



Center for State Health Policy

A Unit of the Institute for Health, Health Care Policy and Aging Research

Evaluation Design: New Jersey FamilyCare Comprehensive Demonstration 4/1/2023-6/30/2028

Joel C. Cantor, ScD
Jennifer Farnham, MS
John S. Palatucci, PhD, MPA, CPH
Hillary Samples, PhD
Amanda Spishak-Thomas, PhD, MSW, LCSW
Dan Treglia, PhD, MPP
Ann M. Nguyen, PhD, MPH
Cynthia Minkovitz, MD, MPP
Anne Lilly, MSPH

May 2025

Table of Contents

Evaluation Design Leadership.....	6
Evaluation Design Component Leadership.....	7
Acknowledgements	8
Introduction.....	9
1. Adjunct Services Autism Spectrum Disorder (ASD) Pilot.....	12
A. General Background Information	12
B. Evaluation Questions and Hypotheses	13
C. Methodology	14
D. Methodological Limitations	24
E. Attachments.....	24
Appendix 1.1: Parent/Caregiver/Guardian Adjunct Services Autism Spectrum Disorder Pilot Questionnaire.....	25
2. Children’s Support Services Programs (SED, I/DD)	43
A. General Background Information	43
B. Evaluation Hypotheses and Questions	46
C. Methodology	48
D. Methodological Limitations	59
E. Attachments.....	60
Appendix 2.1: CSSP, SED & IDD Parent & Guardian Questionnaire	60
Appendix 2.2: CSSP, SED & I/DD Parent/Caregiver Focus Group Guide	66
3. Postpartum Eligibility Extension	68
A. General Background Information	68
B. Evaluation Questions and Hypotheses	69
C. Methodology	70
D. Methodological Limitations	79
4. New Jersey Home Visiting Pilot (NJHV) Program	80
A. General Background Information	80
B. Evaluation Questions and Hypotheses	81
C. Methodology	84
D. Methodological Limitations	92
5. Medically Indicated Meals Pilot.....	93

A. General Background Information	93
B. Evaluation Questions and Hypotheses	94
1. Implementation Study	96
1.1 Methodology.....	96
2. Outcomes Study	96
2.1 Methodology.....	98
C. Methodological Limitations	106
Appendix 5.1: In-depth key informant implementation interviews	107
6. Continuous Eligibility for MAGI Adults	110
A. General Background Information	110
B. Evaluation Hypotheses and Questions	111
C. Methodology	112
D. Methodological Limitations	117
7. Community Health Worker (CHW) Pilot Programs	118
A. General Background Information	118
B. Evaluation Questions and Hypotheses	119
C. Methodology	122
D. Methodological Limitations	131
E. Attachments.....	131
Appendix 7.1: Survey Question Bank for Medicaid Members Receiving CHW Services	131
Appendix 7.2: Key Informant Interview Guide	142
Appendix 7.3: CHW Focus Group Screening Survey.....	144
Appendix 7.4: CHW Focus Group Guide.....	152
8. Tenancy and Housing Supports.....	154
A. General Background Information	154
B. Research Questions and Hypotheses.....	159
1. Implementation Study	161
1.1 Methodology.....	162
2. Outcomes Study	163
2.1 Methodology.....	164
C. Methodological Limitations	168
Appendix 8.1: Interview Questions for Housing CBOs	177
Appendix 8.2: Interview Questions for MCO Members	179

Appendix 8.3: Interview Questions for State, MCO, And Community-Based Stakeholders....	180
9. Opioid Use Disorder (OUD) / Substance Use Disorder (SUD) Program	182
A. General Background Information	182
B. Evaluation Questions and Hypotheses	184
C. Methodology	187
D. Methodological Limitations	199
E. Attachments.....	200
Appendix 9.1: Interview Questions for OUD/SUD Initiative	200
10. Adult IDD Services: Supports and Community Care Programs.....	202
A. General Background Information	202
B. Evaluation Questions and Hypotheses	203
C. Methodology	205
D. Methodological Limitations	217
E. Attachments.....	218
Appendix 10 .1: I/DD Questionnaire	218
Appendix 10.2: Adults With I/DD Focus Group Guide.....	225
Appendix 10.3: Family Members/Advocates of Adults With I/DD Focus Group Guide	227
11. Managed Long Term Services and Supports (MLTSS) Program	229
A. General Background Information	229
B. Evaluation Questions and Hypotheses	233
1. Implementation Study	235
1.1 Methodology.....	235
2. Outcomes Study	235
2.1 Methodology.....	237
C. Methodological Limitations	250
Appendix Exhibit 11.1: In-Depth Key Informant Implementation Interviews	251
Appendix Exhibit 11.2: Full Caregiver Survey	254
Appendix Exhibit 11.3: In-Depth Caregiver Interviews	272
12. Administrative Simplifications for LTSS	275
A. General Background Information	275
B. Evaluation Questions and Hypotheses	278
C. Methodology	278
D. Methodological Limitations	282

13. Demonstration Cost Assessment (<i>new section</i>)	283
A. General Background Information	283
B. Evaluation Questions and Hypotheses	283
C. Methodology	285
D. Methodological Limitations	296
Attachment 1: Budget	298
Attachment 2: Project Workplan and Deliverable Summary	299

Evaluation Design Leadership

Principal Investigator: Joel C. Cantor, ScD, Director, Rutgers Center for State Health Policy; and Distinguished Professor of Public Policy, Rutgers Edward J. Bloustein School of Planning and Public Policy

Project Managers: Jennifer Farnham, MS, Senior Research Analyst, Rutgers Center for State Health Policy (overall project lead); Dina Belloff, MA, Research Project Manager, Rutgers Center for State Health Policy (metric development, survey and data management)

Rutgers University Faculty Co-Investigators¹:

Ann M. Nguyen, PhD, MPH, Assistant Research Professor, Rutgers Center for State Health Policy

John S. Palatucci, PhD, MPA, CPH, Assistant Research Professor, Rutgers Center for State Health Policy

Hillary Samples, PhD, Assistant Professor of Health Systems and Policy, Rutgers School of Public Health; Core Faculty, Center for Pharmacoepidemiology and Treatment Science

Amanda Spishak-Thomas, PhD, MSW, LCSW, Assistant Research Professor, Rutgers Center for State Health Policy

Dan Treglia, PhD, MPP, Instructor, Rutgers Center for State Health Policy and Department of Family Medicine and Community Health, Robert Wood Johnson School of Medicine

External Collaborators:

Johns Hopkins Bloomberg School of Public Health

Cynthia Minkovitz, MD, MPP, William H. Gates Sr. Professor and Chair, Department of Population, Family and Reproductive Health

Anne Lilly, MSPH, Senior Research Associate

¹ All faculty are members of the Rutgers Health Institute for Health, Health Care Policy and Aging Research. Rutgers Center for State Health Policy and the Center for Pharmacoepidemiology and Treatment Science are units of the Institute.

Evaluation Design Component Leadership

Chapter	Lead Author(s)
<i>Youth Programs</i>	
1. Adjunct Services Autism Spectrum Disorder (ASD) Pilot	John Palatucci
2. Children's Support Services Programs (SED, I/DD)	John Palatucci
<i>Maternity-related Components</i>	
3. Postpartum Eligibility Extension	Amanda Spishak-Thomas
4. New Jersey Home Visiting Pilot (NJHV) Program	Amanda Spishak-Thomas, Cynthia Minkovitz, Anne Lilly
5. Medically-indicated Meals Pilot	Amanda Spishak-Thomas
<i>Facilitating Access to Essential Health Services</i>	
6. Continuous Eligibility for MAGI Adults	Amanda Spishak-Thomas
7. Community Health Worker (CHW) Pilot Programs	Joel Cantor, Ann Nguyen, Jennifer Farnham
8. Tenancy and Housing Supports	Dan Treglia, Joel Cantor
9. Opioid Use Disorder (OUD) /Substance Use Disorder (SUD) Program	Hillary Samples
<i>Long-Term Services for Adults</i>	
10. Adult IDD Services: Supports and Community Care Programs	John Palatucci
11. Managed Long Term Services and Supports (MLTSS) Program	Amanda Spishak-Thomas
12. Administrative Simplifications for LTSS	Jennifer Farnham
<i>Cost Assessment</i>	
13. Demonstration Cost Assessment	Joel Cantor

Acknowledgements

The Evaluation Design leadership would like to thank several Rutgers colleagues for their helpful input on the evaluation design: Sujoy Chakravarty (Associate Professor of Health Sciences and Economics, Rutgers Camden), Derek DeLia (Associate Professor, Bloustein School of Planning and Public Policy), Kristen Lloyd (Senior Research Project Manager, Rutgers Center for Pharmacoepidemiology and Treatment Science), Mark McGovern (Associate Professor, School of Public Health), and Colleen McLaughlin (Associate Director of The Boggs Center on Developmental Disabilities). We would also like to thank our CSHP colleagues who provided helpful support to our evaluation design work: Joe Brecht, Yasmeen Khellah, Margaret Koller, Jose Nova and Kate Scotto. Finally, our colleagues at the New Jersey Department of Human Services and the Department of Children and Families provided invaluable information about Demonstration implementation plans and feedback on drafts of our designs.

Introduction

Evaluation Design Partners

Building on its longstanding relationship to the New Jersey Department of Human Services, Division of Medical Assistance and Health Services (DMAHS), Rutgers Center for State Health Policy (CSHP) was selected to serve as the independent evaluator for the New Jersey FamilyCare Comprehensive Demonstration 4/1/2023-6/30/2028. CSHP has been the independent evaluator for New Jersey's §1115 Demonstrations since 2012 in collaboration, where applicable, with experts outside the Center. For this evaluation design, we have partnered with Cynthia Minkovitz and Anne Lilly of the Johns Hopkins Bloomberg School of Public Health. Dr. Minkovitz and Ms. Lilly are experts in maternal and child health and currently partner with New Jersey's Department of Children and Families to evaluate the department's Maternal, Infant and Early Childhood Home Visiting Initiatives. So, they were a natural partner for CSHP for the Home Visiting component of the Comprehensive Demonstration. The CSHP team, Dr. Minkovitz and Ms. Lilly declare no conflicts of interest with respect to this evaluation.

Structure of the Evaluation Design

The New Jersey FamilyCare Comprehensive Demonstration 4/1/2023-6/30/2028 is significantly more expansive and complex than previous demonstrations. For the sake of manageability, CSHP has divided the Demonstration into 12 component parts and will apply CMS' design guidance to each part separately. Each component has its own chapter in this design report, followed by a budget encompassing all components. We have organized the components thematically, with youth programs in Chapters 1 and 2 (the Adjunct Services Autism Spectrum Disorder (ASD) Pilot and Children's Support Services Programs (SED, I/DD)), maternity-related components in Chapters 3-5 (Postpartum Eligibility Extension, the New Jersey Home Visiting Pilot (NJHV) Program, and the Medically-indicated Meals Pilot), programs facilitating timely access to essential health services for a variety of populations in Chapters 6-9 (Continuous Eligibility for MAGI Adults, the Community Health Workers (CHW) Pilot Program, Tenancy and Housing Supports, and the Opioid Use Disorder (OUD) /Substance Use Disorder (SUD) Program) and long-term services for adults in Chapters 10-12 (Adult IDD Services: Supports and Community Care Programs, Managed Long Term Services and Supports (MLTSS) Program, and Administrative Simplifications for LTSS).

We recognize that CMS has specific guidance around health-related social needs (HRSN) and that there are three demonstration components that include HRSN—the housing component, the medically-indicated meals component, and the MLTSS component with the added counseling, respite, and nutrition supports. To address cross-cutting themes within the demonstration, we will include a summary deliverable report that presents themes across components. Our draft workplan and deliverables are detailed in Attachment 2.

Summary of Demonstration History, by Component

Component	Description
1. Adjunct Services Autism Spectrum Disorder (ASD) Pilot	<ul style="list-style-type: none">Behavioral therapies for Medicaid/CHIP members with Autism Spectrum Disorder began under the first §1115 Comprehensive

Component	Description
	<p>Demonstration (October 2012-July 2017) and continued during the renewal period (starting in August 2017).</p> <ul style="list-style-type: none"> • In 2020, New Jersey amended its Medicaid state plan to include coverage of “medically necessary autism benefits.” • The Adjunct Services Autism Spectrum Disorder (ASD) Pilot in the current demonstration represents a new set of services.
2. Children’s Support Services Programs (SED, I/DD)	<ul style="list-style-type: none"> • The first §1115 Comprehensive Demonstration (October 2012-July 2017) included the Children with Serious Emotional Disturbance (SED) and Intellectual/Developmental Disabilities with Co-Occurring Mental Health Diagnosis (I/DD-MI) waivers with additional services rolled out from 2015-2017. • The “Plan A” eligibility expansion in July 2016 granted Medicaid State Plan services for youth with SED in out-of-home settings. • These prior waivers were incorporated into the Children’s Support Services Program during the first §1115 Comprehensive Demonstration renewal period (starting in August 2017); eligibility for children with I/DD no longer required a co-occurring mental health diagnosis, but many children with SED enrolled in CSSP were not Medicaid/CHIP eligible for State Plan services.
3. Postpartum Eligibility Extension	While there was an extension of postpartum eligibility approved in October 2021, it was not evaluated due to the COVID-19 pandemic extending eligibility for all beneficiaries. ²
4. New Jersey Home Visiting Pilot (NJHV) Program	While the NJHV program was first approved in July 2019, ³ it was not implemented due to the COVID-19 pandemic.
5. Medically-indicated Meals Pilot	New
6. Continuous Eligibility for MAGI Adults	New
7. Community Health Worker (CHW) Pilot Programs	New
8. Tenancy and Housing Supports	New
9. Opioid Use Disorder (OUD) /Substance Use Disorder (SUD) Program	<ul style="list-style-type: none"> • Approved under the §1115 Comprehensive Demonstration (October 2012-July 2017, this piece in October 2017) and allowed expenditures for services within Institutions for Mental Disease. • With the exception of moving the Substance Use Disorder Promoting Interoperability Program into the Behavioral Health

² See <https://www.medicaid.gov/medicaid/section-1115-demonstrations/downloads/nj-1115-request-pa.pdf>

³ See <https://www.medicaid.gov/medicaid/section-1115-demonstrations/downloads/nj-1115-request-cms-amend-appvl-07252019.pdf>

Component	Description
	<p>Promoting Interoperability Program, CMS has authorized the State to continue its OUD/SUD from the previous demonstration without modification.</p> <ul style="list-style-type: none"> The program has been expanded to include a carve-in of behavioral health services to managed care.
10. Adult IDD Services: Supports and Community Care Programs	<ul style="list-style-type: none"> First approved in 1985 for adults who met an institutional level of care, under 1915(c) the “Community Care Waiver” was incorporated into the §1115 Comprehensive Demonstration in 2017, as the Community Care Program (CCP). In 2016 CMS approved amendment to the first §1115 Comprehensive Demonstration (October 2012-July 2017) that expanded income eligibility for the Supports program allowing individuals up to 300% FBR.
11. Managed Long Term Services and Supports (MLTSS) Program	<p>MLTSS began in July 2014 under New Jersey’s first 1115 Comprehensive Demonstration and continued during each renewal demonstration including this one.</p> <p>MLTSS is extended into the 2023-2028 demonstration, largely as constructed under prior waiver authorities, but with a few additional services.</p> <p>New services:</p> <ol style="list-style-type: none"> Housing-related services: case management, outreach, education, and housing transition or tenancy-sustaining services Caregiver supports <ol style="list-style-type: none"> Individual or group therapy for caregivers Expanded respite benefit (from 30 days in the previous demonstration period to 90 days per calendar year) Nutritional supports <ol style="list-style-type: none"> One-time pantry stocking for a beneficiary transitioning home from an institution Short-term provision of groceries Nutritional education and skills development
Administrative Simplifications for LTSS	<ul style="list-style-type: none"> Qualified Income Trusts (QITs) were adopted in December 2014 and continue with this demonstration. The process for self-attestation regarding asset transfers was first approved in December 2012 and continues with this demonstration. The program for attestation by the NJ Office of the Public Guardian regarding assets for individuals under their care was effective as of July 25, 2019 and continues with this demonstration.

1. Adjunct Services Autism Spectrum Disorder (ASD) Pilot

A. General Background Information

Autism Spectrum Disorder (ASD) is a lifelong neurodevelopmental disorder that affects social interaction, communication, learning, and behavior, and typically first presents during early childhood.⁴ Data from the Autism and Developmental Disabilities Monitoring Network suggests that 2.9% of 8-year-olds in New Jersey have ASD with a higher prevalence among non-Hispanic Black and Hispanic children.⁵ As part of the Early and Periodic Screening Diagnosis and Treatment (EPSDT), all Medicaid-enrolled children under age 21 are entitled to appropriate “preventive, dental, mental health, developmental, and specialty services.”⁶

Behavioral therapies for Medicaid/CHIP members with Autism Spectrum Disorder began under the first §1115 Comprehensive Demonstration (October 2012-July 2017) and continued during the first renewal period (August 1, 2017 – June 30, 2022). In 2020, New Jersey amended its Medicaid state plan to also include coverage of medically necessary autism benefits.⁷ Eligibility for the Autism benefits has been limited to the “NJ FamilyCare Medicaid child member, under the age of 21, who has been diagnosed with ASD, defined by ICD-10-CM diagnosis codes F84.0 through F84.9” (i.e., Pervasive Developmental Disorders).⁸ Currently operationalized **State Plan Autism Benefits** include:

- Applied Behavior Analysis (ABA)
- Allied health services (Occupational, Physical, Speech, and Language Therapies)
- Developmental and Relationship-based Approaches
- Sensory Integration Therapy
- Skill Acquisition and Capacity Building

⁴National Institute of Mental Health. Autism Spectrum Disorder. U.S. Department of Health and Human Services, National Institutes of Health, 2023. Retrieved February 2024, from <https://www.nimh.nih.gov/health/topics/autism-spectrum-disorders-asd>.

⁵ Shaw KA, Bilder DA, McArthur D, Williams AR, Amoakohene E, Bakian AV, Durkin MS, Fitzgerald RT, Furnier SM, Hughes MM, Pas ET. Early Identification of Autism Spectrum Disorder Among Children Aged 4 Years—Autism and Developmental Disabilities Monitoring Network, 11 Sites, United States, 2020. MMWR Surveillance Summaries. 2023 Mar 3;72(1):1.

⁶ Medicaid.gov. Early and Periodic Screening, Diagnostic, and Treatment. Centers for Medicare & Medicaid Services, 2023. Retrieved February 2024. <https://www.medicaid.gov/medicaid/benefits/early-and-periodic-screening-diagnostic-and-treatment/index.html>

⁷ NJFamilyCare. Family Guide to Autism Services. Division of Medical Assistance and Health Services, 2023. Retrieved February 2024. https://www.nj.gov/humanservices/dmahs/news/DMAHS_Guide_to_Autism_Services_eng.pdf

⁸ World Health Organization. ICD10-2019: F84 Pervasive developmental disorders, nd. Retrieved February 2024. <https://icd.who.int/browse10/2019/en#/F84>

Autism Spectrum Disorder Adjunct Services Pilot

The goal of the ASD Pilot is “to enhance inclusion in the community rather than clinic-based settings or the member’s home, and they must be associated with and support goals within the overall treatment plan” (STC 5.12.a). During the current 1115 demonstration period (April 1, 2023 through June 30, 2028), the Adjunct Services ASD Pilot (hereafter, “ASD Pilot”) will provide eligible Medicaid/CHIP enrolled children with specialized services that they would otherwise be unable to access via the state plan. Eligibility for ASD Pilot will be limited to NJ Medicaid/CHIP beneficiaries up to age 21, who do not have concurrent private insurance that offers similar benefits and have an ASD diagnosis determined by the approved assessment tools, listed below:

- ABAS – Adaptive Behavior Assessment System II
- CARS – Childhood Autism Rating Scale
- DDRT – Developmental Disabilities Resource Tool
- GARS – Gilliam Autism Rating Scale
- ADOS – Autism Diagnostic Observation Scale
- ADI – Autism Diagnostic Interview-Revised
- ASDS – Asperger’s Syndrome Diagnostic Scale

Per the CMS approval letter from CMS Administrator Brooks-LaSure, dated March 30, 2023, **“the pilot’s effectiveness will be evaluated based on how the adjunct services enhance community inclusion for beneficiaries up to age 21 with an ASD diagnosis.”** Services offered through the demonstration will be limited to those listed below and will be evaluated to assess the extent to which the services enhance community inclusion for beneficiaries.

- *Art therapy*
- *Aquatic therapy*
- *Hippotherapy/therapeutic horseback riding*
- *Music therapy*
- *Drama therapy*
- *Dance/movement therapy*
- *Recreation therapy*

B. Evaluation Questions and Hypotheses

We posit that the introduction of ASD Pilot to eligible children will enhance inclusion in the community and support beneficiaries’ treatment plan goals. The primary drivers for this inclusion is the facilitation of social interaction, emotional regulation, mobility, and behavioral skills through access to therapeutic activities provided within community settings as described above. Below we present the *driver diagram* (Figure 1.1) that delineates the pathway from the policy change to overall program goals. Here the secondary drivers include the services offered through the ASD Pilot.

Figure 1.1 Adjunct Services Autism Services Disorder (ASD) Pilot Aim Driver Diagram

Aim 1 ASD Pilot	Primary Driver	Secondary Drivers
Support treatment plan goals that	<ul style="list-style-type: none">• Facilitate social interaction through	<ul style="list-style-type: none">• Adjunct Autism Services<ul style="list-style-type: none">○ Art therapy

enhance communication and inclusion in the Community.	access to therapeutic activities provided within community settings <ul style="list-style-type: none"> Promote emotional regulation, mobility, and behavioral skills 	<ul style="list-style-type: none"> Aquatic therapy Hippotherapy/therapeutic horseback riding Music therapy Drama therapy Dance/movement therapy Recreation therapy
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="border-top: 1px solid black; width: 30%;"></div> <div>Causality</div> <div style="border-top: 1px solid black; width: 30%;"></div> </div>		

Evaluation Questions and Hypotheses

Hypothesis 1: Authorizing adjunct autism services among eligible Medicaid youth will lead to utilization of the available services.

Research Question 1a: What are the trends in overall utilization of, and spending on, ASD Pilot services? How do trends vary across different subgroups (e.g., race/ethnicity, age, geography, and sex, or co-occurring conditions)?

Hypothesis 2: Providing adjunct autism services to eligible Medicaid children/youths/young adults will enhance community participation among those children/youths/young adults and their families.

Research Question 2: Is utilization of the ASD Pilot associated with greater community engagement and how do experiences with ASD Pilot services vary across subgroups (e.g., race/ethnicity, age, age at identified ASD, geography, gender, co-occurring conditions, and socio-economic factors)?

C. Methodology

To evaluate the above hypotheses and research questions, the study will utilize descriptive analysis of claims to measure utilization of ASD. The evaluators will also conduct a cross-sectional analysis of community engagement through a survey of adult beneficiaries and parents/guardians. Measures for the studies are outlined below (Tables 1.1 and 1.2) and a summary of the methods, organized by hypotheses and research questions can be found at the end of this section in Table 1.3.

Measures

Table 1.1 Inventory of Claims-based Measures

Measures		Brief Description
ASD Pilot Utilization		
1.	ASD service use	Rates of child/youth utilization of the ASD among eligible beneficiaries, for the services listed below: <ul style="list-style-type: none"> Art therapy Aquatic therapy Hippotherapy/therapeutic horseback riding Music therapy

		<ul style="list-style-type: none"> • Drama therapy • Dance/movement therapy • Recreation therapy
2.	Number of ASD Pilot sessions	Number of ASD Pilot services sessions per participating youth, including overall and by specific service type.
3.	Total spending on ASD Pilot service use	Total spending on ASD sessions per participating youth, including overall and by specific service type.
State Plan Autism Benefit Services Utilization		
4.	Utilization of Autism Benefit Services	Rates of child/youth utilization of the Autism Services benefit: <ul style="list-style-type: none"> • Applied Behavior Analysis (ABA) • Allied health services (Occupational, Physical, Speech, and Language Therapies) • Developmental and Relationship-based Approaches • Sensory Integration Therapy • Skill Acquisition and Capacity Building

Table 1.2 Experience of Supports and Services Survey Domains*

Youth/Child with ASD and Family Experience		
1	Services Access	<ul style="list-style-type: none"> • Availability of ASD Pilot and/or Autism benefit eligibility and enrollment opportunities • Transportation
2	Community Engagement	<ul style="list-style-type: none"> • Children's/youths' opportunities to participate in the community, including activities outside the home, and time with other children/youths/young adults • The presence of community networks (e.g., church, recreational activities, parent-to-parent groups, and sibling groups) • My Family's Accessibility and Community Engagement Tool^{9, 10}
Survey Sample Characteristics		
4	Child/Youth/Young Adult Characteristics	<ul style="list-style-type: none"> • Child/youth characteristics available via linked Medicaid claims file (see data collection for Hypothesis 2, Research Question 2) • Age at ASD diagnosis • Child/youth's gender • Equipment used by the child (e.g., wheelchair or speech generating device) • Activities of daily living (e.g., feeding, bathing, getting dressed)
5	Parent/Guardian Characteristics	<ul style="list-style-type: none"> • Age • Race/Ethnicity • Gender • Location (urbanicity/rurality) • Educational attainment of parent/guardian • (Parent or beneficiary aged 18-20) Patient Health Questionnaire 4 (PHQ-4): Four-item validated composite depression/anxiety screening scale screening tool.¹¹
6	Household and Environmental Characteristics	<ul style="list-style-type: none"> • Household income • Child's school type (public/private/home-based) • Language spoken in home • Household composition

⁹ Bourke-Taylor, H. M., Joyce, K. S., & Tirlea, L. (2022). Initial development and evaluation of the My Family's Accessibility and Community Engagement (MyFACE) Tool for families of children with disabilities. *The American Journal of Occupational Therapy*, 76(4), 7604205150.

¹⁰ Bourke-Taylor, H. M., Tirlea, L., & Joyce, K. S. (2021). Further psychometric evaluation of the My Family's Accessibility and Community Engagement (MyFACE) tool: Mothers' ratings of perceptions of community accessibility and engagement for their child with disabilities. *Research in Developmental Disabilities*, 114, 103955;

¹¹ Kroenke K, Spitzer RL, Williams JB, Löwe B. An ultra-brief screening scale for anxiety and depression: the PHQ-4. *Psychosomatics*. 2009 Nov 1;50(6):613-21.

		<ul style="list-style-type: none"> • Other supports/services used (e.g., CSSP I/DD, educationally-based supports) • Caregiving arrangements • Perceptions of home and neighborhood safety
7	Recommendations	<ul style="list-style-type: none"> • Barriers and facilitators to ASD Pilot and/or State Plan Autism Benefit utilization • Recommendations for additional services or other requested modifications
NOTES: *Adapted from National Core Indicators, IDD Survey™ and Child Family Survey™, PHQ-4, and MyFACE tools. ^{6,7,8, 12}		

Hypotheses 1, RQ 1

Study population for Hypothesis 1, RQ 1:

For examining trends in utilization of ASD services, ASD Pilot services, and ASD Pilot associated spending, the study population will be comprised of children, youth, and young adults up to age 21 with a qualifying diagnosis for ASD Pilot participation during the demonstration period (April 1, 2023, through June 30, 2028).

Analytic strategy for Hypothesis 1, RQ 1:

For calculating adjusted trends in levels of ASD Pilot utilization on a quarterly or annual basis (as feasible given sample size concerns). We will implement a repeated cross-sectional approach for all ASD Pilot eligible beneficiaries and will estimate differences by subpopulation (e.g., race/ethnicity, age, geography, and sex, or co-occurring conditions) using regression models. We will use line graphs and tables to describe results. Sample sizes permitting, the adjusted trends will also be calculated by subgroups of interest (e.g., age distribution, race/ethnicity, gender, and presence of comorbidities or co-occurring conditions).

The empirical models will be specified as described below:

Main Models:

$$Outcome_{it} = \alpha_0 + \alpha_1(Time_Indicator)_i + \alpha_2(Group)_{it} + \lambda X_{it} + \varepsilon_{it}$$

Secondary Models:

$$Outcome_{it} = \alpha_0 + \alpha_1(Time_Indicator)_i + \alpha_2(Group)_{it} + \alpha_3(Time_Indicator * Group)_{it} + \lambda X_{it} + \varepsilon_{it}$$

For the Main Models, $Outcome_{it}$ represents the outcome of interest for an individual respondent i in year t (e.g., ASD Benefit/Pilot Utilization or ASD Pilot spending). $Group_{it}$ represents a group attribute (e.g., age distribution, race/ethnicity, gender, and presence of comorbidities or co-

¹² NCI (National Core Indicators). 2022. *Child Family Survey 2020-21 Final Report*. National Association of State Directors of Developmental Disabilities Services and Human Services Research Institute. Retrieved on 7/25/2023 from: https://legacy.nationalcoreindicators.org/upload/core-indicators/2020-21_CFS_National_Report_Final.pdf

occurring conditions). α represents the corresponding coefficients for the model. X_i represents a set of independent variables (e.g., child/youth characteristics, parent/guardian characteristics, household and environmental factors) for individual i at time t and λ represents the vector of coefficients for each of the corresponding variables of X . ε represents the error term. Models will be estimated using ordinary least squares regression, Poisson regression (i.e., for modeling number of events used), and for spending, a generalized linear model as dollars would be the dependent variable (e.g., Gamma distribution with log link function).¹³ Marginal analysis will be applied after running each regression to generate adjusted trends over time based on these models (i.e., using predictive margins).¹⁴

Specifications for the Secondary Models will be identical to the Main Models, except that we will introduce an interaction term of *Time_Indicator * Group*, used to capture time-varying differences by group with the α_3 coefficient. This would allow us to plot the adjusted trends by group of interest (as indicated above) through the post hoc marginal analysis.

Hypothesis 2, RQ 2

Study population for Hypothesis 2, RQ 2:

For examining the effect of ASD Pilot on community engagement, the study population will be comprised of adult parents, guardians, or other primary caregivers of any children, youth, or young adults up to age 21 with an ASD diagnosis observed in the Medicaid claims, as described above. Responses from respondents whose child who utilize the ASD Pilot will be compared to primary guardian of children and youth who are eligible for ASD Pilot but had not yet participated. We will draw a sample based on claims as described below.

Data collection for Hypothesis 2, Research Question 2: We will hire a survey research contractor to serve as a trusted third party to handle Medicaid member identifiers needed to conduct a confidential caregiver survey.

Survey sample selection and participant recruitment will take place in 4 steps:

1. Using ASD Pilot utilization indicators (see Table ASD.1), CSHP will select a stratified random sample of parents or other primary guardian of any children, youth, or young adult up to age 21 with an ASD diagnosis from de-identified Medicaid claims and encounter data held by CSHP, including both those who used ASD Pilot and those that did not.
2. CSHP will then send a list of Rutgers unique study IDs for the sampled members to DMAHS which will in turn send a file to the third-party survey vendor which includes the Rutgers study ID and member identifiers (names, addresses, telephone, and other contact information). *The vendor will not receive Medicaid claims or encounter data.*
3. The vendor will contact families to request their voluntary participation in the survey. An initial letter of invitation will be followed up with a reminder postcard and, possibly, telephone or email reminders. The letter/postcard will be on Rutgers and/or DMAHS letterhead and will include the unique and one-time use ASD Survey ID and a QR code to

¹³ Deb P, Manning W, Norton E. Modeling health care costs and counts. IniHEA World Congress in Sydney, Australia 2013.

¹⁴ Williams R. Using the margins command to estimate and interpret adjusted predictions and marginal effects. The Stata Journal. 2012 Jun;12(2):308-31.

access the survey. The survey will include a screener for parents/guardians (i.e., those who are the primary caregivers for children and youth up to age 21 with an ASD diagnosis) followed by an approximate 30-45 minute survey. If feasible and necessary, telephone surveys may be utilized to increase recruitment and accessibility.

4. The vendor will securely send completed survey responses to CSHP. The response files will include the Rutgers study ID but *no personal identifiers* of members or parent/guardians. CSHP will then link the survey responses to de-identified claims and encounter records for analysis.

The survey will be voluntary and brief; a screener to identify respondents will take approximately 2-3 minutes to complete and, for eligible respondents, the full survey of approximately 30-45 minutes will include 45 question prompts including both close-ended and open-ended questions. The survey questionnaire will include questions on services access, community engagement, child/youth characteristics, parent/guardian characteristics, household and environmental factors, and recommendations. The survey will be available in English and Spanish. Qualifying participants (i.e., after completing the screener) will be offered a study incentive of \$25 per completed survey (incentive limited to one per eligible family). In the second round, we will resurvey families from the first round to examine changes between intervals.

Analytic strategy for Hypothesis 2, Research Question 2:

We will measure the effect of the ASD Pilot on services access and community engagement, between respondents who participated in the ASD Pilot (or whose children participated) and those of children/youth/young adults who are eligible but did not yet participate at time of the survey collection. We will present both a bivariate and multiple regression-based approach (e.g., adjusting for demographic and clinical characteristics) to describe cross-sectional differences in experiences between ASD Pilot participants and those eligible that did not participate. We will first create bar charts or line diagrams to examine measures of community participation. To adjust estimates, the survey will collect basic information on child/youth characteristics, parent/guardian characteristics, household, and environmental characteristics, which will be supplemented by child characteristics available on the Medicaid claims files.

Model of ASD Pilot Survey:

$$Outcome_{it} = \alpha_0 + \lambda X_{it} + \varepsilon_{it}$$

For the Main Models, $Outcome_{it}$ represents the outcome of interest for an individual respondent i in year t . X_i represents a set of control variables for individual i at time t and λ represents the coefficients for each of the corresponding control variables of X . ε represents the error term. Models will be estimated using ordinary least squares regression.

Open-ended free-text responses will be independently coded by two researchers. In addition to predetermined thematic areas aligned with ASD Pilot aims, the research team will identify emergent themes and patterns in the data after conducting a coding consensus process.

In a prior validation study, MyFace scores ranged from 13-36 with mean of 23.6 and standard deviation of 5.24.⁴ This suggests that to detect a 1.5-point group mean change in instrument scores

from baseline survey, 302 respondents would be required for power at the 0.80 level. For data collection, a maximum of 800 completed surveys will be collected via the internet, and possibly telephone, in two intervals (approximately 400, each round). Depending on sample size concerns, we will consider a supplemental analysis that would include additional recruitment for the second round.

Table 1.3: Summary of Questions, Hypotheses and Methodology for Evaluation of the Adjunct Autism Services Pilot

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic Methods
<i>Hypothesis 1: Authorizing adjunct autism services among eligible Medicaid youth will lead to utilization of the available services.</i>				
RQ1a. What are the trends in overall utilization of, and spending on, ASD Pilot services? How do trends vary across different subgroups (e.g., race/ethnicity, age, geography, and sex, or co-occurring conditions)?	<ul style="list-style-type: none"> • Rates of overall ASD Pilot service use • Rates of specific service use • Number of ASD Pilot sessions per participant • Total spending on ASD Pilot sessions per participant 	Children and youth up to 21 years of age who receive ASD pilot services.	Medicaid Fee-for-Service and Encounter Claims Records	Examine adjusted trends in study outcomes through analytic summaries and regression analysis and by race/ethnicity, age, geography, and sex, or co-occurring conditions.

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic Methods
<i>Hypothesis 2: Providing adjunct autism services to eligible Medicaid children/youths/young adults will enhance community participation among those children/youth/young adults and their families.</i>				
RQ2. Are eligible children/youths/young adults and their families able to effectively access ASD Pilot services and is utilization associated with greater community engagement and how do experiences with ASD Pilot services vary across subgroups (e.g., race/ethnicity, age, age at identified ASD, geography, gender, and co-occurring conditions)?	Service Access and Community Engagement	Adult parents/guardians/primary caregivers (age 18+) of children/ youths/young adults that participate in ASD pilot compared to those who had not yet participated in the pilot.	Survey questionnaire administered to eligible families, based on screening of Medicaid claims in two data collection rounds. See “Data collection for Hypothesis 2, Research Question 2” for detailed description of data collection process.	<p>Close-ended questions analyzed through analytic summaries and regression analysis and by race/ethnicity, age, age at identified ASD, geography, gender, co-occurring conditions, and socio-economic factors.</p> <p>Open-ended free text questions will be analyzed with qualitative thematic analysis.</p>

Table 1.4 shows an activity timeline for the research activities

Table 1.4 Key Milestones, Adjunct Services Autism Spectrum Disorder (ASD) Pilot

Analytic Activity	Year 1 2025	Year 2 2026	Year 3 2027	Year 4 2028	Year 5 2029	Year 6 2030
1. Utilization and spending assessment (RQ1)	Define appropriate population and customized metrics for MMIS analysis	Begin analysis of MMIS-based utilization and spending metrics	Complete interim analysis		Conduct analysis	Complete analysis
2. Community inclusion assessment (RQ2)	Identify survey vendor and execute contract Finalize survey instrument and member list	Work with vendor to conduct round 1 member surveys (n=300-400)	Analyze member surveys	Work with vendor to conduct round 2 member surveys (n=300-400)	Analyze member surveys	Complete analysis
3. Submit reports to CMS			Interim report			Final report

RQ=Research Question.

NOTE: Evaluation project years are March-Feb. (subject to change depending on date of authorization to begin).

D. Methodological Limitations

In measuring ASD Pilot utilization, the Medicaid claims-based analyses are descriptive and used to measure the extent to which eligible services were utilized and how utilization may differ by child characteristics. While these estimates will not support causal inference, they will provide valuable information in describing the population of beneficiaries who used ASD Pilot. This work will contribute an understanding of differences in utilization by race and ethnicity, co-occurring conditions, and location, which will inform future efforts for outreach and sustainment. Our claims-based metrics will not account for all clinical factors that may also impact the likelihood of outcomes.

Due to the voluntary nature of our survey, the findings of ASD participation may not be generalizable to all eligible beneficiary parents, guardians, and caregivers. To mitigate this bias, the survey vendor will make multiple attempts to recruit the randomly sampled respondents. We will also collect information on child and caregiver characteristics through the questionnaire which will allow us to adjust estimates on characteristics not observable within the Medicaid claims (e.g., severity of symptoms and environmental factors). While the adjusted analyses will account for differences between study groups, the associations determined through the cross-sectional analyses are not intended to provide causal inference.

E. Attachments

Appendix 1.1: Parent/Caregiver/Guardian Adjunct Services Autism Spectrum Disorder Pilot Questionnaire

Version 2024.2.19

Would you prefer to complete this survey in English or Spanish?

- a. English
- b. Spanish -> GO TO SPANISH TRANSLATED SURVEY

Source: New question

Introduction

On behalf of Rutgers University and the New Jersey Division of Medical Assistance and Health Services, thank you for your interest in the **Adjunct Services Autism Spectrum Disorder Pilot Survey!** We have asked you to participate because you are the primary caregiver, parent, or guardian of a child, youth, or young adult who is eligible for the Adjunct Services Autism Spectrum Disorder Pilot. As you may know, the State of New Jersey, in partnership with the Federal government offers medically necessary autism benefits to eligible individuals in New Jersey. You may be familiar with some of these services. **The Autism Benefit includes:**

- Applied Behavior Analysis (ABA)
- Allied health services (Occupational, Physical, Speech, and Language Therapies)
- Developmental and Relationship-based Approaches
- Sensory Integration Therapy
- Skill Acquisition and Capacity Building

Since 2023, New Jersey has been working to provide additional services through what is known as the Adjunct Services Autism Spectrum Disorder (ASD) Pilot. **The ASD Pilot includes:**

- Art therapy
- Aquatic therapy
- Hippotherapy/therapeutic horseback riding
- Music therapy
- Drama therapy
- Dance/movement therapy
- Recreation therapy

The goal of the ASD Pilot is to increase community engagement for New Jersey families and to support goals within the overall treatment plan for Medicaid/NJFamilyCare enrolled children, youth, and young adults with ASD. We would like to know more about your experience in New Jersey in accessing the ASD Benefit, ASD Pilot services, and resources in your community so that we can better support individuals with ASD and their families. Your knowledge and expertise on these programs are very important. By taking this survey, you will inform program changes and improvements. After a brief screening exercise, the survey is estimated to take approximately 30-45 minutes to complete. The participating parent, guardian, or primary caregiver will be provided with \$25 for completing this survey.

Screening Survey

[To proceed, must answer “A” to I, II, and III.]

[Consent form scroll box; language to be approved by DMAHS, CMS, Rutgers IRB]

1. Do you consent to participate in the survey?

- a. Yes
- b. No, exit the survey

Source: New question

2. Are you at least 18 years of age?

- a. Yes
- c. No, exit the survey

Source: New question

3. Are you the parent/guardian/primary caregiver of a child, youth, or young adult with ASD whose health benefits are provided through New Jersey’s Medicaid program (i.e., NJFamilyCare)?

- a. Yes
- d. No, exit the survey
- e. Not sure, exit the survey

Source: New question

NOTE: You may have heard of this type of insurance as being referred to NJFamilyCare, Medicaid, or one of the five health plans (also known as MCOs) that participate in New Jersey’s NJ FamilyCare Medicaid program:

Aetna Better Health of New Jersey

Wellpoint New Jersey (formerly known as Amerigroup)

Fidelis Care (formerly known as WellCare)

Horizon NJ Health

UnitedHealthcare Community Plan

[Estimated Time; <45 Minutes]

Child/Youth/Young Adult Characteristics – These questions ask about the child, youth, or young adult with ASD.

1. **Starting with your youngest child, youth, or young adult with ASD that is covered by Medicaid, how old are they (in years, at their last birthday)?**

___ years old [Number]

Source: Adapted from CSHP/Eagleton/Department of Children and Families - IDD Caregiver Survey

2. **Does this child [youth| young adult] identify as male, female, or in some other way?**
- a. Male
 - b. Female
 - c. Non-binary
 - d. Some other way (please specify)
 - e. Prefer not to answer

Source: Adapted from CSHP/Eagleton/Department of Children and Families - IDD Caregiver Survey

3. **In general, how would you describe this child[youth| young adult]'s health?**
- a. Excellent
 - b. Very Good
 - c. Good
 - d. Fair
 - e. Poor

Source: National Survey on Child's Health, <https://www.childhealthdata.org/learn-about-the-nsch/NSCH>

4. **What age was the child[youth| young adult] with ASD when they were first diagnosed with ASD?**
- a. As an infant (by age 2)
 - b. Age 2-4
 - c. Age 5-12
 - d. Age 13-18
 - e. Age 19-20
 - f. Not sure

Source: New question

5. **What is this child[youth| young adult]'s preferred means of communication? (choose one)**

- a. Spoken Language
- b. Gestures or Body language
- c. Sign language or finger spelling
- d. Communication aid or device
- e. Other (please specify) [Open-ended free text]

Source: National Core Indicators - Child Family Survey,
<https://idd.nationalcoreindicators.org/>

6. Would you describe the child[youth| young adult]’s autism or autism spectrum disorder as mild, moderate, or severe?

- a. Mild
- b. Moderate
- c. Severe

Source: NJ CATS Survey,
<https://www.nj.gov/humanservices/ddd/assets/documents/sample-njcat-assessment.pdf>

7. How much support does this child[youth| young adult] need to prevent or manage self-injurious, disruptive, and/or destructive behaviors? (choose one)

- a. None
- b. Some
- c. Extensive

Source: National Core Indicators- Child Family Survey,
<https://idd.nationalcoreindicators.org/>

8. The next questions ask about difficulties this child[youth| young adult] may have doing certain activities.

	1= no difficulty	2 = some difficulty	3 = a lot of difficulty	4 = unable to do
Does the child [youth young adult] with ASD have difficulty seeing even if wearing glasses?				
Does the child [youth young adult] with ASD have difficulty hearing even if using a hearing aid?				
Does the child [youth young adult] with ASD have difficulty walking or climbing steps?				
Does the child [youth young adult] with ASD have difficulty remembering or concentrating?				
Does the child [youth young adult] with ASD have difficulty with self-care such as washing all over or dressing?				
Using their usual language, does the child [youth young adult] with ASD have difficulty communicating, for example understanding or being understood?				

Source: Adapted from *Washington Group Short Set of Questions on Disability*,
<http://www.washingtongroup-disability.com/>

9. **Do you have any other children with ASD in New Jersey Medicaid?**

[List ages of children reported to this point]

- a. Yes (Repeat 1-8)
- b. No

ASD Pilot Services Use – These questions ask about experiences accessing the Autism Benefit and ASD Pilot Services available through the child [youth| young adult]’s Medicaid coverage.

10. **How did you learn about the Autism Benefit available through NJFamilyCare? (One or more categories may be selected)**

Note: Available **Autism Benefit** services include,

- Applied Behavior Analysis (ABA)
- Allied health services (Occupational, Physical, Speech, and Language Therapies)
- Developmental and Relationship-based Approaches
- Sensory Integration Therapy
- Skill Acquisition and Capacity Building

- Text/call/email/letter from a managed care organization that manages the benefits

NOTE: You may have heard of this type of insurance as being referred to NJFamilyCare, Medicaid, or one of the five health plans (also known as MCOs) that participate in New Jersey’s NJ FamilyCare Medicaid program:

Aetna Better Health of New Jersey

Wellpoint New Jersey (formerly known as Amerigroup)

Fidelis Care (formerly known as WellCare)

Horizon NJ Health

UnitedHealthcare Community

- Text/call/email/letter from the New Jersey government (NJFamilyCare, Children’s System of Care, Division of Medical Assistance and Health Services, or Division of Developmental Disabilities)
- Community events or other community outreach
- Online/television advertisement
- Primary care physician/pediatrician
- Allied health professional/therapist
- This is the first time I have learned about the available autism benefits
- Some other way (please specify) [Open-ended free text]
- Don’t know/not sure

Source: New question

**How did you learn about the ASD Pilot Services now available through NJFamilyCare?
(One or more categories may be selected)**

Note: Available **ASD Pilot Services** include,

- Art therapy
- Aquatic therapy
- Hippotherapy/therapeutic horseback riding
- Music therapy
- Drama therapy
- Dance/movement therapy
- Recreation therapy

- Text/call/email/letter from a managed care organization that manages the benefits

NOTE: You may have heard of this type of insurance as being referred to NJFamilyCare, Medicaid, or one of the five health plans (also known as MCOs) that participate in New Jersey's NJ FamilyCare Medicaid program:

Aetna Better Health of New Jersey

Wellpoint New Jersey (formerly known as Amerigroup)

Fidelis Care (formerly known as WellCare)

Horizon NJ Health

UnitedHealthcare Community

- Text/call/email/letter from the New Jersey government (NJFamilyCare, Children's System of Care, Division of Medical Assistance and Health Services, or Division of Developmental Disabilities)
- Community events or other community outreach
- Online/television advertisement
- Primary care physician/pediatrician
- Allied health professional/therapist
- This is the first time I have learned about the available autism benefits
- Some other way (Please specify)[Optional free text]
- Don't know/not sure

Source: New question

11. For each of the following Autism Benefit services, please tell us if you have received or tried to access the service:

Service	Received service	Have not tried to access	Tried but was unable to access
Applied Behavior Analysis (ABA)			
Allied health services (Occupational,			

Physical, Speech, and Language Therapies)			
Developmental and Relationship-based Approaches			
Sensory Integration Therapy			
Skill Acquisition and Capacity Building			
None of these			

Source: Response categories from IDD Survey (CSHP/Eagleton/DCF)

12. [For services received above, ask] **How was the service paid?**

Service	NJFamilyCare	Another type of insurance	Privately paid from personal resources	Not sure
Applied Behavior Analysis (ABA)				
Allied health services (Occupational, Physical, Speech, and Language Therapies)				
Developmental and Relationship-based Approaches				
Sensory Integration Therapy				
Skill Acquisition and Capacity Building				

Source: Response categories from IDD Survey (CSHP/Eagleton/DCF)

13. How difficult is it [or would it be] for the child [youth| young adult] to attend therapies, services, or appointments such as those listed in the Autism Benefit?

	Not sure	Not difficult at all	Somewhat difficult	Very difficult	Not possible
Applied Behavior Analysis (ABA)					
Allied health services (Occupational, Physical, Speech, and Language Therapies)					
Developmental and Relationship-based Approaches					
Sensory Integration Therapy					
Skill Acquisition and Capacity Building					

Source: Adapted from National Core Indicators - Child Family Survey,
<https://idd.nationalcoreindicators.org/>

14. What makes it difficult (or would make it difficult) to take part in Autism Benefit services? (One or more categories may be selected.)

	Lack of transportation	Cost	Lack of support staff	Stigma	Availability (time of day/week or too far away)	Something else (please specify)
Applied Behavior Analysis (ABA)						

Allied health services (Occupational, Physical, Speech, and Language Therapies)						
Developmental and Relationship-based Approaches						
Sensory Integration Therapy						
Skill Acquisition and Capacity Building						

Source: Adapted from National Core Indicators - Child Family Survey,
<https://idd.nationalcoreindicators.org/>

15. What would make it easier to take part in Autism Benefit services?

__ [Open-ended free text]

16. For each of the following Autism Pilot services, please tell us if you have received or tried to use the service:

Service	Received service	Have not tried to access	Tried but was unable to access
Art therapy			
Aquatic therapy			
Hippotherapy/therapeutic horseback riding			
Music therapy			
Drama therapy			
Dance/movement therapy			
Recreation therapy			
None of these			

Source: Response categories from IDD Survey (CSHP/Eagleton/DCF)

17. [for services received above, ask] How was the service paid?

Service	NJFamilyCare	Another type of insurance	Privately paid from personal resources	Not sure
Art therapy				
Aquatic therapy				
Hippotherapy/therapeutic horseback riding				
Music therapy				
Drama therapy				
Dance/movement therapy				
Recreation therapy				

Source: Response categories from IDD Survey (CSHP/Eagleton/DCF)

18. How difficult is it [or would it be] for the child [youth| young adult] to attend therapies, services, or appointments such as those listed in the Autism Pilot Services?

	Not sure	Not difficult at all	Somewhat difficult	Very difficult	Not possible
Art therapy					
Aquatic therapy					
Hippotherapy, therapeutic horseback riding					
Music therapy					
Drama therapy					
Dance/movement therapy					
Recreation therapy					

Source: Adapted from National Core Indicators - Child Family Survey,
<https://idd.nationalcoreindicators.org/>

19. What makes it difficult (or would make it difficult) to take part in ASD Pilot services? (One or more categories may be selected.)

	Lack of transportation	Cost	Lack of support staff	Stigma	Availability (time of day/week or too far away)	Something else (please specify)

Art therapy						
Aquatic therapy						
Hippotherapy, therapeutic horseback riding						
Music therapy						
Drama therapy						
Dance/movement therapy						
Recreation therapy						

Source: Adapted from National Core Indicators - Child Family Survey,
<https://idd.nationalcoreindicators.org/>

20. What would make it easier to take part in ASD Pilot services?

__ [Open-ended free text]

Community Engagement – These questions ask about experiences in your community.

21. In the last two weeks, how often have you felt lonely?

- a. Never
- b. Rarely
- c. Sometimes
- d. Usually
- e. Always

Source: Adapted from Parenting Stress, RAPID, <https://rapidsurveyproject.com/>

22. In the last two weeks, when you felt overwhelmed or stressed when caring for or making decisions about the child(ren)/youth(s)/young adult(s) in your household, how often did you get the support you needed?

- a. Never
- b. Rarely
- c. Sometimes
- d. Usually
- e. Always

Source: Adapted from Parenting Stress, RAPID, <https://rapidsurveyproject.com/>

23. Tell me if you strongly agree, somewhat agree, somewhat disagree, or strongly disagree with the following statement:

“I would know where to go for help if I had trouble making ends meet.”

