analyses
2C. How does Emergency Department (ED) and inpatient hospitalization differ for those enrollees who use expanded benefits (e.g., additional vaccines,	-ED utilization -Inpatient hospitalizations	-Users of expanded benefits vs non-users of expanded benefits	-Encounter data	-Multivariate analyses, when applicable & to the extent possible

Research Question	Outcome Measures Used	Sample or Population Subgroups Compared	Data Sources	Analytic Methods
physician home visits, extra outpatient services, extra primary care and prenatal/perinatal visits, and over-the-counter drugs/supplies) vs. those enrollees who do not?				
Beginning with the evaluation of DY11 (SFY 2016-17) **2D.** How do enrollees rate their experiences and satisfaction with the expanded benefits that are offered by their health plan?	-Enrollee satisfaction with expanded benefits	-Health plan enrollees	-Surveys	-Qualitative analyses
Component 3: Participation in the Healthy Behaviors programs and its effect on participant behavior or health status				
3A. What Healthy Behaviors programs do MMA plans offer? What types of programs and how many are offered in addition to the three required programs (medically approved smoking cessation program, the medically directed weight loss program, and the medically approved alcohol or substance abuse treatment program)?	-Types and number of Healthy Behaviors programs	-MMA standard and specialty plans	-MMA managed care plan reports on healthy behaviors	-Descriptive analyses
3B. What incentives and rewards do MMA plans offer to their enrollees for participating in	-Incentives and rewards offered by the plans to enrollees participating in HB programs.	-MMA standard and specialty plans	-MMA managed care plan reports on healthy behaviors.	-Descriptive analyses

Research Question	Outcome Measures Used	Sample or Population Subgroups Compared	Data Sources	Analytic Methods
Healthy Behaviors programs?				
3C. How many enrollees participate in each Healthy Behaviors program? How many enrollees complete Healthy Behaviors programs? Which types of Healthy Behaviors programs attract higher numbers of participants? **3D.** How does participation in Healthy Behaviors programs vary by gender, age, race/ethnicity and health status of enrollees? (evaluation of DY13 SFY 2018-19 and beyond, upon receipt of individual-level Healthy Behaviors data) **3E.** What differences in service utilization occur over the course of the demonstration for enrollees participating in Healthy Behaviors programs versus enrollees not participating? (evaluation of DY13 and beyond, upon receipt of individual-level Healthy Behaviors data)	-Healthy Behaviors enrollees (gender, age) -Healthy Behaviors enrollees (race/ethnicity, health status beginning with the evaluation of DY13 – SFY 2018-19) -Healthy Behaviors program types -Service utilization (evaluation of DY13 and beyond)	-Healthy Behaviors program enrollees	-Healthy Behaviors plan summary reports, quarterly -Individual data, DY13 and beyond	-Descriptive analyses -Multivariate analyses for 3E, DY13 and beyond

Research Question	Outcome Measures Used	Sample or Population Subgroups Compared	Data Sources	Analytic Methods
Component 4 : The impact of LIP funding on hospital charity care programs				
For the evaluation of DY10 (SFY 2015-16) only **4A.** What is the impact of LIP funding on access to care for Medicaid, uninsured, and underinsured recipients served in hospitals? That is, how many Medicaid, uninsured, and underinsured recipients receive services in LIP funded hospitals?	-Number of uninsured/underinsured patient served in LIP funded hospitals in DY10	-Hospitals that received LIP funding in DY10	-LIP providers -Payment amounts and type of payments (category) made to each provider. -"Annual Milestone Data": number of uncompensated care/uninsured patients served, types and number of uncompensated care services and encounters provided to the uninsured	-Descriptive statistics and univariate analyses as applicable and to the extent possible
For the evaluation of DY10 (SFY 2015-16) only **4B.** What types of services are being provided to Medicaid, uninsured, and underinsured recipients receiving care in LIP funded hospitals?	-Number and types of services provided to uninsured/underinsured patients served in LIP funded hospitals in DY10	-Hospitals that received LIP funding in DY10	- LIP providers -"Annual Milestone Data": number of uncompensated care/uninsured patients served, types and number of uncompensated care services and encounters provided to the uninsured	-Descriptive statistics and univariate analyses as applicable
Beginning with the evaluation of DY11 (SFY 2016-17) **4C.** What is the impact of LIP funding on access to care for uncompensated charity care recipients served in hospitals? That is, how many	-Volume of services provided to uninsured patients: adjusted days (total inpatient days adjusted by patient-care revenues for outpatient services) -Dollar amount of charity care provided: gross revenue, net revenue, operating expense	-All organizations receiving LIP funding beginning with the evaluation of DY11	-FHURS data: annual financial and utilization statistics for hospitals (include gross revenues & net revenues for uncompensated care patients, and operating expenses) -LIP data: LIP	-Descriptive statistics and univariate analyses as applicable

Research Question	Outcome Measures Used	Sample or Population Subgroups Compared	Data Sources	Analytic Methods
uncompensated charity care recipients receive services in LIP funded hospitals? How does this compare among hospitals in different tiers of LIP funding? **4D.** What types of services are being provided to uncompensated charity care recipients receiving care in LIP funded hospitals? **4E.** What is the difference in the type and number of services offered to uncompensated charity care patients in hospitals receiving LIP funding?			providers -Payment amounts and type of payments (category) made to each provider -LIP funding tiers including the specific organizations included in each tier -"Annual Milestone Data": number of uncompensated care/uninsured patients served, types and number of uncompensated care services and encounters provided to the uninsured -Medicare cost reports -DSH reporting data as available -Information on hospital charity care programs (policies, procedures, descriptions etc.)	
Beginning with the evaluation of DY12 (SFY 2017-18) **4F.** What is the impact of LIP funding on the number of uncompensated charity care patients served and the types of services provided in FQHCs, RHCs, and medical	-Number of uncompensated charity care patients served -Types of services provided for each provider within each provider type category	-LIP funded FQHCS, RHCs, and medical school physician practices	-Number of uncompensated charity care patients served and the types of services provided in FQHCs, RHCs, and medical school physician practices -FHURS data: annual financial and utilization statistics for hospitals (include gross revenues & net	-Descriptive and univariate analyses, to the extent possible

Research Question	Outcome Measures Used	Sample or Population Subgroups Compared	Data Sources	Analytic Methods
school physician practices?			revenues for uncompensated care patients, and operating expenses) -Payment amounts and type of payments (category) made to each provider -LIP funding tiers including the specific organizations included in each tier -"Annual Milestone Data": number of uncompensated care/uninsured patients served, types and number of uncompensated care services and encounters provided to the uninsured -Medicare cost reports -DSH reporting data as available	
Component 5: The effect of having separate managed care plans for acute care and LTC services on access to care, care coordination, quality, efficiency of care, and the cost of care (This Component will sunset following the evaluation of DY12 – SFY 2017-18)				
5A. How many enrollees are enrolled in separate Medicaid managed care programs for acute (medical) care and LTC services? **5B**. How many enrollees are enrolled in comprehensive	-Enrollment numbers -Service utilization and cost per enrollee per year	-Medicaid enrollees in separate acute and LTC plans -Enrollees in comprehensive plans that provide both acute and LTC services	-Enrollment data -FL Hospital Discharge, ambulatory surgery visit and emergency department visits data -Medicaid claims and encounter data	-Descriptive statistics -Multivariate analysis

Research Question	Outcome Measures Used	Sample or Population Subgroups Compared	Data Sources	Analytic Methods
plans that provide both acute (medical) care and LTC services? **5C.** Are there differences in service utilization, as well as in the appropriateness of service utilization (to the extent this can be measured), between enrollees who are in a comprehensive plan for both MMA and LTC services versus those who are enrolled in separate MMA and LTC plans?		-Service utilization and costs	-Capitation payment data	
Component 6: The impact of efforts to align with Medicare and improving beneficiary experiences and outcomes for dual eligible individuals				
6A. How many MMA enrollees are also Medicare recipients (dual-eligibles) and to what extent do dual-eligible enrollees utilize behavioral health and non-emergency transportation services? **6B.** What specific care coordination strategies and practices are most effective for ensuring access to and quality of care for behavioral health services and non-emergency transportation services for dual-	-Enrollee counts (6A) -Content analysis results for plans' care coordination practices related to behavioral health and non-emergency transportation services -Qualitative themes from interviews with plan experts on care coordination -CAHPS measures of experience and satisfaction with delivery of non-emergency transportation services; and ECHO measures of experience and satisfaction with	-Representatives of MMA and MMA specialty plans (care coordination experts) -Dual-eligible members in MMA and MMA specialty plans	-Medicaid encounter, eligibility, and enrollment data -Florida Health Data Center hospital and emergency department encounter data for dual-eligibles receiving care under Medicare auspices -MMA and MMA specialty plan P&P documents on coordination of behavioral health and non-emergency transportation services	-Descriptive analysis -Qualitative analysis using Atlas Ti, grounded theory and content analysis for plan care coordination experts -Descriptive analysis of telephone interview data

Research Question	Outcome Measures Used	Sample or Population Subgroups Compared	Data Sources	Analytic Methods
eligible enrollees? **6C.** How do dual-eligible enrollees rate their experience and satisfaction with delivery of care they received related to behavioral health and non-emergency transportation services?	behavioral health services		-Follow up Qualitative Interviews -Medicaid eligibility and enrollment data for telephone interview-eligible sample pool of dual-eligibles -Telephone survey results (frequencies for response categories for each question)	
Component 7: The effectiveness of enrolling individuals into a managed care plan upon eligibility determination in connecting beneficiaries with care in a timely manner				
7A. How quickly do new enrollees access services, including expanded benefits in excess of State Plan covered benefits, after becoming Medicaid eligible and enrolling in a health plan? **7B.** Among new enrollees, what is the time to access services for enrollees who are enrolled under express enrollment compared to enrollees who were enrolled prior to the implementation of express enrollment?	-Time to access services from enrollment date to date of first service use	New MMA enrollees (7A, 7B) New Medicaid enrollees in pre-MMA HMO and PSN plans in DY7 (7B) -New MMA enrollees who selected their MMA plan (7A) -New MMA enrollees who were auto-enrolled in an MMA plan (7A) -New MMA enrollees who switched plans within 120 days of initial enrollment (7A) -New MMA enrollees who did not switch plans within 120 days of initial enrollment (7A)	-Eligibility and Encounter data -Enrollment data that indicates auto-enrolled vs. enrollee-selected and whether the enrollee switched plans within 120 days	-Descriptive statistics and t-tests as applicable

Research Question	Outcome Measures Used	Sample or Population Subgroups Compared	Data Sources	Analytic Methods
Component 8: The effect the Statewide Medicaid Prepaid Dental Health Program has on accessibility, quality, utilization, and cost of dental health care services				
8A. How does enrollee utilization of dental health services vary by age, gender, race/ethnicity, and geographic area? **8B.** What changes in dental health service utilization occur with the implementation of the Statewide Medicaid Prepaid Dental Health Program (PDHP)?	Dental Utilization: - Inpatient -Outpatient -ED -Professional (Physician, Specialist)	-Pre-PDHP period for the two SFYs immediately preceding SMPDHP implementation -PDHP period for SFYs following establishment of prepaid dental program -Enrollees eligible for enrollment in a prepaid dental plan	-Medicaid claims, eligibility, enrollment, encounter data for dental services	-Univariate analysis -Multivariate analysis. Multivariate controls will include age, gender, health status (to the extent possible), and race/ethnicity.
8C. What changes in quality of dental health services occur with the implementation of the Statewide Medicaid Prepaid Dental Health Program?	-**Dental performance measures listed in Table 3:** -Annual Dental Visit -Dental Treatment Services -Sealants for 6-9 Year-old Children at Elevated Caries Risk - Preventive Dental Services **The following four performance measures were not reported by plans prior to PDHP:** -Oral Evaluation -Topical Fluoride for Children at Elevated Caries Risk -Ambulatory Care Sensitive Emergency Department Visits for	-Pre-PDHP period for the two SFYs immediately preceding PDHP implementation -PDHP period for SFYs following establishment of prepaid dental program -Child enrollees eligible for enrollment in a prepaid dental plan	-PDHP performance measure reports to the Agency	-Univariate analyses of temporal changes in dental quality measures using statistical tests of changes

Research Question	Outcome Measures Used	Sample or Population Subgroups Compared	Data Sources	Analytic Methods
	Dental Caries in children -Follow-up after Emergency Department Visits for Dental Caries in Children			
8D. What changes in the accessibility of dental services occur with the implementation of the Statewide Medicaid Prepaid Dental Health Program?	**-Measures from CAHPS Dental Survey related to Access to Services (see Table 3):** -Percentage of respondents reporting their dental appointments are usually or always as soon as they want (vs. sometimes or never) -Percentage of respondents reporting they usually or always get an appointment with their dental specialist as soon as they want (vs. sometimes or never) -Percentage of respondents reporting they usually or always spend 15 minutes or less in the waiting room before seeing someone for their appointment (vs. sometimes or never) -Percentage of respondents reporting someone usually or always tells them why there is a delay or how long the delay will be if they have to wait more than 15 minutes in the waiting room before being seen for an	-PDHP program CAHPS access to care results examined over time	-CAHPS data described in Table 3	-Descriptive statistics and t-tests as applicable. Analyze overall ratings variables related to accessibility of services

Research Question	Outcome Measures Used	Sample or Population Subgroups Compared	Data Sources	Analytic Methods
	appointment (vs. sometimes or never) -Percentage of respondents answering "somewhat yes" or "definitely yes" when asked whether they get to see a dentist as soon as they want if they have a dental emergency (vs. "somewhat no" or "definitely no")			
8E. What barriers do enrollees encounter when accessing dental health services?	-Frequencies of complaints, grievances, and appeals related to access to care for dental services	- Statewide Medicaid Prepaid Dental Health Program enrollees reporting complaints, and issues to (1) the Agency Complaints, Issues, Resolutions & Tracking System (CIRTS) or (2) individual plan reports of complaints, grievances, and appeals	-Agency Complaints, Issues, Resolutions & Tracking System (CIRTS) data -Dental plan data on frequencies of complaints, grievances, and appeals related to access to care -Medicaid Fair Hearing data	-Descriptive statistics and t-tests as applicable. Analyze overall ratings variables related to access to primary care and preventive services
8F. How many enrollees utilize expanded benefits provided by the dental health plans and which ones are most commonly used?	- Number of dental plan enrollees that use expanded dental benefits -Expanded dental benefits that are used most frequently by dental enrollees	-Users of expanded dental benefits	-Dental encounter data -Data on the types of expanded benefits offered by each dental plan.	-Descriptive analyses
8G. How does enrollee utilization of dental health services impact dental-related hospital events (e.g., Emergency Department, Inpatient hospitalization)?	-Medicaid dental encounter records for dental plan enrollees merged by Medicaid enrollee ID with MMA encounter records for hospital ED and inpatient use -Rates of dental service	-Statewide Medicaid Prepaid Dental Health Program enrollees who also use MMA services	-Medicaid dental and medical encounter data, eligibility, enrollment, encounter data	-Univariate analysis -Multivariate analysis. Multivariate controls will include age, gender, health status (to the

Research Question	Outcome Measures Used	Sample or Population Subgroups Compared	Data Sources	Analytic Methods
How does utilization of expanded benefits offered by the dental health plans impact dental-related hospital events?	utilization and associated dental-related hospitalizations			extent possible), and race/ethnicity
8H. What changes in per-enrollee cost for dental health services occur with the implementation of the Statewide Medicaid Prepaid Dental Health Program?	-Per-member per-month expenditures as measured by monthly risk-adjusted capitated payment to plans	-Pre-PDHP beneficiaries enrolled in FFS, Reform and 1915 (b) waiver plans at any point in time during pre-PDHP period -PDHP beneficiaries in dental plans following PDHP roll-out	-Medicaid FFS and capitation claims related to dental services -Medicaid and dental eligibility data	-Univariate analysis -Multivariate regression and interrupted time series analyses (as appropriate) to assess PMPM expenditures before and after implementation of the PDHP program. Evaluators will examine trends in PMPM expenditures over time. Multivariate controls will include age, gender, risk score, and race/ethnicity
8I. How do enrollees rate their experiences and satisfaction with dental health services, including timeliness of dental health services, provided by their dental health plans?	-CAHPS dental survey measures as listed in this table for Question 8D	-PDHP program child enrollees	-CAHPS Dental Services Survey	-Descriptive statistics and t-test. Analyze overall ratings variables related to enrollee perceptions of timeliness of services
8J. How do enrollees rate their experiences and satisfaction with the expanded benefits offered by their	-Enrollee satisfaction with expanded benefits	-PDHP plan Enrollees	-Surveys	-Qualitative analyses