- a. Strongly agree

- b. Somewhat agree
- c. Somewhat disagree
- d. Strongly disagree
- e. Not sure

Source: Adapted from Protective Factors Survey,
<https://friendsnrc.org/wp-content/uploads/Protective-Factors-Survey.pdf>

24. Does the child [youth] young adult] with ASD take part in activities in the community?

- a. Yes
- b. No
- c. Not sure

Source: Adapted from National Core Indicators - Child Family Survey,
<https://idd.nationalcoreindicators.org/>

25. What makes it difficult to take part in activities in the community?

- a. Lack of transportation
- b. Cost
- c. Lack of support staff
- d. Stigma
- e. Other (please specify) [Open-ended free text]

Source: Adapted from National Core Indicators - Child Family Survey,
<https://idd.nationalcoreindicators.org/>

26. In your community, are there resources that your family can use that are not provided through the Autism Benefit or ASD Pilot (for example, recreational programs, community housing, library programs, religious groups, etc.)?

- a. Yes
- b. No
- c. Not sure

Source: Adapted from National Core Indicators - Child Family Survey,
<https://idd.nationalcoreindicators.org/>

27. Does your family take part in any family-to-family networks in your community (for example, Parent to Parent, sibling networks, etc.)?

- a. Yes
- b. No
- c. Not sure

Source: Adapted from National Core Indicators - Child Family Survey,
<https://idd.nationalcoreindicators.org/>

28. [Adapted from developer] The statements below are about leisure, recreation and activities that families engage with in their communities. We are interested in the child

[youth| young adult] with ASD and family’s experiences engaging with desired services, programs, and activities in your community. For each statement, please indicate your family’s level of inclusion and involvement.

	0 = not interested/not applicable to us	1=excluded, maximal changes and/or support required	2=somewhat included and involved, many changes and/or support required	3=moderately included and involved, minor changes and/or support required	4=included and involved, no changes and/or support required
Using local parks, beaches, or other open spaces,					
Walking or wheeling around my local neighborhood,					
Dining or socializing at restaurants or similar venues,					
Using local shopping facilities,					
Using local recreational facilities such as those for indoor sport and swimming,					
Attending health, dental and medical facilities for my child with a disability,					
Attending health, dental and medical facilities for myself or my other child(ren),					
Being invited to and attending					

other people's homes, and					
---------------------------	--	--	--	--	--

Source: Bourke-Taylor, Tirlea, Joyce, 2021. <https://pubmed.ncbi.nlm.nih.gov/33894506/>

Parent/Primary Caregiver/Guardian Characteristics – These questions ask about your experiences as the parent, primary caregiver, or guardian of the child [youth] young adult] with ASD.

29. To ensure we are reaching people of all ages, would you please tell me your age?

__[Number]

Prefer not to answer/unsure

Source: CSHP/Eagleton/Department of Children and Families, IDD Caregiver Survey

30. [For prefer not to answer/unsure above, ask] Would you be willing to tell us whether it's between...

- a. 18 - 20
- b. 21 - 24
- c. 25 - 29
- d. 30 - 34
- e. 35 - 44
- f. 45 - 49
- g. 50 - 54
- h. 55 - 64
- i. 65 OR OVER
- j. Prefer not to answer

Source: CSHP/Eagleton/Department of Children and Families - IDD Caregiver Survey

31. What is the highest degree or level of school you have completed?

- a. no schooling completed
- b. nursery school to 8th grade
- c. 9th-12th grade, no diploma
- d. high school graduate (high school diploma or the equivalent)
- e. vocational/technical/business/trade school certificate or diploma (beyond the high school level)
- f. some college, but no degree
- g. associate degree
- h. bachelor's degree
- i. master's, professional or doctorate degree
- j. don't know
- k. prefer not to answer

Source: CMS, <https://www.cms.gov/data-research/research/medicare-current-beneficiary-survey/questionnaires/2023-questionnaires>

32. Are you of Latino or Hispanic origin, such as Mexican, Puerto Rican, Cuban or some other Spanish background?

- a. Yes
- b. No

Source: Adapted from US Department of Health and Human Services, Office of Minority Health, <https://minorityhealth.hhs.gov/explanation-data-standards-race-ethnicity-sex-primary-language-and-disability>

33. Are you White, Black or of Asian origin, or are you some other race, or multi-racial?

- a. White (includes Caucasian, European, Middle Eastern)
- b. Black (includes African American)
- c. Asian (includes Asian-Indian, South Asian, East Asian, Chinese, Japanese)
- d. Hispanic / Latino / Spanish
- e. Other (please specify) [Open-ended free text]
- f. Multi-racial (please specify) [Open-ended free text]

Source: Adapted from US Department of Health and Human Services, Office of Minority Health, <https://minorityhealth.hhs.gov/explanation-data-standards-race-ethnicity-sex-primary-language-and-disability>

34. How do you describe your gender? [Select ONE]

- a. Female
- b. Male
- c. Trans Male/Trans Man
- d. Trans Female/Trans Woman
- e. Genderqueer/Gender Nonconforming
- f. Prefer to self-describe, please specify: [open field]
- g. Prefer not to answer

Source: Q7-8 Two Step Gender Identity, <https://registrar.ucsc.edu/gender-identity/index.html>

35. Over the last 2 weeks, how often have you been bothered by the following problems?

- 34.A Feeling nervous, anxious or on edge**
- 34.B Not being able to stop or control worrying**
- 34.C Little interest or pleasure in doing things**
- 34.D Feeling down, depressed or hopeless**

- i. Not at all
- ii. Several days
- iii. More than half the days
- iv. Nearly every day

Source: PHQ-4, <https://pubmed.ncbi.nlm.nih.gov/19996233>

Household and Environment – These questions refer to the home and apply to all members of the household

36. What is the primary language spoken in your home?

- a. English
- b. Spanish
- c. Other (please specify) [Open-ended free text]

Source: Adapted from US Department of Health and Human Services, Office of Minority Health, <https://minorityhealth.hhs.gov/explanation-data-standards-race-ethnicity-sex-primary-language-and-disability>

37. Please tell me how many children are in your household in each of the following age groups, according to their age at their last birthday:

- a. How many children are aged 0-2? __[Number]
- b. How many children are aged 3-5? __[Number]
- c. How many children are aged 6-9? __[Number]
- d. How many children are aged 10-12? __[Number]
- e. How many children are aged 13-17? __[Number]

Source: Adapted from NJ Population Cohort Study

38. Next, please tell me how many adults (not including you) are in your household in each of the following age groups, according to their age at their last birthday:

- a. How many adults are aged 18-24? __[Number]
- b. How many adults are aged 25-44? __[Number]
- c. How many adults are aged 45-64? __[Number]
- d. How many adults are aged 65+? __[Number]

Source: Adapted from NJ Population Cohort Study

39. Did you or any other adult in the household have to reduce their working hours to provide care?

- a. Yes
- b. No

Source: CSHP/Eagleton/Department of Children and Families, IDD Caregiver Survey

40. In the past 12 months, how often were you worried that your food would run out before you got money to buy more?

- a. Often
- b. Sometimes
- c. Never

Source: Hager et al., 2-Item Screen to Identify Families at Risk for Food Insecurity, <https://doi.org/10.1542/peds.2009-3146>

41. In the past 12 months, how often did the food you bought just not last, and you didn't have money to get more?

- a. Often
- b. Sometimes
- c. Never

Source: Hager et al., 2-Item Screen to Identify Families at Risk for Food Insecurity,
<https://doi.org/10.1542/peds.2009-3146>

42. In the past 12 months, did you or any member of this household receive benefits from the Food Stamp Program or SNAP (the Supplemental Nutrition Assistance Program)?

- a. Yes
- b. No
- c. Not sure/prefer not to answer

Source: Census, <https://www.census.gov/programs-surveys/acs/about/forms-and-instructions.html>

43. Overall, how safe do you feel in your home?

- a. Very safe
- b. Somewhat safe
- c. Not very safe
- d. Not safe at all

Source: Modified from JHU COVID-19 Community Response Surveyv1.3, used in CSHP/Eagleton,
https://tools.niehs.nih.gov/dr2/files/jhu_covid19_community_response_survey_v13_508.pdf

44. Overall, how safe do you feel in your neighborhood?

- a. Very safe
- b. Somewhat safe
- c. Not very safe
- d. Not safe at all

Source: Modified from JHU COVID-19 Community Response Surveyv1.3, used in CSHP/Eagleton,
https://tools.niehs.nih.gov/dr2/files/jhu_covid19_community_response_survey_v13_508.pdf

Additional Feedback

45. Thank you again for participating in the Adjunct Services Autism Spectrum Disorder Pilot Survey. Are there any additional recommendations, comments, or concerns regarding the ASD Benefit, ASD Pilot services, and resources in your community that you would like us to know about?

- a. Yes (Please specify) [Open-ended free text]
- b. No

2. Children’s Support Services Programs (SED, I/DD)

A. General Background Information

NEW JERSEY DEPARTMENT OF CHILDREN AND FAMILIES CHILDREN’S SYSTEM OF CARE ADMINISTERED PROGRAMS

The New Jersey Department of Children and Families (DCF), Division of Children’s System of Care (CSOC) administers two separate programs under the authority of the demonstration: one for children, youths, and young adults with serious emotional disturbances (SED) and one for those who meet DCF Children’s System of Care’s functional eligibility for children, youths, and young adults with intellectual and developmental disabilities (I/DD). Collectively, these programs are the Children’s Support Services Program (CSSP). There are three eligibility categories for the CSSP:

1. **State Plan Members** “who qualify for Medicaid under the State Plan”;
2. **217-like**, “who do not qualify for Medicaid or CHIP under the State Plan, and whose household income is less than 300% of the Federal Benefit Rate”; and
3. **1915-like**, “do not qualify for Medicaid or CHIP under the State Plan, and whose household income is too high to qualify as 217-like members.”¹⁵

The first §1115 Comprehensive Demonstration (October 2012-July 2017) included the Children with Serious Emotional Disturbance (SED) and Intellectual/Developmental Disabilities with Co-Occurring Mental Health Diagnosis (I/DD-MI) waivers with additional services rolled out from 2015-2017. These prior waivers were combined into the Children’s Support Services Program during the §1115 Comprehensive Demonstration initial renewal period (August 1, 2017 – June 30, 2022). Additionally, in July 2016, the “Plan A” eligibility expansion granted Medicaid State Plan services to youth with SED in out-of-home settings. As part of the current demonstration renewal (April 1, 2023, through June 30, 2028), CMS approved two critical changes to the CSSP:

- **Disregarding parental income when determining Medicaid eligibility** for children/youth within the CSSP SED or the CSSP I/DD (described below). This allows those who currently have access only to waiver and behavioral health services to receive full State Plan benefits, and
- implementation of **existing waiver authority policies for children, youths, and young adults with I/DD**.

These changes to service provision by eligibility category are described in the sections that follow.

¹⁵ New Jersey Department of Human Services. NJ FamilyCare Comprehensive Demonstration: Draft renewal proposal. New Jersey Department of Human Services Division of Medical Assistance and Health Services. https://www.nj.gov/humanservices/dmahs/home/1115_NJFamilyCare_Comprehensive_Demonstration_Draft_Proposal.pdf

CSSP SED Program

The CSSP SED program provides behavioral health and Home and Community Based Services (HCBS) benefits to beneficiaries under the age of 21 with SED who are at risk of institutionalization, out-of-home treatment, or hospitalization. Specific covered HCBS continued under the demonstration include:

- social and emotional learning services,
- interpreter services, and
- non-medical transportation.

New Jersey seeks to build upon the successes of the existing CSSP SED program to further reduce the institutionalization of New Jersey children, youths, and young adults with SED. Parental income will be disregarded for calculating household income for a children, youths, and young adults who remains in home and in community. This would expand eligibility for youth who qualify as a 217-like (i.e., at risk for institutionalization and child meets income eligibility requirement) under CSSP SED. Additionally, this would mean that most members currently in the 1915-like (i.e., at risk for institutionalization but who exceeds the income threshold for 217-like eligibility) category would now instead qualify as 217-like. Accordingly, **most children, youths, and young adults with SED who meet the clinical and other non-income eligibility criteria and have not been institutionalized would now have access to full Medicaid State Plan services**, in most instances as a backstop to their existing health coverage.

Table 2.1. Changes for CSSP SED

Group	Change	What does this mean?
State Plan Members	No changes	N/A
217-like Individuals	<ul style="list-style-type: none">• Parental income will now be disregarded when calculating household income for children, youths, and young adults that remain in home and in community, and not just for those who have been institutionalized.	<ul style="list-style-type: none">• This means that most members currently in the 1915-like category would now instead qualify as 217-like and ensures that eligible beneficiaries have access to all state plan services (both behavioral and physical).
1915-like Individuals	<ul style="list-style-type: none">• Parental income will now be disregarded when calculating household income for children, youths, and young adults that remain in home and in community, and not just for those who have been institutionalized.• Most 1915-like individuals will now qualify as 217-like individuals due to the parental disregard and receive all State	<ul style="list-style-type: none">• Relatively few members are expected to remain in this eligibility category.

	Plan Services and HCBS benefits.	
--	----------------------------------	--

CSSP I/DD Program

The CSSP I/DD program provides HCBS benefits to children, youths, and young adults under the age of 21 who meet DCF/CSOC's functional eligibility for I/DD (as defined by State and Federal law). These beneficiaries may also have co-occurring mental health diagnoses. In the renewal, eligibility for children with I/DD no longer required a co-occurring mental health diagnosis, but many children with SED enrolled in CSSP were not Medicaid/CHIP eligible for State Plan services. Under the existing demonstration, the State is authorized to provide services under CSSP I/DD to three categories of beneficiaries, mentioned above. However, in the prior demonstration, **the State had only utilized demonstration authority to provide Medicaid services for State Plan members, and not for the 217-like or 1915-like groups.** During the renewal period New Jersey intends to fully implement the 1915-like and 217-like programs for which it currently has authority under the ongoing 2017-2023 demonstration. While various operational and budget constraints have prevented full implementation to date, the State has identified solutions to these barriers, and it intends to move forward with full implementation.

Specific HCBS benefits covered under the demonstration include:

- social and emotional learning services,
- interpreter services,
- non-medical transportation,
- individual support services,
- intensive in-community/in-home services, and
- agency hired respite services.

The current demonstration **will align with the changes proposed under CSSP SED to disregard parental income when assessing whether a child qualifies as a 217-like or 1915-like member under CSSP I/DD.**

Table 2.2. Changes for CSSP I/DD

Group	Change	What does this mean?
State Plan Members	No changes	N/A
217-like Individuals	<ul style="list-style-type: none"> • DMAHS and DCF plan to operationalize this group • Parental income will now be disregarded when calculating household income for children, youths, and young adults that remain in home and in community, and not just for those who have been institutionalized. 	<ul style="list-style-type: none"> • I/DD children, youths, and young adults who previously did not qualify for Medicaid due to exceeding the income requirement under state plan will now have access to state plan services; • CSOC HCBS services that are currently funded using state-only dollars for this population will be eligible for federal match. • Members who would have previously qualified in the 1915-like category (if implemented) will now instead qualify as

		217-like and have access to all state plan services (both behavioral and physical).
1915-like Individuals	<ul style="list-style-type: none"> DMAHS and DCF plan to operationalize this group Parental income will now be disregarded when calculating household income for children, youths, and young adults that remain in home and in community, and not just for those who have been institutionalized. 	<ul style="list-style-type: none"> This group will be newly operationalized – however, relatively few members are expected to qualify for Medicaid within this category.

B. Evaluation Hypotheses and Questions

Evaluation of CSSP SED & I/DD Programs

We posit that the expansion of CSSP eligibility and implementation of previously established HCBS benefits to the CSSP I/DD 217-like and 1915-like groups will provide improved access to both behavioral and physical health services that will allow holistic and coordinated medical and behavioral health treatment. This is expected to improve care delivery, reduce rates of institutionalization, and enhance beneficiary experience.

Below we present the *driver diagram* (Figure 2.1) that delineates the pathway from the policy change to overall program aims. Here the secondary drivers represent the various services offered through the CSSP SED and CSSP I/DD programs.

Figure 2.1. Children’s Support Services Program Aim Driver Diagram

Aim	Primary Drivers	Secondary Drivers
1.A. Ensure that eligible beneficiaries have access to all necessary services (both behavioral and physical) to allow holistic and coordinated treatment	Full Medicaid State Plan services for children, youths, and young adults at-risk of hospitalization or out-of-home services	<ul style="list-style-type: none"> Parental income disregarded when calculating household income for children, youths, and young adults that remain in home and in community Extension of eligibility for full State Plan benefits to children, youths, and young adults who currently have access only to waiver and behavioral health services
1.B. Reduce the institutionalization of New Jersey children, youths, and young adults with SED or I/DD	Expand access to person-centered care delivered in the home and community	HCBS (SED & I/DD) <ul style="list-style-type: none"> Social and emotional learning services Interpreter services Non-medical transportation HCBS (I/DD only) <ul style="list-style-type: none"> Individual support services Intensive in-community/in-home services Agency respite services
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="width: 30%; border-top: 1px solid black; border-bottom: 1px solid black; position: relative;"> ← </div> <div style="width: 40%; text-align: center;">Causality</div> <div style="width: 30%; border-top: 1px solid black; border-bottom: 1px solid black; position: relative;"> ← </div> </div>		

Research Hypotheses and Questions

We next detail the hypotheses and corresponding research questions about the effects of providing HCBS and full state plan Medicaid services on care and health outcomes among children, youths, and young adults with SED or I/DD.

Hypothesis 1: Providing full State Plan services and HCBS to children, youths, and young adults within (1) CSSP SED and (2) CSSP I/DD who are at-risk for institutionalization, out-of-home care, and hospitalization and who would otherwise have not been eligible for Medicaid or CHIP due to parental income (i.e., “CSSP eligibility expansion”), will increase access to preventive services, reduce reliance on out of home treatment, reduce avoidable hospitalization and emergency services, and improve beneficiary experience.

Research Question 1a: What are the trends in **preventative services** (i.e., child and adolescent well-care visits and follow-up after hospitalization for mental illness) among the CSSP expanded eligibility groups over the course of the current demonstration (2023-2028)? How do these trends vary across different subgroups (e.g., race/ethnicity, gender, presence of comorbidities, and eligibility category)?

Research Question 1b: What are the trends in **overall utilization of care** (i.e. inpatient hospitalizations, emergency department (ed) treat-and-release visits, and primary care utilization) among the CSSP expanded eligibility groups over the course of the current demonstration (2023-2028)? How do these trends vary across different subgroups (e.g., race/ethnicity, gender, presence of comorbidities, and eligibility category)?

Research Question 1c: What are the trends in **out of home treatment** (i.e., out-of-home stays in residential treatment, total number of days in residential treatment) among the CSSP expanded eligibility groups over the course of the current demonstration (2023-2028)? How do these trends vary across different subgroups (e.g., race/ethnicity, gender, presence of comorbidities, and eligibility category)?

Research Question 1d: What are the trends in **avoidable utilization and spending** (i.e., avoidable hospitalizations, hospitalization for mental illness, 30-day hospital readmissions, inpatient days, and spending related to all inpatient hospitalizations and ed visits) among the CSSP expanded eligibility groups over the course of the current demonstration (2023-2028)? How do these trends vary across different subgroups (e.g., race/ethnicity, gender, presence of comorbidities, and eligibility category)?

Research Question 1e: How has CSSP participation affected the experience of **services and supports and overall satisfaction of beneficiaries** as the health care consumer, as evidenced by the child/youths’ parents, guardians, or other primary caregivers?

Hypothesis 2: Providing home and community-based services (HCBS) to child/youth Medicaid beneficiaries with intellectual disabilities/developmental disabilities (I/DD) through operationalizing the Children’s Support Services Program for I/DD (i.e., newly operationalized 217-like and 1915-like eligibility groups) will increase access to preventive services, reduce reliance on out of home

treatment, reduce avoidable hospitalization and emergency services, and improve beneficiary experience.

Research Question 2a: What are the trends in **preventative services** (i.e., child and adolescent well-care visits and follow-up after hospitalization for mental illness) among the CSSP I/DD beneficiaries, who utilize HCBS, in the newly operationalized eligibility categories over the course of the current demonstration (2023-2028)? How do these trends vary across different subgroups (e.g., race/ethnicity, gender, presence of comorbidities, and eligibility category)?

Research Question 2b: What are the trends in **utilization of care** (i.e., inpatient hospitalizations, emergency department (ed) treat-and-release visits, and primary care utilization) among the CSSP I/DD beneficiaries, who utilize HCBS, in the newly operationalized eligibility categories over the course of the current demonstration (2023-2028)? How do these trends vary across different subgroups (e.g., race/ethnicity, gender, presence of comorbidities, and eligibility category)?

Research Question 2c: What are the trends in **out of home treatment** (i.e., out-of-home stays in residential treatment, total number of days in residential treatment) among the CSSP I/DD beneficiaries, who utilize HCBS, in the newly operationalized eligibility categories over the course of the current demonstration (2023-2028)? How do these trends vary across different subgroups (e.g., race/ethnicity, gender, presence of comorbidities, and eligibility category)?

Research Question 2d: What are the trends in **avoidable utilization and spending** (i.e., avoidable hospitalizations, hospitalization for mental illness, 30-day hospital readmissions, inpatient days, and spending related to all inpatient hospitalizations and ed visits) among the CSSP I/DD beneficiaries, who utilize HCBS, in the newly operationalized eligibility categories over the course of the current demonstration (2023-2028)? How do these trends vary across different subgroups (e.g., race/ethnicity, gender, presence of comorbidities, and eligibility category)?

C. Methodology

Below, we provide brief descriptions of the proposed measures and methods. A summary of the methods, organized by hypotheses and research questions can be found at the end of this section in Table 2.6.

Claims-based Outcomes:

We will assess the claims-based outcomes listed and described in Table 2.3 below.

Table 2.3. Inventory of Claims-based Measures

Measure		Brief Description
Preventative Services		
1.	Child and Adolescent Well-Care Visits	“Children 3–21 years of age who received one or more well-care visit with a primary care practitioner or an OB/GYN practitioner during the measurement year.” ¹⁶

¹⁶ NCQA (National Committee for Quality Assurance). 2023. *HEDIS 2023: Healthcare Effectiveness Data and Information Set. Vol. 2: Technical Specifications for Health Plans*. Washington, DC: NCQA.

2.	Follow-up after Hospitalization for Mental Illness (age 6+)	“Inpatient discharges for a diagnosis of mental illness or intentional self-harm among patients aged 6 years and older that resulted in follow-up care with a mental health provider within 7 and 30 days.” ²
Overall Utilization of Services		
3.	Inpatient hospitalizations (all-cause) (all ages)	Individuals receive inpatient hospital treatment including pregnancy and childbirth, for surgery, or for nonsurgical medical treatment, and those for psychiatric inpatient admissions.
4.	Emergency department (ED) treat-and-release visits (all ages)	Individuals seek ambulatory care in the emergency department because of pregnancy and childbirth, for surgery, or for nonsurgical medical treatment
5.	Emergency screening center services (all ages)	Individuals seek emergency psychiatric screening services at state-designated sites for services including but not limited to crisis intervention and stabilization.
6.	Primary care utilization	Indicator that youth receives routine outpatient or preventative medical care, includes frequency of visits per year.
Out-of-home Care		
7.	Out-of-home stays in residential treatment (all ages)	Count of children/youths/young adults’ residential treatment center stays including residential treatment facilities and group home settings.
8.	Total number of days in residential treatment (all ages)	Total number of days in out-of-home treatment in the year, excluding leaves.
Avoidable Utilization and Spending		
9.	Avoidable Hospitalizations (age 6-17 and 18+, separately)	Preventable or potentially avoidable hospitalization that may occur due to inadequate ambulatory/primary care within communities. Includes hospitalization for conditions typically treatable in outpatient settings: asthma, diabetes with short-term complications, gastroenteritis, or urinary tract infection. ¹⁷
10.	Hospitalization for mental illness (age 6+)	Individuals receive inpatient hospital treatment for mental illness. ¹
11.	30-day hospital readmissions (all-cause) (all ages)	Indicates readmission for any cause within 30 days of the discharge date for the index hospitalization, excluding a specified set of planned readmissions. ^{18, 19}

¹⁷ Agency for Healthcare Research and Quality. Pediatric Quality Overall Composite Technical Specifications. Agency for Healthcare Research and Quality; 2013.

¹⁸ Benbassat J, Taragin M. Hospital readmissions as a measure of quality of health care: advantages and limitations. Archives of internal medicine. 2000 Apr 24;160(8):1074-81.

¹⁹ Feng JY, Toomey SL, Zaslavsky AM, Nakamura MM, Schuster MA. Readmission after pediatric mental health admissions. Pediatrics. 2017 Dec 1;140(6):e20171571.

12.	Inpatient days (all ages)	Number of days for inpatient stays at general acute care hospitals
13.	Spending related to all inpatient hospitalizations and ED visits (all ages)	Payments on facility claims for inpatient and treat-and-release ED visits, inflation adjusted.

Qualitative Domains:

We will collect qualitative data within the domains in Table 2.4. This is not meant to be an exhaustive list, but qualitative analyses will include inquiries into these areas.

Table 2.4. Beneficiary Experience

Domain		Brief Description
1.	Services and Supports Access	Family experience in <ul style="list-style-type: none"> a. accessing information used to understand health services choices and health decision-making and accessing special equipment or accommodations (i.e., health literacy)²⁰ b. Children, youths, and young adults 's access to primary care physicians c. Children, youths, and young adults 's access to specialists.
2.	Community Engagement	a. Children, youths, and young adults 's opportunities to participate in the community, including activities outside the home, and time with other children/youths. Including but not limited to families' participation in recreational groups and programs, and presence of family networks (e.g., parent-to-parent groups and sibling groups).
3.	Satisfaction and Recommendations	<ul style="list-style-type: none"> a. Satisfaction with the services and support provided. b. Impact of services and support on experience of care and out-of-pocket costs. c. Recommendations for additional services or other requested modifications.
NOTES: Adapted from National Core Indicators, Child Family Survey™. ²¹		

²⁰ Muscat DM, Shepherd HL, Nutbeam D, Trevena L, McCaffery KJ. Health literacy and shared decision-making: exploring the relationship to enable meaningful patient engagement in healthcare. *Journal of general internal medicine*. 2021 Feb;36:521-4.

²¹ NCI (National Core Indicators). 2022. *Child Family Survey 2020-21 Final Report*. National Association of State Directors of Developmental Disabilities Services and Human Services Research Institute. Retrieved on 7/25/2023 from: https://legacy.nationalcoreindicators.org/upload/core-indicators/2020-21_CFS_National_Report_Final.pdf

For research questions 1a-1d & 2a-2d

Study population for research questions 1a-1d: Data on the healthcare experiences of child, youth, and young adult beneficiaries prior to enrollment are not available, which precludes testing the effect of reform using pre-post comparisons. Additionally, child, youth, and young adult beneficiaries will enter the waiver programs at different times throughout the demonstration.²² As a result of these constraints, the study population will include individuals who were “ever enrolled” in the CSSP SED or I/DD programs (in the quarter or year as described below), respectively, and had a minimum of 10 months of enrollment. We will compare trends by subpopulation (e.g., race/ethnicity, gender, presence of comorbidities, and eligibility category).

Study population for research questions 2a-2d: The study populations for hypotheses 2a-2d are comprised of children and youth up to age 21 who were eligible for I/DD CSSP during the demonstration period. For hypotheses 2a-2d, we will compare the experiences of children, youths, and young adults with I/DD who utilized HCBS within the newly operationalized eligibility categories (i.e., those in the newly operationalized 217-like and 1915-like CSSP I/DD categories who were not given access to CSSP HCBS prior to the demonstration) to eligible CSSP I/DD children, youths, and young adults who did not utilize HCBS. As above, the study population will include individuals who were “ever enrolled” in the CSSP SED or I/DD programs (in the quarter or year as described below), respectively, and had a minimum of 10 months of enrollment.

Analytic strategy for research questions 1a-1d and 2a-2d:

We will calculate adjusted trends, estimating levels of outcome measures on a quarterly or annual basis (as feasible relative to sample size concerns) to examine preventative services, utilization of services, out of home treatment, and avoidable utilization and spending (see Table CSSP.3 for complete list of proposed outcome measures).

We will use two approaches to estimate yearly measures of study outcomes. First, we will implement a repeated cross-sectional approach for all beneficiaries enrolled in the respective eligibility categories (SED or I/DD). We will then restrict the samples to cohorts of individuals enrolled in CSSP SED or I/DD, respectively, during the baseline period (2023) and examine changes in outcomes over the current demonstration period (2023-2028). We will adjust for possible changes in population composition using regression models. We will use line graphs and tables to describe results. Sample sizes permitting, the adjusted trends will also be stratified by subgroups of interest such as race/ethnicity, gender, presence of comorbidities, and eligibility categories.

The models will be specified as follows:

Main Models:

$$Outcome_{it} = \alpha_0 + \alpha_1(Time_Indicator)_i + \alpha_2(Group)_{it} + \lambda X_{it} + \varepsilon_{it}$$

²² Chakravarty, S, Lloyd, K, Farnham, J, Pizzi, L, Agrawal, M, Nova, J, Prioli, KM, Nasiri, M. 2022. *Examining the Effect of the NJ FamilyCare Comprehensive Demonstration on Access to Care, Quality, and Cost of Care: Draft Interim Evaluation Report*. New Brunswick, New Jersey: Rutgers Center for State Health Policy.

Secondary Models:

$$Outcome_{it} = \alpha_0 + \alpha_1(Time_Indicator)_i + \alpha_2(Group)_{it} + \alpha_3(Time_Indicator * Group)_{it} + \lambda X_{it} + \varepsilon_{it}$$

For the Main Models, $Outcome_{it}$ represents the outcome of interest for an individual respondent i in year t (e.g., annual dental visit, avoidable hospitalizations, etc., as described in Table CSSP.3). $Group_{it}$ represents a group attribute (i.e., race/ethnicity, gender, eligibility category, presence of comorbidities, and, for RQ2, HCBS utilization). α represents the corresponding coefficients for the model. X_i represents a set of control variables for individual i at time t and λ represents the coefficients for each of the corresponding control variables of X . ε represents the error term. Models will be estimated using ordinary least squares regression except those measured as a count variable (i.e., Poisson distribution) and for spending, which will be estimated using a generalized linear model as dollars would be the dependent variable (e.g., Gamma distribution with log link function).²³ Marginal analysis will be applied after running each regression to generate adjusted trends over time based on these models (i.e., using predictive margins).²⁴

Specifications for the Secondary Models will be identical to the Main Models, except that we will introduce an interaction term of $Time_Indicator * Group$, used to capture time-varying differences by group (i.e., race/ethnicity, gender, and presence of comorbidities) with the α_3 coefficient. This would allow us to plot the adjusted trends by group of interest through the post hoc marginal analysis.

The cohorts approach compares trends for a fixed group of individuals over time to ensure that observed changes in utilization are not due to changes in population composition resulting from beneficiaries newly enrolling or disenrolling from the program. Change in beneficiary characteristics, such as age, disease diagnoses and burden of illness over time, will be accounted for in these models (e.g., with CDPS scores, beneficiary age, and morbid conditions). While the cohort analysis mitigates the likelihood for differences in the composition of the sample over time, the cross-sectional analyses will offer larger sample sizes and, as a result, more statistical power to detect differences. The study team will also conduct sensitivity analyses regarding the effect of comorbid conditions and CDPS score on study outcomes. This would include running the main and secondary models with and without the comorbidity and CDPS independent variables and monitoring changes in these measures over time.

For research question 1e

Study population for research question 1e:

We will also conduct a qualitative study of beneficiary and caregiver experience. The study populations will include (1) parents, guardians, and other primary caregivers of children, youths, and young adults with SED and (2) parents, guardians, and other primary caregivers of children, youths, and young adults with I/DD enrolled in CSSP with experience with CSSP components, who

²³ Deb P, Manning W, Norton E. Modeling health care costs and counts. In: IHEA World Congress in Sydney, Australia 2013.

²⁴ Williams R. Using the margins command to estimate and interpret adjusted predictions and marginal effects. The Stata Journal. 2012 Jun;12(2):308-31.

have knowledge of the beneficiaries' experiences with services and supports and overall satisfaction as the health care consumer.

Data collection for research question 1e:

The study team will utilize focus groups to elicit family and caregiver experience, from the groups described above, to gather reflections on family and caregiver experience and recommendations, and to inform study findings.²⁵ Participants will be recruited to participate in the focus group session most relevant to their experience (i.e., related to youth in CSSP SED or CSSP I/DD). DMAHS will provide eligible households (i.e., those with a child/youth who participate in the CSSP SED or CSSP I/DD) with an access pin to complete a brief online survey to collect basic information on demographics and beneficiary characteristics (limited to one per family). Focus groups will be constructed from a random sample of those who complete the screening survey. The focus groups will have two strata based on CSSP participation of the child in either CSSP SED or CSSP I/DD (approximately 50 people total, 2-3 focus groups per strata).²⁶ The focus groups will be held virtually and recorded via video conferencing software in compliance with the evaluator's Institutional Review Board. We propose a study incentive of up to \$125 per participant (\$25 for completing the initial survey and an additional \$100 for participating in the focus group).

We will begin the focus groups with a brief introduction followed by a set of open-ended interview questions to elicit participants' views on experiences of beneficiaries and families regarding program components in either the CSSP SED or CSSP I/DD, and satisfaction and recommendations. Sessions will be approximately 60 to 90 minutes in length.

Analytic strategy for research question 1e:

Focus group recordings will be transcribed and then de-identified, then independently coded by two researchers. In addition to predetermined thematic areas aligned with CSSP aims, the research team will identify emergent themes and patterns in the data after conducting a coding consensus process.

Table 2.5: Research Questions and Interview Strategies for RQ1e

Research Question	Number	Interview Strategy
RQ2e: How has CSSP participation affected the experience of services and supports and overall satisfaction of beneficiaries as the health care consumer, as evidenced by the child/youths' parents, guardians, or other primary caregivers?	Up to 10 participants per focus group, 4-6 groups following the interim evaluation (n=~50)	In consultation with DMAHS and CSOC, CSHP will identify individuals for recruitment through a brief online screening survey to inquire about CSSP participation, including HCBS utilization. Interviews will be conducted with purposively sampled CSSP parents, guardians, and other primary caregivers, to obtain viewpoints about benefits and program success. Interviews will be approximately 60-90 minutes.

²⁵ Crabtree, BF and Miller, WL. 2022. *Doing qualitative research*. Sage publications.

²⁶ Hennink MM, Kaiser BN, Weber MB. What influences saturation? Estimating sample sizes in focus group research. *Qualitative health research*. 2019 Aug;29(10):1483-96.

Table 2.6: Summary of Questions, Hypotheses and Methodology for Evaluation of the CSSP SED and CSSP I/DD Programs

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic Methods
<i>Hypothesis 1: Providing full State Plan services and HCBS to children, youths, and young adults within (1) CSSP SED and (2) CSSP I/DD who are at-risk for institutionalization, out-of-home care, and hospitalization and who would otherwise have not been eligible for Medicaid or CHIP due to parental income (i.e., “CSSP eligibility expansion”), will increase access to preventive services, reduce reliance on out of home treatment, reduce avoidable hospitalization and emergency services, and improve beneficiary experience.</i>				
RQ1a. What are the trends in preventative services (i.e., child and adolescent well-care visits and follow-up after hospitalization for mental illness) among the CSSP expanded eligibility groups over the course of the current demonstration (2023-2028)? How do these trends vary across different subgroups (e.g., race/ethnicity, gender, presence of comorbidities, and eligibility category)?	<ul style="list-style-type: none"> child and adolescent well-care visits follow-up after hospitalization for mental illness 	Children and youth up to age 21 who were eligible for CSSP during the demonstration period.	Medicaid Fee-for-Service and Encounter Claims Records	Examine adjusted trends in study outcomes through analytic summaries and regression analysis and stratification of models by race/ethnicity, gender, and presence of comorbidities.
RQ 1b. What are the trends in overall utilization of care (i.e. inpatient hospitalizations, emergency department (ed) treat-and-release visits, and primary care utilization) among the CSSP expanded eligibility groups over the course of the current demonstration (2023-2028)? How do these trends vary across different subgroups (e.g., race/ethnicity, gender, presence of comorbidities, and eligibility category)?	<ul style="list-style-type: none"> inpatient hospitalizations (all-cause) emergency department (ED) treat-and-release visits primary care utilization 	As above	As above	As above
RQ1c. What are the trends in out of home treatment (i.e., out-of-home stays in	<ul style="list-style-type: none"> stays in out of home treatment such as 	As above	As above	As above

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic Methods
residential treatment, total number of days in residential treatment) among the CSSP expanded eligibility groups over the course of the current demonstration (2023-2028)? How do these trends vary across different subgroups (e.g., race/ethnicity, gender, presence of comorbidities, and eligibility category)?	<ul style="list-style-type: none"> behavioral health homes and residential treatment centers total number of days in residential treatment 			
RQ1d. What are the trends in avoidable utilization and spending (i.e., avoidable hospitalizations, hospitalization for mental illness, 30-day hospital readmissions, inpatient days, and spending related to all inpatient hospitalizations and ED visits) among the CSSP expanded eligibility groups over the course of the current demonstration (2023-2028)? How do these trends vary across different subgroups (e.g., race/ethnicity, gender, presence of comorbidities, and eligibility category)?	<ul style="list-style-type: none"> avoidable hospitalizations spending related to all inpatient hospitalizations and ED visits 	As above	As above	As above
RQ1e. How has CSSP participation affected the experience of services and supports and overall satisfaction of beneficiaries as the health care consumer, as evidenced by the child/youths' parents, guardians, or other primary caregivers?	<ul style="list-style-type: none"> reported experiences of beneficiaries and caregivers relating to services and supports, community engagement, and consumer satisfaction. 	<p>Purposively sampled parents, guardians, and primary caregivers, to obtain viewpoints about benefits and program success, no comparison group (n=~50).</p> <p>There will be two strata, parents, guardians, and other primary caregivers</p>	Remote (via video conference) focus groups to be conducted after the interim evaluation.	Qualitative thematic analysis

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic Methods
		of children/youth/young adults within the SED program and those within the I/DD program.		
<i>Hypothesis 2: Providing home and community-based services (HCBS) to child/youth Medicaid beneficiaries with intellectual disabilities/developmental disabilities (I/DD) through operationalizing the Children’s Support Services Program for I/DD (i.e., newly operationalized 217-like and 1915-like eligibility groups) will increase access to preventive services, reduce reliance on out of home treatment, reduce avoidable hospitalization and emergency services, and improve beneficiary experience.</i>				
RQ2a. What are the trends in preventative services (i.e., child and adolescent well-care visits and follow-up after hospitalization for mental illness) among the CSSP I/DD beneficiaries, who utilize HCBS, in the newly operationalized eligibility categories over the course of the current demonstration (2023-2028)? How do these trends vary across different subgroups (e.g., race/ethnicity, gender, presence of comorbidities, and eligibility category)?	<ul style="list-style-type: none"> • child and adolescent well-care visits • follow-up after hospitalization for mental illness 	Children, youth, and young adults enrolled in the newly operationalized 217-like and 1915-like CSSP I/DD HCBS, compared to children, youth, and young adults up to age 21 who were eligible for CSSP I/DD during the demonstration period.	Medicaid Fee-for-Service and Encounter Claims Records	Examine adjusted trends in study outcomes through analytic summaries and regression analysis and stratification of models by race/ethnicity, gender, and presence of comorbidities.
RQ2b., What are the trends in utilization of care (i.e., inpatient hospitalizations, emergency department (ed) treat-and-release visits, and primary care utilization) among the CSSP I/DD beneficiaries, who utilize HCBS, in the newly operationalized eligibility categories over the course of the current demonstration (2023-2028)? How do these trends vary across different subgroups	<ul style="list-style-type: none"> • inpatient hospitalizations (all-cause) • emergency department (ED) treat-and-release visits • primary care utilization 	As above	As above	As above

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic Methods
(e.g., race/ethnicity, gender, presence of comorbidities, and eligibility category)?				
RQ2c. What are the trends in out of home treatment (i.e., out-of-home stays in residential treatment, total number of days in residential treatment) among the CSSP I/DD beneficiaries, who utilize HCBS, in the newly operationalized eligibility categories over the course of the current demonstration (2023-2028)? How do these trends vary across different subgroups (e.g., race/ethnicity, gender, presence of comorbidities, and eligibility category)?	<ul style="list-style-type: none"> • stays in out of home treatment such as behavioral health homes and residential treatment centers • total number of days in residential treatment 	As above	As above	As above
RQ2d. What are the trends in avoidable utilization and spending (i.e., avoidable hospitalizations, hospitalization for mental illness, 30-day hospital readmissions, inpatient days, and spending related to all inpatient hospitalizations and ed visits) among the CSSP I/DD beneficiaries, who utilize HCBS, in the newly operationalized eligibility categories over the course of the current demonstration (2023-2028)? How do these trends vary across different subgroups (e.g., race/ethnicity, gender, presence of comorbidities, and eligibility category)?	<ul style="list-style-type: none"> • avoidable hospitalizations • spending related to all inpatient hospitalizations and ED visits 	As above	As above	As above

Table 2.7 shows an activity timeline for the research activities.

Table 2.7 Key Milestones, Children’s Support Services Programs (SED, I/DD)

Analytic Activity	Year 1 2025	Year 2 2026	Year 3 2027	Year 4 2028	Year 5 2029	Year 6 2030
1. Quality of care, health service utilization, and spending assessment: Analyze MMIS data (RQ1a-1d;RQ2a-2d)	Define appropriate population and customized metrics for MMIS analysis	Begin analysis of MMIS-based utilization and quality metrics	Complete interim analysis		Conduct analysis	Complete analysis
2. Qualitative beneficiary experience assessment (RQ1e)		Review documents, observe meetings	Conduct CSSP focus groups screening survey	Conduct CSSP 4-6 focus groups (N=~50) Conduct analysis	Complete analysis	
3. Submit reports to CMS			Interim report			Final report

RQ=Research Question.

NOTE: Evaluation project years are March-Feb. (subject to change depending on date of authorization to begin).

D. Methodological Limitations

The evaluation methods describe above have several limitations. The two major revisions to the CSSP include populations that were previously ineligible for state plan medical services, which precludes the possibility of observing them in the Medicaid claims prior to the policy change. Additionally, our claims-based metrics may not account for clinical factors such as severity that may also impact the likelihood of outcomes over time. To address this limitation, we will adjust trends by beneficiary characteristics, including CDPS risk score to adjust for the effect of differences in beneficiary characteristics on trends.

Our cohort analysis will also mitigate the possibility that changes in the composition of beneficiaries could drive differences in study outcomes. However, the cohort analysis may be subject to small sample size which could limit the ability to detect meaningful differences (i.e., insufficient statistical power). The sample sizes will be larger in the repeated cross-sectional analysis, but characteristics of individuals determining service utilization may change over time. By engaging in both approaches, we will be able to compare results for consistency, and we will compare observed peaks and troughs in adjusted outcome trends to align with exogenous shocks (such as those observed during the COVID-19 pandemic in the previous demonstration period).

Given the absence of a pre-period observation, our alternative strategies to examine the newly operationalized CSSP I/DD initiatives have their own limitations, like those mentioned above in monitoring the CSSP eligibility expansion. Our cohort analysis may be subject to small sample size due to disenrollment or other losses to follow-up. As mentioned above, the sample size will be larger in repeated cross-sectional analysis but characteristics of individuals determining outcomes may change over time.

Regarding the qualitative component, focus groups offer the opportunity for in-depth, experience-based interpretation of quantitative findings. However, findings from the focus groups may not necessarily be generalizable to the experiences of all parents, guardians, and other primary caregivers. Participation will depend first on program take-up and then on caregiver availability, interest, and willingness to participate. Differences between participants and other CSSP participants may be driven, in part, by willingness to participate in the research activity. We will aim to mitigate this issue by recruiting study participants that reflect the demographic characteristics of the study population but acknowledge that participants may differ from the other participants in the CSSP in ways that are not observable.

E. Attachments

Appendix 2.1: CSSP, SED & IDD Parent & Guardian Questionnaire

Version 2024.2.23

Would you prefer to complete this survey in English or Spanish?

- c. English
- d. Spanish -> GO TO SPANISH TRANSLATED SURVEY

Source: New question

Introduction

On behalf of Rutgers University and the New Jersey Division of Medical Assistance and Health Services, thank you for your interest in the evaluation of the **Children's Support Services Program**. We have asked you to participate because you are the parent, guardian, or other primary caregiver of a child, youth, or young adults who is enrolled in services within the Children's Support Services Program. You are likely familiar with some of the services available through the Children's Support Services Program:

- Extension of eligibility for full State Plan medical benefits (NJFamilyCare) to children/youths who currently have access only to waiver and behavioral health services (disregarding parental income)
- Social and emotional learning services
- Interpreter services
- Non-medical transportation
- Individual support services (I/DD Only)
- Intensive in-community/in-home services (I/DD Only)
- Agency respite services (I/DD Only)

The following brief survey is part of our recruitment for focus groups on the Children's Support Services Program. We will ask about your child, you, and your household.

Screener [To proceed, must answer "A" to I, II, III, IV, and a number for V.]

[Consent form scroll box; language to be approved by DMAHS, CMS, CSOC, Rutgers IRB]

4. Do you consent to participate in the survey?

- f. Yes
- g. No, exit the survey

Source: New question

5. Are you at least 18 years of age?

- a. Yes
- b. No, exit the survey

Source: New question

6. Are you the parent, guardian, or other primary caregiver of at least one child, youth, or young adult who participates in New Jersey's Children's Support Services Program through Medicaid (i.e., NJFamilyCare)?
- Yes
 - No, exit the survey

7. The following survey is part of our recruitment for an online meeting (Zoom) to discuss New Jersey's Children's Support Services Program. The online meeting will be 60-90 minutes. The following survey will take about 20 minutes.

- Participation is limited to one participant per family.
- Every participant who completes the survey will receive \$25.
- Each online meeting (Zoom) participant will receive an additional \$100 (\$125 total).
- There are a limited number of spots for the online meeting (Zoom). If you are not chosen for the online meeting but complete the survey, you will still be given \$25.
- If you would like to only participate in the survey, you will still be given \$25.

Are you interested in participating in the online meeting?

- Yes
- No

Source: New question

8. [If IV. is "Yes"] When would you most likely be able to meet for the online meeting? This will be used to schedule the focus group activity (via Zoom or similar video conferencing tool).

Indicate what time you are typically able to meet online (Zoom) for 60-90 minutes.

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Morning (After 9a-12p)							
Afternoon (After 12p-4p)							
Evening (After 4p-9p)							
Night (After 9p-12a)							

- Other or special circumstances (Please specify)

Source: New question

9. [If IV. is "Yes"] Please provide your contact details so that we may schedule the interview.

- First name:___ [text response]
- Last name: ___[text response]

- email address: __ [text response]
- phone number: __ [text response]
- Other or special circumstances (Please specify) __ [text response]

Child/Youth/Young Adult Characteristics – These questions ask about the experiences of the child, youth, or young adult covered by the Children’s Support Services Program.

- 46. Starting with your youngest child, youth, or young adult that participated in the Children’s Support Services Program, how old are they (in years, at their last birthday)?**

__ years old [Number]

Source: Adapted from CSHP/Eagleton/Department of Children and Families - IDD Caregiver Survey

- 47. Does this child [youth] young adult] identify as male, female, or in some other way?**

- f. Male
- g. Female
- h. Non-binary
- i. Some other way (please specify)
- j. Prefer not to answer

Source: Adapted from CSHP/Eagleton/Department of Children and Families - IDD Caregiver Survey

- 48. In general, how would you describe this child[youth] young adult]’s health?**

- f. Excellent
- g. Very Good
- h. Good
- i. Fair
- j. Poor

Source: National Survey on Child’s Health, <https://www.childhealthdata.org/learn-about-the-nsch/NSCH>

- 49. What is this child[youth] young adult]’s preferred means of communication? (choose one)**

- f. Spoken Language
- g. Gestures or Body language
- h. Sign language or finger spelling
- i. Communication aid or device
- j. Other (please specify) [Open-ended free text]

Source: National Core Indicators - Child Family Survey, <https://idd.nationalcoreindicators.org/>

50. **How much support does this child[youth] young adult] need to prevent or manage self-injurious, disruptive, and/or destructive behaviors? (choose one)**

- d. None
- e. Some
- f. Extensive

Source: National Core Indicators- Child Family Survey,
<https://idd.nationalcoreindicators.org/>

51. **Do you have any other children with Serious Emotional Disturbance or Intellectual and Developmental Disability who participate in New Jersey's Children's Support Services Program as part of Medicaid?**

[List ages of children reported to this point]

- a. Yes (Repeat 1-6)
- b. No

Source: New Question

Parent/Guardian/Primary Caregiver Characteristics – These questions ask about you as the parent, guardian, or other primary caregiver of the child/youth/young adult with SED or I/DD.

52. **What is your relationship to the child/youth/young adult?**

- Mother
- Father
- Legal guardian
- Other primary caregiver (Please specify)
- Don't know/Not sure
- Refused

Source: CSHP/Eagleton/Department of Children and Families, IDD Caregiver Survey

53. **To ensure we are reaching people of all ages, would you please tell me your age?**

__[Number]

Prefer not to answer/unsure

Source: CSHP/Eagleton/Department of Children and Families, IDD Caregiver Survey

54. **[For prefer not to answer/unsure above, ask] Would you be willing to tell us whether it's between...**

- k. 18 - 20
- l. 21 - 24
- m. 25 - 29
- n. 30 - 34
- o. 35 - 44
- p. 45 - 49
- q. 50 - 54

- r. 55 - 64
- s. 65 OR OVER
- t. Prefer not to answer

Source: CSHP/Eagleton/Department of Children and Families - IDD Caregiver Survey

55. What is the highest degree or level of school you have completed?

- a. no schooling completed
- b. nursery school to 8th grade
- c. 9th-12th grade, no diploma
- d. high school graduate (high school diploma or the equivalent)
- e. vocational/technical/business/trade school certificate or diploma (beyond the high school level)
- f. some college, but no degree
- g. associate degree
- h. bachelor's degree
- i. master's, professional or doctorate degree
- j. don't know
- k. prefer not to answer

Source: CMS, <https://www.cms.gov/data-research/research/medicare-current-beneficiary-survey/questionnaires/2023-questionnaires>

56. Are you of Latino or Hispanic origin, such as Mexican, Puerto Rican, Cuban or some other Spanish background?

- c. Yes
- d. No

Source: Adapted from US Department of Health and Human Services, Office of Minority Health, <https://minorityhealth.hhs.gov/explanation-data-standards-race-ethnicity-sex-primary-language-and-disability>

57. Are you White, Black or of Asian origin, or are you some other race, or multi-racial?

- g. White (includes Caucasian, European, Middle Eastern)
- h. Black (includes African American)
- i. Asian (includes Asian-Indian, South Asian, East Asian, Chinese, Japanese)
- j. Hispanic / Latino / Spanish
- k. Other (please specify) [Open-ended free text]
- l. Multi-racial (please specify) [Open-ended free text]

Source: Adapted from US Department of Health and Human Services, Office of Minority Health, <https://minorityhealth.hhs.gov/explanation-data-standards-race-ethnicity-sex-primary-language-and-disability>

58. How do you describe your gender? [Select ONE]

- h. Female
- i. Male
- j. Trans Male/Trans Man

- k. Trans Female/Trans Woman
- l. Genderqueer/Gender Nonconforming
- m. Prefer to self-describe, please specify: [open field]
- n. Prefer not to answer

Source: Q7-8 Two Step Gender Identity, <https://registrar.ucsc.edu/gender-identity/index.html>

59. What is the primary language spoken in your home?

- d. English
- e. Spanish
- f. Other (please specify) [Open-ended free text]

Source: Adapted from US Department of Health and Human Services, Office of Minority Health, <https://minorityhealth.hhs.gov/explanation-data-standards-race-ethnicity-sex-primary-language-and-disability>

60. Last year, that is in 2022, what was your total household income from all sources, before taxes?

- a. Less than \$25,000
- b. 25 to under \$50,000
- c. 50 to under \$75,000
- d. 75 to under \$100,000
- e. 100 to under \$150,000
- f. \$150,000 or more
- g. Prefer not to answer

Source: CSHP/Eagleton/Department of Children and Families - IDD Caregiver Survey

61. In the past 12 months, did you or any member of this household receive benefits from the Food Stamp Program or SNAP (the Supplemental Nutrition Assistance Program)?