Research Question	Outcome Measures Used	Sample or Population Subgroups Compared	Data Sources	Analytic Methods
dental health plans?				
Component 9: The impact of the waiver of retroactive eligibility on beneficiaries and providers.				
9A. How will eliminating retroactive eligibility change enrollment continuity?	-Pre-post changes in the probability of enrollment renewal for Medicaid cohorts both before and after the policy change -Qualitative information on how hospitals and nursing facilities have changed their enrollment procedures following or in anticipation of the policy change	-Enrollment renewal data for (1) Medicaid enrollee cohorts prior to January 2019 (last month prior to policy change) and (2) Medicaid enrollee cohorts following January 2019 up until the last month available after the policy change	-Primary: Medicaid eligibility and enrollment data -Secondary: Qualitative results of surveys/interviews of hospital and nursing facility administrators for context.	-Pre-post logistic regressions of enrollment renewal controlling for demographics (age and sex), eligibility group, health status (Clinical Risk Group), and retroactive enrollment policy.
9B. How will eliminating retroactive eligibility change the enrollment of eligible people when they are healthy relative to those eligible people who have the option of retroactive eligibility?	-Self-assessed health status based on new enrollee survey or -SF-12 scores (beneficiary survey #1; under development)	-New Medicaid enrollees	-Beneficiary survey #1 (under development) on new enrollees re self-assessed health status and possibly SF-12 health status instrument. **NOTE: The evaluation team at present has not located a source for self-assessed health status or SF-12 scores from new Medicaid enrollees prior to the policy change. This may limit our ability to provide analytic results.**	-Difference-in-differences testing (if possible) or pre-post statistical models (if possible) of self-assessed health status and/or SF-12 scores -The evaluation team will also explore administering the SF-12 tool
9C. How will eliminating retroactive eligibility affect new enrollee financial burden?	(1) Crediting reporting data concerning individual new enrollee medical debt verified by collection agencies prior to the new enrollee's application date. Note: The evaluation team is currently exploring the availability and cost of purchasing credit reporting data. Should credit reporting data ultimately prove unavailable, RQ 9C will	New Medicaid enrollees	(1) New enrollee credit reporting data should such data be available for these analyses or.Linked (2) statewide Florida Health Information and Transparency (FHIT) Center hospital inpatient, outpatient, ambulatory, and ED utilization data and (3) Medicaid new enrollee encounter	-(1) Modified difference-in-differences models (as explained in Attachment 6) of total and medical debt credit reporting data should such data be available for these analyses, or (2) Pre-post testing of self-pay utilization and charges in the three-months prior to Medicaid application using linked encounter

Research Question	Outcome Measures Used	Sample or Population Subgroups Compared	Data Sources	Analytic Methods
	rely on the self-pay charge data prior to enrollment as outlined above. 2) Hospital utilization and charges with self-pay payor status from the three-months prior to Medicaid application date both before and after the policy change.		data both before and after the policy change for the three months prior to Medicaid application date.	data both before and after the policy change. In particular, self-pay charges will measure the amount of health care charges previously covered by Medicaid under retroactive eligibility that will now fall to the self-pay patient and/or provider uncompensated care. The evaluation team will also examine any pre-post changes in Medicaid FFS and Medicaid MMA payer classes proportions to determine if any such changes are consistent with earlier enrollment by those no longer eligible for retroactive enrollment.
9D. How will eliminating retroactive eligibility affect provider uncompensated care amounts? **9E.** How will eliminating retroactive eligibility affect provider financial performance (income after expenses)? **9F.** How will eliminating retroactive eligibility affect the net financial impact of uncompensated care (UCC – LIP payments)?	-Hospital and SNF Uncompensated Care Expenditures -Hospital and SNF net income and rates of return -Hospital net change impact of UCC: UCC – LIP payments Hospital and SNF Uncompensated Care Expenditures -Hospital and SNF net income and rates of return -Hospital net change impact of UCC: UCC – LIP payments	-Florida hospital and SNFs serving Medicaid enrollees	CMS Healthcare Cost Report Information System (HCRIS) Hospital and Skilled Nursing Facility datasets (when available for 2019) -Florida Hospital Uniform Reporting System (FHURS) (if HCRIS data post policy change is unavailable) -Florida Low Income Pool expenditure reports **Note: FHURS data is available approximately 180 days (or 6 months) after the fiscal year ends for each hospital.**	-Difference-in-Differences models (if possible) or pre-post statistical models examining uncompensated care amounts, net income/rates of return, and uncompensated care net of LIP payments

Research Question	Outcome Measures Used	Sample or Population Subgroups Compared	Data Sources	Analytic Methods
9G. *Do beneficiaries subject to the retroactive eligibility waiver understand that they will not be covered during enrollment gaps?* ***9H.*** *What are common barriers to timely renewal for those subject to the retroactive eligibility waiver?*	Beneficiary responses on beneficiary survey #2 to questions pertaining to their (1) understanding of the change in retroactive enrollment policy and its implications for their Medicaid coverage during enrollment gaps and (2) perceptions of common barriers to timely renewal	Random telephone sample of Medicaid enrollees subject to the new retroactive enrollment policy (i.e., male and non-pregnant women)	Beneficiary Survey #2 dealing with understanding of the policy change and common barriers to timely renewal. Beneficiary Survey #2 is under development and will be submitted to CMS for review and approval prior to fielding.	Descriptive tabulations and cross-tabulations of question responses by sex, age group, and enrollment length.
Component 10: The impact of the behavioral health and supportive housing assistance pilot on beneficiaries who are 21 and older with serious mental illness (SMI), substance use disorder (SUD) or SMI with co-occurring SUD, and are homeless or at risk of homelessness due to their disability.				
10A. How many MMA plans participate in the Housing Assistance Services pilot program? How many enrollees are participating in the housing assistance services program, by plan? How does participation in the housing assistance services program vary by gender, age, race/ethnicity and health status of enrollees? How did MMA plans implement the pilot program?	-Total number of participating MMA plans -Total number of enrollees receiving housing assistance services per plan -Total number of enrollees receiving housing assistance services by gender, age, race/ethnicity -Total number and type of services and diagnosis code(s) each enrollee had one year prior to entering the program and while in the program - Implementation processes used by participating MMA plans	-MMA enrollees receiving housing assistance services -MMA program staff involved with the implementation process	-Enrollee Roster Report submitted by MMA plans -Qualitative interview to assess implementation	-Descriptive statistics (means, medians, standard deviations, etc.) -Descriptive tabulations of question responses from qualitative interviews
10B. What is the frequency and duration of use for the specific services (transitional housing services, mobile crisis services, peer support, tenancy services) offered by the housing assistance program by plan? What is the proportion of enrollees who are	-Total number of enrollees using transitional housing services -Total number of enrollees using mobile crisis services -Total number of enrollees using peer support -Total number of	-MMA enrollees receiving housing assistance services	-Enrollee Roster Report submitted by MMA plans	-Descriptive statistics (means, medians, standard deviations, etc.)

Research Question	Outcome Measures Used	Sample or Population Subgroups Compared	Data Sources	Analytic Methods
successfully discharged from the pilot but subsequently become homeless again and resume using services?	enrollees using tenancy services			
10C. Based on Medicaid data submitted by the MMA plans, do enrollees in the study population have fewer avoidable hospitalizations and emergency department visits than they did prior to receiving housing assistance services?	-Total number of potentially preventable hospitalizations per enrollee -Total number of potentially preventable emergency department visits per enrollee	-MMA enrollees with a diagnosis of SMI and homeless or at risk of being homeless	-Medicaid claims, eligibility, enrollment and encounter data - Enrollee Roster Report submitted by MMA plans to identify enrollees using housing assistance services	-Difference-in-difference multivariate analyses comparing changes in utilization rates between the population enrolled in MMA plans offering housing assistance services who are participating in the pilot program and enrollees in the same MMA plans who are eligible for the pilot program but are placed on a waiting list and are not yet participating in the pilot program
10D. Are there changes in utilization of MMA services (specifically PCP visits, Outpatient visits, pharmacy services and behavioral health services) in the study population compared to their service utilization prior to participation in the Pilot program?	-Total number of PCP visits per enrollee -Total number of outpatient visits per enrollee -Total number of pharmacy claims per enrollee -Total number of behavioral health service visits per enrollee	-MMA enrollees with SMI who are homeless or at risk of being homeless	-Medicaid claims and encounter data, specifically looking at utilization of PCP visits, outpatient visits, pharmacy services and behavioral health services - Enrollee Roster Report submitted by MMA plans to identify enrollees using housing assistance services	-Difference-in-difference multivariate analyses comparing changes in utilization rates between the population enrolled in MMA plans offering housing assistance services who are participating in the pilot program and enrollees in the same MMA plans who are eligible for the pilot program but are placed on a waiting list and are not yet participating in the pilot program
10E. Based on interviews with MMA plan staff, including Care Coordinators, is care coordination more effective for the study population as a result of the Pilot program?	-Qualitative assessment of care coordination effectiveness before and after implementation of the Pilot program -Percentage of participants achieving housing permanency -Percentage of participants who days of homelessness were	-MMA plan staff with knowledge of care coordination conducted by the plan -Pilot Participants	-Qualitative data based on survey responses to a Vendor-created survey of MMA staff, including Care Coordinators -Participating MMA plans roster reports	-Descriptive statistics

Research Question	Outcome Measures Used	Sample or Population Subgroups Compared	Data Sources	Analytic Methods
	reduced -Percentage of participants diagnosed with a substance use disorder receiving medication assistance treatment -percentage of participants with serious mental illness who are compliant with medication management requirements			
10F. What are enrollee experiences with the Pilot program, including whether service needs were met, their experiences with integration of services, involvement in their care, and satisfaction with the services provided	-Pilot program participants responses to questions pertaining to service needs, integration of care, involvement in care, and satisfactions with services	-Housing Assistance Pilot program participants	-Responses to Vendor-created survey assessing experiences and satisfaction with services provided through the Pilot program.	-Descriptive Statistics
10G. What are the costs of the Pilot Program, including the costs of services provided to enrollees and the costs to administer the program?	-Per-member-per-month expenditures as measured by paid amounts on encounter data. -Program administrative costs reported by participating MMA plans and AHCA	-Housing Assistance Pilot program participants -Enrollees placed on the waiting list for the Housing Assistance Pilot program	-Medicaid encounter data -Administrative costs reported by participating MMA plans and AHCA	-Univariate analysis -Multivariate regression analysis using a difference-in-difference approach to compare changes in expenditures before and after implementation of the Housing Assistance Pilot.

D. Methodological Limitations

Limitations of the evaluation include the design, the data sources or collection process, analytic methods and the state's efforts to minimize the limitations. Additionally, this section includes information about features of the demonstration that effectively present methodological constraints the state would like CMS to consider in its review.

- Current and subsequent years will continue to show that the MMA demonstration remains non-complex and mostly unchanged; therefore, evaluation results may be limited in providing additional or divergent findings from prior evaluations. In addition, the MMA program continues to operate smoothly without administration changes, with minimal appeals and grievances, and with no known issues with CMS 64 reporting or budget neutrality. Consequently, the new STCs were modified to simplify and streamline

the state's reporting requirements to CMS, moving from quarterly to annual reporting. In addition, monthly calls with CMS are now on a periodic basis as the need is determined.

- Individual level Healthy Behaviors data will be available beginning with the evaluation of DY13. However, the lack of individual level Healthy Behaviors data for the evaluations of DY10, DY11 and DY12 is a limitation because service utilization patterns will not be known for specific enrollees. For example, it will not be possible to know if participation in the program results in more appropriate use of services if the ability to link to individual enrollment, encounter and claims data is not possible.

Also, responses from dual-eligibles to telephone interviews concerning their assessments of their health care may unavoidably reflect a combination of Medicare and Medicaid experiences for behavioral health services.

Florida implemented the MMA program statewide over a period of three months and enrolled the great majority of Florida Medicaid recipients into MMA at that time. Consequently, there does not exist an appropriate comparison group within Florida Medicaid following the implementation of the MMA program. This poses major issues for conducting either a standard difference-in-differences or propensity score matching analysis. Standard difference-in-differences analysis requires data on both treatment and comparison groups both prior to and subsequent to the implementation of the MMA program. Florida's shift of the vast majority of its Medicaid recipients into the MMA program over a very short period of time precludes identifying a comparison group from within Florida Medicaid post-implementation. While other groups (e.g., the privately insured in Florida or other states' Medicaid enrollees) could furnish a comparison group, such diverse groups are likely to violate the parallel slopes assumption of difference-in- differences since they will be subject to different spatial and temporal trends than MMA enrollees.

Using such heterogeneous groups for propensity score matching to the MMA population poses similar challenges since such groups have intrinsic differences in geographical location and insurance coverage provisions that cannot be controlled through matching.

A major limitation in evaluating retroactive enrollment (Component 9) is the inability to identify enrollees after the policy change who would have been eligible for retroactive enrollment under the rules in effect prior to the policy change. The Agency estimates that only a small percentage of new Medicaid enrollees qualified for retroactive enrollment prior to the policy change. Consequently, any effect of the policy change on current new enrollees who would have qualified for retroactive enrollment under the previous policy will be difficult to capture among the large number of current new enrollees who would have been ineligible for retroactive enrollment under the previous policy.

Another potential challenge for the retroactive enrollment evaluation is the need to merge Medicaid enrollment records with Florida Health Data Center statewide inpatient discharge and ambulatory and ED visit data to capture the utilization of new Medicaid enrollees in the three months prior to Medicaid application. While such a merge should be possible given common identifiers in the datasets, such a merge has not been attempted previously to the best of our knowledge and the match rate is therefore unknown. This will become a material limitation should credit reporting medical and total debt data be unavailable for this evaluation.

E. Attachments

1) Independent Evaluator.

Upon receipt of letters of intent and review of proposals submitted by two universities in 2015, the Agency determined that the University of Florida's (UF) proposals best fit the Agency's needs. Subsequently, in 2016, the Agency contracted with UF, located in Gainesville, FL, to conduct an independent evaluation of the MMA program. UF subcontracts with two other universities to conduct some components of the evaluation (Florida State University and University of Alabama at Birmingham). The Agency provided the evaluators with a description of the objectives of the MMA program and the approved evaluation design.

The Principal Investigator for the project is Dr. Bruce Vogel, whose contact information is as follows:

Associate Professor
Department of Health Outcomes and Biomedical Informatics, University of Florida
2004 Mowry Road, P.O. Box 100177
Gainesville, FL 32610-0177
(352) 294-5970
bvogel@ufl.edu

See Dr. Vogel's Curriculum Vitae (CV) attached.

2) No Conflict of Interest.

The state has assured that the Independent Evaluator will conduct a fair and impartial evaluation, will prepare an objective Evaluation Report, and that there will be no conflict of interest. "Conflict of Interest" statements have been signed by appropriate Agency staff attesting to the following: No immediate family or business partners have financial interest in the vendor; no immediate family or business partners have a personal relationship with the vendor or their representatives; no gratuities, favors, or anything of monetary value has been offered to or accepted by the vendor or their representatives; no state parties have been employed by the vendor within the past 24 months; no discussions to seek or accept future employment with the vendor or their representatives; and, no other conditions exist which may cause conflict of interest.

3) Evaluation Budget.

The Agency initially contracted with UF for a period of three (3) years (SFY 2016-17 through SFY 2018-19) at a total cost of $1,290,600.00 ($430,200 per year). In the first three years, DYs 9, 10, and 11 will be evaluated.

The Agency renewed the contract for a period of three years (SFY 2019-20 through SFY 2021-22) during which time DYs 12, 13, and 14 will be evaluated. The budget for SFY 2019-20 through SFY 2021-22 is $2,713,542.00. Budgeted amount includes Institution Cost Share.

Components 9 and 10 will be added to the Agency's contract with the university, at which time a revised budget will be requested from the evaluators.

4) Timeline and Major Milestones.

Table 7 outlines the timeline for conducting the evaluation activities, including deliverable submissions and activities related to the renewal and reprocurement of a contractor.

Timelines for Component 9 and 10 will be updated upon CMS approval.