- a. Yes
- b. No
- c. Not sure/prefer not to answer

Source: Census, <https://www.census.gov/programs-surveys/acs/about/forms-and-instructions.html>

Appendix 2.2: CSSP, SED & I/DD Parent/Caregiver Focus Group Guide

(Version 2024.2.23)

Thank you for meeting with us. Today, we will be discussing healthcare and support programs in New Jersey. Over the next 60-90 minutes, we will focus on ways to improve services for children and youth with **[depending on focus group strata; “Serious Emotional Disturbance” | “Intellectual and Developmental Disabilities”]** in New Jersey. We will ask the group guiding questions. After each question, a prompt will pop-up on your screen with an opportunity write a brief response. We will then share the responses and each member will have the opportunity to explain their answers to the group.

We are aiming to get as many different opinions as possible. We will not be using job titles, degrees, or affiliations. Instead, we will be using first names. For this focus group to be successful, please remember that your perspective cannot be wrong, and your opinion is incredibly valuable to this work. It may be that someone will say something that you disagree with. To encourage everyone to feel free to take part, we will not have a debate or argument over one another’s opinions. As mentioned, your perspective cannot be wrong.

[Question appears on screen with a free text box below it]

[INSTRUCTIONS: Type your first name and then a brief response. Example, "John: There are too many appointments to keep track of." We will then have a discussion where each person will have the opportunity to discuss what they wrote and provide additional details.]

Services and Supports Access

1.a. Parents, guardians, and other primary caregivers often explain that there can be so much to learn and navigate when considering decisions that affect the health and wellbeing of their child with complex needs. **What three words describe your experience in navigating decision-making opportunities (also known as health literacy) related to your child’s health and wellbeing, emotional stability, behavioral regulation?** These can be positive/negative/or neutral.

1.b. **What three words come to mind when you think about helping your child with [“Serious Emotional Disturbance” | “Intellectual and Developmental Disabilities”] get basic medical care (think of your pediatrician or regular doctor)?** These can be positive/negative/or neutral.
(Probe) *What would make appointments easier to schedule or attend?*

1.c. Specialists are important for children with [“Serious Emotional Disturbance” | “Intellectual and Developmental Disabilities”]. Think of your child's therapists, such as allied health professionals like speech therapists and physical therapists, or mental health providers. **What three words come to mind when you think about helping your child with [“Serious Emotional Disturbance” | “Intellectual and Developmental Disabilities”] to see specialists?** These can be

positive/negative/or neutral. *(Probe) Are some of these services easier or more difficult to find or use than others? (Probe) What would make these easier to schedule or attend?*

Community Engagement

2.a. Community can be good for sharing in life experiences and can be a way to access emotional or financial support. We'd like you to think of the people outside your home that you have formed relationships with. **What three words describe your experience forming relationships with other people outside of your home, including families with children?** These can be positive/negative/or neutral. *(Probe) What might make it easier to find a community?*

Satisfaction and Recommendations [No pop-up box to write comments, open discussion]

1.a. New Jersey has been offering special services for children with ["Serious Emotional Disturbance" | "Intellectual and Developmental Disabilities"]. These include social and emotional learning therapies to learn about empathy for others, keeping friendships, and making good decisions.²⁷ There are also transportation services and interpreter services to make health care and other services more accessible. If your child has I/DD, you may have also used other supports, including intensive in-home services and respite services. ***If you have used these services, how would you describe your experience? If you haven't, why have you not been able to or chosen not to use these services?***

2.b. Parents, guardians, and other primary caregivers sometimes pay for things to support the health and wellbeing of their child with complex needs, sometimes referred to as "out of pocket" costs. **How has participation in the Children's Support Services Program affected what you need to pay for yourself?**

2.c. **What would you like New Jersey systems leaders (like the directors at Medicaid, the governor's office, and state agencies) to know about what it is like to be a family member of a child with ["Serious Emotional Disturbance" | "Intellectual and Developmental Disabilities"]?** *(Probe) What improvements should be made (this includes policies, services, and systems)?*

Thank you again for helping us know more about your experience in New Jersey in accessing the Children's Support Services Program. This will help find ways to better support children and youth with **["Serious Emotional Disturbance" | "Intellectual and Developmental Disabilities"]** and their families.

²⁷ Collaborative for Academic, Social, and Emotional Learning (CASEL). Fundamentals of SEL; nd. <https://casel.org/fundamentals-of-sel/>

3. Postpartum Eligibility Extension

A. General Background Information

In this section, we describe the plan to evaluate the impact of CMS approval of a policy change to extend postpartum coverage to 12 months after the end of pregnancy under the 1115 Demonstration (i.e., from April 1, 2023 through June 30, 2028). Prior coverage was 60 days after the end of pregnancy.

Under this initiative, this extended coverage will apply only to pregnant people who meet all other requirements for NJ FamilyCare eligibility, and do not otherwise qualify for continued coverage (after 60 days) through another eligibility category. New Jersey projected that approximately 8,700 people will be affected by this change annually, representing about 23% of all Medicaid births in New Jersey.²⁸

Prior to this initiative, some post-pregnancy and postpartum people may have struggled to find alternative sources of coverage after exhausting their Medicaid eligibility, and as a result, they fail to receive essential care.²⁹ Others may successfully find alternative coverage, including through GetCoveredNJ, the state's health insurance marketplace, but nonetheless need to switch providers and have their continuity of care disrupted as a result. Some clinicians may choose to participate in Medicaid or private coverage, but not both, making sustaining a care relationship challenging. Depending on how comprehensive a postpartum person's new source of coverage is, they may also lose access to critical services such as dental care or certain behavioral health benefits. Postpartum care is especially important considering that approximately 12% of postpartum deaths occur between 43-365 days after the end of a pregnancy.³⁰ Importantly, preliminary analysis shows that 53% of pregnant people who lost Medicaid coverage postpartum re-enrolled at some point over the two years after their coverage initially terminated.³¹ When this re-enrollment occurs with such frequency, the health care issues associated with lack of coverage in the interim, and the disruption of coverage become an issue for the Medicaid program to address both clinically and financially.

New Jersey is seeking to test the impact of extending coverage to eligible pregnant people for 12 months after the end of pregnancy on postpartum outcomes and expenditures, paying particular attention to health disparities in access and outcomes.

²⁸ "NJ 1115 Comprehensive Demonstration Amendment" (Center for Medicare & Medicaid Services, February 27, 2020), <https://www.medicaid.gov/medicaid/section-1115-demonstrations/downloads/nj-1115-request-pa.pdf>.

²⁹ Sarah Gordon et al., "Medicaid After Pregnancy: State-Level Implications of Extending Postpartum Coverage," 2021.

³⁰ Roosa Tikkanen et al., "Maternal Mortality and Maternity Care in the United States Compared to 10 Other Developed Countries" (Commonwealth Fund, November 18, 2020), <https://doi.org/10.26099/411v-9255>; Building U.S. capacity to review and prevent maternal deaths, et al., "Report from Nine Maternal Mortality Review Committees.," Center for Disease Control and Prevention, 2018, <https://stacks.cdc.gov/view/cdc/51660>.

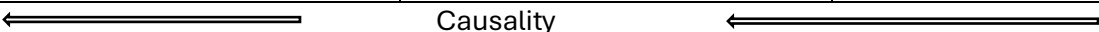
³¹ "NJ 1115 Comprehensive Demonstration Amendment."

B. Evaluation Questions and Hypotheses

We posit that allowing individuals to maintain their Medicaid coverage for a longer period after the end of pregnancy is likely to improve their access to and continuity of care and ultimately lead to improvements in their experience of care and health and mental health outcomes. For pregnancies that end in live births, childbirth and the postpartum period are exciting life experiences for many people, but this is also a period of physical, mental, and social change. Given these challenges, requiring birthing people to switch their source of coverage only two months after birth may lead to worse outcomes and quality of care.

Below we present the *driver diagram* (Figure 3.1: Postpartum Extension Driver Diagram) that delineates the pathway from the policy change to improved outcomes. Here the secondary drivers represent the various services available to birthing people.

Figure 3.1: Postpartum Extension Driver Diagram

Aim	Primary Drivers	Secondary Drivers
<p>1.A. Ensure that eligible people have access to all necessary services (both physical and behavioral) to improve health and well-being after the end of pregnancy</p> <p>1.B. Improve access, utilization, and quality of physical and behavioral health care</p> <ul style="list-style-type: none"> -Reduce preventable hospitalizations -Improve postpartum and well-child follow-up care <p>1.C. Reduce disparities among individuals after the end of pregnancy</p>	<p>Address the need for comprehensive, consistent health care coverage for individuals after the end of pregnancy</p>	<p>Extension of eligibility for Medicaid benefits from 60 days to 12 months after the end of pregnancy for people with incomes above 138% FPL and below 205% FPL</p>
<p style="text-align: center;">  </p>		

We next detail the hypotheses and corresponding research questions that help assess the impact of extending postpartum coverage to eligible pregnant people to 12 months after the end of pregnancy. For all measures that have sufficient sample size, we will investigate differences by demographic and geographic characteristics (e.g., race/ethnicity and county). These are also summarized in Table 3.2.

Hypothesis 1: Extending coverage to 12 months after the end of pregnancy will result in greater continuity of coverage, improved utilization of recommended services, improved quality of care, and altered Medicaid spending in the period after pregnancy—for pregnant beneficiaries and, where relevant, their infants.

Research Question 1a: Does extending Medicaid eligibility to those with 12 months after the end of pregnancy improve trends in **continuity of Medicaid coverage**?

Research Question 1b: What are the trends in utilization of **maternal and newborn preventative services** (e.g., depression and anxiety screening, well-child visits, postpartum and well-woman visits, dental visits, contraceptive counseling, mental health visits) among those with 12 months of coverage after the end of pregnancy?

Research Question 1c: What are the trends in **overall and postpartum-related emergency department (ED) use** among those with 12 months of coverage after the end of pregnancy?

Research Question 1d: Does providing 12 months of coverage after the end of pregnancy change the **composition of spending on outpatient services, emergency department, and hospital admissions**?

Hypothesis 2: Extending postpartum coverage to 12 months after the end of pregnancy will reduce hospitalization admissions, ED utilization, and the number of uninsured ED visits and hospitalizations after delivery.

Research Question 2a: Does providing 12 months of coverage after the end of pregnancy reduce **overall and postpartum-related ED use, ambulatory care sensitive hospital admissions, inpatient hospital stays for postpartum-related causes**?

Research Question 2b: Does providing 12 months of coverage after the end of pregnancy decrease the **uninsured ED visits and hospitalizations** after delivery?

C. Methodology

Outcomes:

We will assess the outcomes listed in Table 3.1 below using Medicaid fee-for-service and encounter claims records and hospital uniform billing (UB) data.

Table 3.1: Inventory of Measures

Measure		Brief Description
Enrollment		
1.	Medicaid enrollment	Total number of months enrolled during study period. Enrollment gaps: the number of days between enrollment periods for a beneficiary who experiences gaps.
Utilization of Care		
2.	Postpartum and well-woman visits	Receipt of postpartum visit 7-84 days after delivery. (Dichotomous: 0=No; 1=Yes)

		Receipt of well-woman visit in past year. ³² (Dichotomous: 0=No; 1=Yes).
3.	Well-child care	Receipt of 6 visits in 15 months for infants. (Dichotomous: 0=No; 1=Yes) Number of visits in 15 months. (Continuous: 0-6)
4.	Emergency department (ED) visits	Number of ED visits in the 12 months after delivery or end of pregnancy. ³³ <i>Using all-payer hospital uniform billing (UB) data (hypothesis 2):</i> -Likelihood of any and number of ED visits overall between 61-365 days post-pregnancy/postpartum. -Likelihood of any and number of ED visits between 61-365 days by expected payer.
5.	Inpatient hospitalization	Individuals receive inpatient hospital treatment because of pregnancy and childbirth, for surgery, or for nonsurgical medical treatment. Using ICD-10, primary diagnoses for hospitalization will be placed into two categories: those with a primary diagnosis related to complications of pregnancy, childbirth, and the puerperium, and all other diagnoses. ³⁴ <i>Using all-payer hospital uniform billing (UB) data (hypothesis 2):</i> -Likelihood of any and number of inpatient hospitalizations overall between 61-365 days post-pregnancy/postpartum. -Likelihood of any and number of inpatient hospitalizations between 61-365 days by expected payer. Among those with any hospitalizations: -Length of inpatient hospitalizations between 61 and 365 days.

³² “HEDIS: Prenatal and Postpartum Care (PPC),” NCQA (blog), accessed April 3, 2024, <https://www.ncqa.org/hedis/measures/prenatal-and-postpartum-care-ppc/>; “Optimizing Postpartum Care,” Presidential Task Force on Redefining the Postpartum Visit (The American College of Obstetricians and Gynecologists, May 2018), <https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2018/05/optimizing-postpartum-care>.

³³ Steven L. Clark et al., “Emergency Department Use during the Postpartum Period: Implications for Current Management of the Puerperium,” *American Journal of Obstetrics & Gynecology* 203, no. 1 (July 1, 2010): 38.e1-38.e6, <https://doi.org/10.1016/j.ajog.2010.02.033>.

³⁴ Maria W. Steenland and Laura R. Wherry, “Medicaid Expansion Led To Reductions In Postpartum Hospitalizations,” *Health Affairs* 42, no. 1 (January 2023): 18–25, <https://doi.org/10.1377/hlthaff.2022.00819>.

Quality		
6.	Avoidable hospitalizations	Rates of Ambulatory Care Sensitive (ACS) inpatient (IP) hospitalizations that may occur due to inadequate ambulatory/primary care within communities, during the 12 months after delivery or end of pregnancy. ³⁵
7.	Screening and rates of anxiety and depression	<p>Individuals receive postpartum depression screening at either maternal or infant follow-up visit in the 12 months after delivery or end of pregnancy.³⁶ (Dichotomous: 0=No; 1=Yes)</p> <p>Number of times screened (American Academy of Pediatrics recommends screenings at 1-, 2-, 4-, and 6-month well-infant visits).³⁷</p> <p>ICD-10 Mental Health diagnosis codes at different periods (e.g., 1 month postpartum, 2 months, 4 months, and 6 months).</p>
8.	Mental health visit	<p>Receipt of outpatient mental health visit among Medicaid beneficiaries with a diagnosed mental health disorder (NCQA) in the 12 months after delivery or end of pregnancy. (Dichotomous: 0=No; 1=Yes)</p> <p>Number of outpatient mental health visits among those diagnosed with a mental health disorder in the 12 months after delivery or end of pregnancy.</p>
9.	Dental visit	Individuals had one or more dental visit in the 12 months after delivery or end of pregnancy. (Dichotomous: 0=No; 1=Yes)
10.	Contraceptive counseling	<p>Receipt of family planning/contraceptive counseling in the 12 months after delivery or end of pregnancy. (Dichotomous: 0=No; 1=Yes)</p> <p>Percentage of birthing individuals provided with long-acting reversible method of contraception (LARC) within 3 and 90 days of delivery.³⁸</p>

³⁵ Clark et al., “Emergency Department Use during the Postpartum Period”; “HEDIS: Prenatal and Postpartum Care (PPC)”; “Optimizing Postpartum Care.”

³⁶ “HEDIS: Postpartum Depression Screening and Follow-Up,” NCQA (blog), accessed April 3, 2024, <https://www.ncqa.org/hedis/measures/postpartum-depression-screening-and-follow-up/>.

³⁷ Steenland and Wherry, “Medicaid Expansion Led To Reductions In Postpartum Hospitalizations.”

³⁸ “Measure CCP: Contraceptive Care - Postpartum Women Ages 15 to 44” (HHS Office of Population Affairs, 2022), <https://opa.hhs.gov/sites/default/files/2023-04/2022-CCP-Measure-Specs.pdf>.

Spending, Claims/Encounter data		
11.	Spending related to outpatient care	Payments on claims for outpatient care (e.g., postpartum and well-woman visits, mental health visits, dental visits, etc.), inflation adjusted, in the 12 months after delivery or end of pregnancy.
12.	Spending related to inpatient hospitalizations and ED visits	Payments on facility claims for inpatient and ED visits, inflation adjusted, in the 12 months after delivery or end of pregnancy.

For hypotheses 1 and research questions 1a-1d

Study population: This hypothesis and research questions relate to trends in utilization, spending, and quality health care available to postpartum and post-pregnancy beneficiaries eligible for 12-months of continued coverage after the end of pregnancy. Using Medicaid Claims & Encounter Data, we will only be able to observe those individuals who maintain Medicaid coverage in the postpartum period, thus there is no available comparison group.

Analytic strategy: We will calculate adjusted trends, estimating levels of outcome measures on a quarterly or annual basis (as appropriate) to examine utilization and quality of care (e.g., depression/anxiety, well-child visits, postpartum and well-woman visits, dental visits, contraceptive counseling, mental health visits, ED utilization), composition of spending, and continuity of Medicaid enrollment over the demonstration period. We will implement a repeated cross-sectional approach for all eligible beneficiaries impacted by the 12-month coverage extension.

Spending analyses will differentiate between spending over time comparing potentially avoidable spending (e.g., ED and hospital use) to preventative care spending (e.g., postpartum and well-woman visits, dental care, contraceptive counseling, etc.). We will produce line diagrams to examine trends. We will rely on trend analyses to differentiate between spending that positively increases because of higher utilization of preventative care vs spending on preventable hospital use as a result of inadequate ambulatory/primary care use within communities.

We will explore demographic and geographic differences across outcomes. As such, models may be stratified by race/ethnicity, county, and other demographic or geographic characteristics as appropriate to estimate results separately where sample size is sufficient. This analytic strategy will be applied to all research questions and hypotheses to understand disparities in outcomes related to the 12-month coverage extension.

For hypothesis 2 and research question 2a-2b

Study population: Using Hospital all-payer uniform billing (UB) data, accessed through the New Jersey Integrated Population Health Data (iPHD) project, we will identify two cohorts of birthing people who had a Medicaid-covered delivery at baseline. The first cohort will be drawn from 2017-2022 data, the second will be drawn from 2023-2025 data. The two cohorts will allow a comparison before and after the policy implementation. Procedures similar to those used in prior studies to enable UB-MMIS linkage while using only de-identified data will be used for the planned analyses.

Analytic strategy: We will first conduct descriptive analyses to understand trends and distribution of expected payer (e.g., Medicaid, other public, private insurance, self-pay/uninsured) for ED utilization and hospitalizations over time before and after the policy implementation. We will produce line diagrams to examine trends and bar charts to understand the distribution of payers.

We will then conduct a difference-in-differences (DID) analysis, with ED utilization and hospitalizations as the outcomes. Initial models will predict the likelihood and frequency of ED or hospital utilization before/after policy implementation. Subsequent models will be run conditional on having an ED or hospital visit to determine the likelihood of having an *uninsured* visit before/after policy implementation.

Our study period includes the current demonstration period (2023-2028) as well as 3 full calendar years prior to the public health emergency (PHE) as baseline (2017-2019). We may use longer or shorter baseline period if required by our model specifications. Additionally, dependent on the parallel pre-trends analysis (explained in more detail below) and comparison cohort, the PHE years may be excluded from the analysis. For these models, an interaction variable between exposure group (individuals with incomes between 138% and 205% FPL) versus control group (individuals with incomes below 138% FPL) and an indicator variable for pre-policy (2017-2019), the PHE (2020-2023), and the post-policy implementation (2024-2028) will be constructed. Given the PHE went into effect prior to the policy implementation and this demonstration period, ensuring continuous coverage for 2 additional years, the models for outcomes will be run using three time periods. We will estimate a count model regressions (e.g., Poisson or negative binomial) for hospital and emergency department utilization. If sample sizes are sufficient, regressions will control for maternal and child demographic characteristics (e.g., maternal age, marital status, race/ethnicity, type of delivery, parity, dual eligible status, presence of comorbidities, CDPS risk score) with specifications including geographic and year fixed effects to control for any time- and geography-invariant effects. To account for non-independence of error terms by geography and time, standard errors will be calculated to allow for clustering at the zip code and year levels. Standard errors may be adjusted in the event of repeated observations in the data.

The overall modeling strategy is illustrated by the linear specification below:

$$\begin{aligned} Outcome_{it} = & \alpha_0 + \alpha_1(time)_i + \alpha_2(TreatmentGroup)_i + \alpha_3(policyPHEpost)_{it} \\ & + \alpha_4(policypost)_{it} + \alpha_5(TreatmentGroup * Post)_{it} + \alpha_6(TreatmentGroup \\ & * PHEpost)_{it} + \lambda X_{it} + \varepsilon_{it} \end{aligned}$$

$Outcome_{it}$ represents the annualized outcome of interest for an individual member i in year t . α represents the coefficients that correspond to each model component. The $time$ variable is a continuous variable indicating time in months or calendar years from the start of the study period and subsequent policy changes (PHE and postpartum coverage extension). The variable $policyPHEpost$ is a binary (0/1) variable for the period during the public health emergency, which initiated a postpartum extension. The variable $policypost$ is a binary (0/1) variable for the period subsequent to the policy changes under the postpartum extension. The interaction term of $TreatmentGroup * Post$ yields the difference-in-differences estimator (the α_5 coefficient), which estimates how much utilization changed among individuals above 138% FPL after policy implementation relative to the utilization among individuals below 138% FPL whose eligibility is unchanged. The interaction term of $TreatmentGroup * PHEpost$ yields the difference-in-

differences estimator (the α_6 coefficient), which estimates how much utilization changed among individuals above 138% FPL after the public health emergency when the policy was initially implemented, relative to the utilization among individuals below 138% FPL whose eligibility remained unchanged. X_{it} represents a set of control variables for individual i at time t . ε represents the stochastic error term.

A primary assumption for a valid DID inference is parallel pre-treatment trends.³⁹ This assumption is necessary to indicate whether, in the absence of the policy change, the trends in outcomes would have been similar between treatment and comparison groups. Event studies will be conducted to establish the parallel trends hold for all groups. If the parallel trends assumption is violated, we will explore alternative strategies such a lagged dependent variable regression approach and matching on pre-intervention outcome trends.⁴⁰

³⁹ Andrew M Ryan et al., “Now Trending: Coping with Non-Parallel Trends in Difference-in-Differences Analysis,” *Statistical Methods in Medical Research* 28, no. 12 (December 1, 2019): 3697–3711, <https://doi.org/10.1177/0962280218814570>; Joshua D. Angrist and Jörn-Steffen Pischke, *Mostly Harmless Econometrics: An Empiricist’s Companion* (Princeton University Press, 2009), <https://press.princeton.edu/books/paperback/9780691120355/mostly-harmless-econometrics>.

⁴⁰ Stephen O’Neill et al., “Estimating Causal Effects: Considering Three Alternatives to Difference-in-Differences Estimation,” *Health Services & Outcomes Research Methodology* 16 (2016): 1–21, <https://doi.org/10.1007/s10742-016-0146-8>.

Table 3.2: Summary of Questions, Hypotheses and Methodology

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic Methods
<i>Hypothesis 1: Extending coverage to 12 months after the end of pregnancy will result in greater continuity of coverage, improved utilization of recommended services, improved quality of care, and altered Medicaid spending in the period after pregnancy—for pregnant beneficiaries and, where relevant, their infants.</i>				
RQ1a: Does extending Medicaid eligibility to those with 12 months after the end of pregnancy improve trends in continuity of Medicaid coverage?	-Medicaid enrollment	No comparison group Subgroup analyses by race/ethnicity and county	Medicaid Fee-for-Service and Encounter Claims Records	Adjusted analysis of trends, descriptive
RQ1b: What are the trends in utilization of maternal and newborn preventative services (e.g., depression and anxiety screening, well-child visits, postpartum and well-woman visits, dental visits, contraceptive counseling, mental health visits) among those with 12 months of coverage after the end of pregnancy?	-Postpartum and well-woman visit and timing of visit -Well-child visit and timing of visit -Annual dental visit -Postpartum depression screening -Rates of anxiety and depression -Contraceptive counseling -Mental health visit	As above	As above	As above
RQ1c: What are the trends in overall and postpartum-related emergency department (ED) use among those with 12 months of coverage after the end of pregnancy?	-ED utilization overall -Postpartum-related ED utilization	As above	As above	As above

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic Methods
RQ1d: Does providing 12 months of coverage after the end of pregnancy change the composition of spending on outpatient services, emergency department, and hospital admissions?	<ul style="list-style-type: none"> -Spending related to outpatient care (e.g., postpartum and well-woman visits, mental health visits, dental visits, etc.) -Spending related to ED utilization -Spending related to avoidable hospitalizations 	As above	As above	As above
<i>Hypothesis 2: Extending postpartum coverage to 12 months after the end of pregnancy will reduce hospitalization admissions, ED utilization, and the number of uninsured ED visits and hospitalizations after delivery.</i>				
RQ2a: Does providing 12 months of coverage after the end of pregnancy reduce overall and postpartum-related ED use, ambulatory care sensitive hospital admissions, inpatient hospital stays for postpartum-related causes?	<ul style="list-style-type: none"> -Preventable hospitalizations -Ambulatory care sensitive hospital admission -Inpatient hospital stay for postpartum-related cause -ED utilization overall -Postpartum-related ED utilization 	2017-2022 cohort & 2023-2025 cohort Subgroup analyses by race/ethnicity and county	Hospital uniform billing (UB) data linked to MMIS indicator of having a delivery	Examine trends in outcomes, descriptive analysis, difference-in-differences
RQ2b: Does providing 12 months of coverage after the end of pregnancy decrease the uninsured ED visits and hospitalizations after delivery?	<ul style="list-style-type: none"> -ED utilization overall by expected payer (number of ED visits) -Number of inpatient hospitalizations overall -Number of inpatient hospitalizations between 61-365 days by expected payer -Length of inpatient hospitalizations 	As above	As above	As above

Table 3.3 shows an activity timeline for the research activities.

Table 3.3 Key Milestones, Postpartum Eligibility Extension

Analytic Activity	Year 1 2025	Year 2 2026	Year 3 2027	Year 4 2028	Year 5 2029	Year 6 2030
1. Enrollment, quality of care and health service utilization assessment: Analyze MMIS data (RQ1a-RQ1d)	Define appropriate population and customized metrics for MMIS analysis	Begin analysis of MMIS-based utilization and quality metrics	Complete interim analysis		Conduct analysis	Complete analysis
2. Link and analyze MMIS and UB data (RQ2a, RQ2b)	Execute data use agreements to link MMIS and UB data 2017-2028 and begin data linkage	Finalize linkage of MMIS and UB data sets and conduct baseline analysis	Complete interim analysis of linked data		Update linkage & analysis	Complete analysis of linked data
3. Submit reports to CMS			Interim report			Final report

RQ=Research Question.

NOTE: Evaluation project years are March-Feb. (subject to change depending on date of authorization to begin).

D. Methodological Limitations

This analysis has several limitations. First, as with other studies using claims data, the data may not include all relevant visits and services, and some data may be missing from this analysis. This will be the case if there are gaps in Medicaid enrollment. To avoid bias from unobserved periods of utilization, our models will adjust for number of days enrolled in each year. Relatedly, balance checks will be performed to test for statistically significant differences in sample characteristics over time despite possible gaps in Medicaid enrollment. Our proposed analysis of all-payer hospital uniform billing (UB) data will allow us to examine hospital utilization during gaps in Medicaid coverage. Use of UB data will require approval by the iPHD governing board and DMAHS to create linked- cohorts based on MMIS data, although we anticipate that these approvals will be forthcoming. Screening for anxiety/depression is also subject to under-reporting and a concurrent perinatal episode of care pilot is seeking to address this issue. As a result, we may observe spurious trends if beneficiaries enrolled in the pilot see providers participating in the ongoing episode of care pilot. Diagnostic patterns may vary by provider and provider biases and results may incorrectly estimate the prevalence of malnutrition, anxiety, or depression. Lastly, stratified analyses by race/ethnicity and geography could result in small sample sizes, limiting our ability to detect statistically significant effects.

4. New Jersey Home Visiting Pilot (NJHV) Program

A. General Background Information

In this section, we describe the plan to evaluate the impact of a NJ Home Visitation (NJHV) pilot program designed to support pregnant or postpartum individuals and their families. The pilot will support up to 500 eligible people, statewide, per demonstration year.

Under this initiative, New Jersey will leverage an existing statewide home visiting network that is supported by the Maternal, Infant, and Early Childhood Home Visiting (MIECHV) program. New Jersey's home visiting network is implemented by NJ Department of Children and Families (NJDCF). New Jersey's network utilizes the following three voluntary, evidence-based models focused on the health of pregnant people and families:

- **Nurse-Family Partnership (NFP):** NFP is designed to reinforce maternal behaviors that encourage positive parent-child relationship and maternal, child, and family accomplishments. First-time, low-income mothers are expected to enroll by 28 weeks gestation and are eligible to receive home visits up until their child's 2nd birthday.
- **Healthy Families America (HFA):** HFA is an in-home health, parenting education, and supportive service to eligible at-risk families, especially those overburdened by stressors that may contribute to child neglect and abuse. Families can enroll prenatally or up until three months after the child's birth and are eligible to receive services up to the child's 3rd birthday.
- **Parents as Teachers (PAT):** PAT is an in-home health, parenting education, and supportive service to eligible at-risk families, especially those overburdened by stressors that may contribute to child neglect and abuse. Families can enroll in PAT prenatally and postnatally up to age three and are eligible to receive services until the child's 5th birthday. PAT aims to provide home visits to each family for two years.

The New Jersey Medicaid Home Visiting Pilot expects to provide 3,000 months of services annually (500 families served annually × an average of six months duration of services) at an average cost of \$500 per member per month.

With funding from the Maternal, Infant, and Early Childhood Home Visiting (MIECHV) program (Health Resources and Services Administration or HRSA) in addition to State and TANF funding, New Jersey currently offers the same three evidence-based home visiting programs -- NFP, HFA, and PAT-- in each of the state's 21 counties. The state annually collects and reports performance measures across several areas including: improved maternal and newborn health; reduction of child injuries, and emergency department visits; improved school readiness and achievement; and improvements in the coordination and referrals for other community resources and supports. Johns Hopkins University (JHU) collects and processes these Annual Performance Report (APR) measures in partnership with state agencies and the home visiting programs. In addition, JHU routinely analyzes data from the home visiting program data system as part of New Jersey's home visiting continuous quality improvement efforts. New Jersey intends to leverage this partnership with JHU and their data sources as part of the evaluation the NJHV pilot program.

New Jersey is seeking to study the effect of the NJHV pilot program on perinatal outcomes and expenditures, paying particular attention to health disparities in access and outcomes.

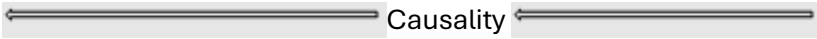
B. Evaluation Questions and Hypotheses

Since MIECHV supports established evidence-based strategies, we propose to test whether the New Jersey pilot achieved **similar outcomes** to the established MIECHV New Jersey initiatives. We have prioritized performance measures aligned with New Jersey Medicaid as relates to health outcomes (e.g., safe sleep, child injury, developmental screening), whole person care (e.g., depression screening, well-child visit, postpartum care) and community integration (e.g., completed depression referrals, completed developmental referrals). We expect more families enrolled in NJHV to receive appropriate well-child visits, postpartum care, and well-woman visits consistent with clinical guidelines since home visitors across each of the models reinforce the importance of children and women receiving preventive health care services.

Below we present the *driver diagram* (Figure 4.1: NJHV Program Aims Driver Diagram) that delineates the pathway from policy to program aims. Here the secondary drivers represent the various services offered through the NJHV pilot.

Figure 4.1. NJHV Program Aims Driver Diagram

Aim	Primary Drivers	Secondary Drivers
<p>Related to Hypothesis 1, we expect that families served by NJHV will achieve comparable outcomes to families served by MIECHV. These outcomes are:</p> <p>In families served by NJHV, caregivers:</p> <ul style="list-style-type: none"> • Complete depression screening • Complete postpartum care • Complete referrals to care to address depressive symptoms <p>In families served by NJHV, children:</p> <ul style="list-style-type: none"> • Receive well-child visits • Are placed to sleep in a safe manner • Have reduced rates of injury-related ED visits • Are screened for developmental delay • Complete referrals to care to address developmental delays <p>Related to Hypothesis 2, we expect that families served by NJHV will achieve improved outcomes compared to families served by Medicaid alone. These outcomes are:</p> <p>In families served by NJHV, caregivers:</p> <ul style="list-style-type: none"> • Complete postpartum care • Complete well-visits • Reduce visits to Emergency Department (ED) 	<ul style="list-style-type: none"> • Caregivers understand the importance of their mental and physical health; their child’s health; safe sleep; and child development. • Caregivers have referrals to needed services related to their mental and physical health and that of their children and to services related to child development. • Caregivers and their children are enrolled in Medicaid and have healthcare coverage. • Caregivers have a medical home for themselves and their children where their family can attend well visits. • Caregivers plan logistics for completing medical visits and referrals to care. 	<ul style="list-style-type: none"> • Home visitors provide information and coaching to families about the importance of caregiver mental and physical health; child physical health; safe sleep; and child development. • Home visitors provide referrals to needed services related to mental and physical health for caregiver and children and to services related to child development. • Home visitors work with caregivers to enroll and maintain enrollment in Medicaid. • Home visitors work with caregivers to identify and maintain a relationship with a medical home for themselves and their children. • Home visitors work with caregivers to plan logistics for completing medical visits and referrals to care (i.e. transportation, childcare)

In families served by NJHV, children: <ul style="list-style-type: none"> • Receive well-child visits • Reduce visits to Emergency Department (ED) 		
		

We next detail the hypotheses and associated research questions that help assess the impact of NJHV. These are also summarized in Table 4.2. For all measures that have sufficient sample size, we will investigate differences by demographic and geographic characteristics (e.g., race/ethnicity and zip code).

Hypothesis 1: Families enrolled in NJHV achieve outcomes comparable to those reported for families enrolled in the MIECHV program in New Jersey.

Research Question 1a: Do families enrolled in NJHV achieve outcomes comparable to those reported for families enrolled in the MIECHV program in New Jersey with regard to **maternal and newborn health** (depression screening, well-child visit, postpartum care)?

Research Question 1b: Do families enrolled in NJHV achieve outcomes comparable to those reported for families enrolled in the MIECHV program in New Jersey with regard to **child injuries and emergency department visits** (safe sleep, child injury)?

Research Question 1c: Do families enrolled in NJHV achieve outcomes comparable to those reported for families enrolled in the MIECHV program in New Jersey with regard to **school readiness and achievement** (developmental screening)?

Research Question 1d: Do families enrolled in NJHV achieve outcomes comparable to those reported for families enrolled in the MIECHV program in New Jersey with regard to **coordination and referrals** (completed depression referrals, completed developmental referrals)?

Hypothesis 2: Families enrolled in NJHV will achieve improved rates of preventive services for children and women and reduced emergency department visits and spending compared to those enrolled in Medicaid and not enrolled in NJHV or MIECHV.

Research Question 2a: Do children born to families enrolled in NJHV achieve higher rates of **preventive services for children (well-child visits)** compared to those reported for families enrolled in New Jersey Medicaid and not enrolled in NJHV or MIECHV?

Research Question 2b: Do birthing persons in families enrolled in NJHV achieve higher rates of **preventive services for women** (postpartum visits and well-woman visits) compared to those reported for families enrolled in New Jersey Medicaid and not enrolled in NJHV or MIECHV?

Research Question 2c: Do children born to families enrolled in NJHV and their birthing persons have lower emergency department (ED) visits, lower hospital admissions, and lower ED and inpatient spending compared to those reported for families enrolled in New Jersey Medicaid and not enrolled in NJHV or MIECHV?

C. Methodology

Table 4.1. Inventory of Measures

Measure		Brief Description
Maternal and Newborn Health, NJ Home Visiting Program Data		
1.	Depression screening	Percent of primary caregivers enrolled in home visiting who are screened for depression using a validated tool within 3 months of enrollment (for those not enrolled prenatally) or within 3 months of delivery (for those enrolled prenatally)
2.	Well-child visit	Percent of children enrolled in home visiting who received last recommended visit based on the American Academy of Pediatrics (AAP) periodicity schedule
3.	Postpartum care	Percent of mothers enrolled in home visiting prenatally or within 30 days after birth who received postpartum visit with healthcare provider within 8 weeks (56 days) of delivery
Child Injuries and Maltreatment, NJ Home Visiting Program Data		
4.	Safe sleep	Percent of infants enrolled in home visiting that are always placed to sleep on their backs, without bed-sharing and without soft bedding
5.	Child injury	Rate of injury-related visits to the Emergency Department (ED) during the reporting period among children enrolled in home visiting
School Readiness and Achievement, NJ Home Visiting Program Data		
7.	Developmental screening	Percent of children enrolled in home visiting with a timely screen for developmental delays using a validated parent-completed tool
Coordination and Referrals, NJ Home Visiting Program Data		
8.	Completed depression referrals	Percent of primary caregivers referred to services for a positive depression screen who receive one or more service contacts
9.	Completed developmental referrals	Percent of children enrolled in home visiting with positive screens for developmental delays (measured using a validated tool) who receive services in a timely manner
Preventive Services, Claims/Encounter data		
10.	Well-child care	Receipt of 6 visits in 15 months (Dichotomous: 0=No; 1= Yes) Number of visits in 15 months (Continuous: 0-6)
11.	Postpartum and well-woman visits	Receipt of post- partum visit 7-84 days after delivery (Dichotomous: 0=No; 1= Yes) Receipt of well-woman visit in past year (Dichotomous: 0=No; 1= Yes)
Emergency Department Use and Inpatient Hospitalizations, Claims/Encounter data		
12.	Emergency department visits and spending for birthing persons and newborns	Number of ED visits and associated spending in the <i>prenatal period</i> for <u>birthing persons</u> . Number of ED visits and associated spending in the 12 months <i>after delivery or end of pregnancy</i> for <u>birthing persons</u> .

		Number of ED visits and associated spending in the 12 months <i>after delivery for newborns</i> .
13.	Inpatient hospitalization and spending for birthing persons	<p>Individuals receive inpatient hospital treatment because of pregnancy and childbirth, for surgery, or for nonsurgical medical treatment. Using ICD-10, primary diagnoses for hospitalization will be placed into two categories: those with a primary diagnosis related to complications of pregnancy, childbirth, and the puerperium, and all other diagnoses.⁴¹</p> <p>Among those with any hospitalizations: -Length of inpatient hospitalizations in the <i>prenatal period</i> and in the 12 months <i>after delivery or end of pregnancy for birthing persons</i>.</p> <p>Payments on facility claims for inpatient hospitalizations, inflation adjusted.⁴²</p>

For hypothesis 1 and research questions 1a-1d

Study population: The study design is cross sectional. We will compare performance measures for clients enrolled in NJHV vs. MIECHV programs in New Jersey. To strengthen inferences about program impacts, we will use propensity matching along with multi-variable statistical modeling to adjust for differences between study groups.

Data sources: RQ1a-RQ1d rely on analysis of New Jersey home visiting data. **Table 4.2** defines the data sources for specific measures; each is defined as a continuous measure, specifically the percent of clients achieving the desired outcome or the rate of child injuries.⁴³ Home visiting agencies delivering home visiting services to clients in NJHV will collect similar outcomes data as those collected for clients in MIECHV; the data home visiting programs provide to the state comprises the NJ HV Data System.

Analytic strategy: Analytics for this aspect of the study will be conducted solely by JHU team. First, we will conduct descriptive analysis to compare characteristics of the NJHV sample and the MIECHV comparison group with regard to HV model, timing and duration of home visiting enrollment, demographic characteristics (race/ethnicity, primary language, maternal age, education, county) and health characteristics (parity, pre-term birth, health insurance). Second, we will explore creating a matched comparison group of MIECHV participants if the NJHV sample is limited to select counties, and will match based on insurance status, county, and other demographic and health characteristics. Third, we will compare percentages using regression analyses and adjust for baseline differences in characteristics as needed. We also will examine

⁴¹ Maria W. Steenland and Laura R. Wherry, “Medicaid Expansion Led To Reductions In Postpartum Hospitalizations,” *Health Affairs* 42, no. 1 (January 2023): 18–25, <https://doi.org/10.1377/hlthaff.2022.00819>.

⁴² “CPI Inflation Calculator,” U.S. Bureau of Labor Statistics, accessed September 6, 2023, https://www.bls.gov/data/inflation_calculator.htm.

⁴³ <https://mchb.hrsa.gov/sites/default/files/mchb/programs-impact/performance-indicators-sys-outcomes-summary.pdf>

comparisons between the NJHV sample and MIECHV comparison group within each study year; we will pool data if findings are consistent over time and/or include time as covariate in the models. Lastly, we will explore demographic and geographic differences across outcomes. As such, models may be stratified by race/ethnicity, zip code, and other demographic or geographic characteristics as appropriate to estimate results separately where sample size is sufficient. This analytic strategy will be applied to all research questions and hypotheses in order to understand disparities in outcomes related to the NJHV pilot.

Human Subjects considerations: When a client enrolls in a home visiting program in New Jersey, they complete two consent forms. One consent form for receipt of services and the data collection involved in service provision. A second consent form that enables their program data to be used for evaluation and quality improvement. Addressing the Hypothesis 1 research questions will require that DMAHS ensure that all NJHV participants complete the required consent forms.

The JHU team receives home visiting program data for consenting clients with identifiers. To maximize protection against breaches of confidentiality, the JHU team has a dedicated, secure server which houses these data. The JHU server is accessible only to those on the JHU team with direct data management and analysis responsibilities. The server is located in a locked rack in a restricted access, locked space in the Johns Hopkins Bloomberg School of Public Health building. The server provides two layers of firewall security: at both the network and server level. On the network level there are hardware firewalls between the outside internet and secure perimeter network. These hardware devices are managed by an independent IT consulting group. Windows Firewall is installed on the server to help protect it at the local level. Data are encrypted in transit and at rest. Accounts for the server are configured so that only the partitions for which they have been approved to use are accessible. Accounts are also configured by project to ensure that read/write access is provided according to guidelines made by data providers. Access to the internet is disabled for all user accounts. Strong passwords are required for all accounts. Client identifiers will be removed to create files for analysis. The JHU team will conduct all data analysis on the server.

To further ensure the minimum necessary access to identifying information, the CSHP team will not have access to client consent forms or client identifiers. (CSHP will require the NJHV program participation information be available to them in de-identified encounter and claims files). In addition, as discussed above, the JHU team will not have access to individual level Medicaid encounter or claims records. They will receive only aggregated statistical results of analyses of Medicaid encounter/claims data.

For hypothesis 2 and research questions 2a-2c

Study population: The study design is cross sectional. We will compare Medicaid clients enrolled in NJHV to Medicaid clients not enrolled in NJHV or MIECHV programs. To strengthen inferences about program impacts, we will use propensity matching along with multi-variable statistical modeling to adjust for differences between study groups.

Data sources: RQ2a-RQ2c rely on analysis of Medicaid encounter and claims data. **Table 4.2** defines the data sources for each measure; each, except ED visits and inpatient hospitalizations and associated spending, are defined as dichotomous measures indicating whether a client

received a specific health care service. ED visits and inpatient hospitalizations and associated spending are measured as continuous variables. In addition, although the binary outcome measures the desired outcome, we will also use a continuous measure of the number of well-child visits in RQ2a.

Analytic strategy: Analytics for this aspect of the study will be conducted solely by Rutgers team. First, we will follow methods developed by DMAHS we will link Medicaid claims for the mother and child and then link those records to New Jersey birth records. (Birth record linkage will follow other CSHP Medicaid work preserving de-identification of Medicaid records.) Second, we will create a propensity matched comparison group (5 matches/participant) on the basis of demographic characteristics (race/ethnicity, primary language, maternal age, education, county) and birth characteristics (parity, plurality, birthweight). Excluded from the matched comparison group will be families enrolled in Medicaid and participating in MIECHV. Removing records of participants in these alternative home visiting programs will require matching program participation records to Medicaid claims. Third, we will use regression analyses to compare differences in outcomes for NJHV and families in Medicaid not participating in alternative home visiting programs. Fourth, among the NJHV families, we also will explore differences in outcomes among the 3 different HV models if sufficient numbers of families are enrolled in each and claims records support identification of program model. Fifth, among the NJHV families, we will explore whether number of home visits is associated with outcomes. Finally, for RQ2c (total Medicaid spending), we will compare spending changes to per-family NJHV participation costs. We will rely on DMAHS to provide program costs data, although can provide guidance on the collection of cost data if needed. Lastly, we will explore demographic and geographic differences across outcomes. Models may be stratified by race/ethnicity, zip code, and other demographic or geographic characteristics as appropriate to estimate results separately where sample size is sufficient. This analytic strategy will be applied to all research questions and hypotheses in order to understand disparities in outcomes related to the NJHV pilot.

Human Subjects considerations: The Rutgers CSHP evaluation team will use only a de-identified Limited Data Set for this and other components of the waiver evaluation. Execution of data linkages that require identifiers will be conducted by DMAHS or a trusted third party that they designate. Birth record data will be provided by the Integrated Population Health Data (iPHD) Project, which is managed by CSHP. To prevent the possibility of re-identification, CSHP staff using identifiable birth record data (“iPHD team”) will not participate in the analyses described herein and CSHP staff working in Medicaid claims for this analysis (“Waiver team”) will not have access to identified iPHD records. To execute the linkage, the iPHD team will send a finder file that contains identifiers and a study ID to DMAHS (or its designee) and provide de-identified birth record information to the Waiver team with the Study ID but no direct identifiers. Once the linkage is executed, DMAHS (or its designee) will share a crosswalk file containing only study IDs that do not include information that could be used to re-identify study subjects with the Waiver team.

Table 4.2: Summary of Questions, Hypotheses and Methodology

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic methods
<i>Hypothesis 1- Families enrolled in NJHV achieve outcomes comparable to those reported for families enrolled in the MIECHV program in New Jersey</i>				
RQ1a. Do families enrolled in NJHV achieve outcomes comparable to those reported for families enrolled in the MIECHV program in New Jersey with regard to maternal and newborn health (depression screening, well-child visit, postpartum care)?	<ul style="list-style-type: none"> • Depression screening (Continuous: Percent) • Well-child visit (Continuous: Percent) • Postpartum care (Continuous: Percent) 	Birthing people and newborns in New Jersey, participating in NJHV compared to propensity score matched dyads enrolled in MIECHV.	NJ Home Visiting Program Data	Examine differences in outcomes, descriptively and through regression analysis
RQ1b. Do families enrolled in NJHV achieve outcomes comparable to those reported for families enrolled in the MIECHV program in New Jersey with regard to child injuries and emergency department visits (safe sleep, child injury)?	<ul style="list-style-type: none"> • Safe sleep (Continuous: Percent) • Child injury (Continuous: Rate) 	Newborns in New Jersey, participating in NJHV compared to propensity score matched dyads enrolled in MIECHV.	NJ Home Visiting Program Data	Examine differences in outcomes, descriptively and through regression analysis
RQ1c. Do families enrolled in NJHV achieve outcomes comparable to those reported for families enrolled in the MIECHV program in New Jersey with regard to school readiness and achievement (developmental screening)?	<ul style="list-style-type: none"> • Developmental screening (Continuous: Percent) 	Newborns in New Jersey, participating in NJHV compared to propensity score matched dyads enrolled in MIECHV.	NJ Home Visiting Program Data	Examine differences in outcomes, descriptively and through regression analysis

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic methods
RQ1d. Do families enrolled in NJHV achieve outcomes comparable to those reported for families enrolled in the MIECHV program in New Jersey with regard to coordination and referrals (completed depression referrals, completed developmental referrals)?	<ul style="list-style-type: none"> Completed depression referrals (Continuous: Percent) Completed developmental referrals (Continuous: Percent) 	Birthing people and newborns in New Jersey, participating in NJHV compared to propensity score matched dyads enrolled in MIECHV.	NJ Home Visiting Program Data	Examine differences in outcomes, descriptively and through regression analysis
Hypothesis 2- Families enrolled in NJHV will achieve improved rates of preventive services for children and women and reduced emergency department visits and spending compared to those not enrolled in NJHV or MIECHV				
RQ2a. Do children born to families enrolled in NJHV achieve higher rates of well-child visits compared to those enrolled in New Jersey Medicaid and not enrolled in NJHV or MIECHV?	Well-child care: <ul style="list-style-type: none"> Receipt of 6 visits in 15 months (Dichotomous: 0=No; 1= Yes) Number of visits in 15 months (Continuous: 0-6) 	NJHV and Other Medicaid (not enrolled in MIECHV)	Medicaid Fee-for-Service and Encounter Claims Records	Examine differences in outcomes, descriptively and through regression analysis
RQ2b. Do birthing persons in families enrolled in NJHV achieve higher rates of preventive services for women (postpartum visits and well-woman care) compared to those reported for families enrolled in New Jersey Medicaid and not enrolled in NJHV or MIECHV?	<ul style="list-style-type: none"> Receipt of post- partum visit 7-84 days after delivery (Dichotomous: 0=No; 1= Yes) Receipt of well-woman visit in past year (Dichotomous: 0=No; 1= Yes) 	NJHV and Other Medicaid (not enrolled in MIECHV)	Medicaid Fee-for-Service and Encounter Claims Records	Examine differences in outcomes, descriptively and through regression analysis
RQ2c. Do children born to families enrolled in NJHV and their birthing persons have lower emergency department (ED) visits, lower	<ul style="list-style-type: none"> Number of ED visits and associated spending in the prenatal period and 12 months after delivery or end of pregnancy for birthing persons 	NJHV and Other Medicaid (not enrolled in MIECHV)	Medicaid Fee-for-Service and Encounter	Examine differences in outcomes, descriptively and

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic methods
hospital admissions, and lower ED and inpatient spending compared to those reported for families enrolled in New Jersey Medicaid and not enrolled in NJHV or MIECHV?	<ul style="list-style-type: none"> • Number of ED visits and associated spending in the prenatal period and 12 months after delivery for newborns • Number of inpatient hospitalizations and associated spending in the prenatal period and 12 months after delivery for birthing persons 		Claims Records	through regression analysis

Table 4.3 shows an activity timeline for the research activities.

Table 4.3 Key Milestones, New Jersey Home Visiting Pilot (NJHV) Program

Analytic Activity	Year 1 2025	Year 2 2026	Year 3 2027	Year 4 2028	Year 5 2029	Year 6 2030
1. School readiness and achievement, quality of care, health service utilization, and referrals assessment: Analyze NJ Home Visiting Program Data (RQ1a-RQ1d)	Establish agreement with RU/JHU	Conduct analysis	Complete interim analysis		Conduct analysis	Complete analysis
2. Quality of care, health service utilization, and spending assessment: Link and analyze MMIS and birth record data (RQ2a-RQ2c)	Define appropriate population and customized metrics for MMIS analysis (includes program cost variables)	Finalize linkage of MMIS and birth record data sets and conduct baseline analysis	Complete interim analysis of linked data	Update linkage & analysis	Update linkage & analysis	Complete analysis of linked data
3. Submit reports to CMS			Interim report			Final report

RQ=Research Question.

NOTE: Evaluation project years are March-Feb. (subject to change depending on date of authorization to begin).

D. Methodological Limitations

Design: First, the goal of the pilot program is to enroll up to 500 eligible families per demonstration year. Elements of the analysis may be statistically underpowered to detect differences attributed from the pilot given the limitations of a program of this size. Second, the study design is cross sectional. As such, our analyses do not assess causality and we may observe systematic differences between the sample and comparison groups. We will assess and adjust for baseline differences in demographic and birth characteristics. To the extent that NJHV participants are distributed across 3 home visiting models and sample sizes and data permit, we will examine differences in subgroups and comparisons by home visiting model.

Data sources/collection: For Hypothesis 1, we rely on existing home visiting data systems. However, programmatic data are collected, in part, for federal evaluation purposes and New Jersey engages in continuous quality improvement efforts to enhance data quality. In these analyses, we focus on New Jersey performance measures with more complete data and robust denominators. We will rely on DMAHS to obtain and provide programmatic data from NJHV program participants using the standard instruments to be provided by JHU.