Table 7. MMA Evaluation Activities, December 31, 2017-December 31, 2023

Deliverable / Activity	Due Date
Evaluation Design submitted to CMS*	January 31, 2018
MMA Interim Report - Project 2 DY10: Component 3 (Healthy Behaviors)	April 2, 2018
MMA Interim Report - Project 3 DY10: Component 4 (LIP)	April 2, 2018
MMA Interim Report - Project 1 DY10: Components 1, 2, 5, and 7 (Access, Quality, Cost)	May 1, 2018
Revised Evaluation Design submitted to CMS*	May 7, 2018
MMA Interim Report - Project 4 DY10: Component 6 (Dual-Eligibles)	May 15, 2018
DY11 MMA Program Medicaid Data Request and Verification	Request Due: July 2, 2018 Verification Due: 30 calendar days after data delivery
DY11 Florida Center Data Request and Verification	Request Due: July 2, 2018 Verification Due: 30 calendar days after data delivery
Stakeholder Debriefing Materials	September 4, 2018
Stakeholder Debriefing and Summary	Thirty (30) calendar days after Debriefing completion

Deliverable / Activity	Due Date
Annual Monitoring Report due to CMS*	September 30, 2018
MMA Interim Report-Project 1 DY11-Components 1, 2, 5, and 7 (Access, Quality, Cost)	May 1, 2019
MMA Interim Report-Project 2 DY11-Component 3 (Healthy Behaviors)	April 1, 2019
MMA Interim Report-Project 3 DY11-Component 4 (LIP)	March 1, 2019
MMA Interim Report-Project 4 DY11-Component 6 (Dual-Eligibles)	May 15, 2019
Agency contract with UF is renewed for three (3) years	July 1, 2019
DY12 MMA Program Medicaid Data Request and Verification	Request Due: July 2, 2019 Verification Due: 30 calendar days after data delivery
DY12 Florida Center Data Request and Verification	Request Due: July 2, 2019 Verification Due: 30 calendar days after data delivery
Annual Monitoring Report due to CMS*	September 30, 2019
MMA Interim Report- Project 3 DY12-Component 4 (LIP)	September 3, 2019
MMA Interim Report- Project 2 DY12-Component 3 (Healthy Behaviors)	October 1, 2019
MMA Interim Report-Project 1 DY12-Components 1, 2, 5, and 7 (Access, Quality, Cost)	November 1, 2019

Deliverable / Activity	Due Date
MMA Legislative Report on the Waiver of Medicaid Retroactive Eligibility on Beneficiaries and Providers	November 22, 2019
MMA Interim Report-Project 4 DY12-Component 6 (Dual-Eligibles)	January 15, 2020
DY13 MMA Program Medicaid Data Request and Verification	Request Due: April 30, 2020 Verification Due: 30 calendar days after data delivery
DY13 Florida Center Data Request and Verification	Request Due: April 30, 2020 Verification Due: 30 calendar days after data delivery
Annual Monitoring Report due to CMS*	September 30, 2020
DY14 MMA Program Medicaid Data Request and Verification	Request Due: October 1, 2020 Verification Due: 30 calendar days after data delivery
DY14 Florida Center Data Request and Verification	Request Due: October 1, 2020 Verification Due: 30 calendar days after data delivery
DY13 and DY14 Enrollee Satisfaction Survey Materials	December 4, 2020
DY13 and DY14 Health Plan Qualitative Administrative Interview Materials	December 4, 2020
MMA Interim Report- Project 3 DYs 13 and 14-Component 4 (LIP)	February 1, 2021

Deliverable / Activity	Due Date
MMA Interim Report- Project 2 DYs 13 and 14-Component 3 (Healthy Behaviors)	March 1, 2021
MMA Interim Report-Project 1 DYs 13 and 14- Components 1, 2, 5 (DY13 only), and 7 (Access, Quality, Cost)	April 1, 2021
MMA Interim Report-Project 4 DYs 14 and 14-Component 6 (Dual-Eligibles)	April 15, 2021
MMA Interim Report-DY 14- Component 8 (Pre-paid Dental Health Program)	April 30, 2021
Draft Interim Evaluation Report (DYs 9-14) due to Agency	August 16, 2021
Annual Monitoring Report due to CMS*	September 30, 2021
DY15* MMA Program Medicaid Data Request and Verification	October 1, 2021
DY15 Florida Center Data Request and Verification	October 1, 2021
Final Draft Interim Evaluation Report (DYs 9-14) due to Agency	November 1, 2021
DY15 Enrollee Satisfaction Survey Materials	December 3, 2021
DY15 Health Plan Qualitative Administrative Interview Materials	December 3, 2021
MMA Interim Report- Project 3 DY15-Component 4 (LIP)	February 1, 2022
MMA Interim Report- Project 2 DY 15-Component 3 (Health Behaviors)	March 1, 2022
MMA Interim Report- Project 1 DY15-Components 1, 2, 5, and 7 (Access, Quality, Cost)	April 1, 2022
MMA Interim Report- Project 4 DY15-Component 6 (Dual-Eligibles)	April 15, 2022

Deliverable / Activity	Due Date
MMA Interim Report-Project 4 DYs 13 and 14-Component 6 (Dual-Eligibles)	May 15, 2021
Draft of Interim Evaluation Report DY14-Component 8 (Pre-paid Dental Health Program)	June 15, 2021
Draft of Draft Interim Evaluation Report (DYs 9-14) due to Agency	August 15, 2021
Annual Monitoring Report due to CMS*	September 30, 2021
DY15 MMA Program Medicaid Data Request and Verification	Request Due: October 1, 2021 Verification Due: 30 calendar days after data delivery
DY15 Florida Center Data Request and Verification	Request Due: October 1, 2021 Verification Due: 30 calendar days after data delivery
Final Draft Interim Evaluation Report (DYs 9-14) due to Agency	November 1, 2021
Draft Interim Evaluation Report (DYs 9-14) due to CMS*	January 1, 2022
MMA Interim Report-Project 1 DY15-Components 1, 2, and 7 (Access, Quality, Cost)	March 1, 2022
MMA Interim Report- Project 2 DY15-Component 3 (Healthy Behaviors)	April 1, 2022
MMA Interim Report- Project 3 DY15-Component 4 (LIP)	May 1, 2022

Deliverable / Activity	Due Date
MMA Interim Report-Project 4 DY15-Component 6 (Dual-Eligibles)	May 15, 2022
Draft of Interim Evaluation Report DY15-Component 8 (Pre-paid Dental Health Program)	June 14, 2022
Anticipated Date of Execution of New Contract with UF	July 1, 2022
Annual Monitoring Report due to CMS*	September 30, 2022
DY16 MMA Program Medicaid Data Request and Verification	Request Due: October 1, 2022 Verification Due: 30 calendar days after data delivery
DY16 Florida Center Data Request and Verification	Request Due: October 1, 2022 Verification Due: 30 calendar days after data delivery
MMA Interim Report-Project 1 DY16-Components 1, 2, and 7 (Access, Quality, Cost)	March 1, 2023
MMA Interim Report- Project 2 DY16-Component 3 (Healthy Behaviors)	April 1, 2023
MMA Interim Report- Project 3 DY16-Component 4 (LIP)	May 1, 2023
MMA Interim Report-Project 4 DY16-Component 6 (Dual-Eligibles)	May 15, 2023
Draft of Draft Summative Evaluation Report (DYs 12-16) due to Agency	August 15, 2023

Deliverable / Activity	Due Date
Annual Monitoring Report due to CMS*	September 30, 2023
Final Draft Summative Evaluation Report (DYs 12-16) due to Agency	November 1, 2023
Draft Summative Evaluation Report (DYs 12-16) due to CMS*	December 31, 2023

*Deliverables due to CMS.

5). State Expectations

The following table outlines the State's expectations for the evaluation's research questions that have hypotheses associated with them. The evaluators are utilizing two-sided null statistical hypotheses within the evaluation design in order to allow them to objectively test for changes that could be either positive or negative, as well as to eliminate the potential for bias (e.g., confirming their own predictions). However, in keeping with the goals of the MMA demonstration as stated in the design, the State expects the demonstration to have an overall positive impact on Florida's efforts to improve its Medicaid program under a capitated managed care program.

Research Question*	State Prediction
Component 1. The effect of managed care on access to care, quality and efficiency of care, and the cost of care	
1B. What changes in the accessibility of services occur with MMA implementation, comparing accessibility in pre-MMA implementation plans (Reform plans and 1915(b) waiver plans) to MMA plans?	Accessibility of services will show statistically significant improvement for MMA plans as a whole compared to pre-implementation plans (Reform plans and 1915(b) waiver plans).
1C. What changes in the utilization of services for enrollees are evident post-MMA implementation, comparing: 1) utilization of services in the pre-MMA period (FFS, Reform plans and pre-MMA 1915(b) waiver plans) to utilization of services in post-MMA implementation; 2) utilization of services in specialty MMA plans versus standard MMA plans for enrollees eligible for enrollment in a specialty plan (e.g., enrollees with HIV or SMI) who are enrolled in standard MMA plans versus enrollees in the specialty plans?	I. Appropriate utilization of services will be statistically significantly greater in MMA plans as a whole than in pre-implementation plans (Reform plans and 1915(b) waiver plans). II. Specialty MMA plans will provide enrollees with improved access to services related to the specialty condition compared to standard MMA plans.
1D. What changes in quality of care for enrollees are evident post-MMA implementation, comparing: 1) quality of care in pre-MMA implementation plans (Reform plans and 1915(b) waiver plans) to quality of care in MMA plans in the MMA period; 2) quality of care in specialty MMA plans versus standard MMA plans for enrollees eligible for enrollment in a specialty plan (e.g. enrollees with HIV or SMI) who are enrolled in standard plans versus enrollees in the specialty plans (to the extent possible)?	I. Quality of care will show statistically significant improvement in MMA plans as a whole compared to pre-MMA implementation plans (Reform plans and 1915(b) waiver plans). II. Quality of care will be statistically significantly higher for enrollees in specialty MMA plans compared to enrollees with the specialty condition (e.g. HIV) in standard MMA plans.
1F. What changes in timeliness of services occur with MMA implementation, comparing timeliness of services in pre-MMA	Timeliness of services will show statistically significant improvement in post-MMA implementation plans compared to pre-MMA