We rely on Medicaid claims data for Hypothesis 2. As such, we are limited in available measures. However, the selected measures are among those proximate to receipt of home visiting, important for promoting maternal and child health, and aligned with both MIECHV and HEDIS performance measures.

Methods: Hypothesis 1: Some APR measures have small denominators limiting ability to detect differences; we focused in this evaluation strategy on measures with more robust denominators. Some APR data have significant missing data, similarly, these measures are not included.

For Hypothesis 2, we rely on proximate outcomes. While families on average remain in home visiting for < 1 year, well-child visit outcome over first 15 months reflects that health seeking behaviors start early and that home visiting has potential to impact health seeking behaviors.

Impact of additional supportive programs: Beneficiaries of NJHV may also be receiving home visits through other supportive services. Specifically, birthing individuals may be receiving doula care, which typically involves home visits throughout the perinatal period. Also, NJ has launched universal home visiting (Family Connects NJ) in 5 counties in 2024, with plans for statewide availability by the end of the demonstration period. Family Connects NJ is not as intensive as the NJHV models, typically involving a single visit in the immediate postpartum period. We will attempt to control for participation in these supportive services, as the intended impacts of these services align with those of the NJHV pilot. Use of NJ Medicaid community doula services can be identified if Medicaid claims are submitted for those services. JHU is involved in evaluating Family Connects NJ for New Jersey and will be able to identify families receiving Family Connects NJ visits for the purposes of the NJHV evaluation.

5. Medically Indicated Meals Pilot

A. General Background Information

In this section, we describe the plan to evaluate the impact of a Medically Indicated Meals (MIM) pilot designed to address the dietary needs of pregnant people with a diagnosis of either pre-existing diabetes and/or gestational diabetes. The pilot will support the delivery of medically indicated meals to up to 300 eligible pregnant people per demonstration year.

Under this initiative, New Jersey will partner with selected Managed Care Organizations (MCOs) which will contract with meal preparation vendors to provide medically indicated meals to qualifying pregnant people. Selected vendors will provide medically indicated meals, which are to be made fresh and either delivered locally or shipped. Each meal delivery will come with information on how to store, heat, and keep the meals fresh, as well as information explaining how to recreate the meals at home.

Gestational diabetes is a key risk factor for adverse perinatal outcomes. Medical Nutrition Therapy (MNT), which aims to address dietary risk factors among pregnant women, is a critical intervention to address gestational diabetes.⁴⁴ Research has shown that combining MNT with medically appropriate home-delivered meals supports better health outcomes and significantly reduces costs for the health care system by keeping patients in their homes rather than in hospitals or nursing homes.⁴⁵ A recent study conducted by the University of North Carolina School of Medicine showed positive results for high healthcare utilizing participants who received medically tailored meal intervention.⁴⁶ The authors found that through 18 months of follow-up, participants showed a 70% decrease in emergency department use, a 50% reduction in hospitalization rates, and a decrease of \$220 in health care costs per participant per month. Another study conducted by Health Partner Plans concluded similar results finding that patients who received medically tailored meals three times a day, seven days a week for 6 to 18 weeks experienced a reduction of 19% in medical costs per month, as well as decreases in inpatient admission and emergency room visits by 26% and 7%, respectively.⁴⁷

New Jersey is seeking to study the effectiveness of the implementation of the MIM pilot and to test the effect of the pilot on perinatal outcomes and expenditures, paying particular attention to health disparities in access and outcomes.

⁴⁴ Neda Dolatkah, Majid Hajifaraji, and Seyed Kazem Shakouri, “Nutrition Therapy in Managing Pregnant Women With Gestational Diabetes Mellitus: A Literature Review,” *Journal of Family & Reproductive Health* 12, no. 2 (June 2018): 57–72. No Reference

⁴⁵ Laura C. Kusinski et al., “Dietary Intervention in Pregnant Women with Gestational Diabetes; Protocol for the DiGest Randomised Controlled Trial,” *Nutrients* 12, no. 4 (April 2020): 1165, <https://doi.org/10.3390/nu12041165>.

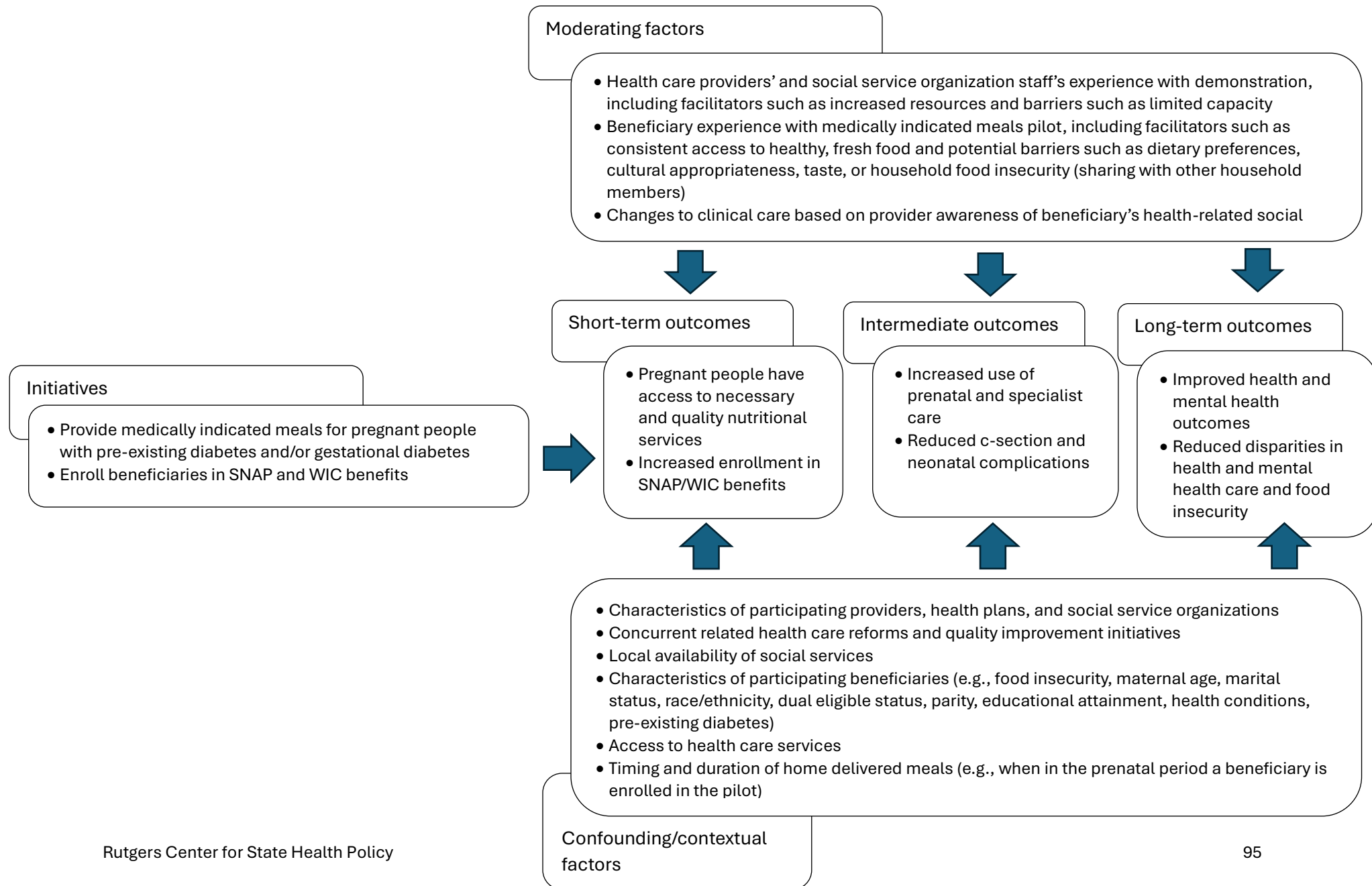
⁴⁶ Seth A. Berkowitz et al., “Meal Delivery Programs Reduce The Use Of Costly Health Care In Dually Eligible Medicare And Medicaid Beneficiaries,” *Health Affairs* 37, no. 4 (April 2018): 535–42, <https://doi.org/10.1377/hlthaff.2017.0999>.

⁴⁷ “Food as Medicine Model: A Framework for Improving Member Health Outcomes and Lowering Health Costs” (Health Partners Plans, 2018), <https://www.healthpartnersplans.com/media/100225194/food-as-medicine-model.pdf>.

B. Evaluation Questions and Hypotheses

Our evaluation of the Medically Indicated Meals Pilot includes an implementation study as well as research questions related to demonstration outcomes. Figure 5.1 is a logic model showing the implementation questions and the expected outcomes.

Figure 5.1 Medically Indicated Meals Logic Model



1. Implementation Study

To understand the implementation of the medically indicated meals pilot, researchers will review available administrative data and monitoring reports and conduct in-depth individual interviews with entities responsible for the demonstration such as MCOs and their vendors, DMAHS staff, other state and local experts such as health-care providers serving at-risk Medicaid beneficiaries, and other key informants involved in the implementation of the pilot itself. The complete interview guide for proposed implementation questions modeled on the suggested implementation questions in CMS' technical assistance guide for evaluating health related social needs can be found in the Appendix. These questions will provide context for quantitative analyses and assess the design and implementation of the MIM pilot.

1.1 Methodology

Data Collection: In-depth individual interviews will be conducted using semi-structured, open-ended questions that probe key informants on their experiences implementing the medically indicated meals pilot, identifying how roles or participation changed throughout the demonstration period. Interviews will offer insights into pilot implementation as well as identifying barriers and opportunities to improve the pilot. Participant recruitment will be based on criteria established during protocol development and will primarily involve staff and key informants with existing relationships to the evaluators such as MCOs and their vendors, DMAHS staff, and other state and local experts. Up to 20 interviews of approximately 45-60 minutes will be completed, with attention to diversity by MCO and geographical region. Key informant interviewees participating in their professional roles (e.g., DMAHS, MCO staff, vendors) will not be offered participation incentives, but others (e.g., community advocates) will receive a \$50 participation incentive. Interviews will be conducted virtually over Zoom and transcribed.


Analytic Strategy for Interview Data: NVivo or similar software will be used to analyze for themes. A general inductive approach will be used to allow for themes to emerge. Where appropriate, themes will be categorized as a barrier or facilitator to provide a coherent analysis to MCOs on the implementation of the medically indicated meals pilot.

2. Outcomes Study

We posit that home delivered medically indicated meals for pregnant people with pre-existing diabetes and/or gestational diabetes will improve perinatal outcomes. Additionally, while the pilot will have costs associated with the meal delivery, we anticipate potential reductions in Medicaid expenditures receiving the meals.

Below we present the *driver diagram* (Figure 5.2: Medically Indicated Meals Driver Diagram) that delineates the pathway from the pilot to improved outcomes. Here the secondary drivers represent the services available to pregnant people.

Figure 5.2: Medically Indicated Meals Driver Diagram

Aim	Primary Drivers	Secondary Drivers
<p>1.A. Ensure that eligible pregnant people have access to necessary and quality nutritional services to improve perinatal outcomes</p> <ul style="list-style-type: none"> -Improve access to prenatal and postpartum care -Reduce delivery and neonatal complications -Improve maternal mental health and nutritional adequacy -For population with gestational diabetes, reduce incidence of long-term diabetes diagnosis after the end of pregnancy <p>1.B. Reduce disparities among birthing people with gestational and/or existing diabetes</p>	<p>Address the dietary needs of pregnant people with pre-existing diabetes and/or gestational diabetes, like those related to diet and food insecurity.</p>	<ul style="list-style-type: none"> • Provide medically indicated meals for pregnant people with pre-existing diabetes and/or gestational diabetes • Enroll more beneficiaries in SNAP and WIC benefits
<p style="text-align: center;">  Causality </p>		

We next detail the hypotheses and corresponding research questions that help assess the impact of the pilot on perinatal outcomes and expenditures. For all measures that have sufficient sample size, we will investigate differences by demographic and geographic characteristics (e.g., race/ethnicity and county).

Hypothesis 2.1: Implementing a pilot that meets the dietary needs of pregnant people with a diagnosis of either pre-existing diabetes and/or gestational diabetes will improve access to and quality of care for both pregnant persons and infants.

Research Question 2.1a: What is the impact of providing medically indicated meals to pregnant people with pre-existing and/or gestational diabetes on **prenatal and specialist care, postpartum and well-woman visits, well-child care, postpartum glucose screening, emergency room (ED) visits, and hospital admissions?**

Research Question 2.1b: What is the impact of providing medically indicated meals to pregnant people with pre-existing and/or gestational diabetes on **type of delivery (e.g., cesarean deliveries) and neonatal complications (e.g., birth weight)?**

Hypothesis 2.2: Implementing a pilot that meets the dietary needs of pregnant people with a diagnosis of either pre-existing diabetes and/or gestational diabetes will improve maternal mental health and reduce indicators of nutritional inadequacy.

Research Question 2.2a: What is the impact of providing medically indicated meals to pregnant people with pre-existing and/or gestational diabetes on **screening and rates of anxiety and depression?**

Research Question 2.2b: What is the impact of providing medically indicated meals to pregnant people with pre-existing and/or gestational diabetes on **indicators of nutritional inadequacy?**

Hypothesis 2.3: Implementing a pilot that meets the dietary needs of pregnant people with a diagnosis of either pre-existing diabetes and/or gestational diabetes will change the levels and balance of spending on maternal and neonatal expenditures.

Research Question 2.3a: What is the impact of providing medically indicated meals to pregnant people with pre-existing and/or gestational diabetes on the levels and balance of **spending on inpatient hospitalizations, ED visits, and outpatient expenditures?**

2.1 Methodology

Outcomes:

We will assess the outcomes listed in Table 5.1 below using Medicaid fee-for-service and encounter claims records.

Table 5.1: Inventory of Measures

Measure		Brief Description
Utilization of Care		
1.	Prenatal care	<p>Number of prenatal care visits with primary provider (OBGYN or equivalent).</p> <p>Number of visits with maternal fetal medicine specialist.</p> <p>Number and timing of ultrasounds conducted (e.g., week 18 to 20, week 28, and 32 to 36).</p>
2.	Postpartum and well-woman visits	<p>Receipt of postpartum visit 7-84 days after delivery. (Dichotomous: 0=No; 1=Yes)</p> <p>Receipt of well-woman visit in past year. (Dichotomous: 0=No; 1=Yes)^{48, 49}</p>
3.	Well-child care	<p>Receipt of 6 visits in 15 months. (Dichotomous: 0=No; 1=Yes)</p> <p>Number of visits in 15 months. (Continuous: 0-6)</p>

⁴⁸ American College of Obstetricians and Gynecologists (ACOG). (2018). Optimizing Postpartum Care. ACOG Committee Opinion No. 736. Obstet Gynecol, 131:140-150.

⁴⁹ HEDIS measure: <https://www.ncqa.org/hedis/measures/prenatal-and-postpartum-care-ppc/>

4.	Emergency department (ED) visits	<p>Number of ED visits in the <i>prenatal period</i> for <u>birthing persons</u>.</p> <p>Number of ED visits in the 12 months <i>after delivery or end of pregnancy</i> for <u>birthing persons</u>.⁵⁰</p> <p>Number of ED visits in the 12 months <i>after delivery</i> for <u>newborns</u>.</p>
5.	Inpatient hospitalization	<p>Individuals receive inpatient hospital treatment because of pregnancy and childbirth, for surgery, or for nonsurgical medical treatment. Using ICD-10, primary diagnoses for hospitalization will be placed into two categories: those with a primary diagnosis related to complications of pregnancy, childbirth, and the puerperium (including gestational diabetes), and all other diagnoses.⁵¹</p> <p>Among those with any hospitalizations: -Length of inpatient hospitalizations in the <i>prenatal period</i> and in the 12 months <i>after delivery or end of pregnancy</i> for <u>birthing persons</u>.⁵²</p>
6.	Type of delivery	Cesarean delivery method. ⁵³ (Dichotomous: 0=No; 1=Yes)
7.	Birth weight	Low birth weight. ⁵⁴ (Dichotomous: 0=No; 1=Yes)
Quality		
8.	Glucose screening	<i>Postpartum</i> glucose screening in the 6-12 weeks after the end of pregnancy (ACOG recommendation). ⁵⁵

⁵⁰ Clark, S. L. et al. (2010). Emergency department use during the postpartum period: implications for current management of the puerperium. *American Journal of Obstetrics and Gynecology*, 203(1), 38.e1-38.e6. <https://doi.org/10.1016/j.ajog.2010.02.033>; Harris, A. et al. (2015). Emergency room utilization after medically complicated pregnancies: a Medicaid claims analysis. *Journal of Women's Health*, 24(9), 745-754.

⁵¹ Maria W. Steenland and Laura R. Wherry, "Medicaid Expansion Led To Reductions In Postpartum Hospitalizations," *Health Affairs* 42, no. 1 (January 2023): 18–25, <https://doi.org/10.1377/hlthaff.2022.00819>.

⁵² Garrison, E.A. & Jagasia, S. (2014). Inpatient management of women with gestational and pregestational diabetes in pregnancy. *Current Diabetes Reports*, 14(2), 457. <https://doi.org/10.1007/s11892-013-0457-x>.

⁵³ Nayak et al., "Feto-Maternal Outcomes in Women with and without Gestational Diabetes Mellitus According to the International Association of Diabetes and Pregnancy Study Groups (IADPSG) Diagnostic Criteria"; Wenrui Ye et al., "Gestational Diabetes Mellitus and Adverse Pregnancy Outcomes: Systematic Review and Meta-Analysis," *BMJ* 377 (May 25, 2022): e067946, <https://doi.org/10.1136/bmj-2021-067946>.

⁵⁴ Nayak et al., "Feto-Maternal Outcomes in Women with and without Gestational Diabetes Mellitus According to the International Association of Diabetes and Pregnancy Study Groups (IADPSG) Diagnostic Criteria"; Ye et al., "Gestational Diabetes Mellitus and Adverse Pregnancy Outcomes."

⁵⁵ American College of Obstetricians and Gynecologists, "Gestational Diabetes Mellitus. ACOG Practice Bulletin No. 190," *Obstetrics & Gynecology* 131, no. 2 (2018): e49-64, <http://dx.doi.org/10.1097/AOG.0000000000002501>.

		(Dichotomous: 0=No; 1=Yes)
9.	Screening and rates of anxiety and depression	<p>Individuals receive <i>prenatal</i> depression screening (yes/no). Number of times screened (ACOG recommends at least 1 screening in prenatal period).⁵⁶</p> <p>ICD-10 Mental Health diagnosis codes at different periods (e.g., <i>10 to 14 weeks, 24-28 weeks, and 30 to 32 weeks of pregnancy</i>).⁵⁷</p> <p>Individuals receive <i>postpartum</i> depression screening at either maternal or infant follow-up visit (yes/no).⁵⁸</p> <p>Number of times screened (AAP recommends screenings at 1-, 2-, 4-, and 6-month well-infant visits).⁵⁹</p> <p>ICD-10 Mental Health diagnosis codes at different periods (e.g., <i>1 month postpartum, 2 months, 4 months, and 6 months</i>).</p>
10.	Nutritional adequacy	<p>Incidents of ICD-10 Codes that measure nutritional adequacy in the <i>prenatal and postpartum</i> periods: Z59.4 Lack of adequate food and safe drinking water⁶⁰</p> <p>O25 Malnutrition in pregnancy, childbirth and the puerperium</p>
Spending		

⁵⁶ “Committee Opinion No. 630: Screening for Perinatal Depression,” *Obstetrics & Gynecology* 125, no. 5 (May 2015): 1268, <https://doi.org/10.1097/01.AOG.0000465192.34779.dc>.

⁵⁷ B. N. Gaynes et al., “Perinatal Depression: Prevalence, Screening Accuracy, and Screening Outcomes: Summary,” in *AHRQ Evidence Report Summaries* (Agency for Healthcare Research and Quality (US), 2005), <https://www.ncbi.nlm.nih.gov/books/NBK11838/>; D. D. Affonso et al., “A Standardized Interview That Differentiates Pregnancy and Postpartum Symptoms from Perinatal Clinical Depression,” *Birth (Berkeley, Calif.)* 17, no. 3 (September 1990): 121–30, <https://doi.org/10.1111/j.1523-536x.1990.tb00716.x>.

⁵⁸ HEDIS measure: <https://www.ncqa.org/hedis/measures/postpartum-depression-screening-and-follow-up/>

⁵⁹ “Integrating Postpartum Depression Screening in Your Practice in 4 Steps,” American Academy of Pediatrics, accessed January 24, 2024, <https://www.aap.org/en/patient-care/perinatal-mental-health-and-social-support/integrating-postpartum-depression-screening-in-your-practice-in-4-steps/>.

⁶⁰ S DeSilvey et al., “An Overview of Food Insecurity Coding in Health Care Settings: Existing and Emerging Opportunities.” (Boston, MA: Hunger Vital Sign™ National Community of Practice, 2018), <http://childrenshealthwatch.org/foodinsecuritycoding/>.

11.	Spending related to inpatient hospitalizations and ED visits	Payments on facility claims for inpatient and ED visits, inflation adjusted. ⁶¹
12.	Spending related to outpatient care	Payments on claims for outpatient care (e.g., prenatal care, postpartum and well-woman visits, well-child care, glucose screening, etc.), inflation adjusted. ⁶²

For hypothesis 2.1-2.3 and research questions 2.1a-2.1b, 2.2a-2.2b, and 2.3a

Study population and comparison group: Our study population comprises pregnant people with a diagnosis of either pre-existing diabetes and/or gestational diabetes. The treatment group would be those who are enrolled in the selected MCO and receive meals through the pilot. The comparison group will consist of eligible pregnant people (i.e., have a diagnosis of either pre-existing and/or gestational diabetes), but who do not receive meals through the pilot.

Analytic strategy: We will conduct descriptive trend analysis and utilize a difference-in-differences (DID) design, sample size permitting, to estimate the effects of the pilot on medical and neonatal complications for the study population relative to the comparison group, both defined above. For these models, an interaction variable between exposure group (individuals who receive meals through the pilot) versus control group (individuals within the same MCO, but who did not receive meals through the pilot) and an indicator variable for pre-policy or post-policy will be constructed. For spending analysis, trends will be compared between treatment and control group before and after the implementation of the pilot and differentiate between spending over time comparing avoidable spending (e.g., ED visits, hospital admissions) to preventative care spending (e.g., prenatal visits, postpartum and well-woman visits, etc.). We will produce bar charts and line diagrams to examine types of spending and trends. We will rely on trend analyses to differentiate between spending that positively increases because of higher utilization of preventative care vs spending on preventable ED visits as a result of inadequate ambulatory/primary care use within communities. We will estimate a linear probability model for binary outcomes (e.g., ED visits, hospital admissions, postpartum and well-woman visits, well-child visits, cesarean delivery, low birth weight, depression screening, glucose screening) and ordinary least squares regression for remaining utilization and spending outcomes. Given sufficient sample size, regressions will control for maternal and infant demographic characteristics (e.g., food insecurity, maternal age, marital status, race/ethnicity, dual eligible status, parity, educational attainment, presence of comorbidities, pre-existing diabetes diagnosis) with adjustments such as zip code and year fixed effects to control for any time-invariant geographic variation and time-specific effects. Models may also control for duration of enrollment in the pilot to estimate when a beneficiary started receiving meals in the perinatal period. Efforts to account for autocorrelation, such as the use of robust standard errors clustered by zip code, will also be implemented.

The model is specified below:

⁶¹ “CPI Inflation Calculator,” U.S. Bureau of Labor Statistics, accessed September 6, 2023, https://www.bls.gov/data/inflation_calculator.htm.

⁶² “CPI Inflation Calculator.”

$$Outcome_{it} = \alpha_0 + \alpha_1(TreatmentGroup)_i + \alpha_2(Post)_{it} + \alpha_3(TreatmentGroup * Post)_{it} + \lambda X_{it} + \varepsilon_{it}$$

$Outcome_{it}$ represents the outcome of interest for an individual respondent i in year t . α represents the coefficients that correspond to each model component. The interaction term of $TreatmentGroup * Post$ yields the difference-in-differences estimator (the α_3 coefficient), which estimates how much outcomes changed among individuals receiving medically indicated meals after the pilot implementation relative to outcomes among individuals who do not receive meals. X_i represents a set of control variables, with λ being the corresponding coefficients for each variable in X , for individual i at time t . ε represents the stochastic error term.

A primary assumption for a valid DID inference is parallel pre-treatment trends.⁶³ This assumption is necessary to indicate whether, in the absence of the policy change, the trends in outcomes would have been similar between treatment and comparison groups. Event studies will be conducted to establish the parallel trends hold for all groups. If the parallel trends assumption is violated, we will explore alternative strategies such a lagged dependent variable regression approach and matching on past outcomes.⁶⁴

There may be demographic and geographic differences in access, utilization, and spending outcomes. As a result, logit regressions will be utilized to predict pilot enrollment by demographic and clinical factors, including race/ethnicity and geographic region. Additionally, models may be stratified by race/ethnicity, county, and other demographic or geographic characteristics (e.g., nulliparous, pre-existing diabetes diagnosis, etc.) as appropriate to estimate results separately where sample size is sufficient. This analytic strategy will be applied to all research questions and hypotheses in order to understand disparities in outcomes related to the medically indicated meals pilot.

⁶³ Angrist JD, Pischke J-S. *Mostly harmless econometrics: an empiricist's companion*, Princeton: Princeton University Press, 2009; Ryan et al. (2018). Now trending: Coping with non-parallel trends in difference-in-differences analysis. *Statistical Methods in Medical Research*, 28(12). <https://doi.org/10.1177/0962280218814570>

⁶⁴ O'Neill S, Kreif N, Grieve R, Sutton M, Sekhon JS. Estimating causal effects: considering three alternatives to difference-in-differences estimation. *Health Services and Outcomes Research Methodology*. 2016 Jun;16:1-21.

Table 5.2: Summary of Questions, Hypotheses and Methodology

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic Methods
<i>Hypothesis 2.1: Implementing a pilot that meets the dietary needs of pregnant people with a diagnosis of either pre-existing diabetes and/or gestational diabetes will improve access to and quality of care for both pregnant persons and infants.</i>				
RQ2.1a: What is the impact of providing medically indicated meals to pregnant people with pre-existing and/or gestational diabetes on prenatal and specialist care, postpartum and well-woman visits, well-child care, postpartum glucose screening, emergency room (ED) visits, and hospital admissions?	<ul style="list-style-type: none"> -Number of prenatal care visits with primary provider (OBGYN or equivalent) -Number of visits with maternal fetal medicine specialist -Postpartum and well-woman visits -Well-child care -Number and timing of ultrasounds conducted (e.g., week 18 to 20, week 28, and 32 to 36) -ED visits in the prenatal and postpartum period -Inpatient hospital stay for pregnancy/postpartum related cause -Length of inpatient hospitalizations -Postpartum glucose screening 	<ul style="list-style-type: none"> -Pregnant people who receive home delivered meals compared to those who are also eligible, but do not receive meals. -Infants whose parent received home delivered meals compared to those who had an eligible parent, but did not receive meals. 	Medicaid Fee-for-Service and Encounter Claims Records	Difference-in-differences & descriptive adjusted trend analyses
RQ2.1b: What is the impact of providing medically indicated meals to pregnant people with pre-existing and/or gestational diabetes on type of delivery (e.g., cesarean deliveries) and neonatal complications (e.g., birth weight)?	<ul style="list-style-type: none"> -Cesarean delivery -Low birth weight 	As above	As above	As above

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic Methods
<i>Hypothesis 2.2: Implementing a pilot that meets the dietary needs of pregnant people with a diagnosis of either pre-existing diabetes and/or gestational diabetes will improve maternal mental health and reduce indicators of nutritional inadequacy.</i>				
RQ2.2a: What is the impact of providing medically indicated meals to pregnant people with pre-existing and/or gestational diabetes on screening and rates of anxiety and depression?	-Timing and number of depression screenings -ICD-10 Mental Health diagnosis codes at different periods (e.g., 10 to 14 weeks, 24-28 weeks, and 30 to 32 weeks of pregnancy) -ICD-10 Mental Health diagnosis codes at different periods (e.g., 1 month postpartum, 2 months, 4 months, and 6 months).	Pregnant people who receive home delivered meals compared to those who are also eligible, but do not receive meals.	Medicaid Fee-for-Service and Encounter Claims Records	Difference-in-differences & descriptive adjusted trend analyses
RQ2.2b: What is the impact of providing medically indicated meals to pregnant people with pre-existing and/or gestational diabetes on indicators of nutritional inadequacy?	Incidents of ICD-10 Codes that measure nutritional adequacy in the <i>prenatal and postpartum</i> periods: -ICD 10 codes: (e.g., Z59.4 Lack of adequate food and safe drinking water, O25 Malnutrition in pregnancy, childbirth and the puerperium)	As above	As above	As above
<i>Hypothesis 2.3: Implementing a pilot that meets the dietary needs of pregnant people with a diagnosis of either pre-existing diabetes and/or gestational diabetes will change the levels and balance of spending on maternal and neonatal expenditures.</i>				
RQ2.3a: What is the impact of providing medically indicated meals to pregnant people with pre-existing and/or gestational diabetes on the levels and balance of spending on inpatient hospitalizations, ED visits, and outpatient expenditures?	-Payments on facility claims for inpatient and treat-and-release ED visits -Payments on claims for outpatient care (e.g., prenatal care, postpartum and well-woman visits, well-child care, glucose screening, etc.)	Pregnant people who receive home delivered meals compared to those who are also eligible, but do not receive meals.	Medicaid Fee-for-Service and Encounter Claims Records	Difference-in-differences & descriptive adjusted trend analyses

Table 5.3 shows an activity timeline for the research activities.

Table 5.3 Key Milestones, Medically-indicated Meals Pilot

Analytic Activity	Year 1 2025	Year 2 2026	Year 3 2027	Year 4 2028	Year 5 2029	Year 6 2030
1. Qualitative implementation assessment	Plan for key informant interviews – consult on informant list and finalize recruitment strategy and materials Finalize and test question bank for key informant interviews	Conduct and analyze key informant interviews (n=20)	Finish analyzing key informant interviews Complete interim analysis			Complete analysis
2. Quality of care, health service utilization, and spending assessment: Analyze MMIS data (RQ2.1a-RQ2.1b, RQ2.2a-RQ2.2b, RQ2.3a)	Define appropriate population and customized metrics for MMIS analysis (includes program cost variables)	Begin analysis of MMIS-based utilization and quality metrics	Complete interim analysis	Conduct analysis	Conduct analysis	Complete analysis
3. Submit reports to CMS			Interim report			Final report

RQ=Research Question.

NOTE: Evaluation project years are March-Feb. (subject to change depending on date of authorization to begin).

C. Methodological Limitations

This analysis has several limitations. First, as with other studies using claims data, the data may not have included all relevant visits and services, and some data may be missing from this analysis. Relatedly, while ICD-10 codes provide some indicator of mental health and nutritional inadequacy, they are subject to coding incentives and biases and may be inaccurate or unreliable.⁶⁵ Screening for anxiety/depression is also subject to under-reporting and a concurrent perinatal episode of care pilot is seeking to address this issue. As a result, we may observe spurious trends if beneficiaries enrolled in the pilot see providers participating in the ongoing episode of care pilot. Diagnostic patterns may vary by provider and provider biases and results may incorrectly estimate the prevalence of malnutrition and anxiety or depression. Additionally, some individuals may be misclassified as having gestational diabetes or pre-existing diabetes—though we would expect this number to be small and not have a meaningful impact on the analysis.

The goal of the pilot is to enroll up to 300 eligible pregnant people per demonstration year. Elements of the analysis may be statistically underpowered to detect differences attributed from the pilot given the limitations of a pilot of this size. Similarly, stratified analyses by race/ethnicity and geography could result in small sample sizes, limiting our ability to detect statistically significant effects. In addition, there may be a number of participants whose pregnancy does not end in a live birth, which may have an impact on our analyses. Depending on the size of this group, we will adjust our analyses to account for differences in their experience of the pilot and subsequent outcomes.

Comparing pregnant people who do or do not receive home delivered meals could result in misclassification in both directions. For example, beneficiaries enrolled in the pilot may not receive their meals for a variety of reasons such as theft or scheduling difficulties. Whereas those in the comparison group, not receiving meals, may receive equivalent nutrition from sources outside of the pilot and not captured in this analysis.

To address potential implementation gaps and resulting evaluation biases, this analysis will conduct up to 20 interviews with MCOs, DMAHS staff, and other key informants to understand the implementation of this pilot. While we expect these interviews to enhance our understanding of the pilot, the interviews are focused on indirect reporters and not the beneficiaries themselves, which will limit our ability to interpret the impact of the pilot for beneficiaries. Further analyses using beneficiary surveys or interviews would add substantially to the cost of the evaluation. These could be added if deemed appropriate.

⁶⁵ DeSilvey et al., “An Overview of Food Insecurity Coding in Health Care Settings: Existing and Emerging Opportunities.”

Appendix 5.1: In-depth key informant implementation interviews

Goal: 60 minutes

Purpose of the Interview

I am speaking with you today because you were identified as a key informant in the State's Medically Indicated Meals pilot. The Medically Indicated Meals pilot is a Medicaid 1115 demonstration project that started in 2025. The pilot supports up to 300 eligible pregnant people with a diagnosis of either pre-existing diabetes and/or gestational diabetes through home delivered, medically indicated meals. The overarching goal of the pilot is to improve perinatal and postpartum outcomes and expenditures.

We are interested in your experiences with the implementation of the Medically Indicated Meals pilot thus far as a {say role: administrator, subject matter expert, provider, advocate} and any recommendations you have to make the pilot better.

Question Bank

1. First, tell me a little bit about your specific role or relationship to the medically indicated meals pilot and how long you've been in that role?
2. Which key entities are collaborating to implement and operationalize the medically indicated meals pilot. How were they identified, and what are their main roles?
Probe: How and why have the roles or participation of those key entities changed throughout the demonstration period?
3. What lessons have you learned about promising practices for identifying and engaging members to participate in the medically indicated meals pilot?
 - a. What strategies or tools were used to identify or engage members? If relevant, how and why were any strategies or tools adapted during the course of the pilot?
 - b. What role did NJ's Perinatal Risk Assessment play?
 - c. Did you observe any differences in engagement in the pilot by race/ethnicity/geography/gender or other demographic or geographic characteristics?
4. Thinking about participation in the medically indicated meals pilot, what are some facilitators and barriers that you have observed that members experienced in agreeing to participate? If members choose not to participate, do you know why? What does this information suggest about the need for refinements to member outreach?
5. Were meal contents sufficiently nutritious, storable/packable, and appealing to support successful assembly, delivery, and consumption by the member?
Probe: How do entities assess whether members are receiving and using the meals for their own nutritional needs?

6. Do participating members stay enrolled in the medically indicated meals pilot for as long as meals were offered to them? What do you think are some reasons members dropped out of the pilot?
7. *[For MIM vendors only]:* How did you view your role as a vendor in the MIM pilot? What level of interaction was there with participating members? Can you share a bit more about your experience carrying out the pilot?
Probe: *Were members able to communicate directly with vendors to provide real-time feedback on meals, scheduling difficulties, preferences, etc.?*
8. Thinking about the food insecurity of members, was there any way to know or track whether participating members were more likely to enroll in WIC, SNAP, or other similar social services?
Probe: How do you think participation in the pilot impacted participating members' health-related social needs (including food insecurity), if at all?
9. *[If infrastructure dollars are used for the Medically Indicated Meals pilot]:* What infrastructure did key entities develop or acquire using demonstration funds? What did you learn about promising practices to build infrastructure to support this pilot and other health related social needs benefits like it?
10. Thinking about the pilot and how it was rolled out, what are 1-2 recommendations you would make to ensure the State meets its goals of supporting pregnant people with pre-existing diabetes and/or gestational diabetes?
Probe: *What strategies would you use to overcome barriers? What components of the pilot worked well? What should be changed?*
11. Before we close, is there something else about the medically indicated meals pilot that you would like to share that hasn't been covered?
12. Who else might I talk to get insights?

Demographics

I'd like to end with some basic demographic questions to help us describe who we interviewed. Remember, your personal identification will not be linked with any of your answers. You may choose to skip any of these questions.

13. What is your formal training?
14. How many years have you worked at {organization name}?
15. How many years have you worked in health care?

16. What is your gender identity?

17. Do you identify as Hispanic or Latino?

18. What is your race?

19. In the workplace, what languages do you speak most often?

Thank you for taking the time to talk to us. We learned so much about how the Medically Indicated Meals Pilot is going. If you have additional comments or questions, please don't hesitate to contact us.

6. Continuous Eligibility for MAGI Adults

A. General Background Information

In this section, we describe plans to evaluate the impact of a policy change that enables 12 months of continuous eligibility for adults whose Medicaid eligibility is based on Modified Adjusted Gross Income (MAGI). CMS is authorizing the continuous eligibility initiative to support consistent coverage and continuity of care by keeping beneficiaries enrolled for 12 months, regardless of income fluctuations or other changes that would affect eligibility (except for death or ceasing to be a resident of the state). Eligible beneficiaries are adults age 19 to 64 with incomes up to 138% FPL.

Upon state submission and CMS acceptance of the protocol described in STC 14.13, the state is authorized to provide continuous eligibility for the populations and associated durations specified in STC 5.16.a, regardless of the delivery system through which these populations receive Medicaid benefits. For individuals who qualify for 12 months of continuous eligibility, the continuous eligibility period begins on the effective date of the individual's eligibility under 42 CFR 435.915, or the effective date of the most recent renewal of eligibility. Given individuals are continuously eligible regardless of changes in circumstances (except as provided under STC 5.16.c), the state will conduct renewals of eligibility consistent with 42 CFR 435.916 at the end of the individual's continuous eligibility period.

A growing body of literature has found Medicaid “churn” (when beneficiaries move in and out of Medicaid coverage) results in poorer quality and delayed health care access, increased administrative costs, less predictable state expenditures, and higher monthly health care costs.⁶⁶ Coverage disruptions can happen for a variety of reasons, the most common being income fluctuation from irregular sources of employment.⁶⁷ This phenomenon disproportionately impacts low-income adults who are more likely to lose eligibility for a brief period of time as a result of seasonal employment, overtime pay, or other irregularities, only to reenroll when the additional income period ends and they become eligible once again.⁶⁸ When this re-enrollment occurs with such frequency, the health care issues associated with lack of coverage in the interim, and the disruption of coverage become an issue for the Medicaid program to address both clinically and financially.

Using a simulation model of twelve months of continuous eligibility, one study found a 30% reduction in the number of people churning when reenrolling in Medicaid. Moreover, the authors concluded a

⁶⁶ Anna L. Goldman and Benjamin D. Sommers, “Among Low-Income Adults Enrolled In Medicaid, Churning Decreased After The Affordable Care Act: This Study Examines Whether the Affordable Care Act’s Expansion of Medicaid Eligibility Had an Impact on Coverage Disruptions – Known as ‘Churning’ – among Medicaid Enrollees,” *Health Affairs* 39, no. 1 (January 1, 2020): 85–93, <https://doi.org/10.1377/hlthaff.2019.00378>; Sarah Sugar et al., “Medicaid Churning and Continuity of Care: Evidence and Policy Considerations Before and After the COVID-19 Pandemic” (Assistant Secretary for Planning and Evaluation, Office of Health Policy, April 2021); Katherine Swartz et al., “Reducing Medicaid Churning: Extending Eligibility For Twelve Months Or To End Of Calendar Year Is Most Effective,” *Health Affairs* 34, no. 7 (July 2015): 1180–87, <https://doi.org/10.1377/hlthaff.2014.1204>.

⁶⁷ Goldman and Sommers, “Among Low-Income Adults Enrolled In Medicaid, Churning Decreased After The Affordable Care Act.”

⁶⁸ Swartz et al., “Reducing Medicaid Churning.”

20% increase in people who were covered for a full year.⁶⁹ Continuous coverage may reduce periods of uninsurance and underinsurance while improving continuity of care. New Jersey is seeking to test the impact of continuous coverage for MAGI adults age 19 to 64 with incomes up to 138% FPL. For the population receiving extended coverage under this proposed renewal, the delivery system and benefit package would remain unchanged, building upon already approved elements of the demonstration.

B. Evaluation Hypotheses and Questions

We posit that continuous eligibility will minimize coverage gaps and maintain continuity of access to program benefits and continuity of care, thereby improving health outcomes. Continuous coverage may lead to improved outcomes by improving continuity of care or reducing periods of underinsurance or uninsurance. This would ultimately lead to improvements in experience of care and outcomes, and it could lead to potential reductions in future expenditures.

Below we present the *driver diagram* (Figure 6.1: MAGI Adults Continuous Coverage Driver Diagram) that delineates the pathway from the policy change to improved outcomes. Here the secondary drivers represent the various services available to MAGI adults.

Figure 6.1. MAGI Adults Continuous Coverage Driver Diagram

Aim	Primary Drivers	Secondary Drivers
<p>1.A. Improve duration of enrollment during extension period.</p> <p>1.B. Improve access, continuity, and quality of care.</p> <p>-Improve access to ambulatory care visits (e.g., preventative care).</p> <p>-Reduce ED visits, overall hospitalizations, and avoidable hospitalizations.</p>	<p>Full Medicaid State plan services for eligible MAGI adults.</p>	<ul style="list-style-type: none"> Consistent coverage for Medicaid benefits for 12 months, regardless of income fluctuations or other changes that would otherwise affect eligibility for adults age 19 to 64 with incomes up to 138% FPL.
<p>← Causality →</p>		

We next detail the hypotheses and corresponding research questions that help assess the impact of ensuring continuous coverage to eligible MAGI adults. These are also summarized in Table 6.2.

Hypothesis 1: Extending continuous coverage for MAGI adults will result in improved access, continuity, and quality of care among eligible beneficiaries.

⁶⁹ Swartz et al.

Research Question 1a: What is the impact of providing 12 months of continuous eligibility to adults age 19-64 whose Medicaid eligibility is based on MAGI on **enrollment, utilization, and quality of care**?

Research Question 1b: What is the impact of providing 12 months of continuous eligibility to adults age 19-64 whose Medicaid eligibility is based on MAGI on **avoidable hospitalizations and associated spending**?

C. Methodology

Table 6.1. Inventory of Measures

Measure		Brief Description
Enrollment		
1.	Medicaid enrollment	Total number of months enrolled during study period. Enrollment gaps: the number of months between two enrollment periods for an enrollee. ⁷⁰
Hospital and emergency department (ED) utilization		
2.	Inpatient hospitalizations	Individuals receive inpatient hospital treatment for pregnancy and childbirth, surgery, or for nonsurgical medical treatment.
3.	ED treat-and-release visits	Individuals seek ambulatory care in the emergency department because of pregnancy and childbirth, for surgery, or for nonsurgical medical treatment.
4.	ED visits for behavioral health conditions	Number of ED visits for behavioral health conditions among Medicaid recipient (e.g., SUD, OUD, or mental health dx).
Access to, continuity of, and quality of ambulatory care		
5.	Ambulatory preventative care visit	Individuals seek ambulatory care in an outpatient setting, measured by number of office-visits per month. ⁷¹ Percentage with any primary care visits in a year.
6.	Continuity of primary care among those with 2 or more visits	The Continuity of Care Index (COCI): the number of visits to the most frequent physician divided by

⁷⁰ Bradley Corallo et al., “Medicaid Enrollment Churn and Implications for Continuous Coverage Policies” (Kaiser Family Foundation, December 14, 2021), <https://www.kff.org/medicaid/issue-brief/medicaid-enrollment-churn-and-implications-for-continuous-coverage-policies/>; Jamie R. Daw et al., “Women In The United States Experience High Rates Of Coverage ‘Churn’ In Months Before And After Childbirth,” *Health Affairs* 36, no. 4 (April 1, 2017): 598–606, <https://doi.org/10.1377/hlthaff.2016.1241>.

⁷¹ Eric T. Roberts and Craig Evan Pollack, “Does Churning in Medicaid Affect Health Care Use?,” *Medical Care* 54, no. 5 (May 2016): 483, <https://doi.org/10.1097/MLR.0000000000000509>.

		the total number of visits that patient had overall. ⁷²
7.	Avoidable hospitalizations	Rates of ACS inpatient (IP) hospitalizations that may occur due to inadequate ambulatory/primary care within communities. ⁷³
Spending		
8.	Spending related to total inpatient utilization, total treat-and-release ED visits, and avoidable hospitalizations.	Payments on facility claims for all inpatient and treat-and-release ED visits as well as avoidable hospitalizations that may occur due to inadequate ambulatory/primary care within communities, inflation adjusted. ⁷⁴

For hypothesis 1 and research questions 1a-1b

Study population: For examining the overall effect of the continuous coverage provision for MAGI-eligible adults, the study population will be comprised of adults age 19-64 with incomes up to 138% FPL and whose Medicaid eligibility is based on modified adjusted gross income during the demonstration period. Trends among MAGI-eligible adults will be compared between the baseline period (2017-2019), the public health emergency (PHE) period (2020-2023), and after the policy implementation (2024-2028). As a robustness check, models will adjust for periods of PHE and Waiver policy transitions, e.g., by excluding the first quarter of the respective period from the analysis.

Analytic strategy: The analysis will rely upon a repeated cross-sectional design to produce unbiased estimates of individuals enrolled in Medicaid whose eligibility is based on MAGI and examine their outcomes on selected metrics over the demonstration period while they remain continuously enrolled under this policy change.

We will calculate both monthly and yearly enrollment-adjusted rates of outcomes for all beneficiaries ever enrolled under the continuous coverage provision for the demonstration period (i.e., repeated cross sections). A repeated cross-sectional approach allows for good sample representation for a given time period, without necessarily following respondents over time, which is appropriate for this analysis where individuals may experience changes in coverage based on eligibility from year to year. Small sample sizes may limit the monthly analysis, in which case we will rely on pooled cross-sections at the annual level. The repeated cross-sectional rates examine outcomes for all individuals gaining eligibility under the expansion controlling for changes in composition of each year's enrolled population.

⁷² Norman Frohlich et al., "Profiling Primary Care Physician Practice in Manitoba" (Winnipeg, MB: Manitoba Centre for Health Policy, August 2006), <http://mchp-appserv.cpe.umanitoba.ca/deliverable.php?referencePaperID=51203>.

⁷³ "AHRQ QI: Prevention Quality Indicators Overview," accessed December 12, 2023, https://qualityindicators.ahrq.gov/measures/pqi_resources.

⁷⁴ "CPI Inflation Calculator," U.S. Bureau of Labor Statistics, accessed September 6, 2023, https://www.bls.gov/data/inflation_calculator.htm.

We will conduct both descriptive analysis and a regression-based approach. We will first create bar charts or line diagrams to examine trends over time at a monthly and yearly basis dependent on available data and sample size. Next, we will use interrupted time series (segmented regression analysis) to examine the effect on policy groups given there is no available comparison group. Interrupted time series analysis assumes that the policy effect may lead to a change in level, and also a change in the existing time trend of the metric measuring quality or any other relevant outcome of interest. The regression analysis is able to measure this change in trend or level. Potential confounding may arise from factors that determine our outcomes of interest and change at the same time as the policy implementation. However, our multivariate analysis adjusts for demographic and geographic factors to mitigate such effects. Interrupted time series analysis will be an additional strategy to examine the impact of continuous eligibility policies overall on a cohort of MAGI-eligible adults in the absence of a robust comparison group. Standard errors will be cluster-corrected by zip codes to adjust for non-independence of observations. Given the PHE went into effect prior to the policy implementation and this demonstration period, ensuring continuous coverage for 2 additional years, the models for outcomes will be run using three time periods: baseline (2017-2019), the public health emergency (2020-2023), and policy implementation (2024-2028). This will allow us to differentiate between outcomes driven by the PHE and outcomes driven by the policy change.

The model is specified below:

$$Outcome_{it} = \beta_0 + \beta_1(time)_t + \beta_2(policyPHEpost)_t + \beta_3(PHEtime)_t + \beta_4(policypost)_t + \beta_5(policytime)_t + \gamma X_{it} + \varepsilon_{it}$$

$Outcome_{it}$ reflects the outcome of interest for an individual recipient i in year t . β represents the coefficients that correspond to each model component. Coefficient β_0 estimates the baseline level of the outcome at the first time period, and coefficient β_1 indicates the baseline trend, i.e., the trend in the outcome prior to the first policy change. The $time$ variable is a continuous variable indicating time in months or calendar years from the start of the study period. The variable $policyPHEpost$ is a binary (0/1) variable for the period during the public health emergency, which initiated a continuous eligibility policy. The variable $PHEtime$ is a continuous variable equaling the number of months (or years) after the corresponding PHE policy change. The variable $policypost$ is a binary (0/1) variable for the period subsequent to the policy changes under the MAGI continuous eligibility policy. The variable $policytime$ is a continuous variable equaling the number of months (or years) after the corresponding MAGI policy change. For interpretability purposes, we will further compare predicted values of outcomes post-policy with counterfactual values (that simulate a scenario where the policy implementation did not occur). We will further compute whether this difference is statistically significant.

Table 6.2: Summary of Questions, Hypotheses and Methodology

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic Methods
<i>Hypothesis 1: Extending continuous coverage for MAGI adults will result in improved access, continuity, and quality of care among eligible beneficiaries.</i>				
RQ1a: What is the impact of providing 12 months of continuous eligibility to adults age 19-64 whose Medicaid eligibility is based on MAGI on enrollment, utilization, and quality of care?	<ul style="list-style-type: none"> -Medicaid enrollment -Outpatient preventative care visits -ED utilization -Inpatient hospitalizations -Continuity of outpatient preventative care visit (primary care) -ED visits for behavioral health conditions 	Outcomes among MAGI-eligible adults age 19-64 will be compared between the baseline period (2017-2019), PHE period (2020-2023), and policy implementation period (2024-2028).	Medicaid Fee-for-Service and Encounter Claims Records	Examine trends in outcomes, descriptive, cross-sectional analysis
RQ1b: What is the impact of providing 12 months of continuous eligibility to adults age 19-64 whose Medicaid eligibility is based on MAGI on avoidable hospitalizations and associated spending?	<ul style="list-style-type: none"> -Avoidable hospitalizations Spending related to: <ul style="list-style-type: none"> -Total inpatient utilization -Total treat-and-release ED visits -Avoidable hospitalizations 	Avoidable hospitalizations and associated spending among MAGI-eligible adults age 19-64 will be compared between the baseline period (2017-2019), PHE period (2020-2023), and policy implementation period (2024-2028).	As above	As above

Table 6.3 shows an activity timeline for the research activities.

Table 6.3 Key Milestones, Continuous Eligibility for MAGI Adults

Analytic Activity	Year 1 2025	Year 2 2026	Year 3 2027	Year 4 2028	Year 5 2029	Year 6 2030
1. Enrollment, quality of care, health service utilization, and spending assessment: Analyze MMIS data (RQ1a, RQ1b)	Define appropriate population and customized metrics for MMIS analysis (includes program cost variables)	Begin analysis of MMIS-based utilization and quality metrics	Complete interim analysis		Conduct analysis	Complete analysis
2. Submit reports to CMS			Interim report			Final report

RQ=Research Question.

NOTE: Evaluation project years are March-Feb. (subject to change depending on date of authorization to begin).

D. Methodological Limitations

This analysis has several limitations. First, claims data may not have included all relevant visits and services therefore some data may be missing from this analysis. Secondly, some individuals may be misclassified in their Medicaid eligibility, but we expect that number to be negligible to this analysis overall. Moreover, this analysis lacks an appropriate comparison group such that findings from this analysis do not reflect a causal relationship. Additionally, there may be other exogenous events driving the differences and changes in the composition of the MAGI population over time. Lastly, it may be difficult to differentiate between the PHE and policy implementation and the continuous coverage that has been in place since 2020 as a result of the PHE and continued on through the waiver. A sensitivity analysis will adjust for periods of PHE and waiver policy transitions (e.g., excluding the first quarter of the respective period from the analysis).

7. Community Health Worker (CHW) Pilot Programs

A. General Background Information

Community Health Workers (CHWs) can play critical roles in enhancing care coordination, addressing disparities, and improving outcomes for Medicaid beneficiaries. Various health care providers and entities, community-based organizations, managed care organizations (MCOs), and New Jersey state agencies actively engage CHWs in a variety of roles throughout the state. To build on this existing work, and support, advance and assess the efficacy of CHWs within NJ FamilyCare, the Centers for Medicare and Medicaid Services (CMS) has granted an expenditure authority of \$5 million per year for the length of the New Jersey FamilyCare 1115 Comprehensive Demonstration period (2023-2028). Funds will support CHW pilot programs administered by NJ FamilyCare MCOs in collaboration with DMAHS and various community partners.

For the purposes of this pilot, the State's pilot strategy aligns with the Centers for Disease Control and Prevention's (CDC) definition of Community Health Workers (CHWs) who are defined as: non-clinical frontline public health workers who are members of or have a close understanding of the communities they serve. Acting as a liaison between health and social services, CHWs aim to facilitate access to care through enhancing communication and understanding. CHWs may engage their communities through a range of activities such as outreach, education, counseling, social support and advocacy.

To participate in the pilot, MCOs must submit a proposal that represents an innovative approach to the CHW Demonstration. Proposals will go through a review process by DMAHS and Rutgers Center for State Health Policy (CSHP). After preliminary approval by DMAHS, CMS must review the proposed pilots per the 1115 Demonstration Implementation Protocol. Upon receiving formal CMS approval, DMAHS will grant final approval of the proposals to initiate implementation as well as specific reporting and monitoring requirements.

Pilot programs must include interventions that target a specific Medicaid or CHIP population with, or at-risk of, a chronic condition. For the purposes of the pilot, chronic conditions are defined broadly as health conditions or diseases that are persistent or have long-lasting effects and may limit activities of daily living and/or require ongoing medical attention, including physical and behavioral health conditions. Additionally, the proposal must describe the target population in detail, including demographic characteristics, and must describe how individuals will be identified using available data, including technical details of inclusion/exclusion criteria and the process the MCO will use to identify members for intervention and/or control groups.

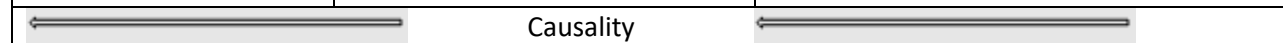
The intervention description must clearly define how CHWs will work with members or caregivers to access services, community resources, and/or offer resources that aid in the adoption of healthy behaviors to address the identified chronic condition. The description must include standardized duties and responsibilities of the CHWs including the specific education or activities the CHWs will perform under the pilot. The description must define an intervention that is specific and scalable. Additionally, the proposal should describe how the initiative will be aligned with or be integrated into the broader health care delivery system.

MCOs must propose a control or comparison group for the purposes of evaluating the impact of the proposed intervention. A randomized control group (e.g., cluster randomization by member zip code or primary care provider, as appropriate for the pilot design) is strongly preferred wherever feasible – if the MCO is not proposing randomization, it must explain in its proposal why it believes randomization is not feasible, and how it will select the comparison group to ensure comparability to the intervention group. The proposal must detail how data on the control or comparison group will be collected and reported pre- and post- implementation. Proposals will be reviewed by Rutgers CSHP and approved by DMAHS.

The proposals must include a description of anticipated impacts in terms of quantitative metrics such as utilization of services, healthcare expenditures, outcomes of care, or patient experience of care. In addition, the proposal should contain a description of any planned qualitative measures. Wherever applicable, the use of CMS Core Quality measures is recommended. If metrics other than or in addition to Child and Adult Core Sets measures are proposed, the sources of those measures, reasons for their selection, and documentation of their validity (if available) should be provided. The proposal should specify the platform or other technology that is planned for tracking CHW activities, if known. The metrics must be aligned with the milestones expected to be met through the initiative.

The driver diagram below shows the primary and secondary drivers toward the aim of improved health outcomes and reduced disparities in care. We hypothesize exposure to CHWs will improve members’ access to care, leading to reduced avoidable utilization, and increased recommended utilization. We also hypothesize CHWs will influence and improve the members’ self-efficacy, healthy behaviors, and assist them in addressing health-related social needs, which should improve their ability to care for themselves in a way that improves their health.

Figure 7.1. CHW Aims Driver Diagram

Aim	Primary Drivers	Secondary Drivers
For Medicaid/CHIP populations with or at risk of chronic conditions, use of CHWs will improve health outcomes and reduce disparities in care	<ul style="list-style-type: none"> • Improved access to care • Better matching between members and needed types of care • Improved patient self-efficacy • Healthier behaviors 	<ul style="list-style-type: none"> • Enhanced care coordination • Improved member experience of care • Culturally competent teaching and support • Assistance with health-related social needs
		

B. Evaluation Questions and Hypotheses

There may be up to five (5) separate CHW interventions, one for each MCO. Where feasible, Rutgers CSHP will use common research designs, measures and instruments across the interventions and aligned with national research efforts (e.g., implementation science literature and the CHW Common Indicators Project by the National Association of Community Health Workers); however,

the evaluation will need to be tailored to each intervention, possibly requiring up to 5 evaluations with distinct measures and study designs. We describe below a general framework we will use in the designs of the evaluations, once the MCO projects are finalized. Our framework is influenced by previous work we have done in New Jersey which found significant improvements in healthy behaviors in a small CHW intervention, but no significant improvements in utilization.⁷⁵ Given that the MCOs will likely have different programs, our ability to detect effects in less common events such as hospital utilization may be limited, so we measure different more common, proximate impacts, such as self-reported behaviors. We are also cognizant of the fact that outreach and education interventions are becoming more common as their importance is recognized, and that comparison group members may have received such interventions from sources other than their MCO. Exposure to such interventions may limit our ability to detect effects of the CHW interventions. We will address this challenge by asking survey questions designed to identify such exposures, allowing us to employ analysis strategies (e.g., exclude comparison group members enrolled in similar interventions) to allow us to produce the most informative evaluation results.

The evaluation hypotheses focus on key anticipated outcomes of the CHW projects. In addition, to the extent supported by sample sizes and the diversity of program enrollment, under each hypothesis and research question we will examine the extent to which the projects address disparities in outcomes. Finally, to strengthen inferences about project impacts, we will examine whether dose-response relationships are observed, e.g., whether more intensive engagement with CHWs is associated with greater improvements in outcomes. In dose-response analyses, we will use caution in interpreting findings, which may be confounded by participant self-selection or motivation to improve.

H1: Quality-of-care outcomes for members served by CHWs will show more improvement than outcomes for comparison group members.

- RQ1a-z (for each type of quality-of-care outcome): What is the difference in outcome measures between members served by CHWs and comparison group members (for example, are members with diabetes served by CHWs more likely to have A1c testing done than comparison group members with diabetes who were not served by CHWs)? Is there a dose-response relationship, where members having more CHW engagement have better outcomes? Are there reduced disparities among members served by CHWs compared to those served by comparison group members?

H2: Avoidable health service utilization will show more improvement for members served by CHWs than for comparison group members.

- RQ2a-z (for each type of health service utilization measured, such as avoidable emergency department visits and preventable hospitalizations): What is the difference in utilization between members served by CHWs and comparison group members? Is there a dose-response relationship, where members having more CHW engagement have less avoidable

⁷⁵ Cantor JC, Chakravarty S, Agrawal A, Nova J. Impact of the New Jersey In-Home Asthma Intervention Pilot Project on NJ FamilyCare Utilization and Spending. Rutgers Center for State Health Policy, July 2022. <https://www.cshp.rutgers.edu/publications/impact-of-the-new-jersey-inhome-asthma-intervention-pilot-project-on-nj-familycare-utilization-and-spending>

utilization? Are there reduced disparities among members served by CHWs compared to those served by comparison group members? Measures will be identified based on target populations selected and may include condition-specific measures such as ED visits for asthma or during the pre-natal period, as appropriate.

H3: Recommended health service utilization will show more improvement for members served by CHWs than for comparison group members.

- RQ3a-z (for each type of recommended care, such as preventive care visits): What is the difference in recommended health service utilization between members served by CHWs and comparison group members? Is there a dose-response relationship, where members having more CHW engagement have better recommended service utilization? Are there reduced disparities among members served by CHWs compared to those served by comparison group members?

H4: Patient experience of care metrics will show more improvement for members served by CHWs than for comparison group members.

- RQ4a – What is the difference in experience of care survey metrics between members served by CHWs and comparison group members (satisfaction with providers, culturally competent care, etc.)? Is there a dose-response relationship, where members having more CHW engagement have more improvement? Are there reduced disparities among members served by CHWs compared to those served by comparison group members?

H5: Members served by CHWs will show more improvement in favorable healthy behaviors than comparison group members.

- RQ5a – What is the difference in healthy behaviors between members served by CHWs and comparison group members? Is there a dose-response relationship, where members having more CHW engagement have more improvement? Are there reduced disparities among members served by CHWs compared to those served by comparison group members?
- RQ5b – Are members served by CHWs more likely to report that someone discussed healthy behaviors with them compared with comparison group members? Is there a dose-response relationship, where members having more CHW engagement are more likely to report such discussions? Are there reduced disparities among members served by CHWs compared to those served by comparison group members?

H6: Members served by CHWs will show more improvement in having their health-related social needs addressed than comparison group members (e.g., by identifying sources of supplemental food or utility assistance, as needed).

- RQ6a – What is the difference in the incidence of health-related social needs between members served by CHWs and comparison group members? Is there a dose-response relationship, where members having more CHW engagement have more improvement? Are there reduced disparities among members served by CHWs compared to those served by comparison group members?
- RQ6b – Are members served by CHWs more likely to report that someone discussed health-related social needs with them compared with comparison group members? Is there a

dose-response relationship, where members having more CHW engagement are more likely to report such discussions? Are there reduced disparities among members served by CHWs compared to those served by comparison group members?

H7: Key informants selected for their ability to provide insights about program implementation (e.g., CHWs, MCOs, DMAHS, providers or advocacy groups that work with affected members, and state or national experts on CHW) will identify facilitators of, and barriers to successful program implementation.

- RQ7a – What barriers, facilitators, and suggestions for improvement do key informants who work with this beneficiary group identify with respect to the program’s ability to improve beneficiary health and reduce disparities in outcomes?

C. Methodology

Hypotheses 1-3 will be addressed with about 12 health-related metrics tailored to each of the MCO pilot programs, as determined by CSHP in consultation with DMAHS and participating MCOs (considering recommended measures such as CMS’ Core Sets, where applicable). Our primary analyses will be conducted on an intent-to-treat (ITT) basis (i.e., by assignment to CHW or comparison groups), with supplemental analyses conducted using per-protocol (PP) methods (i.e., comparing members who received CHW services according to MCO plans relative to comparison members).

Metrics will be calculated either by MCOs and provided to CSHP for intervention and comparison group members, or CSHP will calculate the metrics for intervention and comparison group members in MMIS or other data provided to CSHP by DMAHS or the MCOs. For randomized designs, between-group comparisons will be made using appropriate statistical methods (e.g., Analysis of Variance or regression analysis). For non-randomized designs, regression models comparing outcomes for those assigned to CHW support compared to a matched comparison group and, where feasible, difference-in-differences models will be used to estimate intervention-related changes in metrics. Analyses will examine program impact overall and will test for demographic differences in models interacting treatment assignment with, or stratified by, demographic information available in the data such as race/ethnicity, age, language spoken, urbanicity, disability, and sexual/gender minority. Depending on sample sizes and the demographic composition of the pilot interventions, we expect to be limited in the extent to which we can apply formal statistical tests of disparities. In cases where formal tests are not supported by the data, we will conduct descriptive comparisons.

We will consider assigning or augmenting comparison group samples for MMIS-based outcomes using up to five propensity matched Medicaid members. Comparison populations will be limited to those meeting inclusion criteria for the CHW pilot and be based on member demographic and relevant clinical characteristics. Separate analyses will be conducted for each MCO pilot. In addition, to enhance statistical power, where feasible, we will pool analyses for multiple MCOs that focus on the same target populations and use common CHW strategies. To the extent that it is feasible to match claims or clinical data with survey responses and/or process data about the intervention, sensitivity analyses may be used to examine dose-response relationships among

those members receiving the CHW intervention, exercising caution about the attribution of causality to the dose of engagement. We will also measure the extent to which comparison group members have engaged in similar interventions and adjust our analysis strategies accordingly.

Hypotheses 4-6 will be addressed through member surveys conducted twice over the intervention period (upon enrollment and about 12 months later) to be developed and fielded by CSHP (or its data collection subcontractor) to intervention and control group members. Tailored to the content of each CHW pilot intervention, survey questionnaires will be developed in consultation with DMAHS and MCOs. Survey items will be standardized across MCOs to the maximum extent appropriate, with project-specific questions used when necessary. Where feasible, survey items will be drawn from validated or other well-established instruments (e.g., the CDC Behavioral Risk Factor Surveillance System) to ensure validity and enable comparisons to population norms. Questions will address patient experience of care (generally and in relation to pilot-relevant conditions), healthy behaviors (such as exercise, healthy eating, and use of tobacco/alcohol as well as pilot-relevant behaviors), and health related social needs (such as housing, food security, social support, depression/anxiety, and safety, as well as any specific needs designed to be addressed by the pilot). Members will also be asked if anyone has asked them about these topics. Using a confidential study ID, survey responses can be matched to MMIS data and possibly other information about the member. The Appendices contain sample questions CSHP may propose, but the final questionnaires are subject to discussions with DMAHS and the MCOs.

If enrollment exceeds the number of surveys budgeted, pilot participants and comparison group members will be selected probabilistically, and responses will be weighted, to help ensure representativeness. When appropriate and feasible, members who are at high-risk for adverse outcomes being addressed by the pilot will be oversampled. Again, to the extent feasible, participants surveyed at enrollment will be re-surveyed a year later. Samples will include members assigned to a CHW intervention (regardless of the degree to which they participated) and comparison group members. Members will be offered approximately \$25 for each completed survey in the form of a gift card. Up to 400 members from each MCO may be recruited for surveys depending on final enrollment numbers. Data analysis strategies will use the same methods discussed above under hypotheses 1-3, as appropriate.

Hypothesis 7 will be addressed through key informant interviews with 15-25 individuals knowledgeable about program implementation and/or CHW policy in NJ and beyond, done shortly after intervention launch and again toward the end of the demonstration, and 5 focus groups of 5-8 community health workers for each MCO will be conducted toward the end of the demonstration. For the individual key informant interviews, each MCO will be invited to nominate staff members to be interviewed, along with relevant staff from DMAHS, providers or advocacy groups that work with affected members, and state or national experts on CHW. The interview guide will be refined in consultation with DMAHS, the MCOs, and other interested parties once pilot details are known. Interviews will be conducted via web conference software or phone. Focus groups will be conducted via web conference software. Both interviews and focus groups will be recorded and transcribed, with participant consent. At least two evaluation team members will independently review the transcripts, develop and apply thematic coding procedures. The results will then be analyzed for themes relating to barriers and facilitators of program implementation, effectiveness of the pilots, and key informant ideas for program improvement. All community health workers will

be asked to complete a brief confidential, on-line screening survey about their CHW experiences and demographics so that CSHP can select a diverse group of CHW focus group participants. CHWs will be offered an incentive gift card of about \$10 to complete the screening survey and about \$75 for the up to 90-minute focus group. Focus group guides will be refined in consultation with DMAHS, the MCOs, and other interested parties once pilot details are known. As with the member survey, questions will be standardized across MCOs to the maximum appropriate extent, with project-specific questions used when necessary.

Table 7.1: Summary of Questions, Hypotheses and Methodology

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic Methods
<i>Hypothesis 1: Quality-of-care outcomes for members served by CHWs will be better than outcomes for comparison group members.</i>				
RQ1a-z (for each type of quality-of-care outcome): What is the difference in outcome measures between members served by CHWs and comparison group members? Is there a dose-response relationship, where members having more CHW engagement have better outcomes?	Measures will be identified based on target populations selected and may include condition-specific measures such as HbA1c testing for members with diabetes.	Members served by CHWs Comparison group members, selected using sampling or matching techniques which maximize comparability.	Claims/encounter data from MMIS or provided/calculated by MCOs	Regression for randomized designs; Difference in difference for non-randomized designs
<i>Hypothesis 2: Avoidable health service utilization will be lower for members served by CHWs than for comparison group members.</i>				
RQ2a-z: (for each type of health service utilization measured, such as avoidable emergency department visits and preventable hospitalizations): What is the difference in utilization between members served by CHWs and comparison group members? Is there a dose-response relationship, where members having more CHW engagement have less avoidable utilization?	Avoidable/preventable hospital use Measures will be identified based on target populations selected and may include condition-specific measures such as ED visits for asthma or during the pre-natal period, as appropriate.	Members served by CHWs Comparison group members, selected using sampling or matching techniques which maximize comparability	Claims/encounter data from MMIS or provided/calculated by MCOs	Regression for randomized designs; Difference in difference for non-randomized designs
<i>Hypothesis 3: Recommended health service utilization will be higher for members served by CHWs than for comparison group members.</i>				

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic Methods
RQ3a-z: (for each type of recommended care, such as preventive care visits): What is the difference in recommended health service utilization between members served by CHWs and comparison group members? Is there a dose-response relationship, where members having more CHW engagement have better recommended service utilization?	Measures will be identified based on target populations selected and may include condition-specific measures such as primary care visits, HbA1c testing where relevant, etc.	Members served by CHWs Comparison group members, selected using sampling or matching techniques which maximize comparability	Claims/encounter data from MMIS or provided/calculated by MCOs	Regression for randomized designs; Difference in difference for non-randomized designs
Hypothesis 4: Patient experience of care metrics will be higher for members served by CHWs than for comparison group members.				
RQ4a: What is the difference in experience of care metrics between members served by CHWs and comparison group members (satisfaction with providers, culturally competent care, etc.)? Is there a dose-response relationship, where members having more CHW engagement have more improvement?	Measures will be identified based on target populations selected and may include condition-specific measures such as satisfaction related to condition-specific care as well as cultural competence.	Members served by CHWs Comparison group members, selected using sampling or matching techniques which maximize comparability	Member surveys	Regression for randomized designs; Difference in difference for non-randomized designs
Hypothesis 5: Members served by CHWs will have more favorable healthy behaviors than comparison group members.				
RQ5a – What is the difference in healthy behaviors between members served by CHWs and comparison group members? Is	Measures will be identified based on pilot targeted behaviors and may include condition-specific behaviors if targeted by the pilot as well as more	Members served by CHWs	Member surveys	Regression for randomized designs;

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic Methods
there a dose-response relationship, where members having more CHW engagement have more improvement?	general behaviors like exercise, healthy eating, and use of tobacco/alcohol.	Comparison group members, selected using sampling or matching techniques which maximize comparability		Difference in difference for non-randomized designs
RQ5b – Are members served by CHWs more likely to report that someone discussed healthy behaviors with them compared with comparison group members? Is there a dose-response relationship, where members having more CHW engagement are more likely to report such discussions?	Measures will be identified based on target populations selected and may include discussions about specific conditions, as appropriate.	Members served by CHWs Comparison group members, selected using sampling or matching techniques which maximize comparability	Member surveys	Regression for randomized designs; Difference in difference for non-randomized designs
Hypothesis 6: Members served by CHWs will be more likely to have their health-related social needs addressed than comparison group members				
RQ6a – What is the difference in the incidence of health-related social needs between members served by CHWs and comparison group members? Is there a dose-response relationship, where members having more CHW engagement have more improvement?	Questions selected from tool such as https://innovation.cms.gov/files/worksheets/ahcm-screeningtool.pdf , based on what CHWs are using with members	Members served by CHWs Comparison group members, selected using sampling or matching techniques which maximize comparability	Member surveys	Regression for randomized designs; Difference in difference for non-randomized designs

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic Methods
RQ6b – Are members served by CHWs more likely to report that someone discussed health-related social needs with them compared with comparison group members? Is there a dose-response relationship, where members having more CHW engagement are more likely to report such discussions?	Wording to be determined in consultation with MCOs depending on CHW scope	Members served by CHWs Comparison group members, selected using sampling or matching techniques which maximize comparability	Member surveys	Regression for randomized designs; Difference in difference for non-randomized designs
<i>Hypothesis 7: Key informants will identify facilitators of, and barriers to successful program implementation.</i>				
RQ7a – What barriers, facilitators, and suggestions for improvement do key informants identify?	Questions to be determined based on demo implementation	Key informant interviews at time 1 with interviews and focus groups at time 2. Stratify feedback by institutional location and individual factors <i>such as</i> demographics, training, experience, or other characteristics that align with differences in perspectives.	Key informant interviews (15-25) at beginning and toward end of demo CHW focus groups toward the end of demo period	Qualitative thematic analysis

Table 7.2 shows an activity timeline for the research activities.

Table 7.2 Key Milestones, Community Health Worker (CHW) Pilot Programs

Analytic Activity	Year 1 2025	Year 2 2026	Year 3 2027	Year 4 2028	Year 5 2029	Year 6 2030
1. Quality of care and health service utilization assessment: Link and analyze MCO and MMIS or related administrative measures (RQ1-3)	Work with MCOs to identify 12 health-related metrics tailored to each MCO Execute data use agreements to link MCO data and other admin data (data set start date may vary by MCO and measure)	Finalize linkage of data sets Specify comparison group for each MCO and conduct baseline analysis	Complete baseline analysis of linked administrative data		Conduct analysis of linked administrative data	Complete analysis
2. Patient experience and behavior assessment: MCO members (RQ4-6)	Identify survey vendor and execute contract Work with DMAHS and MCOs to develop member survey instrument and member list	Work with vendor to conduct baseline member surveys (N=400 per MCO, including comparison group) Begin to analyze member surveys	Finish analyzing member surveys	Work with vendor to conduct follow-up member surveys (N=400 per MCO, including comparison group) Begin to analyze member surveys	Continue to analyze member surveys	Complete analysis

Analytic Activity	Year 1 2025	Year 2 2026	Year 3 2027	Year 4 2028	Year 5 2029	Year 6 2030
3. Qualitative implementation assessment (RQ7a)	Review documents, observe meetings Conduct and analyze N=15-25 KIIs	Update document review and meeting observations as needed	Update document review and meeting observations as needed	Review documents, observe meetings Conduct and analyze N=15-25 KIIs Conduct CHW focus group screening survey (N= all CHWs) Conduct CHW focus groups (N=25-40)	Update document review and meeting observations as needed Finish analysis of CHW focus groups	Complete analysis
4. Submit reports to CMS			Interim report			Final report

KII=key informant interviews; RQ=Research Question.

NOTE: Evaluation project years are March-Feb. (subject to change depending on date of authorization to begin).

D. Methodological Limitations

It is difficult to fully specify the evaluation designs before pilot projects are proposed, reviewed, and approved to proceed. Thus, the design described here includes contingency plans. Further, as intervention plans are approved, we will work closely with DMAHS and the MCOs to develop written final evaluation protocols for each pilot that ensure feasibility and rigor.

Hypotheses 1-3 – May be limited by enrollment numbers, including unique pilot features that preclude combination of members across MCOs. Many metrics have inclusion/exclusion criteria that could reduce the numbers of included members. We will pool evaluation samples across MCOs, when possible.

Hypotheses 4-6 – Survey results may be limited by sample sizes, response rates, pilot enrollment numbers, and unique pilot features that preclude combination of members across MCOs. There is a risk that survey participants will not be representative of pilot participants or comparison groups. We will use the following procedures to minimize that risk. We will seek to sample CHW participants and comparison group members from member lists and strongly recommend against using non-systematic sampling techniques (e.g., broadly distrusting invitations seeking volunteers) or anonymous surveys, as these methods would greatly compromise our ability to distinguish intervention from comparison groups, enrich survey data with MMIS other member information, match responses at baseline and 12 months later, and protect against fraudulent survey responses. We anticipate working with a trusted third party (e.g., a survey research firm) to handle member identifiers, and enable CSHP to receive only de-identified data.

Hypothesis 7 – Some interview or focus group subjects may decline participation, leading to possible response bias or limited sample sizes. We typically do not offer financial incentives for key informant interviews as they are generally done by people in the course of their work. For the focus group recruitment, we will include more recently hired CHWs along with those with more tenure to prevent groups composed only of those who have stayed in the position. Because the groups will be done toward the end of the demonstration, we may not be as likely to pick up issues that occurred earlier but have been addressed.

E. Attachments

Appendix 7.1: Survey Question Bank for Medicaid Members Receiving CHW Services

All surveys will contain:

- Questions that probe the respondent's **recent experience with CHW-like interventions** (since many such interventions exist and comparison group members may be receiving outreach from a source other than their MCO).
- Measures of **key respondent characteristics** such as demographic factors and health status, to help us ensure that we are comparing similar intervention and comparison members.

We will work with DMAHS and the MCOs to design surveys that measure the most relevant health-related social needs, care experiences and behaviors for each CHW intervention. Where possible, we will utilize comparable questions so that we can combine surveys across MCOs to maximize the responses available for analysis. To find our questions, we used well-known sources such as the US Census, CDC BRFSS, CAHPS, and CMS' Accountable Health Communities (AHC) Health-Related Social Needs (HRSN) Screening Tool, which contains a variety of validated questions.

Experience with CHW-like interventions – all surveys, possible questions

CHW1. In the past year, has anyone **come to your home** to talk with you about your health and help you identify ways to improve your health? This could include things like figuring out how you can access health care appointments, education about your health, and advice on diet, exercise, and medication management.

1. Yes
2. No

Source: new

[if CHW1=yes]

CHW1a. How many different people have come to your home?

1. One
2. Two
3. Three or more

[if CHW1a>1]

CHW1a1. Did the different person or people have access to information discussed in previous visits, or was it a completely new relationship?

1. Completely new [instruction if CHW1a=2: "When answering questions below, refer to the last person you spoke with."; instruction if CHW1a=3: "When answering questions below, refer to the last person or people you spoke with who had access to information on previous visits"]
2. Some access to previous information [instruction: "When answering questions below about your experiences, think of all the people you've spoken with who have access to your information"]

CHW1b. How long has it been since your most recent in-person, phone, or video visit with this person/organization?

1. Less than 1 month
2. At least 1 months but less than 3 months
3. At least 3 months but less than 6 months

4. At least 6 months

Source: Modified [CAHPS Clinician & Group Visit Adult Survey 4.0 \(beta\)](#) #3

CHW1c. How many times would you estimate that you talked to someone about these issues, including visits to your home and follow-up voice or video conversations?

1. One time only
2. Two or three times
3. Four or five times
4. More than five times

Source: new

CHW1d. Over what time period have you been seeing this person, or people from this organization?

1. Less than 1 month
2. At least 1 months but less than 3 months
3. At least 3 months but less than 6 months
4. At least 6 months

Source: new

CHW1e. During your visits, did this person explain things in a way that was easy to understand?

1. Never,
2. Sometimes,
3. Usually, or
4. Always?
5. Don't know

Source: Modified [CAHPS Home- and Community-Based Services Survey 1.0](#) #31

CHW1f. During your visits, did this person listen carefully to you?

1. Never,
2. Sometimes,
3. Usually, or
4. Always?
5. Don't know

Source: Modified [CAHPS Home- and Community-Based Services Survey 1.0](#) #32

CHW1g. During your visits, did this person treat you with courtesy and respect?

1. Never,
2. Sometimes,
3. Usually, or
4. Always?

5. Don't know

Source: Modified [CAHPS Home- and Community-Based Services Survey 1.0](#) #28

CHW1h. During your most recent visit, did this person spend enough time with you?

1. Yes, definitely
2. Yes, somewhat
3. No

Source: Modified [CAHPS Clinician & Group Visit Adult Survey 4.0 \(beta\)](#) #17

CHW1i. Using any number from 0 to 10, where 0 is the worst visit possible and 10 is the best visit possible, what number would you use to rate your most recent visit with this person?

0 (Worst visit possible) 1 2 3 4 5 6 7 8 9 10 (Best visit possible)

Source: Modified [CAHPS Clinician & Group Visit Adult Survey 4.0 \(beta\)](#) #21

CHW1j. What went well with this person during your most recent visit? Please explain what happened, how it happened, and how it felt to you. [open end]

Source: Modified [Narrative CAHPS Clinician & Group Visit Survey 4.0 \(beta\)](#) PN3

CHW1k. Was there anything you wish had gone differently during your most recent visit with this person? If so, please explain what happened, how it happened, and how it felt to you. [open end]

Source: Modified [Narrative CAHPS Clinician & Group Visit Survey 4.0 \(beta\)](#) PN4

[if LANG1 (regarding language)=1, ask]

CHW1l. Did this person speak with you in [fill language from LANG1a)?

1. Yes
2. No

[if CHW1j=2]

CHW1l1. How did you communicate with this person? (select all that apply)

1. In English
2. In another language
3. Used interpreter services with a live person [definition "An interpreter is someone who helps you talk with others who do not speak your language"]
4. Used a text or speech to text interpreter application like Google translate
5. A relative or friend translated
6. A child younger than 18 translated
7. Other (specify)

[if more than 1 option selected in CHW1l1, show in followup so they can pick most frequent]

CHW1l1a. How did you communicate most frequently?

1-7 [select one of those selected earlier]

8 Don't know

CHW1m. In your visits with this person, how often were the explanations they gave you hard to understand because of an accent or translation difficulty?

1. Never,
2. Sometimes,
3. Usually, or
4. Always?
5. Don't know

Source: Modified [CAHPS Home- and Community-Based Services Survey 1.0](#) #29

Key Respondent Characteristics/Social Context – all surveys, possible questions

LANGUAGE

LANG1. Do you speak a language other than English at home?

1. Yes
2. No

LANG1a. What is this language [open-end]?

LANG1b. How well do you speak English?

1. Very well
2. Well
3. Not well
4. Not at all

Source: [ACS 2024](#) #14a-c, modified

PHYSICAL/MENTAL HEALTH STATUS

PMH1. In general, how would you rate your overall health?

- ☐ Excellent
- ☐ Very good
- ☐ Good
- ☐ Fair
- ☐ Poor

Source: [CAHPS Health Plan Survey](#)

PMH2. In general, how would you rate your overall **mental or emotional** health?

- ☐ Excellent
- ☐ Very good
- ☐ Good
- ☐ Fair
- ☐ Poor

Source: [CAHPS Health Plan Survey](#)

PMH3. Because of a physical, mental, or emotional condition, do you have serious difficulty concentrating, remembering, or making decisions?

- ☐ Yes
- ☐ No

Source: [The AHC Health-Related Social Needs Screening Tool](#)

PMH4. Because of a physical, mental, or emotional condition, do you have difficulty doing errands alone such as visiting a doctor's office or shopping?

- ☐ Yes
- ☐ No

Source: [The AHC Health-Related Social Needs Screening Tool](#)

LON1. How often do you feel lonely or isolated from those around you?

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Often
- ☐ Always

Source: [The AHC Health-Related Social Needs Screening Tool](#)

PHQ1. Over the past 2 weeks, how often have you been bothered by any of the following problems?

PHQ1a. Little interest or pleasure in doing things?

- ☐ Not at all (0)
- ☐ Several days (1)
- ☐ More than half the days (2)
- ☐ Nearly every day (3)

PHQ1b. Feeling down, depressed, or hopeless?

- ☐ Not at all (0)
- ☐ Several days (1)
- ☐ More than half the days (2)
- ☐ Nearly every day (3)

Source: [The AHC Health-Related Social Needs Screening Tool](#)

FINANCIAL STATUS/FOOD SECURITY

Please indicate if each of the following statements is OFTEN, SOMETIMES, or NEVER true for you and your household in the last 12 months:

FS1. Within the past 12 months, you worried that your food would run out before you got money to buy more.

- ☐ Often true
- ☐ Sometimes true
- ☐ Never true

Source: [The AHC Health-Related Social Needs Screening Tool](#)

FS2. Within the past 12 months, the food you bought just didn't last and you didn't have money to get more.

- ☐ Often true
- ☐ Sometimes true
- ☐ Never true

Source: [The AHC Health-Related Social Needs Screening Tool](#)

TRANSPORTATION

TRAN1. In the past 12 months, has lack of reliable transportation kept you from medical appointments, meetings, work or from getting things needed for daily living?

- ☐ Yes
- ☐ No

Source: [The AHC Health-Related Social Needs Screening Tool](#)

HOUSING/INTERNET ACCESS

HSG1. What is your living situation today?

- ☐ I have a steady place to live
- ☐ I have a place to live today, but I am worried about losing it in the future
- ☐ I do not have a steady place to live (I am temporarily staying with others, in a hotel, in a shelter, living outside on the street, on a beach, in a car, abandoned building, bus or train station, or in a park)

Source: [The AHC Health-Related Social Needs Screening Tool](#)

HSG2. Think about the place you live. Do you have problems with any of the following? CHOOSE ALL THAT APPLY

- ☐ Pests such as bugs, ants, or mice
- ☐ Mold
- ☐ Lead paint or pipes
- ☐ Lack of heat
- ☐ Oven or stove not working
- ☐ Smoke detectors missing or not working
- ☐ Water leaks
- ☐ None of the above

Source: [The AHC Health-Related Social Needs Screening Tool](#)

HSG3. Do you have access to the Internet in your home through a cell phone company or internet service provider?

- ☐ Yes
- ☐ No
- ☐ Not sure

Source: [Census ACS 2024](#)

DEMOGRAPHICS

HH1. How many children (less than 18 years of age) live in your household? ____

Source: BRFSS

HH2. How many adults (18 years of age or older), including yourself, live in your household? ____

Source: BRFSS

GID1. Do you identify as male, female, or in some other way?

- a. Male
- b. Female
- c. Non-binary
- d. Some other way (please specify)
- e. Prefer not to answer

AGE1. What is your age?

____[Number]

Prefer not to answer/unsure

Source: Modified [CAHPS Clinician & Group Visit Adult Survey 4.0 \(beta\) #27](#)

AGE2. [For prefer not to answer/unsure above, ask] Would you be willing to tell us whether it's between...

- (a) 18 - 24
- (b) 25 - 34
- (c) 35 - 44
- (d) 45 - 54
- (e) 55 - 64
- (f) 65 - 74
- (g) 75 or older
- (h) Prefer not to answer

Source: Modified [CAHPS Clinician & Group Visit Adult Survey 4.0 \(beta\) #27](#)

ED1. What is the highest grade or year of school you have completed?

- 1 Never attended school or only attended kindergarten
- 2 Grades 1 through 8 (Elementary)
- 3 Grades 9 through 11 (Some high school)
- 4 Grade 12 or GED (High school graduate)
- 5 College 1 year to 3 years (Some college or technical school)
- 6 College 4 years or more (College graduate)

Source: Eagleton Polling, maps to Census categories

HISP1. Are you of Latino or Hispanic origin, such as Mexican, Puerto Rican, Cuban or some other Spanish background?

- a. Yes
- b. No

Source: Adapted from US Department of Health and Human Services, Office of Minority Health, <https://minorityhealth.hhs.gov/explanation-data-standards-race-ethnicity-sex-primary-language-and-disability>

RACE1. Are you White, Black or of Asian origin, or are you some other race, or multi-racial? (select all that apply)

- a. White (includes Caucasian, European, Middle Eastern)
- b. Black (includes African American)
- c. Asian (includes Asian-Indian, South Asian, East Asian, Chinese, Japanese)
- d. Hispanic / Latino / Spanish
- e. Other (please specify) [Open-ended free text]
- f. Multi-racial (please specify) [Open-ended free text]

Source: Adapted from US Department of Health and Human Services, Office of Minority Health, <https://minorityhealth.hhs.gov/explanation-data-standards-race-ethnicity-sex-primary-language-and-disability>

Possible Outcomes to Examine for Improvement, Depending on Pilot

ACCESS TO HEALTHCARE SERVICES

AC1. In the last ____ months, when you needed care right away, how often did you get care as soon as you needed?

- ☐ Never
- ☐ Sometimes
- ☐ Usually
- ☐ Always

Source: [CAHPS Health Plan Survey](#)

AC2. In the last__ months, how often was it easy to get the care, tests, or treatment you needed?

- ☐ Never
- ☐ Sometimes
- ☐ Usually
- ☐ Always

Source: [CAHPS Health Plan Survey](#)

HEALTH BEHAVIORS

EX1. In the last 30 days, other than the activities you did for work, on average, how many days per week did you engage in moderate exercise (like walking fast, running, jogging, dancing, swimming, biking, or other similar activities)?

[Dropdown 1-7]

Source: [The AHC Health-Related Social Needs Screening Tool](#)

EX2. On average, how many minutes did you usually spend exercising at this level on one of those days?
[dropdown 0 ,10, 20, 30 ,40 ,50 ,60,90,120, 150 or greater]

Source: [The AHC Health-Related Social Needs Screening Tool](#)

The next questions relate to your experience with alcohol, cigarettes, and other drugs. Some of the substances are prescribed by a doctor (like pain medications), but only count those if you have taken them for reasons or in doses other than prescribed. One question is about illicit or illegal drug use, but we only ask in order evaluate the services provided by your MCO.

SU1. How many times in the past 12 months have you had 5 or more drinks in a day (males) or 4 or more drinks in a day (females)? One drink is 12 ounces of beer, 5 ounces of wine, or 1.5 ounces of 80-proof spirits.

☐ Never ☐ Once or Twice ☐ Monthly ☐ Weekly ☐ Daily or Almost Daily

Source: [The AHC Health-Related Social Needs Screening Tool](#)

SU2. How many times in the past 12 months have you used tobacco products (like cigarettes, cigars, snuff, chew, electronic cigarettes)?

☐ Never ☐ Once or Twice ☐ Monthly ☐ Weekly ☐ Daily or Almost Daily

Source: [The AHC Health-Related Social Needs Screening Tool](#)

SU3. How many times in the past year have you used prescription drugs for non-medical reasons?

☐ Never ☐ Once or Twice ☐ Monthly ☐ Weekly ☐ Daily or Almost Daily

Source: [The AHC Health-Related Social Needs Screening Tool](#)

SU4. How many times in the past year have you used illegal drugs?

☐ Never ☐ Once or Twice ☐ Monthly ☐ Weekly ☐ Daily or Almost Daily

Source: [The AHC Health-Related Social Needs Screening Tool](#)

Appendix 7.2: Key Informant Interview Guide

Adapted from: EPIS (exploration, planning, implementation, sustainment) implementation science framework to assess factors affecting implementation; CHW Common Indicators (questions are mapped to Common Indicator categories)

Participants: Key informant groups including state leadership, MCO leadership, and CHW program leadership

Purpose of the Interview

I am speaking with you today because you were identified as a key informant in the State's Community Health Worker (CHW) pilot program. The CHW pilot program is part of a Medicaid 1115 demonstration project aimed at improving health outcomes and reducing disparities in care. It began in [insert start year] and is ongoing. The overarching goal of the program is to leverage CHWs to enhance care coordination, address disparities, and improve outcomes for Medicaid beneficiaries in New Jersey.

We are interested in hearing about your experiences with the CHW pilot program thus far, as well as any recommendations you have to make the program more effective in achieving its goals.

Throughout this interview, we will also share some data with you. We would appreciate your insights to better understand trends in the data.

Obtain Participant Consent to Participate and Audio Record

Question Bank

1. First, tell me a little bit about your specific role or relationship to the CHW program and how long you've been in that role. *Possible probes:*
 - a. What sort of setting do you work in? How many CHWs/staff do you work with?
 - b. What led you to this role?
2. Could you tell me about a client that received optimal services as part of the CHW program? [\[CHW ENACTMENT OF THE 10 CORE ROLES; CHW FACILITATED REFERRALS\]](#) *Possible probes:*
 - a. How often do you think that happens? Why is that?
 - b. Are there clients with whom it is more challenging to offer this type of service?
 - c. Who else did the CHW work with? [\[CHW INTEGRATION INTO TEAMS\]](#)
 - d. In what other situations would CHWs be helpful?
 - e. How do you know if things are going well? [\[SUPPORTIVE AND REFLECTIVE SUPERVISION\]](#)
3. Could you tell me about some of your experiences in this program where things went well? [\[CHW ENACTMENT OF THE 10 CORE ROLES; CHW FACILITATED REFERRALS\]](#) *Possible probes:*
 - a. Who facilitated adoption of this program?
 - b. Who else was involved? [\[CHW INTEGRATION INTO TEAMS\]](#)
 - c. Who or what was instrumental in implementing this program?
 - d. What characteristics did that person/entity have?
 - e. What were changes to patient/client outcomes that you observed? Health outcomes, access to care, reducing disparities? Patient engagement, self-efficacy, and health

behavior change? [PARTICIPANT SELF-REPORTED MENTAL, PHYSICAL, AND EMOTIONAL HEALTH; PARTICIPANT SOCIAL SUPPORT; PARTICIPANT EMPOWERMENT]

4. Could you tell me about experiences in this program where things did not work so well? [CHW ENACTMENT OF THE 10 CORE ROLES; CHW FACILITATED REFERRALS] Possible probes:
 - a. What were some of the challenges/obstacles?
 - b. What are things that could prevent the program from expanding?
 - c. How were challenges addressed?
5. What are your experiences with leadership in implementing this program? [SUPPORTIVE AND REFLECTIVE SUPERVISION] Possible probes:
 - a. What are your experiences with partner organizations?
6. How were CHWs integrated into the broader healthcare delivery system. [POLICY AND SYSTEMS CHANGE] Possible probes:
 - a. What role did they play in enhancing care coordination and addressing social determinants of health?
 - b. How do you envision the role of CHWs evolving in the broader context of healthcare delivery and community-based care coordination?
7. Can you share any insights or lessons learned from the pilot program that could inform future CHW initiatives or similar interventions?
8. Is there anything else you would like to add regarding the outcomes or impact of the CHW pilot program within NJ FamilyCare?

Demographics

I'd like to end with some basic demographic questions to help us describe who we interviewed. Remember, your personal identification will not be linked with any of your answers. You may choose to skip any of these questions.

1. What is your formal training?
2. How many years have you worked at {organization name}?
3. How many years have you worked in health care?
4. What is your gender identity?
5. Do you identify as Hispanic or Latino?
6. What is your race?

Thank you for taking the time to talk to us. We learned so much about how the new components of the CHW pilot program are going. If you have additional comments or questions, please don't hesitate to contact us.

Appendix 7.3: CHW Focus Group Screening Survey

Adapted from: CHW Common Indicators

Participants: CHWs across the 5 MCOs

INTRODUCTION

On behalf of Rutgers Center for State Health Policy, thank you for your interest in the evaluation of the Community Health Worker (CHW) Pilot Program. We have asked you to participate because you are a CHW in the CHW Pilot Program. The following brief survey is part of our recruitment for focus groups on the CHW Pilot Program.

PARTICIPANT ELIGIBILITY

1. **Are you currently a CHW in the CHW Pilot Program?**
 - a. Yes
 - b. No, exit the survey
2. **Do you consent to participate in the survey?**
 - a. Yes
 - b. No, exit the survey
3. **Are you at least 18 years of age?**
 - a. Yes
 - b. No, exit the survey
4. **Which MCO (managed care organization) are you a part of?**
 - a. Aetna
 - b. Fidelis
 - c. Horizon
 - d. United Healthcare
 - e. Wellpoint
 - f. None of the above, exit the survey
5. **The following survey is part of our recruitment for an online meeting (Zoom) where we hope to learn from you about your experience in the CHW Pilot Program. The online meeting will be 60-90 minutes. The following survey will take about 20 minutes. Are you interested in participating in the online meeting?**
 - a. Yes
 - b. No

6. [If 4 is “Yes”] When would you most likely be able to meet for the online meeting? This will be used to schedule the focus group activity (via Zoom or similar video conferencing tool). Indicate what time you are typically able to meet online (Zoom) for 60-90 minutes.

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Morning (After 9a-12p)							
Afternoon (After 12p-4p)							
Evening (After 4p-9p)							
Night (After 9p-12a)							

- o Other or special circumstances (Please specify)

7. [If 4. is “Yes”] Please provide your contact details so that we may schedule the interview.

- First name: ____ [text response]
- Last name: ____ [text response]
- email address: ____ [text response]
- phone number: ____ [text response]
- Other or special circumstances (Please specify) ____ [text response]

SURVEY QUESTION BANK

The following are questions that may be included in the survey instrument.

The final instrument will be shorter, adjusted to MCO feedback after CHW programs are confirmed.

COMPENSATION, BENEFITS, AND OPPORTUNITIES FOR ADVANCEMENT

8. What is your current hourly rate or annual salary? _____
9. What is the FTE of your CHW position (or how many hours per week do you typically work)? ____ FTE or ____ hours per week
10. Does your employer currently offer you the following benefits? (check all that apply)
- Insurance
 - Paid leave/vacation
 - Reimbursement for work-related expenses

- Other benefits

11. Are you eligible for promotions/step-ups with pay increases at your place of employment?

- Yes
- No

CHW ENACTMENT OF THE 10 CORE ROLES

12. What roles do you play as a CHW in this program? (check all that apply)

ROLE	SUB-ROLES
<input type="checkbox"/> 1. Cultural Mediation Among Individuals, Communities, and Health and Social Service Systems	a. Educating individuals and communities about how to use health and social service systems (including understanding how systems operate) b. Educating systems about community perspectives and cultural norms (including supporting implementation of Culturally and Linguistically Appropriate Services [CLAS] standards) c. Building health literacy and cross-cultural communication
<input type="checkbox"/> 2. Providing Culturally Appropriate Health Education and Information	a. Conducting health promotion and disease prevention education in a manner that matches linguistic and cultural needs of participants or community b. Providing necessary information to understand and prevent diseases and to help people manage health conditions (including chronic disease)
<input type="checkbox"/> 3. Care Coordination, Case Management, and System Navigation	a. Participating in care coordination and/or case management b. Making referrals and providing follow-up c. Facilitating transportation to services and helping address barriers to services d. Documenting and tracking individual and population level data e. Informing people and systems about community assets and challenges
<input type="checkbox"/> 4. Providing Coaching and Social Support	a. Providing individual support and coaching b. Motivating and encouraging people to obtain care and other services c. Supporting self-management of disease prevention and management of health conditions (including chronic disease) d. Planning and/or leading support groups
<input type="checkbox"/> 5. Advocating for Individuals and Communities	a. Advocating for the needs and perspectives of communities b. Connecting to resources and advocating for basic needs (e.g. food and housing) c. Conducting policy advocacy

<input type="checkbox"/> 6. Building Individual and Community Capacity	<ul style="list-style-type: none"> a. Building individual capacity b. Building community capacity c. Training and building individual capacity with peers and among CHW groups
<input type="checkbox"/> 7. Providing Direct Service	<ul style="list-style-type: none"> a. Providing basic screening tests (e.g. height, weight, blood pressure) b. Providing basic services (e.g. first aid, diabetic foot checks) c. Meeting basic needs (e.g., direct provision of food and other resources)
<input type="checkbox"/> 8. Implementing Individual and Community Assessments*	<ul style="list-style-type: none"> a. Participating in design, implementation, and interpretation of individual-level assessments (e.g. home environmental assessment) b. Participating in design, implementation, and interpretation of community-level assessments (e.g. windshield survey of community assets and challenges, community asset mapping)
<input type="checkbox"/> 9. Conducting Outreach*	<ul style="list-style-type: none"> a. Case-finding/recruitment of individuals, families, and community groups to services and systems b. Follow-up on health and social service encounters with individuals, families, and community groups c. Home visiting to provide education, assessment, and social support d. Presenting at local agencies and community events
<input type="checkbox"/> 10. Participating in Evaluation and Research*	<ul style="list-style-type: none"> a. Engaging in evaluating CHW services and programs b. Identifying and engaging community members as research partners, including community consent processes c. Participating in evaluation and research: <ul style="list-style-type: none"> a. Identification of priority issues and evaluation/research questions b. Development of evaluation/research design and methods c. Data collection and interpretation d. Sharing results and findings e. Engaging stakeholders to take action on findings

Source: C3 Project CHW Roles and Competencies Review Checklist

https://www.c3project.org/_files/ugd/7ec423_cb744c7b87284c75af7318614061c8ec.pdf

CHW INTEGRATION INTO TEAMS

13. How frequently do you communicate with the other healthcare, social service, and/or education providers with whom you work about CHW program participants? (1= never, 2 = rarely, 3 = occasionally, 4 = often, 5 = constantly)

14. Do the other healthcare, social service, and/or education providers with whom you work communicate with you in a timely way about CHW program participants? (1= never, 2 = rarely, 3 =

occasionally, 4 = often, 5 = always)

15. **Do the other healthcare, social service, and/or education providers with whom you work communicate with you accurately about CHW program participants?** (1= never, 2 = rarely, 3 = occasionally, 4 = often, 5 = always)
16. **When an error has been made about CHW program participants, do the other healthcare, social service, and/or education providers with whom you work blame others rather than sharing responsibility?** (1= never, 2 = rarely, 3 = occasionally, 4 = often, 5 = always)
17. **To what extent do the other healthcare, social service, and/or education providers with whom you work share your goals for the care of CHW program participants?** (1 = not at all, 2 = a little, 3 = some, 4 = a lot, 5 = completely)
18. **How much do the other healthcare, social service, and/or education providers with whom you work know about the work you do with CHW program participants?** (1 = nothing, 2 = little, 3 = some, 4 = a lot, 5 = everything)
19. **How much do the other healthcare, social service, and/or education providers with whom you work respect you and the work you do with CHW program participants?** (1 = not at all, 2 = a little, 3 = some, 4 = a lot, 5 = completely)

Thinking about other healthcare, social service, and/or education providers with whom you work, please indicate how much you agree or disagree with the following statements (1= strongly disagree, 4 = strongly agree):

20. **I feel isolated from them because of my race/ethnicity or culture.**
21. **I feel like I have to be the only voice for my race/ethnicity or culture among them.**
22. **I feel dismissed or devalued by them because of my racial/ethnic or cultural background.**
23. **I feel they make assumptions about me because of my race/ethnicity or culture.**
24. **They understand my roles and what I do as a CHW.**
 - Not at all
 - A little
 - Some
 - A lot
 - Completely
25. **I feel comfortable going to other healthcare, social service, and/or education providers with whom I work to talk about participants' needs.**
 - Not at all

- A little
- Some
- A lot
- Completely

SUPPORTIVE AND REFLECTIVE SUPERVISION

26. How many hours of individual (one-on-one) supervision were provided to you in the last 30 days?

One-on-one: _____ hours

Group: _____ hours

27. How many hours of group supervision (supervision conducted with more than 1 CHW) were provided to you in the last 30 days?

28. Please rate the overall quality of the individual supervision you received within the last 30 days (including administrative and/or clinical supervision) (1 = poor, 2 = fair, 3 = good, 4 = excellent)

29. Please rate the overall quality of the group supervision you received in the last 30 days (including administrative and/or clinical supervision). (1 = poor, 2 = fair, 3 = good, 4 = excellent)

Thinking of the person you consider to be your primary supervisor over the past 30 days, please rate the following items: (1= strongly disagree, 4 = strongly agree)

30. My supervisor appreciates my role as a CHW.

31. My supervisor advocates for the role of CHWs with upper management (staff who rank above the supervisor).

32. My supervisor has participated in training about the CHW profession.

33. My supervisor encourages my professional growth (e.g., by regularly encouraging me and/or accepting my suggestions within supervision sessions to pursue training opportunities, attend conferences, develop leadership skills, etc.).