implementation plans (Reform plans and 1915(b) waiver plans) to post-MMA implementation plans?	implementation plans (Reform plans and 1915(b) waiver plans).
1G. What is the difference in per-enrollee cost by eligibility group pre-MMA implementation (FFS, Reform plans and pre-MMA 1915(b) waiver plans) compared to per-enrollee costs in the MMA period (MMA plans as a whole, standard MMA plans and specialty MMA plans)?	Per-enrollee cost by eligibility group will show less month-to-month variability and/or slower rates of increase in the MMA period (MMA plans as w hole, standard MMA plans and specialty MMA plans) compared to pre-MMA implementation (FFS, Reform plans, and pre-MMA 1915(b) waiver plans).
Component 2. The effect of customized benefit plans* on beneficiaries' choice of plans, access to care, or quality of care. * Since MMA plans do not offer customized benefit plans, the State will evaluate the effect of expanded benefits on enrollees' utilization of services, access to care, and quality of care.	
2C. How does Emergency Department (ED) and inpatient hospital utilization differ for those enrollees who use expanded benefits (e.g. additional vaccines, physician home visits, extra outpatient services, extra primary care and prenatal/perinatal visits, and over-the-counter drugs/supplies) vs. those enrollees who do not?	Appropriate utilization of Emergency Department (ED) and inpatient hospitalization services will be statistically significantly greater for enrollees who use expanded benefits versus those who do not.
Component 3. Participation in the Healthy Behaviors programs and its effect on participant behavior or health status	
3E. What differences in service utilization occur over the course of the demonstration for enrollees participating in Healthy Behaviors programs versus enrollees not participating (DY13 and beyond)?	I. Utilization of preventive services and outpatient services (e.g. Primary Care Physician (PCP) visits and smoking cessation counseling sessions) will be statistically significantly higher for enrollees participating in Healthy Behaviors programs compared to enrollees who are not participating. II. Enrollees who participate in Healthy Behaviors programs will show statistically significant declines in utilization of ED, inpatient and outpatient hospital and services for treatment of conditions that these programs are designed to prevent following their enrollment in the Healthy Behaviors program.

Component 4. The impact of LIP funding on hospital charity care programs	
4A. What is the impact of LIP funding on access to care for Medicaid, uninsured, and underinsured recipients served in hospitals? That is, how many Medicaid, uninsured, and underinsured recipients receive services in LIP funded hospitals?	LIP funds to hospital providers will continue to provide access to care for uninsured and underinsured individuals at the same or higher rates as during the pre-MMA implementation period.
4C. What is the impact of LIP funding on access to care for uncompensated charity care recipients served in hospitals? That is, how many uncompensated charity care recipients receive services in LIP funded hospitals? How does this compare among hospitals in different tiers of LIP finding?	There will be a statistically significantly greater number of uninsured patients served and/or a greater amount of expenditures on services by hospitals with higher levels of LIP funding.
4E. What is the difference in the type and number of services offered to uncompensated charity care patients in hospitals receiving LIP funding?	There will be an increase in the type and number of services offered to uncompensated charity care patients in hospitals with higher levels of LIP funding.
4F. What is the impact of LIP funding on the number of uncompensated charity care patients served and the types of services provided in FQHCs, RHCs, and medical school physician practices?	There will be a statistically significantly greater number of uncompensated charity care patients served and an increase in types and number of services offered to uncompensated charity care patients in FQHCs, RHCs, and medical school physician practices with higher levels of LIP funding.
Component 5*. The effect of having separate managed care programs for acute care and LTC services on access to care, care coordination, quality, efficiency of care, and the cost of care *This component will sunset following the evaluation of DY12 (SFY2017-18)	
5C. Are there differences in service utilization, as well as in the appropriateness of service utilization (to the extent this can be measured), between enrollees who are in a comprehensive plan for both MMA and LTC services versus those who are enrolled in separate MMA and LTC plans?	Enrollees receiving MMA and LTC services from a single comprehensive plan will show statistically significantly higher service utilization and service appropriateness than enrollees who receive services from separate MMA and LTC plans.
Component 8. The effect the Statewide Medicaid Prepaid Dental Health Program has on accessibility, quality, utilization, and cost of dental health care services	
8B. What changes in dental health service utilization occur with the implementation of the Statewide Medicaid Prepaid Dental Health Program?	Utilization of dental services will show statistically significant increases following the implementation of the Statewide Medicaid Prepaid Dental Health Program.

8C. What changes in quality of dental health services occur with the implementation of the Statewide Medicaid Prepaid Dental Health Program?	Quality of dental care for enrollees will show statistically significant improvement following the implementation of the Statewide Medicaid Prepaid Dental Health Program.
8D. What changes in the accessibility of dental services occur with the implementation of the Statewide Medicaid Prepaid Dental Health Program?	Accessibility of dental services will show statistically significant improvement following the implementation of the Statewide Medicaid Prepaid Dental Health Program.
8G. How does enrollee utilization of dental health services impact dental-related hospital events (e.g., Emergency Department, Inpatient hospitalization)? How does utilization of expanded benefits offered by the dental health plans impact dental-related hospital events?	I. Appropriate use of dental services will show statistically significant improvement following the implementation of the Statewide Medicaid Prepaid Dental Health Program. II. Appropriate utilization of Emergency Department (ED) and inpatient hospitalization services will show statistically significant improvement for enrollees who use dental expanded benefits compared to those who do not use such benefits.
8H. What changes in per-enrollee cost for dental health services occur with the implementation of the Statewide Medicaid Prepaid Dental Health Program?	Per-enrollee cost of dental health services will show less month-to-month variability and/or slower rates of increase following implementation of the Statewide Medicaid Prepaid Dental Health Program.
Component 9. The impact of the waiver of retroactive eligibility on beneficiaries and providers.	
9A. How will eliminating retroactive eligibility change enrollment continuity?	Eliminating retroactive eligibility will increase the likelihood of enrollment and enrollment continuity.
9B. How will eliminating retroactive eligibility change the enrollment of eligible people when they are health relative to those eligible people who have the option of retroactive eligibility?	Eliminating retroactive eligibility will increase enrollment of eligible people when they are healthy relative to those eligible people who have the option of retroactive eligibility.
9C. How will eliminating retroactive eligibility affect new enrollee financial burden?	Elimination of retroactive coverage eligibility will not have adverse financial impacts on consumers.
9D. How will eliminating retroactive eligibility affect provider uncompensated care amounts?	Elimination of retroactive coverage eligibility will not have adverse financial impacts on provider uncompensated care amounts.

9E. How will eliminating retroactive eligibility affect provider financial performance (income after expenses)?	Elimination of retroactive coverage eligibility will not have adverse financial impacts on provider financial performance.
9F. How will eliminating retroactive eligibility affect the net financial impact of uncompensated care (UCC – LIP payments)?	Elimination of retroactive coverage eligibility will not have adverse financial impacts on net financial impact of uncompensated care.
Component 10. The impact of the behavioral health and supportive housing assistance pilot on beneficiaries who are 21 and older with serious mental illness (SMI), substance use disorder (SUD) or SMI with co-occurring SUD, and are homeless or at risk of homelessness due to their disability.	
10C. Based on Medicaid data submitted by the MMA plans, do enrollees in the study population have fewer avoidable hospitalizations and emergency department visits than they did prior to receiving housing assistance services?	There will be fewer avoidable hospitalizations and emergency department visits among enrollees with SMI who receive supportive housing assistance compared to enrollees who did not receive supportive housing assistance.
10D. Are there changes in utilization of MMA services (specifically PCP visits, Outpatient visits, pharmacy services and behavioral health services) in the study population compared to their service utilization prior to participation in the Pilot program.	Use of MMA services will be greater among enrollees with SMI who receive supportive housing assistance compared to enrollees who did not receive supportive housing assistance.