34. My supervisor understands the strengths and needs of the community/ies we serve.

35. My supervisor understands that improving health requires addressing racism and other forms of oppression.

36. In my organization, CHWs participate on hiring panels when CHW supervisors are selected.

CHW CHARACTERISTICS AND DEMOGRAPHICS

37. How many years have you been working as a CHW? _____

38. How many months have you been working in the CHW program? _____

39. **What is your average patient/client load in the CHW program?** ____

40. **What is your formal CHW training?** [Open text entry]

41. **Do you identify as male, female, or in some other way?**

- a. Male
- b. Female
- c. Non-binary
- d. Some other way (please specify)
- e. Prefer not to answer

42. **To ensure we are reaching people of all ages, would you please tell me your age?** __[Number]

Prefer not to answer/unsure

Source: CSHP/Eagleton/Department of Children and Families, IDD Caregiver Survey

43. **[For prefer not to answer/unsure above, ask] Would you be willing to tell us whether it's between...**

- a. 18 - 24
- b. 25 - 34
- c. 35 – 44
- d. 45 –54
- e. 55 - 64
- f. 65 or over
- g. Prefer not to answer

Source: CSHP/Eagleton

44. **What is the highest degree or level of school you have completed?**

- 1 Never attended school or only attended kindergarten
- 2 Grades 1 through 8 (Elementary)
- 3 Grades 9 through 11 (Some high school)
- 4 Grade 12 or GED (High school graduate)
- 5 College 1 year to 3 years (Some college or technical school)
- 6 College 4 years or more (College graduate)

Source: Eagleton Polling, maps to Census categories

45. **Are you of Latino or Hispanic origin, such as Mexican, Puerto Rican, Cuban or some other Spanish background?**

- b. Yes
- c. No

Source: Adapted from US Department of Health and Human Services, Office of Minority Health, <https://minorityhealth.hhs.gov/explanation-data-standards-race-ethnicity-sex-primary-language-and-disability>

46. **Are you White, Black or of Asian origin, or are you some other race, or multi-racial?** (select all that apply)

- b. White (includes Caucasian, European, Middle Eastern)
- e. Black (includes African American)
- f. Asian (includes Asian-Indian, South Asian, East Asian, Chinese, Japanese)
- g. Hispanic / Latino / Spanish
- f. Other (please specify) [Open-ended free text]
- g. Multi-racial (please specify) [Open-ended free text]

Source: Adapted from US Department of Health and Human Services, Office of Minority Health, <https://minorityhealth.hhs.gov/explanation-data-standards-race-ethnicity-sex-primary-language-and-disability>

Appendix 7.4: CHW Focus Group Guide

Adapted from: CHW Common Indicators (questions are mapped to Common Indicator categories)

Participants: CHWs recruited from the screener survey

Thank you for meeting with us. Over the next 60-90 minutes, we will focus on ways to improve services for people participating in the CHW pilot program in New Jersey. We will ask the group guiding questions. After each question, a prompt will pop-up on your screen with an opportunity write a brief response. We will then share the responses and each member will have the opportunity to explain their answers to the group.

We are aiming to get as many different opinions as possible. We will not be using job titles, degrees, or affiliations. Instead, we will be using first names. For this focus group to be successful, please remember that your perspective cannot be wrong, and your opinion is incredibly valuable to this work. It may be that someone will say something that you disagree with. To encourage everyone to feel free to take part, we will not have a debate or argument over one another's opinions. As mentioned, your perspective cannot be wrong.

Where relevant, we will show up some data from the pilot program and ask for your reflections.

Focus Group Question Bank

1. As a Community Health Worker involved in the pilot program, you're likely assisting individuals in navigating various healthcare decisions. **What three words describe your experience in helping individuals with complex needs access healthcare services and support? These can be positive, negative, or neutral.** [\[CHW ENACTMENT OF THE 10 CORE ROLES\]](#)

Possible probes:

- a. How has your experience been working as a CHW in the pilot program so far?
- b. What specific roles and responsibilities do you have as a CHW within the pilot program?

2. The pilot program aims to improve access to healthcare and support services for individuals in the community. **How would you describe your experience with the pilot program in facilitating access to necessary services?** [\[CHW FACILITATED REFERRALS\]](#)

Possible probes:

- a. What improvements would you suggest to enhance the effectiveness of the pilot program?
- b. Can you describe successful interventions or outcomes you've achieved as a CHW in the pilot program?
- c. What challenges have you encountered while serving as a CHW, and how have you addressed them?
- d. Who else do you work with? [\[CHW INTEGRATION INTO TEAMS\]](#)

3. What support or resources do you think CHWs need to be successful in their roles within the pilot program? [\[COMPENSATION, BENEFITS, AND OPPORTUNITIES FOR ADVANCEMENT\]](#)

Possible probes:

- a. Tell me about working with your supervisor(s). [\[SUPPORTIVE AND REFLECTION SUPERVISION\]](#)
 - b. What happens to feedback that you give to your supervisor? To leadership? To the community? [\[CHW INVOLVEMENT IN DECISION- AND POLICY-MAKING\]](#)
4. Please describe any changes you would like to see in the CHW role, should this program be extended or expanded.

Possible probes:

- a. Level of pay, FTE level, number of hours worked, number of patients/clients) [\[COMPENSATION, BENEFITS, AND OPPORTUNITIES FOR ADVANCEMENT\]](#)
 - b. In what ways do you think the CHW pilot program could be improved to better meet the needs of the participants you serve? [\[CHW ENACTMENT OF THE 10 CORE ROLES\]](#)
5. As a CHW, you play an important role in advocating for the needs of individuals in the community. **What message would you like to convey to New Jersey systems leaders regarding the experiences of individuals accessing healthcare services?** [\[CHW INVOLVEMENT IN DECISION- AND POLICY-MAKING\]](#)

8. Tenancy and Housing Supports

A. General Background Information

Lack of affordable, appropriate housing is a critical barrier to wellness for many Medicaid beneficiaries. Unstable housing may lead to avoidable hospitalization, institutionalization, or other instances of high-cost care, negative clinical outcomes, worsening of chronic conditions, and inability to achieve key life goals. We anticipate that housing supports can lead to better care and outcomes for many beneficiaries, particularly for those with serious mental illness, substance use disorders, pregnant individuals, disabilities, formerly incarcerated, older adults, and individuals and families who have experienced or are at risk for homelessness. Unstable housing is also a driver of disparate health and life outcomes among racial and ethnic groups and other vulnerable populations. A 2022 ASPE brief summarizes needs and strategies regarding social determinants of health, including housing.⁷⁶

As part of the NJ FamilyCare Comprehensive Demonstration Waiver approved in March 2023, New Jersey is implementing a multifaceted, integrated housing strategy for Medicaid beneficiaries that incorporates enhancements to infrastructure, coverage for additional targeted services, and coordination across State and community resources involved in the provision of health and housing services. Core elements of this strategy include:

- Strengthened requirements for MCOs to employ dedicated housing specialists;
- Managed Care Organization (MCO) accountability for achieving housing-related goals;
- A newly created and dedicated State office responsible for implementing the above, as well as tracking progress towards key housing-related milestones for Medicaid-related populations;
- Ongoing, enhanced engagement between MCOs and public housing authorities, developers, shelters, and other housing-related community resources; and
- Targeted Medicaid coverage of key housing-related services, including housing transition and tenancy support services.

Each of these elements is described in greater detail below.

Infrastructure

As part of its enhanced focus on housing for vulnerable subpopulations, New Jersey will significantly strengthen the Medicaid infrastructure dedicated to addressing housing needs, fostering greater accountability and focus among both Medicaid MCOs and State staff. This enhanced infrastructure will help ensure that housing-related services are being efficiently and appropriately targeted towards beneficiaries in need. While the State's plan focused specifically on housing-related needs, the Medicaid infrastructure that is developed to implement this initiative

⁷⁶ Whitman A., et al. (2022). Addressing Social Determinants of Health: Examples of Successful Evidence-Based Strategies and Current Federal Efforts. Available at <https://aspe.hhs.gov/sites/default/files/documents/e2b650cd64cf84aae8ff0fae7474af82/SDOH-Evidence-Review.pdf>

may also serve as a platform or model to implement future Medicaid initiatives focused on other social determinants of health.

MCO Housing Specialists (MHSs) and Accountability

Prior to this demonstration initiative, New Jersey's MCO contract required each MCO to employ at least one housing specialist who was responsible for "helping to identify, secure, and maintain community-based housing for MLTSS members and for developing, articulating, and implementing a broader housing strategy within the Contractor to expand housing availability/options."⁷⁷ Housing specialists play an important role in transitioning beneficiaries from institutions to community settings and maintaining beneficiaries who require long-term care in the community.

Under the demonstration, New Jersey will enhance contractual requirements around housing specialists, including:

- Establishing caseload requirements for housing specialists based on the number of enrolled beneficiaries eligible for housing-related services, including both MLTSS and other populations (for more on beneficiary eligibility, see "Eligibility" section below);
- Developing specific requirements for regular and timely assessments of beneficiaries' housing needs, and standards around referrals and provision of services for those for whom housing needs are identified;
- Requiring housing specialists to be directly accessible (via phone or secure e-mail) to beneficiaries, beneficiaries' family members or caregivers, providers, and community-based organizations; and
- Requiring housing specialists to use technical platforms (where they are determined to be appropriate and helpful) to coordinate with community-based organizations (CBOs) that provide housing services or other related resources to address social determinants of health.

In addition, the state is expected to establish housing-related standards and requirements for MCOs. In particular, MCOs will be expected to develop sufficient networks (potentially including both traditional providers and other community-based organizations) to meet the need for housing-related services described below. MCOs will also be expected to fully participate in multi-agency and stakeholder working groups established by the DHS Housing Unit (see below). They will also be expected to maintain an inventory of possible housing options (i.e., units and rental assistance) based on information obtained during housing searches for individuals and through regular consultations with housing service providers. In addition, MCOs will be expected to report and be accountable for key performance metrics related to housing-related services, including metrics related to total members assessed, cases open/closed/pending (with reasons/disposition), successful member transitions, utilization of housing-related services, and health equity measures.

Medicaid Housing Unit

To provide infrastructure supporting Medicaid's enhanced focus on housing, DMAHS will create a new staff unit focused on housing-related issues. They believe that this will bring renewed energy

⁷⁷ See Article 7, Section 3 of New Jersey's MCO contract, available at <https://www.state.nj.us/humanservices/dmahs/info/resources/care/hmo-contract.pdf>

and focus to Medicaid beneficiaries' housing-related challenges and needs and provide a platform for functional collaboration across State and local government. This unit will have responsibility for a number of functions, including:

- Developing policies and guidance around implementation of new Medicaid-related housing benefits;
- Monitoring and enforcement of the new MCO housing-related contract requirements (described above);
- Maximizing collaboration between DMAHS and other State agencies and departments on housing initiatives, including exploring the possibility of braided funding streams;⁷⁸
- Serving as a bridge between MHSs and other housing stakeholders (see more details in “Enhanced Engagement” section below);
- Leading initiatives and collaborating with sister agencies related to community transitions for nursing facility residents, including Money Follows the Person transitions; and
- Analyzing the level of impact and health equity outcomes, including reporting of performance metrics to CMS.

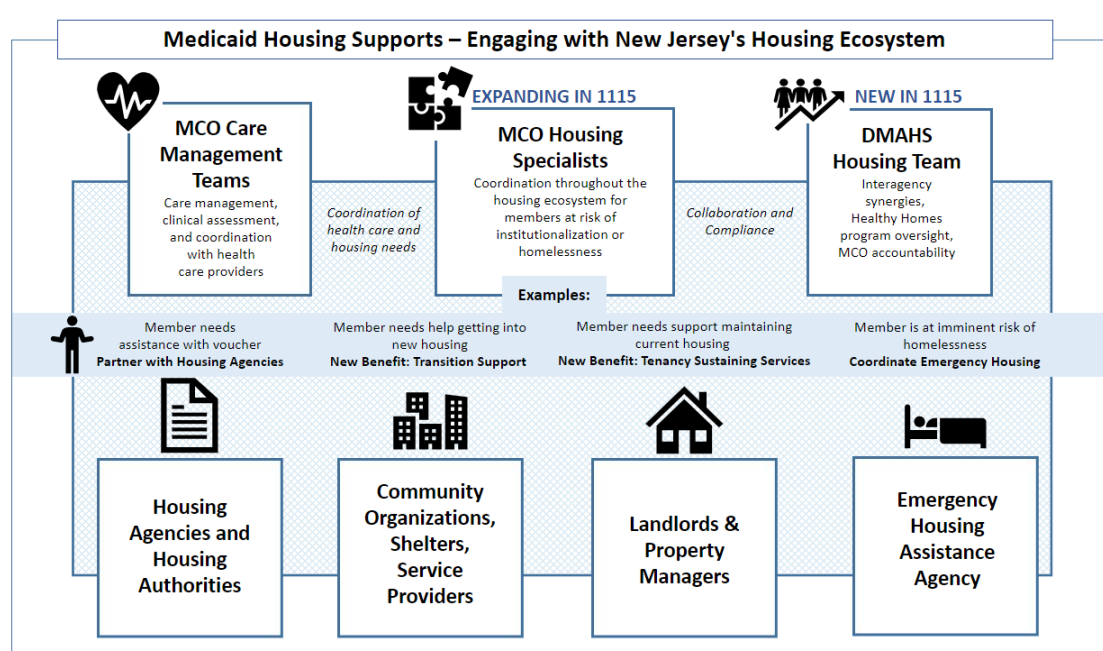
This new unit will create a central locus of accountability for Medicaid-related housing implementation and policy, consistent with Medicaid's envisioned increased involvement in this space and will leverage, rather than replicate, existing work underway at sister agencies.

Enhanced Engagement between Medicaid and Housing Stakeholders

As referenced above, a key responsibility of the Medicaid Housing Unit will be to facilitate connections between DMAHS and MCOs and other housing actors, including housing assistance agencies (e.g., Section 8 and similar programs), CBOs (e.g., shelters and providers of emergency housing assistance like the New Jersey Division of Family Development and county welfare agencies), housing finance organizations (e.g., the New Jersey Housing and Mortgage Finance Agency/HMFA), and other local organizations such as Continuums of Care and Coordinated Entry Programs. The State's goal is to better connect and align Medicaid's involvement with beneficiaries to existing housing systems and supports, and to enhance access to those services rather than replace or duplicate resources or infrastructure that currently operate in this space.

In so doing, the housing unit aims to establish regular multidirectional channels of communication between DMAHS, MCOs, and housing resources. That is, MHSs will be expected to seek assistance from these external partners in identifying appropriate resources for MCO members facing housing challenges. Conversely, housing and other community-based organizations will have a channel to signal MHSs when they have identified a Medicaid beneficiary as experiencing or at-risk of homelessness and in need of additional services or supports (see diagram below).

⁷⁸ This will include multiple DHS divisions in addition to DMAHS, including the Division of Mental Health and Addiction Services, the Division of Aging Services, the Division of Developmental Disabilities, and the Division of Family Development. The populations served by each of these agencies overlap significantly with Medicaid beneficiaries. This will also include other state Departments, including (but not necessarily limited to) the Department of Children and Families, Department of Community Affairs, Department of Corrections, and the Department of Health.



Source: NJ DMAHS 1115 proposal

Medicaid Covered Housing-Related Services

This enhanced infrastructure will be paired with Medicaid coverage of new housing-related services for beneficiaries in need. Additional details around anticipated beneficiary eligibility, delivery system, and services covered are below.

Eligibility for Housing Specialist Support and Housing-Related Services

Eligibility for Medicaid-covered housing-related services (described below) will be based on beneficiary need and is intended to identify those beneficiaries where housing supports are likely to have the greatest positive impact on health and life outcomes. Under this approach, MCOs will follow a two-step process for identifying beneficiaries who are eligible for housing-related services.

First, all new MCO beneficiaries or beneficiaries who are experiencing a trigger event (e.g., served for eviction, released from incarceration, leaving an institutional setting, or self-referral) will be required to undergo an initial screen to identify potential need for housing-related services. This initial assessment will consist of a small number (perhaps 2-3) of high-level questions and will be integrated into the Initial Health Screen that MCOs are currently required to complete for all new members.⁷⁹ In addition, the screening will be woven into the care planning conducted with current members and the NJ Choice assessment for members seeking or enrolled in MLTSS. The initial assessment may also include additional information or support from family members or caregivers.

Second, beneficiaries whose initial assessment indicated a potential need for housing-related services will receive a second, more comprehensive assessment using a standardized instrument. The results of this second assessment will determine the member's eligibility for housing-related services and will also be used by the MHS to develop a person-centered service plan. This assessment will be repeated at least annually.

⁷⁹ For more details, please see Section 4.6.5.B.1 of New Jersey's managed care contract, available here: <https://www.state.nj.us/humanservices/dmahs/info/resources/care/hmo-contract.pdf>

In addition to the process described above, Medicaid beneficiaries (or their care managers) could request an assessment for housing-related services at any time on top of the initial and annual assessments. DMAHS will also consider requiring that certain high-risk populations, including but not limited to individuals being released from correctional facilities and individuals transitioning from nursing facilities, receive a full (second stage) assessment for housing-related needs, regardless of the results of the initial screen. Finally, to support rebalancing goals, DMAHS will also require MCO care managers to assess housing-related needs for MLTSS members during each face-to-face visit. These visits occur at least twice yearly.

Medicaid Covered Housing-Related Services

As part of the demonstration renewal, New Jersey will offer expanded Medicaid coverage for targeted housing-related services that are expected to result in improved beneficiary health and reduced institutionalization while realizing opportunities for better efficiency of the Medicaid delivery system. These services will be made available exclusively through the managed care delivery system, as authorized under the demonstration, to promote accountability and efficiency. Doing so will also put the MCOs' Housing Specialists at the center of care coordination.

The State's intention is to better connect Medicaid beneficiaries to the existing housing ecosystem, particularly community-based organizations, and to enhance this ecosystem through direct support using Medicaid funding. They do not expect to replace or replicate existing infrastructure nor are they proposing MCOs become housing providers. Rather, the aim is for MCOs to better support the existing programs in the communities and assist beneficiaries in accessing these services. Four categories of services are offered (collectively referred to as "**demonstration housing services**"): ⁸⁰

1. Pre-Tenancy Services

- Develop an individualized housing support plan to help members achieve their goals.
- Assist with the housing search and application process.
- Provide connections to resources aiding with housing costs and other expenses.

2. Tenancy Sustaining Services

- Develop an individualized housing support plan to help members achieve their goals.
- Assist with lease renewals and housing certifications.
- Connect members to financial resources and social services (e.g., education, employment, and legal services).
- Assist in addressing circumstances and/or behaviors that may jeopardize housing.
- Assist in resolving disputes with landlords.

3. Move-in Supports

- Pay for the set-up of the new housing unit to address needs identified in the person-centered care plan.

⁸⁰ Note that some of these services are already offered to certain Medicaid beneficiaries – e.g. MLTSS members.

- Pay for the move and support the details of the move.

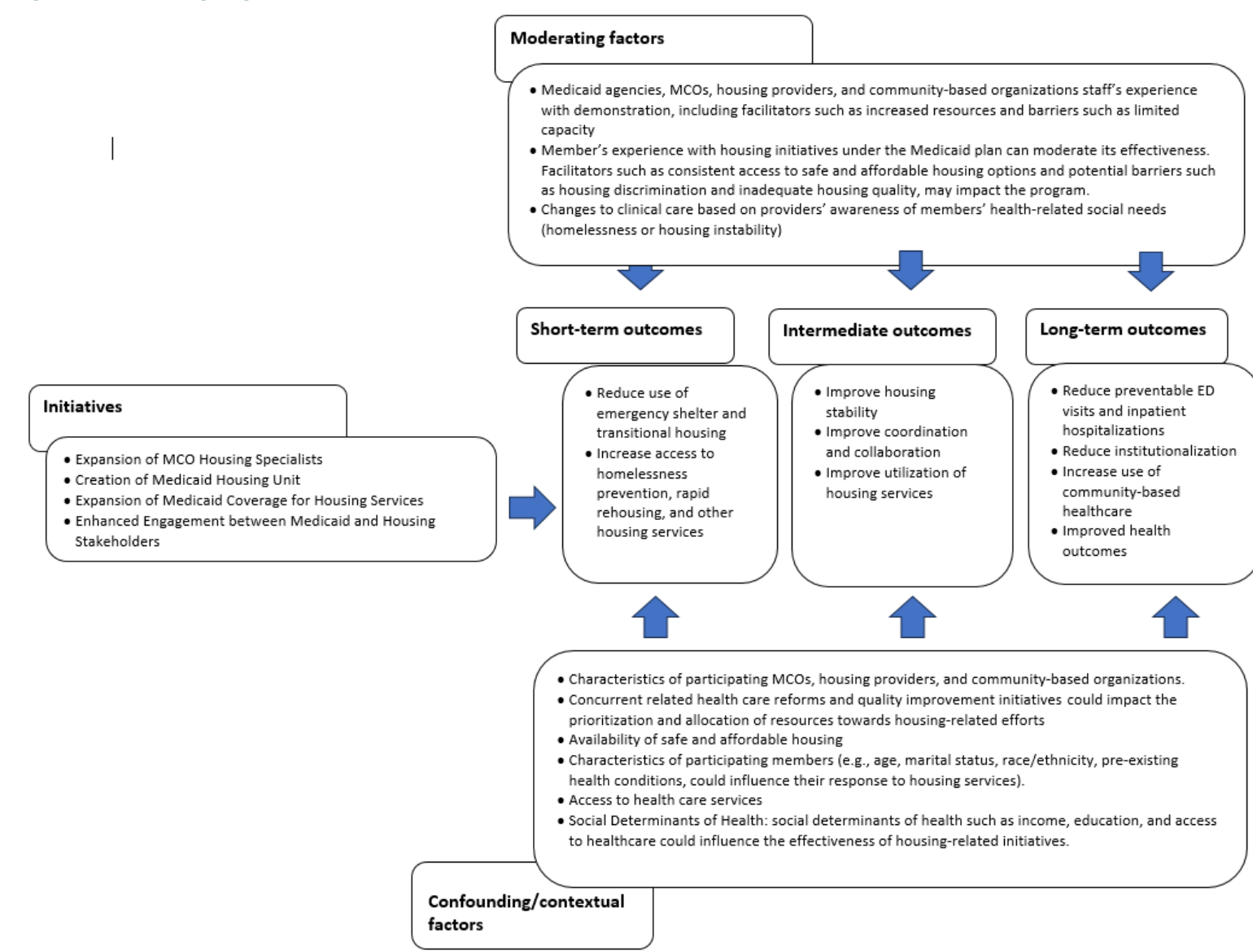
4. Residential Modifications and Remediation

- Provide remediation services, including air filtration devices and asthma remediation.
- Modify home environment (e.g., ramps, handrails, and grab bars).
- Provide medically necessary heating and cooling.

B. Research Questions and Hypotheses

Our evaluation of the Medicaid Housing Program includes an implementation study and research questions related to program outcomes. Figure 8.1 is a logic model showing the implementation questions and the expected outcomes.

Figure 8.1 Housing Logic Model



1. Implementation Study

To understand the implementation of the Medicaid housing program, researchers will review available administrative data and monitoring reports. They will also conduct in-depth individual interviews with entities responsible for the program, such as Medicaid agencies, MCOs, housing providers, and CBOs. These interviews will involve key informants involved in the implementation of the housing program itself.

The following implementation questions will be examined:

1. Which key entities are collaborating to implement and operationalize the Medicaid housing program, how were they identified, and what are their main roles? How and why have the roles or participation of those key entities changed throughout the demonstration period?
2. What are facilitators and barriers for key entities implementing the Medicaid housing program and what strategies have key entities used to overcome these barriers? What suggestions do key entities have for improving the program?
 - a. How do entities identify housing options that will be suitable and accessible for Medicaid beneficiaries, considering factors such as affordability, safety, and location?
3. What facilitators and barriers to participation do beneficiaries experience, and what does this information suggest about the need for refinements to beneficiary and provider outreach as well as program implementation or design more broadly?
 - a. How do entities assess whether beneficiaries are accessing and utilizing housing services for their own needs?
4. What strategies and tools do key entities use to identify beneficiaries with housing needs and facilitate beneficiary participation in the program? How, if at all, and why, have key entities adapted these strategies? What did the state learn about promising practices for identifying and engaging beneficiaries?
 - a. Do beneficiaries identified through housing risk factors agree to participate? If beneficiaries don't participate, do entities know why?
5. How are key entities implementing case management and providing housing assistance through the program? What did the state learn about promising practices for delivering services to address beneficiaries' housing-related social needs? Do participating beneficiaries stay enrolled? What are key reasons for dropping out of the program?
 - a. How, if at all, did the program establish a process to share and receive screening or other results among key entities? How, if at all, have housing providers modified their practices in response to this information?
 - b. How do key entities form and maintain organizational partnerships to promote integration of health and housing services?
 - c. To what extent is the state integrating the program with its existing programs and infrastructure? What did the state learn about promising practices to support this integration?
6. What infrastructure are key entities developing or acquiring using program funds? What did the state learn about promising practices to build infrastructure to support housing screening, case management, and service delivery?

7. Do Medicaid housing services (described above) substitute for other available resources and what is their incremental contribution beyond other available services?

1.1 Methodology

Data Collection: Systematic qualitative interviews will be conducted to address the implementation questions, focusing on the effectiveness of implementation of infrastructure investments within DMAHS, MCOs, and housing CBOs. Interviews will offer insights into program implementation as well as identifying barriers and opportunities to improve the plan. Interviews will be recorded, transcribed, and analyzed using established qualitative thematic analysis techniques. Participant recruitment will be based on criteria established during protocol development and will primarily involve staff and key informants with existing relationships to the evaluators such as MCOs and their vendors, DMAHS staff, housing CBOs, and other state and local experts. Interviews will be conducted twice over the course of the demonstration. We will attempt to recruit the same individuals for both rounds, with comparisons between responses from the first and second rounds to assess progress. All interviews will be conducted confidentially to encourage candid responses.

Analytic Strategy for Interview Data: NVivo or similar software will be used to analyze for themes. A general inductive approach will be used to allow for themes to emerge. Where appropriate, themes will be categorized as a barrier or facilitator in order to provide an analysis of value to DMAHS, MCOs and other program stakeholders.

For Implementation question (IQ)7, we will interview housing services providers, including those facilitating or delivering Medicaid-funded housing support services. Table 8.1 below describes planned qualitative interview recruitment strategies.

Table 8.1: Research Questions and Interview Strategies for Implementation Question (IQ) 7

Research Question	Number	Interview Strategy
IQ7: Do Medicaid pre-tenancy transition and tenancy sustaining services substitute for other available resources and what is their incremental contribution beyond other available services?	<p>≈30</p> <p>Twice over the course of the demonstration</p>	<p>In consultation with DMAHS and New Jersey housing officials from HMFA and/or the Dept. of Community Affairs, CSHP will identify an initial group of housing service providers, including those who do and do not facilitate or provide Medicaid housing-related services. We will ask initial interviewees to recommend other service providers who can address our questions (i.e., “snowball sampling”). Semi-structured interview guides will indirectly ask about possible substitution of funding sources and the overlap/alignment between different types of housing-related services (e.g., “before Medicaid funded these services, how would they be funded? If you had a source that could fully or partly fund these services before the waiver, how are you using those funds now?”) to avoid signaling concerns about possible substitution. Further, we will ask about complementary and coordination (i.e., “blending and braiding”) sources to best meet the needs of clients. Interviews will be approximately 45 to 60 minutes and response incentives will be offered (e.g., \$50).</p>

2. Outcomes Study

Figure 8.2 describes hypothesized drivers connecting demonstration activities to improved beneficiary health and wellbeing. The secondary drivers in the figure represent the demonstration components that address housing and healthcare changes that are expected to lead to improved housing stability and access to essential community-based services. These, in turn, lead to the primary drivers that are expected to lead to increased use of essential community-based physical and behavioral health services and reduced use of avoidable hospital inpatient and emergency department and institutional settings and, ultimately, better health and wellbeing. Further, given known racial/ethnic disparities in homelessness and housing insecurity, we expect the demonstration to drive reductions in disparities in health services outcomes described in the diagram.

Figure 8.2: Housing Services Driver Diagram

Aim	Primary Drivers	Secondary Drivers
<p>Improve housing stability and decrease risk of homelessness.</p> <p>Improve health and wellbeing of persons at risk of housing insecurity</p> <ul style="list-style-type: none"> ○ Increase use of essential community-based physical and behavioral health services. ○ Reduce preventable ED utilization, inpatient hospitalizations, and institution use, as well as spending on institutional and hospital care. Narrow racial/ethnic health services disparities that stem from unstable housing. 	<ul style="list-style-type: none"> ○ Reduce evictions ○ Reduce homelessness ○ Improve access to healthy and safe housing ○ Increase housing tenure ○ Improve access to community-based physical and behavioral health services for people experiencing or at risk of homelessness. 	<ul style="list-style-type: none"> ○ Improve cross-sector collaboration & service coordination among health, housing, housing court, corrections and other relevant systems ○ Screen and identify members experiencing or at risk of housing insecurity or homelessness ○ Deliver pre-tenancy services, tenancy sustaining services, move-in supports, and residential modification and remediation benefits to eligible members
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="border-top: 1px solid black; width: 30%;"></div> <div style="text-align: center;">Causality</div> <div style="border-top: 1px solid black; width: 30%;"></div> </div>		

Infrastructure and benefit enhancements described above are expected to substantially improve housing stability for beneficiaries at risk of avoidable hospitalization, institutionalization, and homelessness. Three hypotheses and associated research questions guide the evaluation of this component of the demonstration.

Hypothesis 1: New infrastructure to support Medicaid’s enhanced focus on housing within DMAHS, the MCOs, and housing CBOs will result in improved housing stability for members at risk of housing insecurity and a higher share of members at risk of institutionalization remaining in the community.

Research Question 1a: Do (a) the monitoring of MCO efforts to meet housing needs and (b) the establishment of partnerships between MCOs and housing entities lead to enhanced engagement between Medicaid and housing stakeholders?

Research Question 1b: Do MCOs, through MHS or care management staff, reach and provide referrals to members with housing-related needs?

Research Question 1c: Do Medicaid members who have interacted with MHSs or other MCO staff about their housing-related needs perceive that those needs are appropriately addressed?

Research Question 1d: Do members experiencing homelessness or at greatest risk of homelessness receive referrals for demonstration housing services (i.e., pre-tenancy transition, tenancy sustaining, move-in supports, or residential modification and remediation services) from MCO staff?

Hypothesis 2: Delivery of Medicaid demonstration housing services will improve housing tenure and reduce associated racial/ethnic disparities.

Research Question 2a: Does delivery of demonstration housing services improve community housing tenure and reduce tenure disparities?

Hypothesis 3: Delivery of Medicaid demonstration housing services will (a) reduce use of preventable or avoidable health services and associated spending, and (b) increase use of essential health services and associated spending on Medicaid services, as well as improve health care outcomes, and reduce associated racial/ethnic disparities.

Research Question 3a: Does delivery of demonstration housing services lead to more optimal Medicaid service utilization and spending and reduced disparities?

2.1 Methodology

Table 8.2 enumerates the beneficiary-level outcomes associated with the Aims and Research Questions above (and in Figure 8.2). These measures will be constructed in the MMIS data and augmented with data from the Homeless Management Information System (for measure #20).

Table 8.2: Medicaid Beneficiary Outcome Measures

Spending Outcomes
1. Total spending for Medicaid members receiving housing support
2. Total Medicaid housing services spending for members receiving housing support
3. Total Medicaid healthcare (non-housing services) spending for members receiving housing support
4. Prescription drug spending (total and for chronic condition maintenance medications)
5. Nursing facilities and other institutions
6. Hospital inpatient care
7. Hospital emergency department visits
8. All other
Utilization Outcomes
9. Primary care provider visits
10. Mental health visits
11. Substance use treatment service initiation and engagement ^a
12. Admission to nursing facilities or other institutions

13. Days in nursing facilities and other institutions
14. Community behavioral health visits (mental health and SUD)
15. All-cause hospital inpatient admissions
16. Potentially avoidable admissions (AHRQ prevention quality indicators)^b
17. 30-day all-cause hospital inpatient readmissions
18. Emergency department visits^c
19. Preventable ED visits
20. Return to the ED within 72 hours following ED discharge^a
21. Emergency department visits for behavioral health conditions
22. Follow-up after mental health or SUD-related ED visits^a
23. Emergency homeless shelter use within 14 days of hospital inpatient or ED discharge
24. Referrals to community-based organizations (housing and other supports)
25. Incidence of homeless service utilization, disaggregated by service type
26. Duration of homeless service utilization, disaggregated by service type

^aCenter for Medicaid and CHIP Services. Core set of adult health care quality measures for Medicaid (adult core set): technical specifications and resource manual. Baltimore, MD: Centers for Medicare & Medicaid Services, 2019. Available from: <https://www.medicare.gov/medicaid/quality-of-care/downloads/medicaid-adult-core-set-manual.pdf>.

^bAgency for Healthcare Research and Quality. Prevention quality indicators overview [Internet]. Rockville, MD: Agency for Healthcare Research and Quality; n.d. Available from: https://www.qualityindicators.ahrq.gov/modules/pqi_resources.aspx.

^cBillings, J., Parikh, N., Mijanovich, T. (2000). Emergency Department Use in New York City: A Substitute for Primary Care?

Methodology for Hypothesis 1, Research Questions (RQ) 1a & 1c

The research questions (RQs) under Hypothesis 1 focus on the effectiveness of implementation of infrastructure investments within DMAHS and the MCOs. RQ1a and RQ1c use systematic qualitative interviews. Analyses for RQ1 will be augmented with reviews of relevant documents and observations of relevant meetings. For qualitative interviews, we will consult with DMAHS on strategies for participant recruitment and the development of semi-structured interview guides. With participant permission, interviews will be recorded, transcribed, and analyzed using established qualitative thematic analysis techniques. Interviews for both RQs will be conducted twice over the course of the demonstration. For interviews involving key informants (RQ1), we will attempt to recruit the same individuals for both rounds; where that is not possible, individuals in the same or similar roles will be recruited. Analysis of second-round interviews will include comparisons to responses from the first round to assess progress. Table 8.3 below describes planned qualitative interview recruitment strategies. All interviews will be conducted on a confidential basis to encourage candor. In the case of key informants (RQ1a) absolute confidentiality will not be promised because the small number of interviewees of each type could enable a knowledgeable person to discern the identity of some participants.

Table 8.3: Research Questions and Interview Strategies for RQ1a and RQ1c

Research Question	Number	Interview Strategy
RQ1a: Do the Medicaid Housing Unit's efforts to enhance engagement between Medicaid and housing stakeholders improve systems and resources for addressing the housing-related needs of Medicaid members at risk	≈20 to 30 Twice over the course of the demonstration	In consultation with DMAHS, CSHP will identify individuals for recruitment. We expect to include: DMAHS and MCO representatives, leaders in NJ agencies responsible for homeless services (e.g., Div. Mental Health and Addiction Services, Dept. of Community Affairs, Housing and Mortgage Finance Agency/HMFA), community-based homeless service

of institutionalization or homelessness?		delivery and advocacy organizations. Interviews will be approximately 45 to 60 minutes.
RQ1c: Do Medicaid members who have interacted with MHSs or other MCO staff about their housing-related needs perceive that those needs are appropriately addressed?	<p>≈100, about 15-25 per MCO.</p> <p>Twice over the course of the demonstration</p>	DMAHS will provide recruitment specification (developed by CSHP) to the MCOs which will mail invitations to selected MCO members who have had contact with MHS and other MCO staff interacting with members about housing needs. Selected members will be offered participation incentives of about \$75 to encourage volunteers to “opt in” and contact a CSHP interviewer. One MCO will conduct a recruitment pilot so that outreach and incentive plans can be refined. Interviews will be approximately 45 to 60 minutes.

Methodology for Hypothesis 1, Research Question 1b

Research question 1b asks the extent to which MHS and other MCO staff reach and complete referrals for members with housing-related needs. This analysis will rely on data collected by the MCOs, including the results of the second, comprehensive housing needs assessment using the DMAHS approved standardized instrument as well as MCO technical platforms recording workflows of the Housing Specialists (contacts, referrals, completed referrals).

We will conduct descriptive trend analysis with comparisons by member characteristics (described below), identified housing-related needs, and MCO. The denominator for RQ1b analyses will be members who “screen positive” for housing needs and numerators will be 1) contacts, 2) referrals, and 3) completed referrals⁸¹ per member who screened positive. To the extent supported by the data, analyses will be conducted by member race/ethnicity; Medicaid eligibility group; diagnosis with SMI, SUD, or I/DD; and housing-related needs identified in the screening process. Offered and completed referrals will be further analyzed by type of service (e.g., income supports, social services, housing services, and services addressing other social needs).

Methodology for Hypothesis 1, Research Question 1d

Research question 1d assesses the extent to which demonstration housing services are (a) approved but not received and (b) approved and received, among individuals identified as experiencing or at-risk of homelessness. These analyses use MMIS data linked with the following state administrative datasets:

- MCO technical platform records of MHS staff referral information (discussed under RQ1b methods above);
- Homeless Management Information System (HMIS) records of homeless services utilization;
- Records of prison incarceration, recidivism, and prison health services use; and
- Eviction filing and judgement records.

Under prior data use and sharing agreements, CSHP received a linked MMIS and HMIS Limited Data Set (LDS) for 19 (of 21) counties for 2011 through Q1 2023. These agreements and data would be extended for the demonstration period. Further, we have entered into an agreement to add one of the remaining counties (Bergen Co.) and are exploring adding the final county (Middlesex Co.), to

⁸¹ Referrals where the member touches the service to which they are referred.

the linked MMIS-HMIS dataset. In addition, a data use agreement between Rutgers on behalf of the Center for Health Services Research and DMAHS authorizes linkage of prison health services data to MMIS. The incarceration data under this agreement are collected under the auspices of the New Jersey Department of Corrections (DOC) and maintained by Rutgers University Correctional Health Care (a unit of Rutgers Biomedical and Health Sciences); these data include information on prison releases, recidivism, and health services and treatments received prior to release. Data on eviction filings and judgments are maintained by the New Jersey Courts. To our knowledge eviction records have not yet been linked to MMIS, and creating such a linkage will require further exploration.

Denominators for RQ1d analyses include beneficiaries in three distinct risk groups for housing instability in the prior year: 1) homeless services users (e.g., shelter stay, street outreach contact), 2) individuals released from incarceration, and 3) individuals who live at an address which was served with an eviction notice or judgement. Numerators will be derived from the MCO technical platform (referrals completed) and MMIS (pre-tenancy transition and tenancy sustaining services). If these housing-related benefits are not recorded in the MMIS, linkage to data on those services will be needed.

We will begin by conducting descriptive analysis examining trends in each of the three categories of services and by member characteristics (e.g., demographics, eligibility group, and SMI, SUD and I/DD status) and MCO. Second, we will fit models of the likelihood of receiving the respective services in each group, adjusting for beneficiary health and housing-related histories. Health history data will be drawn from MMIS and from prison data for periods of incarceration. These models we test for racial/ethnic disparities in service usage rates. No comparison groups are available for these analyses.

Methodology for Hypothesis 2, Research Question 2a

Using the same set of linked administrative data described above, research question 2a addresses the extent to which housing supports authorized under the demonstration lead to improved housing tenure.

Plan for RQ2a

Outcome Measure. Under RQ2a, we define five sources of interruptions in community housing tenure: 1) entry into an Medicaid funded nursing facility or other institution; 2) exit from an HMIS-recorded housing arrangement such as permanent supportive housing (PSH) to non-community or non-stable place of residence including jail/prison, emergency shelter, or a place not fit for habitation; 3) regardless of whether a person exited an HMIS-recorded housing situation, use of any HMIS-recorded homeless service including emergency shelter, transitional housing, or street outreach encounter; 4) entry into incarceration; or 5) living at an address for which an eviction notice or judgement was served.

Analytical Strategy. First, we will examine trends in specified outcomes by member characteristics (e.g., demographics, eligibility group, and SMI, SUD and I/DD status) and MCO. Second, we will apply a difference-in-differences framework to model the likelihood of housing tenure loss among beneficiaries who received Medicaid-funded pre-tenancy transition or tenancy sustaining services.

We will use propensity matching to identify comparison beneficiaries with similar circumstances but who did not receive demonstration housing support benefits. Matching variables will include beneficiary demographics, number of chronic conditions, Chronic Illness and Disability Payment System risk score (CDPS), presence of behavioral health conditions (SMI, SUD), Medicaid eligibility category, as well as histories of Medicaid institutional placement, homeless service use, incarceration, and eviction. Matching will be conducted on data for the year prior to the month that the beneficiary received their first housing support benefit (or date of match for comparison beneficiaries). We will test for changes in racial/ethnic disparities in housing tenure by including interaction terms in the models between race/ethnic group and treatment status.

We will examine the robustness of the match by calculating standardized differences in matching variables. If match quality is adequate, but some variables have standardized differences that exceed 10%, we will add adjustments to the models. If match quality is poor overall, we will use pre-pandemic non-concurrent comparison groups in place of a concurrent difference-in-differences analysis.

Methodology for Hypothesis 3, Research Question 3a

Using the same set of linked administrative data described above, research question 3a addresses the extent to which housing supports authorized under the waiver lead to improved health services outcomes.

Plan for RQ3a

Outcome Measures. Medicaid health services outcomes to be examined under RQ3a are defined in **Table 8.2** above. These measures support evaluation of the demonstration's impact on the level and composition of Medicaid spending as well as changes in utilization and quality of care.

Analytical Strategy. As in all components of the evaluation, we first will examine trends in these outcomes by member characteristics (e.g., demographics, eligibility group, and SMI, SUD and I/DD status) and MCO. Then, using a difference-in-differences framework, we will model the respective outcomes. The treatment group will include beneficiaries who received Medicaid-funded pre-tenancy transition or tenancy sustaining services under the demonstration. We will use propensity matching to identify comparison beneficiaries with similar circumstances as the treatment group. Matching will follow the same strategy described under RQ2a above. We will test for changes in racial/ethnic disparities in housing tenure by including interaction terms in the models between race/ethnicity group and treatment status.

Because a large number of models will be estimated, conclusions will be based on patterns observed across outcomes and we will deemphasize results in any single outcome if they are not part of a general pattern. Further, we will drop analyses of outcomes for which the frequency of events is too small to draw well-founded conclusions.

C. Methodological Limitations

Our planned analyses have several limitations. First, when comparing individuals eligible for waiver services to others, propensity score matching will adjust for measured individual characteristics,

but the possibility of unmeasured confounding cannot be ruled out. Difference-in-differences methods greatly reduces the risk of bias from unobserved characteristics.

Second, data available in MMIS does not allow us to fully account for illness severity and, in turn, severity may be associated with selection into waiver interventions, introducing possible biases. This is a limitation common to claims based analyses, and our reports will note this caveat.

Third, while the planned analyses will include rich data on social drivers of health, including homeless service use, incarceration history, and exposure to eviction, other social drivers such as inadequate family support cannot be measured. These factors could affect outcomes in ways we cannot account for, which we will note in our reports.

Fourth, novel data linkages will support in-depth analyses of importance to the evaluation, but these data have potential gaps. Despite rich data available in the HMIS homeless services, our data do not include “less formal” forms of housing instability and homelessness (e.g., “couch surfing”). Also, NJ DOC data include only prison incarcerations but not jail episodes. Jail terms are generally much shorter than prison terms and thus may be less likely to disrupt community housing ties and are thus less important for this evaluation. Further, jail data do not include health information so would be unsuitable for conducting propensity matching for construction of comparison groups. Finally, while the state maintains data on eviction filing and judgements, these data do not include identifiers for all potentially affected individuals; thus, linkages will have to rely on addresses. This will measure potential exposure to eviction but will not definitively label whether a given individual was displaced. There is some uncertainty whether eviction data will be available for the evaluation, but nevertheless rich information will likely be available from HMIS and incarceration data.

Finally, there may be circumstances in which frequency of outcome events, or the quality of propensity matching may be insufficient to support planned difference-in-differences modeling. In these circumstances we will explore using historical, pre-demonstration comparisons. Because pandemic disruptions may cloud our ability to draw conclusions from such analyses, we would use a pre-pandemic comparison period.

The above noted limitations to our planned quantitative analyses will be mitigated, in part, by in-depth key informant and beneficiary interviews. We will be mindful of limitations of the quantitative work as we design interview protocols.

Table 8.4: Summary of Questions, Hypotheses and Methodology

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic Methods
Hypothesis 1 – New infrastructure to support Medicaid’s enhanced focus on housing within DMAHS, the MCOs, and housing CBOs will result in improved housing stability for members at risk of housing insecurity and a higher share of members at risk of institutionalization remaining in the community				
RQ1aDo (a) the monitoring of MCO efforts to meet housing needs and (b) the establishment of partnerships between MCOs and housing entities lead to enhanced engagement between Medicaid and housing stakeholders?	Perceived improvements and impediments to system changes and resources to address housing-related needs of Medicaid members at risk of institutionalization or homelessness.	State, MCO, and community-based key informants (e.g., DMAHS and MCO representatives, leadership from other NJ agencies responsible for homeless services, relevant advocacy organizations). No comparison group.	Relevant documents (e.g., program guidance and meeting minutes). Observations of relevant meetings (e.g., DMAHS stakeholder sessions). Key informant interviews <u>twice</u> over the course of the demonstration (N≈20-30).	Qualitative thematic analysis, compare observations and interviews conducted early and late in the demonstration period.
RQ1b: Do MCOs, through MHS or care management staff, reach and provide referrals to members with housing-related needs?	Distribution of <u>housing-related needs</u> identified in the standardized assessment by member characteristics. <u>Contacts</u> per member screened in need, by member characteristics. <u>Referrals</u> per member screened in need, by member characteristics and type of referral.	Members screened as having housing-related needs on the MCO stage 2 standardized assessment tool. No comparison group.	MCO technical platform and member housing needs assessment data.	Descriptive trend analysis overall, and by housing needs identified, MCO, and member characteristics.*

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic Methods
	Referrals completed per member screened in need, by member characteristics and type of referral.			
RQ1c: Do Medicaid members who have interacted with MHSs or other MCO staff about their housing-related needs perceive that those needs are appropriately addressed?	Reported experiences of Medicaid members who interacted with MHS staff and self-assessment of the extent to which their housing-related needs were addressed.	Systematically selected Medicaid members who had contact with MCO MHS staff.	Qualitative interviews. (N≈100 total, with about 15 to 25 per MCO). Conducted <u>twice</u> over the course of the demonstration.	Qualitative thematic analysis, compare responses by MCO and conducted early and late in the demonstration period.
RQ1d: Do members experiencing homelessness or at greatest risk of homelessness receive referrals for demonstration housing services (i.e., pre-tenancy transition, tenancy sustaining, move-in supports, or residential modification and remediation	Percent of members who used at least one homeless service (e.g., emergency shelter, street outreach contact), transitioned from incarceration , live in a household served with an eviction filings and judgements , or transitioned to the community from a Medicaid-funded institutional setting in	Members with recent history of homeless service use, incarceration, eviction filings or judgments, or Medicaid institutional transition. No comparison group	Numerators: MCO technical platform and MMIS Denominators: MMIS linked to data from: <ul style="list-style-type: none"> • Homeless Management Information System (HMIS) • Incarceration records[#] • Eviction records[#] 	Descriptive trend analysis overall, by member characteristics* and MCO. Model likelihood of <u>receiving services</u> (separate models for referrals, transition, and sustaining services) adjusting for member health and housing-related histories, with

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic Methods
services) from MCO staff?	the prior 12 months who received: (a) approval for housing-related services (but no receipt of services), (b) approval and receipt of at least one housing-related service		[#] <i>contingent on data availability</i>	analysis of racial/ethnic disparities.
*Racial/ethnic groups; age groups; members with diagnoses of SMI, OUD, or IDD; and eligibility group (expansion, dual, other ABD, other).				
Hypothesis 2 - Delivery of Medicaid demonstration housing services will improve housing tenure and reduce associated racial/ethnic disparities.				
RQ2a Does delivery of demonstration housing services improve community housing tenure and reduce tenure disparities?	<p>Evidence of loss of community housing after receipt of transition/sustaining services as indicated by:</p> <ul style="list-style-type: none"> • Entry to a Medicaid-funded institution (e.g., nursing facility). • Exit from HMIS-recorded housing to a destination other than own or family residence (e.g., jail/prison, place not fit for habitation). • Receipt of HMIS-recorded homeless 	<p>Medicaid members receiving pre-tenancy transition or tenancy support services.</p> <p>Comparison group: Propensity matched Medicaid members with a history of exit from institutional placement, homelessness, incarceration, or eviction who did not receive pre-tenancy transition or tenancy support services.</p>	<p>MMIS linked to data from:</p> <ul style="list-style-type: none"> • Homeless Management Information System (HMIS)** • Incarceration records[#] • Eviction records[#] 	<p>Descriptive trend analysis overall, by “dose” and types of tenancy and sustaining services received, member characteristics*, and MCO.</p> <p>Difference-in-differences models of likelihood of <u>housing tenure loss</u> in the year after using housing transition or sustaining services, adjusting for member health and</p>

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic Methods
	services (e.g., emergency shelter, street outreach encounter). • Incarceration [#] • Eviction [#]			housing-related histories, with analysis of racial/ethnic disparities. <i>If the N in the comparison group is too small or propensity matching is not feasible, a non-concurrent pre-pandemic comparison period will be used</i>
Hypothesis 3 - Delivery of Medicaid demonstration housing services will (a) reduce use of preventable or avoidable health services and associated spending, and (b) increase use of essential health services and associated spending on Medicaid services, as well as improve health care outcomes, and reduce associated racial/ethnic disparities.				
RQ3a Does delivery of demonstration housing services lead to more optimal Medicaid service utilization and spending and reduced disparities?	Total Medicaid spending Utilization & spending on: ○ Nursing facility and other institutional placements ○ Total hospital inpatient care, preventable hospitalizations, and 30-day readmissions ○ Emergency department (ED) visits overall and for behavioral health conditions ○ Primary care	Medicaid members receiving pre-tenancy transition or tenancy support services. Comparison group: Propensity matched Medicaid members not receiving pre-tenancy transition or tenancy sustaining services (see RQ2a for details).	MMIS linked to data from: • Homeless Management Information System (HMIS)** • Incarceration records [#] • Eviction records [#]	Descriptive trend analysis overall, by “dose” and types of tenancy and sustaining services received, member characteristics*, and MCO. Difference-in-differences models of spending or utilization as a function of housing transition and sustaining use, adjusting for member health and housing-related histories, with analysis

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic Methods
	<ul style="list-style-type: none"> ○ Community behavioral health services (among those with BH dx) ○ Prescription drugs overall and chronic condition maintenance drugs 			<p>of racial/ethnic disparities.</p> <p>Models specific to dual eligible members will explore impact on Medicare utilization.</p>

Table 8.5 shows an activity timeline for the research activities.

Table 8.5 Key Milestones, Tenancy and Housing Supports

Analytic Activity	Year 1 2025	Year 2 2026	Year 3 2027	Year 4 2028	Year 5 2029	Year 6 2030
1. Qualitative implementation assessment (IQ1-7)	Review documents, observe meetings Conduct and analyze N=30 KIIs	Update document review and meeting observations as needed	Update document review and meeting observations as needed Complete interim analysis	Update document review and meeting observations as needed Conduct and analyze N=30 KIIs	Update document review and meeting observations as needed	Complete analysis
2. Qualitative systems change and outcome assessment (RQ1a, RQ1c)		Conduct and analyze N=20-30 KIIs Conduct and analyze N=100 beneficiary interviews	Complete interim analysis	Begin to conduct and analyze N=20-30 KIIs Begin to conduct and analyze N=100 beneficiary interviews	Finish conducting, and analyze, N=20-30 KIIs Finish conduct, and analyze, N=100 beneficiary interviews	Complete follow up and change analysis
3. Link and analyze MMIS, HMIS, eviction, & incarceration records (RQ2a, RQ3a)	Execute data use agreements to link MMIS, HMIS, and other admin data from 2016-2024 and	Finalize linkage of MMIS, HMIS, and other administrative data sets and conduct baseline analysis	Complete baseline analysis of linked administrative data		MMIS linked to HMIS, and other admin data 2016-2028	Complete follow up and change analysis

Analytic Activity	Year 1 2025	Year 2 2026	Year 3 2027	Year 4 2028	Year 5 2029	Year 6 2030
	begin data linkage					
4. Link and analyze MCO technical platform data to MMIS linked data (see activity 3) (RQ1b, RQ1d)	Execute data use agreements to link MCO data, MMIS, and other administrative datasets and begin data linkage	Conduct linkage & analysis	Update linkage & complete interim analysis	Update linkage & analysis	Update linkage & complete analysis	Complete analysis
5. Submit reports to CMS			Interim report			Final report

KII=key informant interviews; IQ=Implementation Question; RQ=Research Question.

NOTE: Evaluation project years are March-Feb. (subject to change depending on date of authorization to begin).