*Some RQs within the design were included to provide context, are descriptive in nature, and, thus, have no hypotheses associated with them. Therefore, those RQs do not have an associated State expectation and are not reflected in this table.

6). Modified Difference-in-Differences Approach

This section explains the two modified difference-in-differences methods that the evaluation team will employ in addressing selected questions in (1) the Housing Assistance Pilot (Component 10) and (2) the impact of Florida's retroactive enrollment policy change (Component 9). To set the stage for these modified approaches, we first present the standard difference-in-differences framework.

Standard Difference in Differences

Evaluations have commonly employed a pre-post design where the treatment group outcome is observed both prior to treatment and subsequent to treatment. The difference in outcomes between the post-treatment period and the pre-treatment period is then an estimate of the treatment effect. The obvious danger in such designs is that intervening time factors (sometimes called historical bias) that coincide with the implementation of treatment may introduce bias into the estimated treatment effect.

Another common approach employs treatment and comparison groups where the comparison group is chosen to resemble the treatment group as closely except that the comparison group only receives usual care. The difference in outcomes between the treatment and comparison groups is then taken as an estimate of the treatment effect. The most common problem here is that treatment and comparison groups may differ from one another in unobserved ways that influence both choice of treatment and outcomes,

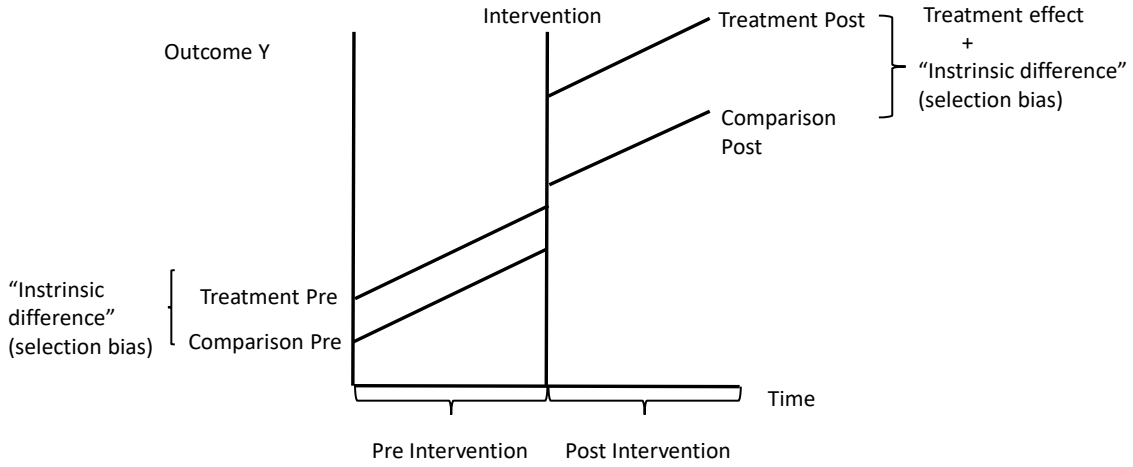
leading to the selection bias described above.

Difference-in-differences (D-i-D) is a research design that attempts to deal with both intervening factors and unobserved selection bias (Imbens & Wooldridge J, 2007). One drawback to D-i-D is that it requires more data than just pre-post observations on a treatment group as in a pre-post design or just a treatment and comparison group observed during the treatment period. D-i-D requires observing both a treatment and comparison group observed both prior to treatment (the pre period) and subsequent to treatment (the post period).

How D-i-D Works

Figure 2[4] illustrates how difference-in-differences isolates the true treatment effect in the presence of biased selection. We observe both the treatment and comparison group both before and after the intervention in implemented. During the pre-intervention period, both the treatment and comparison groups are observed under usual care. At the intervention point, the comparison group continues to receive usual care while the treatment group transitions to the new intervention. D-i-D isolates the intrinsic difference or selection bias between the treatment and comparison groups by measuring the differences in outcomes in the two groups during the pre-intervention period when both groups are under usual care. To do this, the D-i-D approach assumes that both the treatment and comparison groups' time trends are equal. This is commonly called the "constant slopes" assumption.

Figure 2 - How D-i-D Works



Treatment effect = (Treatment Post – Comparisonl Post) – (Treatment Pre – Comparison Pre)

In the post-intervention period, the true treatment effect is obscured by the presence of the intrinsic difference between the two groups. Taking the difference between the treatment and control groups in the post-intervention period gives the sum of the true treatment effect and the intrinsic difference between the groups (the first difference in difference-in-differences). Then, subtracting from that difference the difference between the treatment and comparison groups in the pre-intervention period (the second difference in

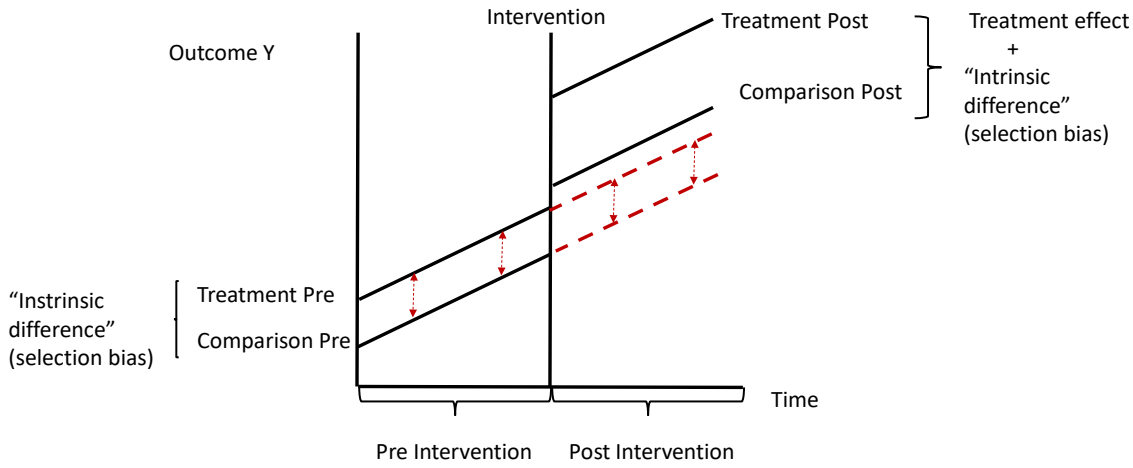
[4] Figure 1 has been omitted from this attachment for purposes of brevity.

difference-in differences) gives the true treatment effect alone.

Assumes Equal Time Trends

Figure 3 shows why D-i-D must assume time trends for the treatment and comparison groups. Only if the time trends are the same will D-i-D yield a stable estimate of the intrinsic difference between the treatment and comparison groups. This is especially important when you have insufficient data across time to examine the treatment and comparison time trends in your data. When sufficient data are available, you can check this assumption by comparing the trends across time for the treatment and comparison groups.

Figure 3 - D-i-D Assumes Equal Time Trends for Treatment and Comparison Groups



Treatment effect = (Treatment Post – Comparson Post) – (Treatment Pre – Comparison Pre)

How is D-i-D Implemented?

D-i-D is simple to implement in practice if data for the treatment and comparison groups are available both pre-intervention and post-intervention. The basic D-i-D model incorporates

1) a pre/post period dummy variable, POST, where POST=1 during the post-implementation period and POST=0 during the pre-implementation period,
2) a treatment/comparison group dummy variable, GROUP, where (GROUP=1 for the treatment group and GROUP=0 for the comparison group),
3) the statistical interaction between these two main effects, POST x GROUP, and
4) the additional control variables, X, used in outcomes models (e.g., age, sex, and health status).

The D-i-D regression equation is

$$Y = \alpha + \beta_P POST + \beta_G GROUP + \beta_{DiD} POSTxGROUP + \beta_X X + \varepsilon$$

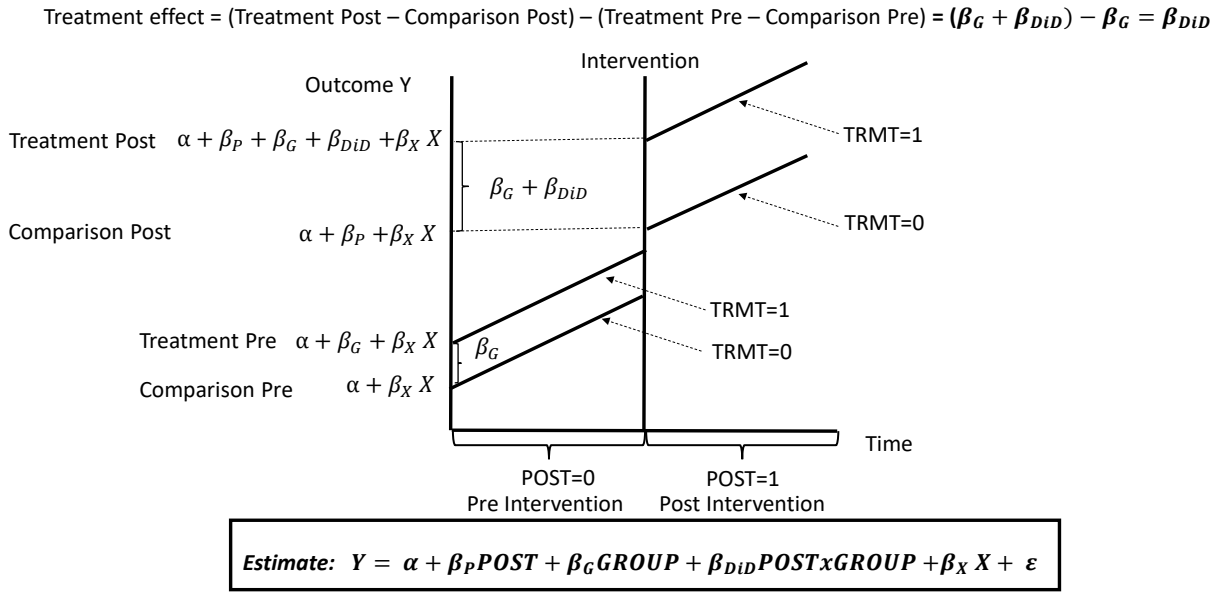
Y is the outcome under study, X represents the control variables, the β's are the model coefficients, and ε is the disturbance term.

Figure 4 shows graphically the way D-i-D works based on the D-i-D statistical model. In Figure 4, the outcome Y is on the vertical axis and time is on the horizontal axis. The horizontal axis is divided into pre- and post-intervention segments. The four straight lines in Figure 4 correspond to the treatment and comparison groups in the pre and post periods. The four model coefficient sums plotted on the Y axis show the predicted treatment and comparison values for both the pre and post periods. Notice that the difference between the treatment pre and comparison pre values gives β_G, which is a measure of the intrinsic difference between the two groups prior to implementation. The difference between the treatment post and comparison post values gives the sum of the interaction coefficient, β_{DID}, and the intrinsic difference between the two groups, β_G. The difference-in-differences treatment effect is found by subtracting the treatment-comparison difference in the pre-period from the treatment-comparison difference in the post-period:

$$(\beta_G + \beta_{DiD}) - \beta_G = \beta_{DiD}$$

The coefficient on the interaction term, β_{DiD}, is the estimated treatment effect in a linear D-i-D model.

Figure 4 – How is D-i-D Implemented?



Testing and Relaxing the Strict Assumptions of Difference-in-Differences

Several approaches exist for testing and relaxing the strict assumptions of D-i-D. Florida MMA evaluation principal investigator Jeff Harman and colleagues used the availability of multiple time periods in both the pre and post periods to relax the strict constant slopes assumptions of D-i-D (Harman, Lemak, Al-Amin, Hall, & Duncan, 2011). This was done by introducing into the standard D-i-D model a time trend main effect along with two-way interactions between time and POST and time and GROUP and a three-way interaction between time, POST, and GROUP:

$$Y = \alpha + \beta_t time + \beta_P POST + \beta_G GROUP + \beta_{Pt} POSTxtime + \beta_{Gt} GROUPxtime + \beta_{DiD} POSTxGROUP + \beta_{DiDt} POSTxGROUPxtime + \beta_X X + \varepsilon$$

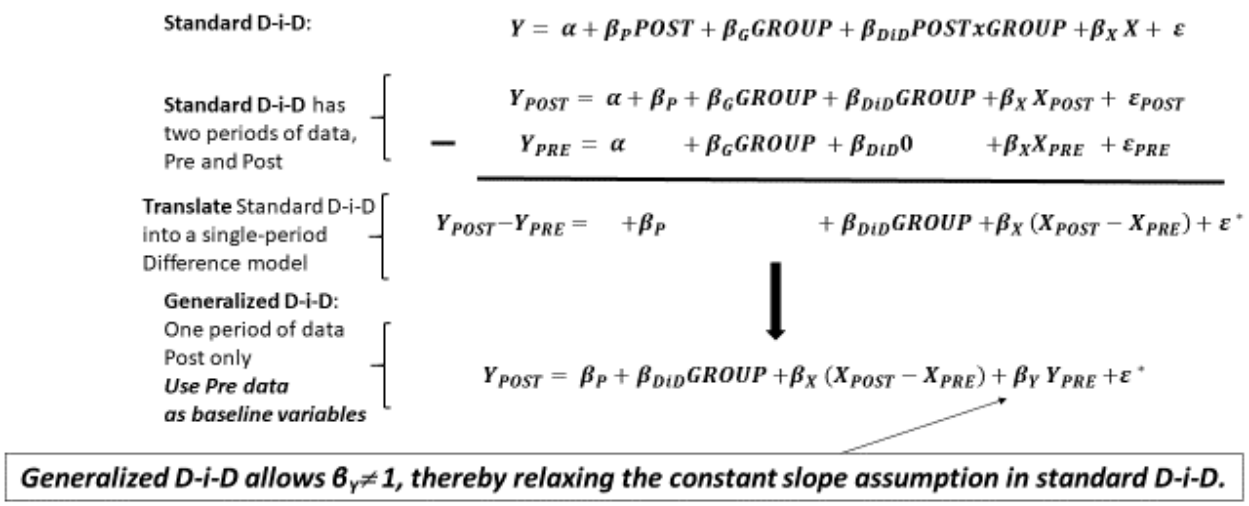
Even when the number of time periods in the pre and/or post periods preclude estimating time trends, the standard D-i-D assumptions can be relaxed. University of Florida faculty member Keith Muller has observed that the standard D-i-D model can be translated from a two period, pre/post model into a single period, post-only model (Wegman et al., 2015). This single period model uses the baseline (pre-period) variables to relax the D-i-D constant slope assumption.

Figure 5 shows how the standard D-i-D model is translated into this more flexible formulation. First, the standard D-i-D model is separated into two parts, one for the post period and one for the pre period. Then, these two equations are differenced to produce a single equation difference model. Lastly, the pre-period outcome, Y_{PRE}, is placed among the regressors with a coefficient, β_Y, to be estimated. When β_Y is treated as a coefficient to be estimated rather than forced to equal one as in standard D-i-D, the constant slope assumption is relaxed.

To be fair, however, this approach to D-i-D is not free of assumptions. The constant slope assumption is replaced with a constant baseline proportionality assumption based on the baseline value of Y. However, it is easy to add an interaction between Y_{PRE} and GROUP so that the constant baseline proportionality assumption can differ between the treatment and comparison groups.

While not perfectly flexible, this modification increases the generality of this D-i-D formulation. Note that this D-i-D formulation subsumes the standard D-i-D formulation as a special case when $\beta_Y=1$. Testing H_0: $\beta_Y=1$ and rejecting H_0: $\beta_Y=1$ in favor of H_A: $\beta_Y\neq1$ tells you that this new model formulation fits your data better than the standard D-i-D formulation.

Figure 5 – Relaxing the DiD Constant Slopes Assumption



Conclusion

We believe that testing for and relaxing the strict assumptions of D-i-D are important for studying the effects of retroactive enrollment policy on new Medicaid enrollee debt in Florida. In particular, we plan to use linked credit reporting data on medical debt for new Medicaid enrollees both prior to and subsequent to the change in retroactive enrollment policy. Consequently, we will have a very large sample size that will likely yield

sufficient statistical power to detect very small changes in medical debt as statistically significant. It is therefore critical to disentangle the effects of retroactive enrollment policy from the other factors than can influence medical indebtedness (enrollee income, employment changes, physical and mental health status, etc.) as discussed in the introduction.

In addition, selecting a control group for D-i-D is difficult since Florida chose to implement the retroactive enrollment policy statewide at a single point in time (February 2019). Consequently, it will likely be necessary to use pregnant women and children as the control group since they remained under the previous retroactive enrollment policy. Unfortunately, the assumption of constant slopes for men and non-pregnant women vs. pregnant women and children is especially tenuous given the obvious differences between these groups. This too argues for exploring techniques for testing and relaxing the constant trends assumptions in standard D-i-D.

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