Appendix 8.1: Interview Questions for Housing CBOs

(Version 2024.10.07)

NOTE: We will interview individuals who work at NJ housing service providers and provide case management, coordination, and housing search assistance to Medicaid beneficiaries to understand their perspective of services provided as a part of this Waiver. We will obtain oral consent prior to each interview.

Thank you for agreeing to speak with us about the NJFamilyCare Housing initiatives. We would like to learn about the program's impact on people enrolled in Medicaid. We would also like to identify how to improve the program and how to sustain any successful components. If you do not know the information or would prefer not to answer, please let us know.

1. Through what mechanisms are Medicaid beneficiaries referred to you for housing services?
2. What are the barriers that Medicaid beneficiaries face in seeking to access your services? What factors facilitate access to your services for Medicaid beneficiaries?
3. Are there Medicaid beneficiaries that reach your organization and do not want to accept your services? Why, and do you have any sense of what happens to them?
4. What is the extent of your collaboration with Managed Care Organizations? Is there any case coordination or strategic planning beyond their referrals to you?
5. What strategies do you find to be most effective in engaging Medicaid beneficiaries in housing services? What strategies are the least effective? How does this vary for different populations? Prompts: Beneficiaries exiting the carceral system; pregnant beneficiaries; beneficiaries.
6. How do you identify which case management and housing assistance strategies are appropriate for each MCO member?
7. What strategies, or types of services, do you find to be most effective in keeping housing unstable Medicaid beneficiaries in their existing housing and placing homeless Medicaid beneficiaries into permanent housing? [prompt for service types offered under waiver]
8. How well have needs of individuals with housing unstable been met within the Housing Initiative program?
9. What are some of the key reasons that MCO members stop using your services?
10. Have there been any unanticipated negative consequences of the Housing initiative?

11. Do you find that housing transition and sustaining services offered by your organization substitute for other available resources in the community? What is the contribution of your organization's housing services beyond those offered elsewhere in the community?

12. Thank you for your time. We would like to speak with a diverse group of individuals and organizations that were involved in developing and sustaining the Housing Initiative. Who else do you think we should consider interviewing?

Appendix 8.2: Interview Questions for MCO Members

(Version 2024.10.07)

NOTE: We will interview MCO members to understand their perspective of services provided as a part of this Waiver. We will obtain oral consent prior to each interview.

Thank you for agreeing to speak with us about the NJFamilyCare Housing initiatives. We would like to learn about the program's impact on people enrolled in Medicaid. We would also like to identify how to improve the program and how to sustain any successful components. If you do not know the information or would prefer not to answer, please let us know.

1. Why did your health insurance company connect you to housing resources? What housing trouble were you experiencing?
2. What barriers did you face in accessing housing resources after the referral from your insurance company? Are there any things that your insurance company or the housing provider did to make the process go more smoothly?
3. What services did you receive from the housing service provider? How did they choose what services you would receive? [prompt for service types offered under waiver]
4. Are you satisfied with the housing provider that you were referred to? What did you like about working with them? What would you like them to have done differently?
5. Are there things that you wish you had done differently when working with the housing service provider?
6. Have you used housing services before? How did your recent experience receiving housing services compare to prior experiences?
7. Would you have accessed services from another housing provider if you had not been referred to one provider by your health insurance company?
8. Do you feel like the housing services you have received were effective in helping you obtain or maintain your housing? Why or why not?
9. Have there been any negative consequences of receiving this housing assistance?

Appendix 8.3: Interview Questions for State, MCO, And Community-Based Stakeholders

(Version 2024.10.07)

NOTE: We will interview individuals who work at DMAHS, MCO's, and leaders from other state agencies responsible for homeless services and relevant advocacy organizations. We will obtain oral consent prior to each interview.

Thank you for agreeing to speak with us about the NJFamilyCare Housing initiatives. We would like to learn about the program's impact on people enrolled in Medicaid. We would also like to identify how to improve the program and how to sustain any successful components. If you do not know the information or would prefer not to answer, please let us know.

1. What are the key entities in implementing and operationalizing the housing program? How were those partners identified, and what are their roles?
2. What are the facilitators and barriers to implementing the Medicaid housing program? What strategies have you seen used to overcome barriers?
3. What have you learned about promising practices for delivering services to address beneficiaries' housing needs through this housing initiative?
4. What strategies and tools have you seen used to identify beneficiaries with housing needs and facilitate beneficiary participation in housing services? What have you learned about promising practices for identifying and engaging beneficiaries?
5. What are the barriers that Medicaid beneficiaries face in accessing pre-tenancy or housing sustainment services? What factors facilitate access to housing services for Medicaid beneficiaries? [prompt for service types offered under waiver]
6. Do you think that housing service providers have modified their practices in response to this initiative? If so, how?
7. What strategies have been most effective in engaging Medicaid beneficiaries in housing services? What strategies are the least effective? How does this vary for different populations? Prompts: Beneficiaries exiting the carceral system; pregnant beneficiaries; beneficiaries.
8. What are some of the key reasons that MCO members stop using services provided through this initiative?
9. What strategies, or types of services, do you find to be most effective in keeping housing unstable Medicaid beneficiaries in their existing housing and placing homeless Medicaid beneficiaries into permanent housing?

10. How well have needs of individuals with unstable housing been met within the Housing Initiative program?

11. What are some of the key reasons that MCO members stop using your services?

12. Have there been any unanticipated negative consequences of the Housing initiative?

13. Do you find that MCO members are substituting services available through this initiative for other available resources in the community? What is the marginal contribution of Medicaid initiative housing services beyond those offered elsewhere in the community?

14. Thank you for your time. We would like to speak with a diverse group of individuals and organizations that were involved in developing and sustaining the Housing Initiative. Who else do you think we should consider interviewing?

9. Opioid Use Disorder (OUD) / Substance Use Disorder (SUD) Program

A. General Background Information

Substance Use Disorder (SUD) is a complex condition that affects thinking and behavior related to the control the use of alcohol, legal and illegal drugs, medications, and/or other substances; this includes misuse and addiction, “a chronic, relapsing disorder characterized by compulsive drug seeking and use despite adverse consequences.”^{82,83} SUDs include Alcohol or other drug Dependence (AOD) and Opioid Use Disorder (OUD). SUD is often associated with worsening health, including increased risk for cancers, heart disease, and lung disease.⁸⁴ In the United States, over one million people have died from drug overdose since 1999, with many of the recent overdose deaths being attributed to opioids (i.e., the “opioid pandemic”).⁸⁵ It is well known that the COVID-19 pandemic worsened risk factors for substance use and led to reductions in access to treatment,^{86,87} which has renewed efforts to mitigate barriers to care and to improve health outcomes among people with SUD.^{5,88}

New Jersey’s OUD/SUD program, initially approved in October 2017, has been extended to the current §1115 demonstration (approved April 1, 2023, through June 30, 2028) in combination with a carve-in of additional behavioral health services to managed care over time. This includes the authorization of expenditures within private Institution for Mental Disease (IMD) settings (i.e., any hospital, nursing facility, or other institution of more than 16 beds caring for individuals where the majority have a diagnosis of mental disease). With the one exception of moving the Substance Use Disorder Promoting Interoperability Program into the Behavioral Health Promoting Interoperability Program, **CMS has authorized the State to continue its OUD/SUD from the previous**

⁸² NIDA. 2024, January 5. Drug Misuse and Addiction. Retrieved January 24, 2024 from

<https://nida.nih.gov/publications/drugs-brains-behavior-science-addiction/drug-misuse-addiction>

⁸³ National Institute of Mental Health. Substance Use and Co-Occurring Mental Disorders. U.S. Department of Health and Human Services, National Institutes of Health. Retrieved September 15, 2023, from <https://www.nimh.nih.gov/health/topics/substance-use-and-mental-health>

⁸⁴ NIDA. 2022, March 22. Addiction and Health. Retrieved January 24, 2024

from <https://nida.nih.gov/publications/drugs-brains-behavior-science-addiction/addiction-health>

⁸⁵ Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. The Drug Overdose Epidemic: Behind the Numbers. U.S. Department of Health and Human Services, National Institutes of Health. Retrieved September 15, 2023, from <https://www.cdc.gov/opioids/data/index.html>.

⁸⁶ Ornell F, Moura HF, Scherer JN, Pechansky F, Kessler FH, von Diemen L. The COVID-19 pandemic and its impact on substance use: Implications for prevention and treatment. *Psychiatry research*. 2020 Jul 1;289:113096.

⁸⁷ Czeisler MÉ, Lane RI, Wiley JF, Czeisler CA, Howard ME, Rajaratnam SM. Follow-up survey of US adult reports of mental health, substance use, and suicidal ideation during the COVID-19 pandemic, September 2020. *JAMA network open*. 2021 Feb 1;4(2):e2037665-.

⁸⁸ Centers for Disease Control and Prevention. Increase in fatal drug overdoses across the United States driven by synthetic opioids before and during the COVID-19 pandemic. *CDC Health Alert Network*. 2020 Dec 17.

demonstration without modification. The Implementation Plan approved in the prior demonstration, details the **overall goals** of the OUD/SUD program, as follows.

1. Increase the rates of identification, initiation and engagement in treatment for OUD and other SUDs;
2. Increase adherence to, and retention in, treatment for OUD and other SUDs;
3. Reduce overdose deaths, particularly those due to opioids;
4. Reduce utilization of emergency departments and inpatient hospital settings for OUD and other SUD treatment, where the utilization is preventable or medically inappropriate;
5. Reduce preventable, or potentially preventable, readmission to the same or higher level of care for OUD and other SUD; and
6. Improve access to care for physical health conditions among beneficiaries with OUD or other SUDs.

In response, the Centers for Medicare and Medicaid Services (CMS) prescribed **milestones for the implementation** of New Jersey's OUD/SUD program.^{89, 90}

1. Establish new benefits for access to critical levels of care for OUD/SUDs.
2. Establish requirements for evidence-based, SUD-specific patient placement criteria to govern providers' assessments of beneficiaries and guide utilization management.
3. Establish residential treatment provider qualifications using evidence-based, SUD program standards and require that residential treatment providers offer access to Medication Assisted Treatment (MAT), and ensure provider compliance with standards of care.
4. Assess provider capacity at each level of care (including MAT for OUD) and develop a plan for addressing any identified gaps.
5. Implement comprehensive treatment and prevention strategies to address opioid abuse and OUD via prescribing guidelines, access to Naloxone, and an SUD Health Information Technology (IT) Plan for prescription drug monitoring.
6. Develop and implement policies to improve transitions between levels of care and improve care coordination between residential/inpatient facilities and community supports.

Federal policy had historically limited both detox-rehabilitative services and short-term residential treatment in IMD settings for Medicaid members aged 21-64.⁹¹ Prior to the completed demonstration, adults under the age of 65 were responsible for bearing the cost of treatment through

⁸⁹ CMS (Centers for Medicare & Medicaid Services). 2017. *NJ FamilyCare Comprehensive Demonstration (Project No. 11-W-00279/2)*. Baltimore: CMS. <https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/nj/nj-1115-request-ca.pdf>.

⁹⁰ CMS (Centers for Medicare & Medicaid Services). 2017. *SMD #17-003 Re: Strategies to Address the Opioid Epidemic*. Baltimore: CMS. <https://www.medicaid.gov/federal-policy-guidance/downloads/smd17003.pdf>.

⁹¹ Lloyd K, Chakravarty S, Nasiri M, Farnham J, Agrawal M. Interim evaluation of the NJ FamilyCare 1115 substance use disorder demonstration. Center for State Health Policy; 2022. <https://doi.org/10.7282/00000317>

self-pay or by accessing other state funding. To close this gap, the State was granted waiver authority to make these **service delivery changes in the prior demonstration**⁹²:

1. Remove the exclusion prohibiting withdrawal management or residential treatment services delivered in an Institute for Mental Disease (IMD).
2. Add long-term residential treatment, including treatment in an IMD (subject to a statewide 30-day average length of stay), as a new level of care in the OUD/SUD service continuum.
3. Add peer recovery support specialist and case management programs to the benefit package for individuals with OUD/SUD.
4. Move to a managed care delivery system with integrated physical and behavioral health services, with gubernatorial approval, over the course of the five-year demonstration under an amendment to the waiver.

The state engaged several additional activities and policies under this initiative to further support the treatment and health outcomes of people with SUD, including:¹¹

- Operationalize the use of American Society for Addiction Medicine (ASAM) criteria and the LOCI-3 assessment tool for SUD treatment;
- Operationalize and align the utilization management by managed care organizations and the Interim Managing Entity (IME) to ensure the appropriate level of care;
- Ensure NJ residential treatment facility (RTF) regulations and provider contracts with MCOs (managed care organizations) meet ASAM criteria for service types, hours of care, and staff credentials and establish a review process to ensure provider compliance;
- Require access to MAT on-site and after RTF discharge;
- Conduct a statewide capacity report and maintain provider capacity data profiles for all levels of care with a plan to address any insufficiency;
- Implement strategies under the Health IT plan to connect SUD providers to EHRs and the Prescription Drug Monitoring Program;
- Utilize and expand training and use of Naloxone to reverse overdoses; and
- Implement an Opioid Overdose Recovery program to those who have received Narcan reversal.

B. Evaluation Questions and Hypotheses

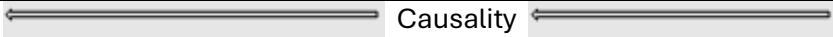
The interim evaluation of the prior demonstration offered promising results from the State's efforts regarding the OUD/SUD program,⁸ suggesting further study of the ongoing impact of the OUD/SUD program is warranted. Given the approved demonstration is unchanged from the previous demonstration, the current evaluation will build upon the previous evaluation and examine trends and continued progress toward project aims.⁸ The analyses will be informed by the Evaluator's

⁹² NJDHS-DMAHS (New Jersey Department of Human Services, Division of Medical Assistance and Health Services). 2018. NJ FamilyCare Comprehensive Demonstration Implementation Protocol for the Opioid Use Disorder (OUD)/Substance Use Disorder (SUD) Program. Trenton: NJDHS-DMAHS. https://www.state.nj.us/humanservices/dmahs/home/Comprehensive_Demonstration_Implementation_Protocol_OUD-SUD_Program.pdf.

experience in studying the OUD/SUD component and offer comparable findings between the two demonstrations.

Below we present the *logic model* (Figure 9.1) as aligned with CMS guidance that delineates the pathway from the policy change to overall program aims, initially presented in the evaluation of the previous demonstration.⁸ Here the secondary drivers represent the various services offered through the SUD/OUD programs.

Figure 9.1. OUD/SUD Aim Driver Diagram

Aims	Primary Drivers	Secondary Drivers
1.A Reduce incidence of OUD 1.B Reduce preventable readmission to the same or higher level of care for OUD-SUD 1.C Reduce avoidable utilization of emergency departments and inpatient hospital settings for OUD-SUD treatment	<ul style="list-style-type: none"> • Increase rates of initiation and engagement in treatment of OUD-SUD • Improve adherence to and retention in treatment for OUD-SUD • Improve access to care for physical health conditions among beneficiaries with OUD-SUD • Increase access to Naloxone 	<ul style="list-style-type: none"> • Ensure sufficient provider capacity • Implement evidence-based patient placement criteria • Establish provider qualifications and access to MAT • Increase access to critical levels of care • Improve transitions and care coordination • Establish provider qualifications and access to MAT • Improve transitions and care coordination • Implement strategies under HIT plan to connect SUD providers to EHRs and Prescription Drug Monitoring Program.
		
SUD = Substance Use Disorder; OUD = Opioid Use Disorder; MAT = Medication Assisted Treatment;		

Research Hypotheses and Questions

In this section, we provide details on the hypotheses and corresponding research questions regarding the continued impact of the SUD/OUD programs among Medicaid beneficiaries. As outlined in the Special Terms and Conditions, evaluation hypotheses for the SUD program component “must focus on an assessment of the program’s effectiveness in further achieving or maintaining the program goals... [the evaluation] is expected to incorporate outcomes such as initiation and compliance with treatment; utilization of health services, including avoidable emergency department visits and inpatient hospitalizations; care coordination, including access to care for physical health conditions; preventable or medically inappropriate readmissions; and opioid-related overdose deaths (STC 13.5.c).” The evaluation will also include a study of meaningful subgroups such as housing status as described, below.

Hypothesis 1: Rates of identification, initiation, and engagement in treatment for OUD and other SUDs will increase over the course of the demonstration, relative to a baseline established in 2022.

Research Question 1: What are the trends in rates of identification, initiation, and engagement in treatment for OUD and other SUDs programs over the course of the current demonstration (2023-2028)? How do these trends vary across subgroups (e.g., age distribution, race/ethnicity, sex, housing status, and presence of comorbidities or co-occurring conditions)?

Hypothesis 2: Rates of adherence to, and retention in treatment for OUD and other SUDs, overall and for individuals aged 21-64, will increase over the course of the demonstration.

Research Question 2: What are the trends in rates of adherence to, and retention in treatment for OUD and other SUDs, overall and for individuals aged 21-64 over the course of the current demonstration? How do these trends vary by subgroups (e.g., age distribution, race/ethnicity, sex, housing status, and presence of comorbidities or co-occurring conditions)?

Hypothesis 3: Overdose deaths, particularly those due to opioids, will decrease for individuals aged 21-64 over the course of the demonstration, relative to a baseline established in 2022.

Research Question 3: What are the trends in rates of overdose deaths overall and for individuals aged 21-64, particularly those due to opioids over the course of the current demonstration? How do these trends vary by subgroups (e.g., age distribution, race/ethnicity, sex, housing status, and presence of comorbidities or co-occurring conditions)?

Hypothesis 4: Utilization of emergency departments and inpatient hospital settings and associated adjusted estimates of costs for OUD and other SUD treatment, where the utilization is preventable or medically inappropriate, will decrease (including individuals aged 21-64) over the course of the demonstration, relative to a baseline established in 2022.

Research Question 4: What are the trends in preventable or medically inappropriate utilization of emergency departments and inpatient hospital settings for OUD and other SUD treatment, overall and for individuals aged 21-64 over the course of the current demonstration? How do these trends vary by subgroups (e.g., age distribution, race/ethnicity, sex, housing status, and presence of comorbidities or co-occurring conditions)?

Hypothesis 5: Readmissions to the same or higher level of care where readmission is preventable or medically inappropriate for individuals with OUD and other SUD will decrease (including individuals aged 21-64) over the course of the demonstration, relative to a baseline established in 2022.

Research Question 5: What are the trends in readmissions to the same or higher level of care, where readmissions are preventable or medically inappropriate, for individuals with OUD and other SUD, overall and for individuals aged 21-64 over the course of the demonstration? How do these trends vary by subgroups (e.g., age distribution, race/ethnicity, sex, housing status, and presence of comorbidities or co-occurring conditions)?

Hypothesis 6: Access to care for physical health conditions among beneficiaries with OUD or other SUDs will increase over the course of the demonstration, relative to a baseline established in 2022.

Research Question 6: What are the trends in access to care for physical health conditions among beneficiaries with OUD or other SUDs over the course of the demonstration? How do these trends

vary by subgroups (e.g., age distribution, race/ethnicity, sex, housing status, and presence of comorbidities or co-occurring conditions)?

Research Question 7 (applies to all hypotheses): How does the OUD/SUD program affect quality of OUD-SUD services and care coordination among those with OUD or other SUDs over the course of the demonstration?

C. Methodology

Below, we provide brief descriptions of the proposed measures and methods. A summary of the methods, organized by hypotheses and research questions can be found at the end of this section in Table 9.4.

Claims-based Measures:

We will assess the claims-based outcomes listed and described in Table 9.1. A summary of the methods, organized by hypotheses and research questions can be found at the end of this section.

Table 9.1. Inventory of Claims-based Measures⁹³

Measure		Brief Description (Data Steward)
SUD/ODU/Primary Care Service Utilization		
1.	a. Initiation of Alcohol and Other Drug Abuse or Dependence Treatment	Number of persons who initiate treatment through an inpatient admission, outpatient visit, intensive outpatient encounter, or partial hospitalization within 14 days of the index episode start date among Medicaid recipients age 13 or older diagnosed with a new episode of alcohol or other drug (AOD) dependency (NCQA).
	b. Engagement of Alcohol and Other Drug Abuse or Dependence Treatment	Number of persons with initiation of treatment and two or more additional services for treatment within 34 days of the initiation encounter among Medicaid recipients aged 13 or older diagnosed with a new episode of AOD dependency (NCQA).
2.	Use of critical levels of care for OUD/SUD	Number of persons using MAT services among Medicaid recipients with OUD/SUD (CMS/Mathematica)
3.	Continuity of Pharmacotherapy for OUD	Percentage with at least 180 days of MAT supply and no gaps >7 days among beneficiaries with at least one MAT claim (NCQA; NQF #3175).
4.	Follow-up after Discharge from Emergency Department for Alcohol or Other Drug Dependence	Number of persons with a follow-up visit within 7 and/or 30 days of the ED visit among Medicaid recipients age 13 or older with a principal diagnosis of AOD abuse or dependence (NCQA).

⁹³ [Adapted from] Lloyd K, Chakravarty S, Nasiri M, Farnham J, Agrawal M. Interim evaluation of the NJ FamilyCare 1115 substance use disorder demonstration. Center for State Health Policy; 2022. <https://doi.org/10.7282/00000317>

5.	Access to Preventive/Ambulatory Health Services for Adult Beneficiaries with SUD or OUD	Percentage of beneficiaries with SUD or OUD who had an ambulatory or preventive care visit.
Avoidable or Potentially Preventable Treatment		
6.	Use of Opioids at High Dosage in Persons Without Cancer	Number of persons with opioid prescription claims where the morphine equivalent dose for 90 consecutive days or longer is greater than 90 mg among Medicaid recipients age 18 and older with two or more prescription claims for opioids filled on at least two separate days, for which the sum of the days' supply is > 15.
7.	Rate of all and OUD overdose deaths	Number of overdose deaths by drug type among NJ residents (NJ CARES/CDC). ^a
8.	Rate of emergency department visits for SUD-related diagnoses and specifically for OUD	Number of ED visits for SUD or OUD among Medicaid recipients.
9.	Rate of inpatient admissions for SUD and specifically OUD	Number of IP visits for SUD or OUD among Medicaid recipients.
108.	30-day all-cause hospital readmissions among beneficiaries with SUD and specifically OUD	Number of readmissions among acute inpatient discharges by Medicaid recipients age 18 and older with SUD and separately OUD (AHRQ). ^b
11.	Avoidable inpatient hospitalization rate among individuals with OUD/SUD (AHRQ)	Number of all-cause hospitalizations for ambulatory care sensitive conditions among Medicaid recipients aged 6 and older with OUD/SUD (AHRQ).
Costs		
12.	SUD-IMD costs	Total costs of claims for inpatient/residential treatment within IMDs among beneficiaries with OUD/SUD.
13.	SUD-other costs	Total SUD costs excluding IMD costs among beneficiaries with OUD/SUD.
14.	Total costs - Total - Total federal	Total costs on all claims; federal costs estimated using NJ FMAP percentage among beneficiaries with OUD/SUD.
15.	Source of care costs - Outpatient (non-ED) - Outpatient (ED) - Inpatient - Pharmacy	Total costs on claims identified by claim-type and/or provider-type for each source of care category among beneficiaries with OUD/SUD.

	- Long-term care costs	
<p>SUD = Substance Use Disorder; OUD = Opioid Use Disorder; MAT = Medication Assisted Treatment; AOD=Alcohol or other drug Dependence; ED=Emergency Department; IP = inpatient; NCQA = National Committee for Quality Assurance; AHRQ= Agency for Healthcare Research and Quality; NQF = National Quality Forum</p> <p>^a NJDLPS (New Jersey Department of Law & Public Safety). 2021. “NJ CARES: A Real-Time Dashboard of Opioid-Related Data and Information”. Accessed June 11. Trenton: NJDLPS. https://www.njoag.gov/programs/nj-cares/nj-cares-suspected-overdose-deaths/</p> <p>^bReadmission rates among those with OUD specifically will be calculated only if sample size is sufficient</p> <p>^chttps://wagner.nyu.edu/faculty/billings/nyued-background; This measure is being used to assess avoidable ED use for physical health conditions among individuals with OUD/SUD. The fact that visits due to mental health, alcohol use, and substance abuse are not classified by this algorithm does not affect the utility of this measure for examining physical health outcomes consistent with Hypothesis 6. The measure “Rate of emergency department visits for SUD-related diagnoses and specifically for OUD” under Hypothesis 4 will address ED use for substance abuse.</p>		

Table 9.2. Qualitative Domains, OUD-SUD

Domain		Brief Description
1.	Quality of OUD-SUD services	Inquire into access to guideline-adherent care for OUD/SUD and challenges and benefits of establishing peer support services.
2.	Care coordination	Elicit experiences from key constituents on determining/utilizing level of care and case management for people in the OUD/SUD program.
3.	Beneficiary experience	Elicit perspectives on how beneficiaries’ needs for treatment may have been met within the OUD/SUD program, the impact of case management on access to care for physical health among those with OUD/SUD and identify unanticipated negative consequences of the OUD/SUD initiative.
SUD = Substance Use Disorder; OUD = Opioid Use Disorder		

Methodology for Hypothesis 1-6, Research Questions 1-6

Study population:

Individuals enrolled in Medicaid, especially those experiencing SUD, are likely to have high levels of eligibility churn,⁹⁴ so CMS guidance will be followed by not using a static cohort of continuously enrolled beneficiaries over time.⁹⁵ As a result, adult beneficiaries (age 18+) with SUD/OD and *any* period of active enrollment in a particular year will make up the beneficiary study population for that year. As in the evaluation of the previous demonstration,⁸ this requires enrollment each year and having a claim with a diagnosis of Alcohol Abuse and Dependence, Opioid Abuse and Dependence, or Other Drug Abuse and Dependence or an indication of MAT were considered to have SUD as determined by using NCQA HEDIS value sets.⁹⁶ There are no substantive changes in the demonstration for the OUD/SUD Program, and data on the healthcare experiences of beneficiaries prior to enrollment are not available, which precludes testing the effect of reform using pre-post comparisons. However, analyses will be conducted to track outcomes over time by subgroups. These will include age distribution, race/ethnicity, sex, housing status,⁹⁷ and presence of comorbidities or co-occurring conditions as available within the Medicaid claims.

Analytic strategy:

As a continuation of previous demonstration (2017-2022), the study team will evaluate trends in study outcomes among adults with SUD in the current demonstration (2023-2028). We will calculate adjusted trends, estimating levels of outcome measures on a quarterly or annual basis (as feasible given sample size concerns) to evaluate the ongoing effect of providing substance use disorder services to Medicaid beneficiaries on stated goals of the OUD/SUD program, including paying for services rendered in an Institution for Mental Disease (IMD) (see Table 9.1 for complete list of proposed outcome measures).

We will implement a repeated cross-sectional approach for all OUD/SUD beneficiaries. We will adjust for possible changes in population composition (e.g., by age, race/ethnicity, sex, housing status, and presence of comorbidities, and Chronic Illness and Disability Payment System (CDPS) risk score) using regression models. We will use line graphs and tables to describe results. Sample sizes permitting, the adjusted trends will also be calculated by subgroups of interest (e.g., age distribution, race/ethnicity, sex, housing status, and presence of comorbidities or co-occurring conditions).

The models will be specified as described below:

⁹⁴ Wallace NT, McConnell KJ, Gallia CA, Edlund TD. Benefit policy and disenrollment of adult Medicaid beneficiaries from the Oregon health plan. *Journal of health care for the poor and underserved*. 2010;21(4):1382-94.

⁹⁵ Centers for Medicare & Medicaid Services. Appendix C: Approaches to Analyzing Costs Associated with Section 1115 Demonstrations for Beneficiaries with Serious Mental Illness/Serious Emotional Disturbance or Substance Use Disorder; 2021.. Baltimore: CMS. <https://www.medicaid.gov/medicaid/section1115-demo/downloads/evaluation-reports/smi-sed-sud-cost-appendix-c.pdf>.

⁹⁶ NCQA (National Committee for Quality Assurance). 2020. HEDIS 2020: Healthcare Effectiveness Data and Information Set. Vol. 2: Technical Specifications for Health Plans. Washington, DC: NCQA.

⁹⁷ Information on housing status will be determined using the Z59 ICD-10 code, “Problems related to housing and economic circumstances” and will be supplemented by a linkage to the HUD Homeless Management Information System.

Main Models:

$$Outcome_{it} = \alpha_0 + \alpha_1(Time_Indicator)_i + \alpha_2(Group)_{it} + \lambda X_{it} + \varepsilon_{it}$$

Secondary Models:

$$Outcome_{it} = \alpha_0 + \alpha_1(Time_Indicator)_i + \alpha_2(Group)_{it} + \alpha_3(Time_Indicator * Group)_{it} + \lambda X_{it} + \varepsilon_{it}$$

For the Main Models, $Outcome_{it}$ represents the outcome of interest for an individual respondent i in year t (e.g., annual dental visit, avoidable hospitalizations, etc., as described in Table SUD-OD.1). $Group_{it}$ represents a group attribute (i.e., age distribution, race/ethnicity, sex, housing status, and presence of comorbidities or co-occurring conditions). α represents the corresponding coefficients for the model. X_i represents a set of control variables for individual i at time t and λ represents the vector of coefficients for each of the corresponding control variables of X . ε represents the error term. Models will be estimated using ordinary least squares regression except for models with counts as the dependent variable (i.e., Poisson regression) or for spending, which will be estimated using a generalized linear model as dollars would be the dependent variable (e.g., Gamma distribution with log link function).⁹⁸ Marginal analysis will be applied after running each regression to generate adjusted trends over time based on these models (i.e., using predictive margins).⁹⁹

Specifications for the Secondary Models will be identical to the Main Models, except that we will introduce an interaction term of $Time_Indicator * Group$, used to capture time-varying differences by group (e.g., age distribution, race/ethnicity, sex, housing status, and presence of comorbidities or co-occurring conditions) with the α_3 coefficient. This would allow us to plot the adjusted trends by group of interest through the post hoc marginal analysis.

The study team will also conduct sensitivity analyses regarding the effect of morbid conditions and CDPS score on study outcomes. This would include running the main and secondary models with and without the comorbidity and CDPS independent variables and monitoring changes in these measures over time.

Methodology for Research Question 7

Study population:

Key informants will be recruited among individuals with knowledge of beneficiary experience, including beneficiaries themselves and providers as well as representatives of working groups, community partners, and provider and consumer associations to elicit perceptions of the program, resultant process, and their impact. Interviews will be conducted with a purposeful sample to obtain viewpoints about ongoing benefits and unanticipated consequences for patients and families.

Data Collection for RQ 7:

⁹⁸ Deb P, Manning W, Norton E. Modeling health care costs and counts. IniHEA World Congress in Sydney, Australia 2013.

⁹⁹ Williams R. Using the margins command to estimate and interpret adjusted predictions and marginal effects. The Stata Journal. 2012 Jun;12(2):308-31.

The interviews will be informed by previously conducted document reviews to understand activities and recommendations of the advisory committees, review meeting minutes and related documents, and monitor progress toward program goals for the OUD/SUD program during the prior demonstration, successes, challenges, and lessons learned. We will begin the focus groups with an unprompted presentation of selected findings from the interim evaluation in a non-technical format (e.g., basic charts and summary of findings) to elicit interpretation of findings and feedback. This will be followed by a set of open-ended interview questions (see Appendix 9.1) to elicit participants' views on experiences of beneficiaries and families regarding the OUD/SUD Program, satisfaction, and recommendations. The interview guide will include follow-up prompts and probes to elicit in-depth responses.

Interviews that will be conducted with ~20-30 targeted key informants. Previous conversations with key constituents have informed a draft of the semi-structured interview guide noted in Table 9.3 (i.e., quality of OUD-SUD services, care coordination, and beneficiary experience).

Analytic Approach for RQ 7:

Data from key informant interviews will be de-identified and then independently coded by two researchers to identify themes and patterns in the data using an inductive process. In addition to predetermined (a priori) thematic areas aligned with the OUD/SUD Program's goals, the research team will identify emergent themes and patterns in the data after conducting a coding consensus process.

Table 9.3: Research Questions and Interview Strategies for RQ7

Research Question	Number	Interview Strategy
RQ7: How does the OUD/SUD program affect quality of OUD-SUD services and care coordination among those with OUD or other SUDs?	≈20 to 30	In consultation with DMAHS, the evaluator will identify individuals for recruitment. Interviews will be conducted with individuals with expert knowledge regarding beneficiary experience with services and care coordination, including beneficiaries themselves, providers as well as representatives of working groups, community partners, and provider and consumer associations to obtain viewpoints on benefits and remaining barriers and challenges related to participation in OUD/SUD Program. Interviews will be approximately 60-90 minutes.

Table 9.4. Summary of Questions, Hypotheses and Methodology

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic Methods
Hypothesis 1: Rates of identification, initiation, and engagement in treatment for OUD and other SUDs will increase over the course of the demonstration, relative to a baseline established in 2022.				
RQ1 What are the trends in rates of identification, initiation, and engagement in treatment for OUD and other SUDs programs over the course of the current demonstration (2023-2028)? How do these trends vary across different subgroups (e.g., age distribution, race/ethnicity, sex,	<ul style="list-style-type: none"> Initiation of Alcohol and Other Drug Abuse or Dependence Treatment Engagement of Alcohol and Other Drug Abuse or 	Medicaid recipients age 13 or older diagnosed with a new episode of alcohol or other drug (AOD) dependency	Medicaid Fee-for-Service and Encounter Claims Records	Examine adjusted trends in study outcomes through analytic summaries by using regression analysis with sub analyses by age distribution,

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic Methods
housing status, and presence of comorbidities or co-occurring conditions)?	Dependence Treatment			race/ethnicity, sex, housing status, and presence of comorbidities or co-occurring conditions.
Hypothesis 2: Rates of adherence to, and retention in treatment for OUD and other SUDs, overall and for individuals aged 21-64, will increase over the course of the demonstration.				
RQ2 What are the trends in rates of adherence to, and retention in treatment for OUD and other SUDs, overall and for individuals aged 21-64 over the course of the current demonstration? How do these trends vary by subgroups (e.g., age distribution, race/ethnicity, sex, housing status, and presence of comorbidities or co-occurring conditions)?	<ol style="list-style-type: none"> 1. Use of critical levels of care (MAT) for OUD/SUD 2. Follow-up after Discharge from Emergency Department for Alcohol or Other Drug Dependence 	<ol style="list-style-type: none"> 1. Medicaid recipients with OUD/SUD 2. ED visits by Medicaid recipients age 13 or older with a principal diagnosis of AOD abuse or dependence 	Same as above	Same as above
Hypothesis 3: Overdose deaths, particularly those due to opioids, will decrease for individuals aged 21-64 over the course of the demonstration, relative to a baseline established in 2022.				
RQ3 What are the trends in rates of overdose deaths overall and for individuals aged 21-64, particularly those due to opioids over the course of the current demonstration? How do these trends vary by subgroups (e.g.,	<ol style="list-style-type: none"> 1. Use of Opioids at High Dosage in Persons Without Cancer 2. Rate of all and OUD overdose deaths 	<ol style="list-style-type: none"> 1. Medicaid recipients age 18 and older with two or more prescription claims for 	Same as above	Same as above

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic Methods
<i>age distribution, race/ethnicity, sex, housing status, and presence of comorbidities or co-occurring conditions)?</i>		opioids filled on at least two separate days, for which of the sum of the days' supply is > 15. 2. NJ residents		
Hypothesis 4: Utilization of emergency departments and inpatient hospital settings and associated adjusted estimates of costs for OUD and other SUD treatment, where the utilization is preventable or medically inappropriate, will decrease (including individuals aged 21-64) over the course of the demonstration, relative to a baseline established in 2022.				
<i>RQ4 What are the trends in preventable or medically inappropriate utilization of emergency departments and inpatient hospital settings for OUD and other SUD treatment, overall and for individuals aged 21-64 over the course of the current demonstration? How do these trends vary by subgroups (e.g., age distribution, race/ethnicity, sex, housing status, and presence of comorbidities or co-occurring conditions)?</i>	<ul style="list-style-type: none"> Rate of emergency department visits for SUD-related diagnoses and specifically for OUD Rate of inpatient admissions for SUD and specifically OUD 	Medicaid beneficiaries	Same as above	Same as above
Hypothesis 5: Readmissions to the same or higher level of care where readmission is preventable or medically inappropriate for individuals with OUD and other SUD will decrease (including individuals aged 21-64) over the course of the demonstration, relative to a baseline established in 2022.				
<i>RQ5 What are the trends in readmissions to the same or higher level of care, where readmissions are preventable or medically inappropriate, for individuals with OUD and other</i>	<ul style="list-style-type: none"> 30-day all-cause hospital readmissions among beneficiaries 	Acute inpatient discharges by Medicaid recipients age 18 and older with	Same as above	Same as above

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic Methods
<i>SUD, overall and for individuals aged 21-64 over the course of the demonstration? How do these trends vary by subgroups (e.g., age distribution, race/ethnicity, sex, housing status, and presence of comorbidities or co-occurring conditions)?</i>	with SUD and specifically OUD	SUD and separately OUD		
Hypothesis 6: Access to care for physical health conditions among beneficiaries with OUD or other SUDs will increase over the course of the demonstration, relative to a baseline established in 2023.				
<i>RQ6 What are the trends in access to care for physical health conditions among beneficiaries with OUD or other SUDs over the course of the demonstration? How do these trends vary by subgroups (e.g., age distribution, race/ethnicity, sex, housing status, and presence of comorbidities or co-occurring conditions)?</i>	<ul style="list-style-type: none"> • Avoidable hospitalizations (PQI/PDI) among individuals with SUD/OUD • SUD-IMD costs • Total and non-SUD specific costs <ul style="list-style-type: none"> - Outpatient (non-ED) - Outpatient (ED) - Inpatient - Pharmacy - Long-term care costs 	Medicaid recipients with OUD/SUD	Same as above	Same as above
<i>RQ7 How does the OUD/SUD program affect quality of OUD-SUD services and care coordination among those with OUD or other SUDs over the course of the demonstration?</i>	Qualitative domains: <ul style="list-style-type: none"> • Quality of OUD-SUD services • Care coordination 	Individuals with knowledge of beneficiary experience, including beneficiaries and	Key informant interviews once, following the interim report.	Qualitative thematic analysis, using an a priori codes determined from OUD/SUD goals and

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic Methods
	<ul style="list-style-type: none"> Beneficiary experience 	providers as well as representatives of working groups, community partners, and provider and consumer associations (n=~20-30).		emergent coding process to obtain viewpoints on benefits and remaining barriers and challenges related to participation in OUD/SUD Program.

Table 9.5 shows an activity timeline for the research activities.

Table 9.5 Key Milestones, Opioid Use Disorder (OUD) /Substance Use Disorder (SUD) Program

Analytic Activity	Year 1 2025	Year 2 2026	Year 3 2027	Year 4 2028	Year 5 2029	Year 6 2030
1. Conduct midpoint assessment	Analyze state monitoring metrics Conduct and analyze N=20-30 KIIs					
2. Qualitative implementation assessment (RQ7)					Conduct and analyze N=20-30 KIIs	Complete analysis
3. Quality of care, health services utilization, and spending assessments: Analyze MMIS data (RQ1-RQ6)	Work with DMAHS staff to define appropriate population and customized metrics for MMIS analysis. Begin analysis of MMIS-based utilization and quality metrics.	Begin analysis of MMIS-based spending metrics Refine/finalize analysis of utilization and quality metrics	Complete interim analysis	Update analysis	Update analysis	Complete analysis
4. Submit reports to CMS	Midpoint assessment report		Interim report			Final report

KII=key informant interviews; RQ=Research Question.

NOTE: Evaluation project years are March-Feb. (subject to change depending on date of authorization to begin).

D. Methodological Limitations

The evaluation methods describe above have several limitations. Our claims-based metrics may not account for clinical factors such as severity that may also impact the likelihood of outcomes over time. To address this limitation, we will adjust trends beneficiary characteristics, including CDPS risk score to adjust for the effect of differences in beneficiary characteristics on trends. However, unobserved differences in characteristics of individuals diagnosed with OUD/SUD over time might underlie estimated differences in outcomes. Several outcomes specifically for the population with OUD that may require a minimal sample size to ensure accuracy of estimates, such as hospital discharge (followed by a readmission or outpatient physician visit).

Individuals experiencing homelessness will be identified using the Z59 ICD-10 code on beneficiary claims. Previous studies have suggested the incompleteness of Z59 as indicator.¹⁰⁰ We will supplement this indicator by leveraging a data linkage to the Homeless Management Information System (see “Evaluation of Housing Supports” for additional information on the data linkage).

As with all measures in the evaluation, reporting of these measures and the subsequent use in empirical models are subject to achieving minimum cell sizes. The analyses also assume completeness of utilization reporting in the Medicaid claims data for services where Medicare is the primary payer. Additionally, the quantitative evaluation will be limited to utilization that is observed within the available claims database.

Regarding the qualitative component, key-informant interviews offer the opportunity for in-depth, experience-based interpretation of quantitative findings. However, findings from the interviews may not necessarily achieve generalizability to the experiences of all beneficiaries. To analyze the beneficiary experience through the interviews, participation will depend first on program take-up and then on caregiver availability, interest, and willingness to participate. Differences between participants and other OUD/SUD Program participants may be driven, in part, by willingness to participate in the research activity. We will aim to mitigate this issue by recruiting study participants that reflect the demographic characteristics of the study population but acknowledge that participants may differ from the other participants in the OUD/SUD Program in ways that are not observable.

¹⁰⁰ Enich M. *Identifying homelessness in Medicaid claims: a mixed-methods approach* (Doctoral dissertation, Rutgers University-School of Graduate Studies).

E. Attachments

Appendix 9.1: Interview Questions for OUD/SUD Initiative

Version 2024.04.03

NOTE: Individuals interviewed will be individuals with expert knowledge regarding OUD/SUD treatment and beneficiary's experiences with services and care coordination, including beneficiaries themselves, providers as well as representatives of working groups, community partners, and provider and consumer associations to obtain viewpoints on benefits and remaining barriers and challenges related to participation in OUD/SUD Program. Informed consent will be administered prior to interview.

Thank you for agreeing to speak with us about the NJFamilyCare OUD/SUD initiatives. We would like to learn about the program's impact on people enrolled in Medicaid. We would also like to identify how to improve the program and how to sustain any successful components. If you do not know the information or would prefer not to answer, please let us know.

1. What improvements in care access for OUD/SUD, if any, have you observed related to the OUD/SUD programs?
2. Are individuals with OUD/SUD able to access the right level of care? If yes, what facilitates this? If no, what are some barriers to accessing the right level of care?
3. How is care coordinated for people in the OUD/SUD program?
4. What is your impression of peer support services? Are there ongoing challenges that we should be aware of? And what benefits, if any, have you observed from peer support services?
5. How have OUD/SUD services impacted treatment success? How could they be improved to promote treatment success?
6. How have newly available housing support initiatives such as the introduction of housing specialists affected treatment goals of beneficiaries with OUD/SUD and/or the experience of their family members or caregivers, providers, and/or community-based organizations?
7. Are you aware of interventions to prevent overdose deaths? If yes, how well have these been applied within the OUD/SUD program?
8. How well have needs of individuals with OUD/SUD for treatment been met within the OUD/SUD program?
9. What has been the impact of case management on access to care for physical health among those with OUD/SUD?

10. Have there been any unanticipated negative consequences of the OUD/SUD initiative?
11. Thank you for your time. We would like to speak with a diverse group of individuals and organizations that were involved in the development and sustaining of the OUD/SUD initiative. Who else do you think we should consider interviewing?

10. Adult IDD Services: Supports and Community Care Programs

A. General Background Information

Intellectual and developmental disabilities (I/DD) are permanent neurological, sensory, metabolic, or degenerative conditions originating during childhood that may affect physical functioning, learning, language, or behavior.^{101, 102} Persons with I/DD often lack access to preventative services and screening and experience high rates of morbidity.¹⁰³ In this section, we present plans to evaluate ongoing policies and programs affecting adults with I/DD within the current §1115 demonstration. These plans pertain to the Supports Program and the Community Care Program (CCP) in New Jersey.

The Supports Program, initiated under the 2012-2017 §1115 demonstration, was designed to provide a basic level of support services to Medicaid adults (aged 21 and older) with I/DD who live with family members or in other unlicensed settings in the community. The Supports Program does not have a wait list and the eligibility criteria do not require enrollees to meet the ICF/ID (i.e., institutional) level of care eligibility requirements, though enrollees may meet that level. Each enrollee has a support coordinator who assists them in creating an Individualized Service Plan (ISP).

The CCP is restricted to adults (aged 21 and older) who meet Institutional Care Facilities for Individuals with Intellectual Disabilities (ICF/IID) levels of care. Components of the CCP were initially approved in 1985 as the “Community Care Waiver” and were incorporated into the §1115 Comprehensive Demonstration in 2017. Unlike the Supports Program, the CCP has a waiting list, divided into general and priority categories. Priority individuals are assigned based on their community placement and a risk assessment, including the age or disability status of their caregivers. However, all individuals on the CCP waiting list are offered enrollment in the Supports Program while waiting for the CCP.

The §1115 Comprehensive Demonstration in 2017 also expanded eligibility for the Supports Program to include individuals with income up to 300% Federal Benefit Rate (FBR) to receive Medicaid State Plan and Waiver Home & Community Based Services (HCBS). This amendment also included Private Duty Nursing (PDN) services from the Managed Long-Term Services and Support (MLTSS) for certain individuals in the Supports Program. These changes have been continued in the demonstration renewal.

¹⁰¹ Eunice Kennedy Shriver National Institute for Child Health and Human Development. About Intellectual and Developmental Disabilities (IDDs); November 9, 2021. Accessed September 7, 2023. <https://www.nichd.nih.gov/health/topics/idds/conditioninfo>

¹⁰² Developmental Disabilities: Delivery of Medical Care for Children and Adults. I. Leslie Rubin and Allen C. Crocker. Philadelphia, Pa, Lea & Febiger, 1989.

¹⁰³ Escudé C. Advancing Health Equity For People With Intellectual And Developmental Disabilities. Health Affairs Forefront. 2022.

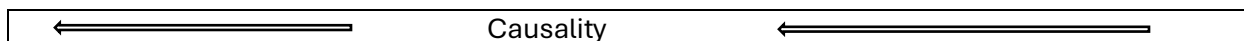
The current 1115 demonstration (2023-2028) expands the eligibility group for the Supports Program and the CCP to individuals aged 18 up to 21 who have graduated from or are no longer eligible for the services to which they were entitled through their local educational authority. We will evaluate the effect of expansion in services eligibility on this age group.

B. Evaluation Questions and Hypotheses

Based on the successes of the previous demonstration, we posit that the demonstration policies relating to provision of HCBS through the Supports Program or CCP to enrolled adults with I/DD will translate into continued improvements in community-level care reflected in maintained or improved ambulatory care outcomes. Below we present the *driver diagram* (Figure 10.1) that delineates the pathway from the policy change to improved outcomes. The secondary drivers represent the various services offered through the Supports Program and CCP. These services promote independent functioning, self-care, physical and emotional wellbeing, and health overall and facilitate patient and caregiver engagement in healthcare decision-making. Improved physical outcomes are also anticipated from the ability of beneficiaries to gain access to coordinated services and supports. Improved coordination and access to community level services and improved access to quality ambulatory and community level care as observed in improved access to preventative services and follow-up care are expected to lead to reductions in reliance on nursing and other residential facilities and reductions in avoidable hospitalizations.

Figure 10.1: I/DD Driver Diagram

Aims	Primary Drivers	Secondary Drivers
1) Improve functionality and address disability-related constraints to daily living 2) Improve wellbeing and health 3) Reduce reliance on nursing or other residential settings 4) Reduce avoidable hospitalizations	<ul style="list-style-type: none"> • Improve access to preventative health care and allied health professionals 	<ul style="list-style-type: none"> • Behavioral support • Assistive technology • Day habilitation • Speech Therapy • Physical therapy • Occupational therapy • Private duty nursing • Respite services
	<ul style="list-style-type: none"> • Improve coordination of services and supports • Improve access to community life 	<ul style="list-style-type: none"> • Care management/support coordination • Supported Employment • Prevocational Services • Goods and Services • Interpreter services • Transportation • Community inclusion services • Individual supports • Community-based supports



We next detail the hypotheses and corresponding research questions that help assess the effect of additional HCBS and expanded eligibility for Medicaid services on care and health outcomes among adults with I/DD.

Hypothesis 1: Providing Home & Community Based Services (HCBS) to Medicaid beneficiaries with intellectual and developmental disabilities (I/DD) through the Supports Program and CCP is associated with improved access to preventative services, reduced reliance on nursing home and other residential facilities, and reduced avoidable hospitalization and emergency services.

Research Question 1a: What are the trends in **preventative services** among the Supports Program and CCP beneficiaries (e.g., metabolic monitoring, annual eye exam among individuals with diabetes, annual dental visit, and annual primary care medical visit) over the course of the current demonstration (2023-2028)? How do these trends vary across different subgroups (e.g., race/ethnicity, gender, and presence of comorbidities)?

Research Question 1b: What are the trends in **utilization of care** among the Supports Program and CCP beneficiaries (e.g., inpatient hospitalizations, emergency department treat-and-release visits, and primary care utilization) over the course of the current demonstration (2023-2028)? How do these trends vary across different subgroups (e.g., race/ethnicity, gender, and presence of comorbidities)?

Research Question 1c: What are the trends in **residential and nursing home placement** among the Supports Program and CCP beneficiaries over the course of the current demonstration (2023-2028)? How do these trends vary across different subgroups (e.g., race/ethnicity, gender, and presence of comorbidities)?

Research Question 1d: What are the trends in **avoidable utilization and spending** among the Supports Program and CCP beneficiaries over the course of the current demonstration (2023-2028)? How do these trends vary across different subgroups (e.g., race/ethnicity, gender, and presence of comorbidities)?

Research Question 1e: How has the Supports Program and CCP affected the **experience of services and supports and overall satisfaction** of beneficiaries as the health care consumer, and that of their parents, guardians, and/or other primary caregivers?

Hypothesis 2: Providing Home & Community Based Services to expanded eligibility groups (individuals with I/DD aged 18 up to 21 and who have graduated from or are no longer eligible for their educational entitlement) who would otherwise have not been eligible for the Supports Program or the CCP absent the demonstration (hereafter, “expanded eligibility groups”) will **increase access to preventative services, reduce reliance on nursing home and other residential facilities, and reduce avoidable hospitalization and emergency services.**

Research Question 2a: What are the trends in **preventative services** among the Supports Program and CCP expanded eligibility group (e.g., metabolic monitoring, annual eye exam among individuals with diabetes, annual dental visit, and annual primary care medical visit) over the

course of the current demonstration (2023-2028)? How do these trends vary across different subgroups (e.g., race/ethnicity, gender, and presence of comorbidities)?

Research Question 2b: What are the trends in **overall utilization of care** among the Supports Program and CCP expanded eligibility group (e.g., inpatient hospitalizations, emergency department (ed) treat-and-release visits, and primary care utilization) over the course of the current demonstration (2023-2028)? How do these trends vary across different subgroups (e.g., race/ethnicity, gender, and presence of comorbidities)?

Research Question 2c: What are the trends in **residential and nursing home placement** among the Supports Program and CCP expanded eligibility group over the course of the current demonstration (2023-2028)? How do these trends vary across different subgroups (e.g., race/ethnicity, gender, and presence of comorbidities)?

Research Question 2d: What are the trends in **avoidable utilization and spending** among the Supports Program and CCP expanded eligibility group over the course of the current demonstration (2023-2028)? How do these trends vary across different subgroups (e.g., race/ethnicity, gender, and presence of comorbidities)?

C. Methodology

We will assess the outcomes listed in Table 10.1 and described below.

Table 10.1: Inventory of Measures

Measure		Brief Description
Preventative Services		
1.	Metabolic monitoring	Routine access to metabolic testing, i.e., A1C testing, to pre-empt or monitor the progression of diabetes. ¹⁰⁴
2.	Annual eye exam among individuals with diabetes	Retinal eye exam performed during the measurement year among beneficiaries with diabetes. ⁴
3.	Annual dental visit	At least one dental visit with a dental practitioner during the measurement year. ⁴
4.	Annual primary care medical visit*	At least one primary care visit with their provider during the measurement year.
5.	Follow-up (7 days and 30 days) after hospitalization for mental illness	Hospitalization for the treatment of selected mental health disorders that were followed by a qualifying visit with a mental health practitioner or behaviorist within 7 and 30 days. ⁴
Overall Utilization of Medical Services		
6.	Inpatient hospitalizations (all-cause) car	Inpatient medical facility treatment/hospitalization which may include, but not limited to, non-surgical medical treatment, surgery, and administration of medication.

¹⁰⁴ NCQA (National Committee for Quality Assurance). 2018. *HEDIS 2018: Healthcare Effectiveness Data and Information Set. Vol. 2: Technical Specifications for Health Plans*. Washington, DC: NCQA.

7.	Emergency department (ED) treat-and-release visits	Medical treatment within a hospital's emergency department not resulting in inpatient hospital admission. ¹⁰⁵
8.	Primary care utilization	Indicator that beneficiary receives routine outpatient or preventative medical care, includes frequency of visits per year.
Nursing Home and Residential		
9.	Stays in residential settings, including nursing homes and long-term care	Rate of residential treatment facilities and nursing home placements. Excludes short-term rehabilitation but includes long-term care for permanent disability.
Avoidable Utilization and Spending		
10.	Avoidable Hospitalizations	Preventable or potentially avoidable hospitalization that may occur due to inadequate ambulatory/primary care within communities, specific to individuals with I/DD. ^{106, 107}
11.	Spending related to all inpatient hospitalizations and ED visits	Payments on facility claims for (1) inpatient and (2) treat-and-release ED visits, inflation adjusted.

Qualitative Domains:

We will collect and analyze qualitative data within the broad domains identified in Table 10.2.

Table 10.2. Qualitative Domains by Research Question

Domains		Brief Description
1.	Services and Supports Access	Beneficiary and parent, guardian, or other primary caregiver experience with services and supports and remaining barriers.
2.	Community Integration	Beneficiary's opportunities to participate in the community, including activities outside the home.
3.	Experience of beneficiaries and their families	Satisfaction with the services and support provided. Impact of services and support on experience of care and

¹⁰⁵ Individuals residing in licensed settings are impacted by Danielle's Law which requires calling 911 for potentially life-threatening emergencies.

¹⁰⁶ Balogh RS, Ouellette-Kuntz H, Brownell M, and Colantonio A. "Ambulatory Care Sensitive Conditions in Persons with an Intellectual Disability – Development of a Consensus." *Journal of Applied Research in Intellectual Disabilities* 24 (2): 150–58; 2011.

¹⁰⁷ Balogh RS, Ouellette-Kuntz H, Brownell M, and Colantonio A. Factors associated with hospitalisations for ambulatory care-sensitive conditions among persons with an intellectual disability – a publicly insured population perspective. *Journal of Intellectual Disability Research*, 57: 226-239; 2013.

		recommendations for additional services or other requested modifications
NOTES Adapted from National Core Indicators, NCI-IDD Survey ^{TM, 108}		

Populations and Evaluation Methods

For hypothesis 1 and 2 and Research Questions 1a-1d & 2a-2d

Study population for research questions 1a-1d: The study population for hypotheses 1a-1d is comprised of individuals aged 21 or older who participated in either the Supports Program or CCP. There are no substantive changes in the demonstration for the Supports Program or CCP. As a continuation of previous demonstration (2017-2022), the study team will monitor trends in study outcomes among the Supports Program and CCP participants in the current demonstration (2023-2028) as required in the Special Terms and conditions (STC 13.3), without a comparison group.

Study population for research questions 2a-2d: The study population for hypotheses 2a-2d is comprised of individuals aged 18 up to 20 who participated in either the Supports Program or CCP as part of the expanded eligibility population. This represents a previously ineligible population, preventing the identification of an appropriate comparison group or pre-intervention observation period.

Analytic strategy for research questions 1a-1d and 2a-2d: We will calculate adjusted trends, estimating levels of outcome measures on a quarterly or annual basis (as feasible relative to sample size concerns) to examine preventative services, utilization of services, nursing home and residential services, avoidable utilization and spending (see Table 10.1 for complete list of proposed outcome measures).

We will select cohorts of individuals enrolled in Supports Program and CCP, respectively, during the baseline period (2022) and then examine changes in outcomes over the current demonstration period (2023-2028). We will adjust for possible changes in population composition (e.g., by age, race/ethnicity, gender, and presence of comorbidities, and Chronic Illness and Disability Payment System (CDPS) risk score) using regression models. We will use line graphs and tables to describe results. Sample sizes permitting, the adjusted trends will also be stratified by subgroups of interest such as race/ethnicity, gender, and presence of comorbidities.

The models will be specified as described below:

Main Models:

$$Outcome_{it} = \alpha_0 + \alpha_1 Time_Indicator_i + \alpha_2 Group_{it} + \lambda X_{it} + \varepsilon_{it}$$

¹⁰⁸ NCI (National Core Indicators). 2022. *NCI-IDD Indicators*. National Association of State Directors of Developmental Disabilities Services and Human Services Research Institute. Retrieved on 10/26/2023 from:

Secondary Models:

$$Outcome_{it} = \alpha_0 + \alpha_1 Time_Indicator_i + \alpha_2 Group_{it} + \alpha_3 Time_Indicator_i * Group_{it} + \lambda X_{it} + \varepsilon_{it}$$

For the Main Models, $Outcome_{it}$ represents the outcome of interest for an individual respondent i in year t (e.g., annual dental visit, avoidable hospitalizations, etc., as described in Table IDD.1). $Group_{it}$ represents a group attribute (i.e., race/ethnicity, gender, and presence of comorbidities). α represents the corresponding coefficients for the model. X_i represents a set of control variables for individual i at time t and λ represents the coefficients for each of the corresponding control variables of X . ε represents the error term. Models will be estimated using ordinary least squares regression except for spending, which will be estimated using a generalized linear model as dollars would be the dependent variable (e.g., Gamma distribution with log link function).¹⁰⁹ Marginal analysis will be applied after running each regression to generate adjusted trends over time based on these models (i.e., using predictive margins).¹¹⁰

Specifications for the Secondary Models will be identical to the Main Models, except that we will introduce an interaction term of $Time_Indicator * Group$, used to capture time-varying differences by group (i.e., race/ethnicity, gender, and presence of comorbidities) with the α_3 coefficient. This would allow us to plot the adjusted trends by group of interest through the post hoc marginal analysis.

The cohort approach compares trends for a fixed cohort of individuals over time to ensure that observed changes in utilization are not due to changes in population composition resulting from beneficiaries newly enrolling or disenrolling from the program. Change in beneficiary characteristics, such as age, disease diagnoses and burden of illness over time, will be adjusted for by accounting for in these models (e.g., with CDPS scores, beneficiary age, and morbid conditions). Additionally, we will estimate yearly measures of study outcomes for all beneficiaries enrolled in Supports Program or CCP without restricting the sample to a cohort of beneficiaries by using a repeated cross-sectional approach. While the cohort analysis mitigates the likelihood for differences in the composition of the sample over time, the cross-sectional analysis will offer a larger sample size and, as a result, more statistical power to detect differences. The study team will also conduct sensitivity analyses regarding the effect of morbid conditions and CDPS score on study outcomes. This would include running the main and secondary models with and without the comorbidity and CDPS independent variables and monitoring changes in these measures over time.

For research question 1e

Study population for research question 1e:

We will also conduct a qualitative study of beneficiary and caregiver experience. The study population will include adults with I/DD themselves and parents, guardians, and other primary

¹⁰⁹ Deb P, Manning W, Norton E. Modeling health care costs and counts. IniHEA World Congress in Sydney, Australia 2013.

¹¹⁰ Williams R. Using the margins command to estimate and interpret adjusted predictions and marginal effects. The Stata Journal. 2012 Jun;12(2):308-31.

caregivers who have knowledge of beneficiaries' experiences with services and supports and overall satisfaction as the health care consumer.

Data collection:

Beneficiaries with I/DD, parents, guardians, and other primary caregivers with knowledge of the beneficiary's experience as the health consumer will be recruited to participate in focus group sessions most relevant to their experience through recruitment materials that clearly articulate the aim of the session (i.e., adults with I/DD or family members/advocates of adults with I/DD). Prior to any participation on the study, and in consultation with DMAHS, the Division of Developmental Disabilities, and the Rutgers Institutional Review Board, all study participants will be asked to participate in an informed consent process that assures comprehension of study participation.¹¹¹ Participants will initially be asked to complete a brief online screening survey to collect basic information on demographics and beneficiary characteristics (including inquiry into any transitions between Supports and CCP), and to determine study eligibility and help ensure diversity of focus group participants. The study team will then initiate data collection through a series of remote focus groups to elicit beneficiary experience, from the groups described above, to gather reflections on beneficiary experience, recommendations, and interpretation of study findings.¹¹² Focus groups will have up to 10 people each. These will be held virtually and recorded via video conferencing software, in compliance with the evaluator's Institutional Review Board. We propose a study incentive of \$10 for completing the screening survey. Adult beneficiaries with I/DD will be given \$100 for participating in their focus group. Similarly, parents, guardians, or other primary caregivers will be given \$100 for participating in their focus group. Advocates assisting in the adult I/DD focus group will not be compensated for their participation as an advocate, but may participate in the parent, guardian, or other primary caregiver focus group when applicable.

We will provide a set of open-ended focus group questions to elicit participants' views on experiences of beneficiaries and families regarding program components in either the Supports Program or CCP, and satisfaction and recommendations. The focus group guide will include follow-up prompts and probes to elicit in-depth responses. Up to five focus groups will be organized following the interim evaluation. Participants will be prompted with questions regarding their experience (i.e., Supports Program, CCP, and expanded eligibility group). Sessions will be approximately 60 to 90 minutes in length.

Analytic strategy:

With participant consent, the focus group will be recorded. Recordings will be de-identified and transcribed, then independently coded by two members of the evaluation team. In addition to predetermined thematic areas aligned with Supports Program and CCP aims, the team will identify emergent themes and patterns in the data after conducting a coding consensus process.

¹¹¹ Strickler JG, Haverkamp SM. Evaluating an informed consent process designed to improve inclusion of adults with intellectual disability in research. *Research in Developmental Disabilities*. 2023 Mar 1;134:104413.

¹¹² Crabtree, BF and Miller, WL. 2022. *Doing qualitative research*. Sage publications.

Table 10.3: Research Questions and Focus Group Strategies for R1e

Research Question	Number	Focus Group Strategy
RQ1e: How has the Supports Program and CCP affected the experience of services and supports and overall satisfaction of beneficiaries as the health care consumer, and that of their parents, guardians, and/or other primary caregivers?	Up to 10 participants per focus group, 4-6 groups following the interim evaluation (n=~50)	In consultation with DMAHS and DDD, CSHP will identify individuals for recruitment. A brief online screening survey and online focus groups will be conducted with purposively sampled adults with I/DD and caregivers/families, to obtain viewpoints about expected benefits and outcomes for patients and families. Focus groups will be approximately 60-90 minutes.

Table 10.4: Summary of Questions, Hypotheses and Methodology

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic Methods
<i>Hypothesis 1: Providing Home & Community Based Services (HCBS) to Medicaid beneficiaries with intellectual and developmental disabilities (I/DD) through the Supports Program and CCP is associated with improved access to preventative services, reduced reliance on nursing home and other residential facilities, and reduced avoidable hospitalization and emergency services.</i>				
RQ1a. What are the trends in preventative services among the Supports Program and CCP beneficiaries (e.g., metabolic monitoring, annual eye exam among individuals with diabetes, annual dental visit, and annual primary care medical visit) over the course of the current demonstration (2023-2028)? How do these trends vary across different subgroups (e.g., race/ethnicity, gender, and presence of comorbidities)?	<ul style="list-style-type: none"> • metabolic monitoring, • annual eye exam among individuals with diabetes • annual dental visit, and • annual primary care medical visit • follow-up after hospitalization for mental illness 	Individuals enrolled in the Supports Program or CCP as part of the eligibility expansion	Medicaid Fee-for-Service and Encounter Claims Records	Examine adjusted trends in study outcomes through analytic summaries and regression analysis and stratification of models by race/ethnicity, gender, and presence of comorbidities.
RQ 1b. What are the trends in utilization of care among the Supports Program and CCP beneficiaries (e.g., inpatient hospitalizations, emergency department treat-and-release visits, and primary care utilization) over the course of the current demonstration (2023-2028)? How do these trends vary across different	<ul style="list-style-type: none"> • inpatient hospitalizations (all-cause) • emergency department (ED) treat-and-release visits • primary care utilization 	As above	As above	As above

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic Methods
subgroups (e.g., race/ethnicity, gender, and presence of comorbidities)?				
RQ1c. What are the trends in residential and nursing home placement among the Supports Program and CCP beneficiaries over the course of the current demonstration (2023-2028)? How do these trends vary across different subgroups (e.g., race/ethnicity, gender, and presence of comorbidities)?	<ul style="list-style-type: none"> • Stays in residential settings, including nursing homes and long-term rehabilitation 	As above	As above	As above
RQ1d. What are the trends in avoidable utilization and spending among the Supports Program and CCP beneficiaries over the course of the current demonstration (2023-2028)? How do these trends vary across different subgroups (e.g., race/ethnicity, gender, and presence of comorbidities)?	<ul style="list-style-type: none"> • avoidable hospitalizations • spending related to all inpatient hospitalizations and ED visits 	As above	As above	As above
RQ1e. How has the Supports Program and CCP affected the experience of services and supports and overall satisfaction of beneficiaries as the health care consumer, and	Reported experiences of beneficiaries and caregivers relating to services and supports, community engagement, and consumer satisfaction.	Purposively sampled adults with I/DD and caregivers/families or others with knowledge about the experience of care among CCP or	Remote (via video conference) focus groups to be conducted after the interim evaluation.	Qualitative thematic analysis

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic Methods
that of their parents, guardians, and/or other primary caregivers?		Supports Program participants, no comparison group (n=~50).		
<i>Hypothesis 2: Providing Home & Community Based Services to expanded eligibility groups (individuals with I/DD aged 18 up to 21 and who have graduated from or are no longer eligible for their educational entitlement) who would otherwise have not been eligible for the Supports Program or the CCP absent the demonstration (hereafter, “expanded eligibility groups”) will increase access to preventative services, reduce reliance on nursing home and other residential facilities, and reduce avoidable hospitalization and emergency services.</i>				
RQ2a. What are the trends in preventative services among the Supports Program and CCP expanded eligibility group (e.g., metabolic monitoring, annual eye exam among individuals with diabetes, annual dental visit, and annual primary care medical visit) over the course of the current demonstration (2023-2028)? How do these trends vary across different subgroups (e.g., race/ethnicity, gender, and presence of comorbidities)?	<ul style="list-style-type: none"> • metabolic monitoring, • annual eye exam among individuals with diabetes • annual dental visit, and • annual primary care medical visit • follow-up after hospitalization for mental illness 	Individuals enrolled in the Supports Program or CCP as part of the eligibility expansion (individuals with I/DD aged 18 up to 21 and have graduated from, or are no longer eligible for their educational entitlement)	Medicaid Fee-for-Service and Encounter Claims Records	Examine adjusted trends in study outcomes through analytic summaries, regression analysis and stratification of models by race/ethnicity, gender, and presence of comorbidities.
RQ2b. What are the trends in overall utilization of care among the Supports Program and CCP expanded eligibility group (e.g., inpatient hospitalizations, emergency	<ul style="list-style-type: none"> • inpatient hospitalizations (all-cause) • emergency department (ED) treat-and-release visits • primary care utilization 	As above	As above	As above

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic Methods
department (ed) treat-and-release visits, and primary care utilization) over the course of the current demonstration (2023-2028)? How do these trends vary across different subgroups (e.g., race/ethnicity, gender, and presence of comorbidities)?				
RQ2c. What are the trends in residential and nursing home placement among the Supports Program and CCP expanded eligibility group over the course of the current demonstration (2023-2028)? How do these trends vary across different subgroups (e.g., race/ethnicity, gender, and presence of comorbidities)?	<ul style="list-style-type: none"> • Stays in residential settings, including nursing homes and long-term rehabilitation 	As above	As above	As above
RQ2d. What are the trends in avoidable utilization and spending among the Supports Program and CCP expanded eligibility group over the course of the current demonstration (2023-2028)? How do these trends vary across different subgroups	<ul style="list-style-type: none"> • avoidable hospitalizations • spending related to all inpatient hospitalizations and ED visits 	As above	As above	As above

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic Methods
(e.g., race/ethnicity, gender, and presence of comorbidities)?				

Table 10.5 shows an activity timeline for the research activities.

Table 10.5 Key Milestones, Adult IDD Services: Supports and Community Care Programs

Analytic Activity	Year 1 2025	Year 2 2026	Year 3 2027	Year 4 2028	Year 5 2029	Year 6 2030
1. Quality of care, health service utilization, and spending assessment: Analyze MMIS data (RQ1a-1d;RQ2a-2d)	Define appropriate population and customized metrics for MMIS analysis	Begin analysis of MMIS-based utilization and quality metrics	Complete interim analysis		Conduct analysis	Complete analysis
2. Qualitative systems change and outcome assessment (RQ1e)		Review documents, observe meetings	Conduct CSSP focus groups screening survey	Conduct CSSP 4-6 focus groups (N=~50) Conduct analysis	Complete analysis	
3. Submit reports to CMS			Interim report			Final report

RQ=Research Question.

NOTE: Evaluation project years are March-Feb. (subject to change depending on date of authorization to begin).

D. Methodological Limitations

The evaluation methods described here have several limitations. First, there are no comparison groups available to enable causal inference analysis. The I/DD Supports and CCP were in place prior to the current demonstration such that pre-post comparisons within the current demonstration would not support inferences about program impacts. Additionally, our claims-based metrics may not account for clinical factors such as severity that may also impact the likelihood of outcomes over time. To address this limitation, we will adjust trends by beneficiary characteristics, including CDPS risk score and age.

Our cohort analysis will also mitigate the threat to validity that changes in the composition of beneficiaries might drive any differences in observed study outcomes. However, the cohort analysis may be subject to small sample size which could limit the ability to detect meaningful differences (i.e., insufficient statistical power). The sample sizes will be larger in the repeated cross-sectional analysis, but characteristics of individuals determining service utilization may change over time. By engaging in both approaches, we will be able to compare results for consistency, and we will compare observed peaks and troughs in adjusted outcome trends to align with exogenous shocks (such as those observed during the COVID-19 pandemic in the previous demonstration period).

Medicaid claims analysis relies on Medicaid enrollment. As a result, healthcare experiences of beneficiaries between the aged 18 up to 21 would not be observed if they were not enrolled in Medicaid enrollment prior to the expansion. Our alternative strategies to examine the effect of eligibility expansion each have their own limitations, like those mentioned above in monitoring the Supports Program and CCP, overall. Our cohort analysis may be subject to small sample size due to disenrollment or other losses to follow-up. As mentioned above, the sample size will be larger in repeated cross-sectional analysis but characteristics of individuals determining outcomes may change over time.

Regarding the qualitative component, focus groups offer the opportunity for in-depth, experience-based interpretation of quantitative findings. However, findings from the focus groups may not necessarily achieve generalizability to the experiences of all beneficiaries, caregivers, and families. To analyze the beneficiary experience through the focus groups, participation will depend first on program take-up and then on beneficiary and caregiver availability, interest, and willingness to participate. Differences between participants and other Supports Program or CCP participants may be driven, in part, by willingness to participate in the research activity. We will aim to mitigate this issue by recruiting study participants that reflect the demographic characteristics of the study population but acknowledge that study participants may differ from the other beneficiaries in the Supports Program or CCP in ways that are not observable.

E. Attachments

Appendix 10 .1: I/DD Questionnaire

(Version 2024.3.4)

Would you prefer to complete this survey in English or Spanish?

- e. English
- f. Spanish -> GO TO SPANISH TRANSLATED SURVEY

Source: New question

Introduction

On behalf of Rutgers University and the New Jersey Division of Medical Assistance and Health Services, thank you for your interest in the evaluation of the **Intellectual and Developmental Disability (I/DD) Supports Program and the Community Care Program (CCP) in New Jersey**. We have asked you to participate because you are a person with I/DD or the parent, guardian, or primary caregiver of an adult with I/DD, who is enrolled in services in either the I/DD Supports Program and the Community Care Program (CCP). You are likely familiar with some of the services available through these programs, such as:

- Behavioral support
- Assistive technology
- Day habilitation
- Supported Employment
- Prevocational Services
- Goods and Services
- Speech Therapy
- Physical therapy
- Occupational therapy
- Care management/support coordination
- Private duty nursing
- Respite services
- Interpreter services
- Transportation
- Community-based supports
- Individual supports
- Community inclusion services

The following brief survey is part of our recruitment for focus groups to learn more about the I/DD Supports Program and the CCP Program. We will ask about the adult beneficiary with I/DD and the household where they live.

Screeners [To proceed, must answer “A” to I, II, III, IV, and a number for V.]

[Consent form scroll box; language to be approved by DMAHS, CMS, CSOC, Rutgers IRB]

10. Do you consent to participate in the survey?

- h. Yes
- i. No, exit the survey

Source: New question

11. Are you at least 18 years of age?

- c. Yes
- d. No, exit the survey

Source: New question

12. Are you an adult with I/DD, or the parent, guardian, or primary caregiver, of at least one adult with I/DD who participates in New Jersey's I/DD Supports Program or the CCP Program through Medicaid (i.e., NJFamilyCare)?

- a. Yes
- b. No, exit survey.

13. The following survey is part of our recruitment for an online meeting (Zoom) to discuss New Jersey's I/DD Supports Program and the CCP Program. The online meeting will be 60-90 minutes. The following survey will take about 10 minutes.

-Eligibility to participate in the study is based on the beneficiary with I/DD. A parent, guardian, or primary caregiver who cares for more than one beneficiary with I/DD may complete a survey for each beneficiary but may only participate in one focus group.

-Those who complete the survey will receive \$10 (limited to one survey per beneficiary with I/DD).

-There will be separate online meetings (zoom) for focus groups. There will be one for adults with I/DD (who may be assisted by an advocate of their choosing) and one for parents, guardians, or other primary caregivers.

-Participants in the online meeting (zoom) will receive \$100 each for their time (advocates in the meeting for adults with I/DD will not be compensated by the study).

-There are a limited number of spots for the online meetings (Zoom). If you are not chosen for the online meeting but complete the survey, you will still be given \$10 for completing the survey.

-If you would like to only participate in the survey, you will still be given \$10.

Are you interested in participating in the online meeting?

- a. Yes
- b. No

Source: New question

14. [If IV. is "Yes"] When would you most likely be able to meet for the online meeting? This will be used to schedule the focus group activity (via Zoom or similar video conferencing tool).

Indicate what time you are typically able to meet online (Zoom) for 60-90 minutes.

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Morning (After 9a-12p)							
Afternoon (After 12p-4p)							
Evening (After 4p-9p)							
Night (After 9p-12a)							

- Other or special circumstances (Please specify)

Source: New question

15. [If IV. is “Yes”] Please provide your contact details so that we may schedule the focus group.

- First name: __ [text response]
- Last name: __ [text response]
- email address: __ [text response]
- phone number: __ [text response]
- Other or special circumstances (Please specify) __ [text response]

Adult Beneficiary with I/DD Characteristics – These questions ask about the experiences of the adult beneficiaries with I/DD covered by the Supports Program and the Community Care Program (CCP) in New Jersey.

62. How old is the adult beneficiary with I/DD covered by the Supports Program and the Community Care Program (CCP) in New Jersey (in years, at their last birthday)?

__ years old [Number]

Source: Adapted from CSHP/Eagleton/Department of Children and Families - IDD Caregiver Survey

63. Is the adult beneficiary with I/DD Latino or Hispanic origin, such as Mexican, Puerto Rican, Cuban or some other Spanish background?

- e. Yes
- f. No

Source: Adapted from US Department of Health and Human Services, Office of Minority Health, <https://minorityhealth.hhs.gov/explanation-data-standards-race-ethnicity-sex-primary-language-and-disability>

64. Is the adult beneficiary’s race?

- m. White (includes Caucasian, European, Middle Eastern)
- n. Black (includes African American)
- o. Asian (includes Asian-Indian, South Asian, East Asian, Chinese, Japanese)
- p. Hispanic / Latino / Spanish
- q. Other (please specify) [Open-ended free text]
- r. Multi-racial (please specify) [Open-ended free text]

Source: Adapted from US Department of Health and Human Services, Office of Minority Health, <https://minorityhealth.hhs.gov/explanation-data-standards-race-ethnicity-sex-primary-language-and-disability>

65. Does this adult beneficiary with I/DD identify as male, female, or in some other way?

- k. Male

- l. Female
- m. Non-binary
- n. Some other way (please specify)
- o. Prefer not to answer

Source: Adapted from CSHP/Eagleton/Department of Children and Families - IDD Caregiver Survey

66. In general, how would you describe the adult beneficiary with I/DD's health?

- k. Excellent
- l. Very Good
- m. Good
- n. Fair
- o. Poor

Source: National Survey on Child's Health, <https://www.childhealthdata.org/learn-about-the-nsch/NSCH>

67. What is this adult beneficiary with I/DD's preferred means of communication? (choose one)

- k. Spoken Language
- l. Gestures or Body language
- m. Sign language or finger spelling
- n. Communication aid or device
- o. Other (please specify) [Open-ended free text]

Source: National Core Indicators - Child Family Survey, <https://idd.nationalcoreindicators.org/>

68. How much support does this adult beneficiary with I/DD need to prevent or manage self-injurious, disruptive, and/or destructive behaviors? (choose one)

- g. None
- h. Some
- i. Extensive

Source: National Core Indicators- Child Family Survey, <https://idd.nationalcoreindicators.org/>

Parent/Guardian/Primary Caregiver Characteristics – These questions ask about the parent, guardian, or other primary caregiver of the adult beneficiary with I/DD.

69. What is your relationship to the adult beneficiary with I/DD?

- Self, skip questions about parent, guardian, and primary caregivers
- Mother
- Father
- Legal guardian
- Other primary caregiver (Please specify)

- Don't know/Not sure
- Refused

Source: CSHP/Eagleton/Department of Children and Families, IDD Caregiver Survey

70. Would you please tell us your age?

__[Number]

Prefer not to answer/unsure

Source: CSHP/Eagleton/Department of Children and Families, IDD Caregiver Survey

71. [For prefer not to answer/unsure above, ask] Would you be willing to tell us whether it's between...

- u. 18 - 20
- v. 21 - 24
- w. 25 - 29
- x. 30 - 34
- y. 35 - 44
- z. 45 - 49
- aa. 50 - 54
- bb. 55 - 64
- cc. 65 OR OVER
- dd. Prefer not to answer

Source: CSHP/Eagleton/Department of Children and Families - IDD Caregiver Survey

72. What is the highest degree or level of school you have completed?

- a. no schooling completed
- b. nursery school to 8th grade
- c. 9th-12th grade, no diploma
- d. high school graduate (high school diploma or the equivalent)
- e. vocational/technical/business/trade school certificate or diploma (beyond the high school level)
- f. some college, but no degree
- g. associate degree
- h. bachelor's degree
- i. master's, professional or doctorate degree
- j. don't know
- k. prefer not to answer

Source: CMS, <https://www.cms.gov/data-research/research/medicare-current-beneficiary-survey/questionnaires/2023-questionnaires>

73. Are you of Latino or Hispanic origin, such as Mexican, Puerto Rican, Cuban or some other Spanish background?

- g. Yes
- h. No

Source: Adapted from US Department of Health and Human Services, Office of Minority Health, <https://minorityhealth.hhs.gov/explanation-data-standards-race-ethnicity-sex-primary-language-and-disability>

74. Are you White, Black or of Asian origin, or are you some other race, or multi-racial?

- s. White (includes Caucasian, European, Middle Eastern)
- t. Black (includes African American)
- u. Asian (includes Asian-Indian, South Asian, East Asian, Chinese, Japanese)
- v. Hispanic / Latino / Spanish
- w. Other (please specify) [Open-ended free text]
- x. Multi-racial (please specify) [Open-ended free text]

Source: Adapted from US Department of Health and Human Services, Office of Minority Health, <https://minorityhealth.hhs.gov/explanation-data-standards-race-ethnicity-sex-primary-language-and-disability>

75. How do you describe your gender? [Select ONE]

- o. Female
- p. Male
- q. Trans Male/Trans Man
- r. Trans Female/Trans Woman
- s. Genderqueer/Gender Nonconforming
- t. Prefer to self-describe, please specify: [open field]
- u. Prefer not to answer

Source: Q7-8 Two Step Gender Identity, <https://registrar.ucsc.edu/gender-identity/index.html>

76. What is the primary language spoken in your home?

- g. English
- h. Spanish
- i. Other (please specify) [Open-ended free text]

Source: Adapted from US Department of Health and Human Services, Office of Minority Health, <https://minorityhealth.hhs.gov/explanation-data-standards-race-ethnicity-sex-primary-language-and-disability>

77. Last year, that is in 2022, what was your total household income from all sources, before taxes?

- h. Less than \$25,000
- i. 25 to under \$50,000
- j. 50 to under \$75,000
- k. 75 to under \$100,000
- l. 100 to under \$150,000
- m. \$150,000 or more
- n. Prefer not to answer

Source: CSHP/Eagleton/Department of Children and Families - IDD Caregiver Survey

78. In the past 12 months, did you or any member of this household receive benefits from the Food Stamp Program or SNAP (the Supplemental Nutrition Assistance Program)?

- a. Yes
- b. No
- c. Not sure/prefer not to answer

Source: Census, <https://www.census.gov/programs-surveys/acs/about/forms-and-instructions.html>

Appendix 10.2: Adults With I/DD Focus Group Guide

(Version 2024.3.4)

Thank you for talking to us. We really appreciate it. We are trying to find ways to help people around New Jersey. We asked to speak with you because you know a lot about what it is like to live with a disability. Together, we will share about our lives and what we like to do. We will talk about getting out of the house, staying healthy, and meeting new people. We will talk about what makes it hard to do the things we like to do. Please remember that what you like to do is important. You cannot be wrong about what you like. We want everybody to feel comfortable. Someone might like something that you don't like. That is OK! The most important thing is that you feel comfortable to share what you think and share about what you like. Together, I will ask questions to the group. The questions will also come up on the screen and I will read it again. Each person will have a chance to share if they would like to.

1. I'd like to know more about you. For example, I am [interviewer]. I like to [list of activities].
What are your favorite things to do?
2. I'd like to know more about the people that you know. This could be people in your home, school, or work. For example, I know people at my job. We like to talk to each other, and we try to learn about disabilities and about helping people be healthy. **What do you like to do with other people?**
3. We hear that having aides or staff can be helpful for people with disabilities. The aides come and help people with disabilities or their families. Your aide might be the person who helps you get dressed, make food, get out of the house, or something else. **How do your aides help you? Is there anything that you wish you had more help with?**
4. Sometimes we can't do the things we'd like to do. It might be difficult to travel, like finding the right bus. It might be too expensive to buy something. Or it might be scary to try something new or go to a new place. **What makes it hard for you to do what you would like to do?**
5. Many people have a staff member called a "support coordinator." This means that they help you to stay organized and get all the right services and activities for you. They might help you with finding a job or help you get special services. **Do you ever speak with your support coordinator about getting the right services? If yes, what happens when you meet with your support coordinator?**
6. **What would you like New Jersey leaders (like the directors of Medicaid, the governor's office, and state agencies) who make decisions about what kinds of services people can have to know about what it is like to live with an intellectual and developmental disability? What could make things better?**

Thank you again for helping us know more about you so that we can find ways to better support people with disabilities and their families!

Appendix 10.3: Family Members/Advocates of Adults With I/DD Focus Group Guide

(Version 2024.3.4)

Thank you for meeting with us. Today, we will be discussing healthcare and support programs in New Jersey. We asked to speak with you because you are a parent, guardian, family member, or other close connection of a person with an Intellectual and Developmental Disability. We will talk about getting services and supports, community, and your experience as a family member of an adult with an Intellectual and Developmental Disability.

Over the next 60-90 minutes, we will focus on ways to improve services for individuals with Intellectual and Developmental Disabilities in New Jersey. We will ask the group six guiding questions. After each question, a prompt will pop-up on your screen with an opportunity write a brief response. We will then share the responses and each member will have the opportunity to explain their answers to the group.

We are aiming to get as many different opinions as possible. We will not be using job titles, degrees, or affiliations. Instead, we will be using first names. For this focus group to be successful, please remember that your perspective cannot be wrong, and your opinion is incredibly valuable to this work. It may be that someone will say something that you disagree with. To encourage everyone to feel free to participate, we will not have a debate or argument over one another's opinions. As mentioned, your perspective cannot be wrong.

[Question appears on screen with a free text box below it]

[INSTRUCTIONS: Type your first name and then a brief response. Example, "John: there are too many appointments to keep track of." We will then have a discussion where each person will have the opportunity to discuss what they wrote and provide additional details.]

1. As I mentioned, we would like to better understand your perspective as a parent, guardian, family member, advocate, or friend of someone with an intellectual and developmental disability. We would like to learn from you so that we can find ways to improve programs and services in New Jersey and help more families. **To break the ice, let's take a moment to think about your family member or friend with I/DD. What are some of their favorite things to do or what do you like to do together?**
2. I'd like to know more about your family member with I/DD and their regular activities. This includes thinking about people they might interact with in your home, school, or work. **What activities does your family member participate in with other people?**
3. What is your impression of the aides who come and help support your friend or family member with I/DD. The aide might be the person who helps them get dressed, makes food, takes them to community events, or something else. **How do their aides help you and the**

person with I/DD? Is there anything that you wish you and the person with I/DD had more help with?

4. We wanted to know more about the barriers to supporting persons with Intellectual and Developmental Disabilities in community. We can think about difficulties in transportation, cost, behavioral challenges, and other barriers. **What makes it hard for the person with I/DD to do what they would like to do? Have there been any changes in the type of waiver services you are using (such as movements to Managed Long-term Supports or between the Community Care Program and Supports Program)?**
5. Both the state and federal government require person-centered planning, where individuals and their families are driving decisions about services that best meet their needs and goals. This might include support in getting out of the house, finding a job, or other services that are aligned with the interests of the individual with I/DD. **How often do you speak with your support coordinator about getting the right services? Are you and your family member with I/DD as involved as you would like to be in choosing services?**
6. **What would you like New Jersey systems leaders (like the directors of Medicaid, the governor's office, and state agencies) to know about what it is like to be a family member of someone with and intellectual and developmental disability? What improvements should be made (this includes policies, services, and systems)?**

Thank you again for helping us know more about you so that we can find ways to better support people with disabilities and their families!

11. Managed Long Term Services and Supports (MLTSS) Program

A. General Background Information

In this section, we describe our plan to evaluate the impact of managed care services in the areas of Long-Term Services and Supports (LTSS) and behavioral health (for selected LTSS-eligible populations) on NJ Medicaid beneficiaries. Managed long-term services and supports (MLTSS) began in July 2014 under New Jersey’s first §1115 Comprehensive Demonstration and continued during the renewal demonstrations including the current one spanning 2023-2028. New Jersey has made significant progress in advancing the goal of rebalancing Medicaid long-term care, with 63% of LTSS-eligible individuals receiving home and community based services (HCBS) rather than nursing home care in 2023, as compared to 28% when the managed long term services and supports program was initiated in 2014.¹¹³ Expanding HCBS supports the majority of older adults who prefer to age in place (e.g., remain in a community-based dwelling as they age).¹¹⁴ A 2021 AARP study found that 75% of people age 50 and older preferred to stay in their homes or communities for as long as possible.¹¹⁵ Our evaluation will examine key indicators of the continued impact of the Managed Long-Term Services and Supports (MLTSS) program, assess the contribution of added MLTSS benefits under the current waiver demonstration, and identify areas for refinement of policy implementation.

Managed Long Term Services and Supports

The MLTSS program provides HCBS benefits to older adults and people with disabilities who require a nursing home level of care. MLTSS is co-administered by DMAHS and the New Jersey Division of Aging Services (DoAS).

Beneficiaries who receive MLTSS services under the demonstration fall into several eligibility categories:

- Aged or Disabled Individuals who qualify for Medicaid under State Plan rules, meet certain additional requirements around beneficiary and spouse assets, and require a nursing facility level of care,
- Aged or Disabled Individuals who would not otherwise be eligible for Medicaid, who have incomes up to 300% of the Federal Benefit Rate, who meet certain additional requirements around beneficiary and spouse assets, and who require a nursing home level of care,

¹¹³ Results calculated for July of each year from 2014-2023 (MLTSS AL + MLTSS HCBS as percent of total) https://njfamilycare.dhs.state.nj.us/analytics/LTC_explorer.html, accessed March 20, 2024.

¹¹⁴ Maggie Ratnayake et al., “Aging in Place: Are We Prepared?,” *Delaware Journal of Public Health* 8, no. 3 (August 31, 2022): 28–31, <https://doi.org/10.32481/djph.2022.08.007>.

¹¹⁵ Joanne Binette and Fanni Farago, “2021 AARP Home and Community Preferences Survey” (Washington, DC: AARP, November 18, 2021), <https://doi.org/10.26419/res.00479.001>.

- Aged or Disabled Individuals who have income above 300% of the Federal Benefit Rate, who establish and fund a Qualified Income Trust,¹¹⁶ who meet certain additional requirements around beneficiary and spouse assets, and who require a nursing home level of care,
- Adults aged 21-64, not receiving Medicare, who have a Modified Adjusted Gross Income less than 138%¹¹⁷ of the federal poverty level and require a nursing facility level of care, and
- Children under age 21 who have a family income less than 355%¹¹⁸ of the federal poverty level, and who require a special care nursing home level of care.¹¹⁹

MLTSS HCBS benefits are provided exclusively through managed care organizations. As part of their provision of MLTSS services, Managed Care Organizations (MCOs) are required to develop a plan of care for each MLTSS beneficiary and offer care management services on an ongoing basis. MCOs are also measured on a broad range of performance and accountability standards around the provision of MLTSS services.

¹¹⁶ *Qualified Income Trusts:* Certain individuals (whose incomes would otherwise be too high) may qualify for MLTSS services by placing excess income in a Qualified Income Trust (QIT). While New Jersey does not plan specific modifications to the QIT provisions of the demonstration, the State is engaging with relevant stakeholders in structured conversations to further consider potential changes either to the QIT policy itself or to how it is administered and communicated to the public. As a result of these discussions, the State may consider proposing policy changes in the future.

¹¹⁷ This includes adjustment of FPL to account for 5% disregard permitted by CMS.

¹¹⁸ This includes adjustment of FPL to account for 5% disregard permitted by CMS.

¹¹⁹ This may also include children under age 21 regardless of parental income. diversion and transition, and technical changes to discourage member churn between MLTSS and HCBS demonstration programs for adults with developmental disabilities.

Specific HCBS benefits provided as part of MLTSS include:

<ul style="list-style-type: none"> • assisted living, 	<ul style="list-style-type: none"> • occupational therapy,
<ul style="list-style-type: none"> • behavioral health management services for individuals with traumatic brain injuries, 	<ul style="list-style-type: none"> • personal emergency response system (PERS),
<ul style="list-style-type: none"> • caregiver/beneficiary training related to skills of independent living, 	<ul style="list-style-type: none"> • physical therapy,
<ul style="list-style-type: none"> • chore services, 	<ul style="list-style-type: none"> • private duty nursing,
<ul style="list-style-type: none"> • cognitive rehabilitation therapy, 	<ul style="list-style-type: none"> • residential modifications,
<ul style="list-style-type: none"> • community residential services, 	<ul style="list-style-type: none"> • respite services,
<ul style="list-style-type: none"> • community transition services for individuals transitioning out of institutions, 	<ul style="list-style-type: none"> • social adult day care,
<ul style="list-style-type: none"> • home-based supportive care, 	<ul style="list-style-type: none"> • speech/language/hearing therapy,
<ul style="list-style-type: none"> • home-delivered meals, 	<ul style="list-style-type: none"> • structured day programs or supportive day services for individuals with traumatic brain injury, and
<ul style="list-style-type: none"> • medication-dispensing, 	<ul style="list-style-type: none"> • vehicle modifications.
<ul style="list-style-type: none"> • non-medical transportation, 	

In addition to these services, New Jersey provides personal care assistance and medical day care as State Plan benefits available to all Medicaid populations based on medical necessity.

Changes to MLTSS in the Demonstration

MLTSS is extended in the 2023-2028 demonstration, largely as constructed under prior waiver authorities. Changes include a renewed focus on housing-related services¹²⁰ and expansion of certain MLTSS benefits to allow beneficiaries to remain in community settings and further encourage transitions from institutional settings to the community. In developing the renewal proposal, the state focused on several overarching policy goals, including:

- Continue improvements in quality of care and efficiency associated with managed care,
- Improve access to critical services in the community through MLTSS and other HCBS programs.

Housing Supports

Lack of stable housing may impede an individual’s ability to enroll in and maintain coverage, to access needed health care, and to age in place. As a result, New Jersey is implementing transitional housing supports for individuals who are transitioning out of institutional care (including incarceration), congregate settings, homelessness or a homeless shelter, or the child welfare system. Related services include case management, outreach, and education, as well as infrastructure investments to support those services. Specifically related to the MLTSS population, beneficiaries eligible to receive housing transition or tenancy-sustaining services include, but are

¹²⁰ See “Housing Supports” evaluation plan.

not limited to those individuals transitioning from an institution to the community or at risk of institutionalization who require a new housing arrangement to remain in the community (including older adults, individuals with disabilities, and individuals with serious mental illness and/or substance use disorder), and/or those who are transitioning out of high-risk or unstable housing situations. Housing supports include, but are not limited to, medically necessary home modifications and remediation services such as accessibility ramps, handrails, grab bars, repairing or improving ventilation systems, and mold/pest remediation. More details on the extent of housing supports and evaluation design can be found in the housing supports chapter.

Caregiver Supports

Recognizing that care provided by family members or other informal or unpaid caregivers is critical to supporting MLTSS members in the community and also that providing such care can be deleterious to a family member's mental health and psychological well-being,¹²¹ New Jersey sought and received approval for enhanced Medicaid-funded supports for caregivers to augment existing MLTSS Caregiver Training and Respite benefits.

Counseling

The Caregiver Supports Program will include individual and/or facilitated peer group counseling through a licensed behavioral health provider under contract with the MCO. Caregivers may receive unlimited counseling sessions as needed (members can receive counseling as well through their regular benefit package). Services will be subject to regular review (quarterly through the plan of care) by the MCO to determine the continued appropriateness for the need of services. Eligible caregivers are those who: 1) provide caregiver services to a member receiving MLTSS for at least ten hours a week; 2) receive a recommendation by the MCO (as part of plan of care development) as in need of counseling services to continue to support the member's independence and/or expand the member's participation in the community, and 3) attest they do not have any third-party insurance coverage that would cover the counseling service.

Respite Services

The previous MLTSS respite benefit was limited to 30 days per participant per calendar year. The 2023-2028 demonstration allows up to 90 days of respite per calendar year, in instances where it is determined by the MCO that such additional respite services are necessary to maintain a beneficiary within the community and that such additional services would be consistent with cost-effective operation of the program.

¹²¹ Martin Pinquart and Silvia Sörensen, "Differences between Caregivers and Noncaregivers in Psychological Health and Physical Health: A Meta-Analysis," *Psychology and Aging* 18, no. 2 (June 2003): 250–67, <https://doi.org/10.1037/0882-7974.18.2.250>; Ludmyla Caroline de Souza Alves et al., "Burnout Syndrome in Informal Caregivers of Older Adults with Dementia: A Systematic Review," *Dementia & Neuropsychologia* 13 (December 9, 2019): 415–21, <https://doi.org/10.1590/1980-57642018dn13-040008>; Pierre Gérain and Emmanuelle Zech, "Do Informal Caregivers Experience More Burnout? A Meta-Analytic Study," *Psychology, Health & Medicine* 26, no. 2 (February 7, 2021): 145–61, <https://doi.org/10.1080/13548506.2020.1803372>.

Nutritional Supports

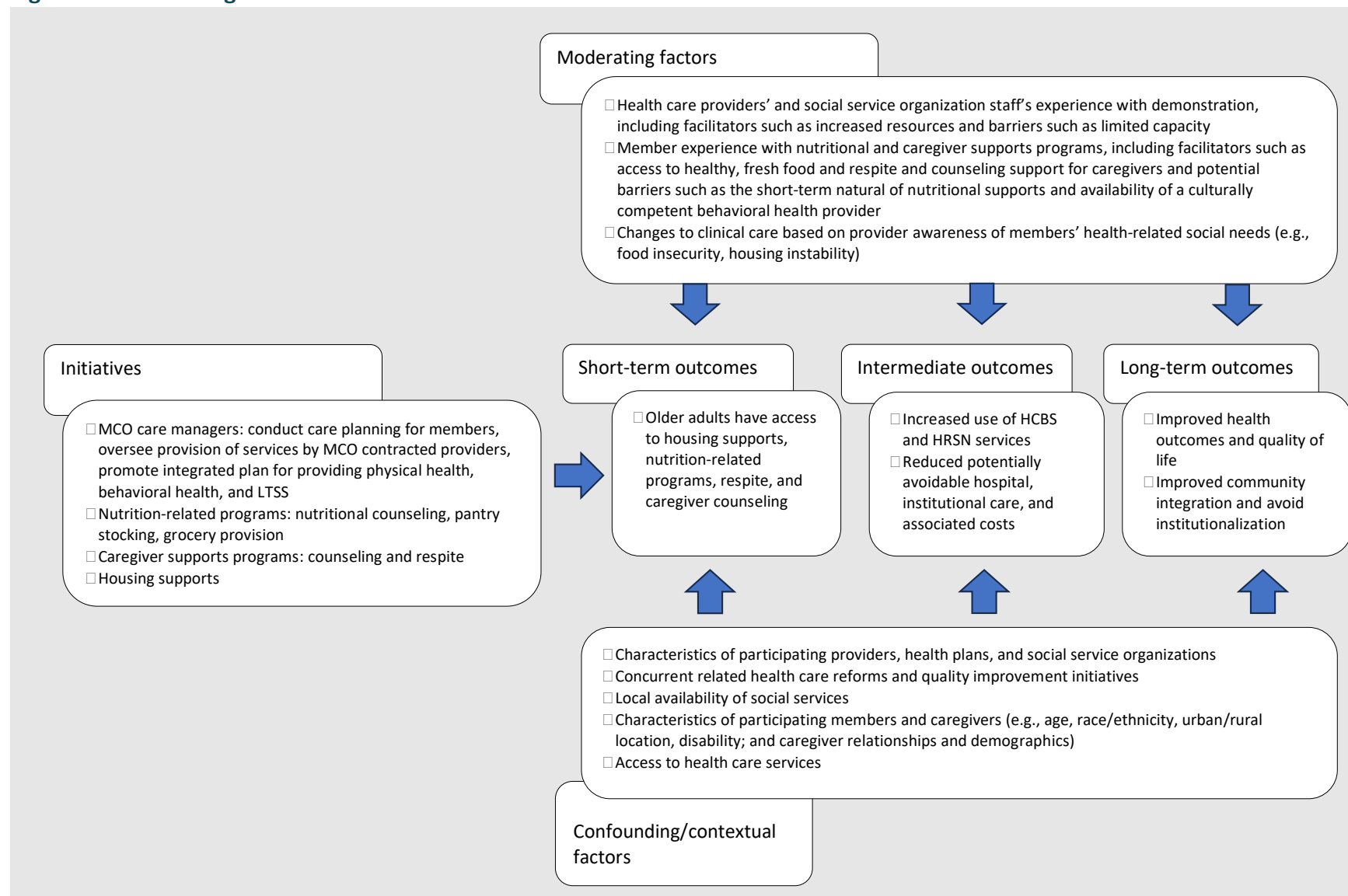
Ensuring that a beneficiary has access to adequate food resources can also be a critical part of maintaining a beneficiary within the community. The previous MLTSS benefit included home-delivered meals for eligible individuals. The 2023-2028 demonstration includes additional nutritional benefits in the MLTSS program, including:

- One-time pantry stocking for any Medicaid eligible beneficiary who is transitioning from an institution. For beneficiaries receiving one-time pantry stocking, MCO care managers will work with the beneficiary to identify permanent sources of food, potentially including assisting the beneficiary in applying for SNAP benefits. New Jersey currently offers this service as a benefit under the MFP program, which has been identified as an essential support for individuals transitioning to community apartment settings.
- Short-term provision of groceries to beneficiaries who have their usual source of food disrupted or who are experiencing an acute behavioral health episode. Temporary provision of food may help avoid placement in an institution, preventable hospital emergency department visits (e.g., dehydration, falls due to lightheadedness) and inpatient admissions. This benefit is limited to 30 days per calendar year, up to 200% of the Maximum Monthly USDA SNAP Allowance, and MCOs providing this benefit would be expected to use that time to work with the beneficiary to more permanently resolve the disruption to the beneficiary's ordinary food supply, potentially including applying for SNAP benefits. Vendors who provide this benefit are required to comply with appropriate nutritional standards.
- Nutritional education and skills development (i.e., training how to shop for groceries on a budget, preparation of a meal, healthy well-balanced alternatives.) Nutrition counseling and education is an added benefit for MLTSS members, including education on healthy meal preparation and connecting members with grocery budget resources.

B. Evaluation Questions and Hypotheses

Our evaluation of MTLSS includes an implementation study as well as research questions related to demonstration outcomes. Figure 11.1 is a logic model showing the implementation questions and the expected outcomes.

Figure 11.1 MLTSS Logic Model



1. Implementation Study

To understand the implementation of new MLTSS programs (e.g., nutritional and caregiver supports), researchers will review available administrative data and monitoring reports and conduct in-depth individual interviews with entities responsible for the demonstration such as MCOs and their vendors, DMAHS staff, other state and local experts such as health-care providers serving at-risk Medicaid beneficiaries, and other key informants involved in the implementation of the new nutritional and caregiver support programs. The complete interview guide for implementation questions modeled on the suggested implementation questions in CMS' technical assistance guide for evaluating health related social needs can be found in the appendix [Appendix Exhibit 11.1]. These questions will provide context for analyses that address hypotheses in section 2 and assess progress toward demonstration goals.

1.1 Methodology

Data Collection: In-depth individual interviews will be conducted using semi-structured, open-ended questions that probe key informants on their experiences implementing the nutritional and caregiver support programs, identifying how roles or participation changed throughout the demonstration period. Interviews will offer insights into program implementation as well as identifying barriers and opportunities to improve the programs. Participant recruitment will be based on criteria established during protocol development and will primarily involve staff and key informants with existing relationships to the evaluators such as MCOs and their vendors, DMAHS staff, and other state and local experts. Up to 15 interviews of approximately 45-60 minutes will be completed regarding the nutritional support programs. Up to 15 interviews of approximately 45-60 minutes will be completed regarding the caregiver support programs. All interviews will take into account diversity by MCO and geographical region. Key informant interviewees participating in their professional roles (e.g., DMAHS, MCO staff, vendors) will not be offered participation incentives, but others (e.g., community advocates) will receive a \$50 participation incentive. Interviews will be conducted virtually over Zoom and transcribed.

Analytic Strategy for Interview Data: NVivo or similar software will be used to analyze for themes. A general inductive approach will be used to allow for themes to emerge. Where appropriate, themes will be categorized as a barrier or facilitator to provide a coherent analysis to MCOs on the implementation of the nutritional and caregiver supports programs.

2. Outcomes Study

We posit that the managed care financing of LTSS (i.e., MLTSS) that began in July 2014 and the renewed focus on housing-related services and expansion of certain MLTSS benefits have the potential to improve health care utilization outcomes, access and quality of care, and community integration and rebalancing.

Below we present the *driver diagram* (Figure 11.2) that delineates the pathway from the policy change to improved outcomes. Here the secondary drivers represent the various services offered through the LTSS programs as well as improved care coordination from managed care financing of physical and behavioral health and LTSS. Such service delivery and care integration promote higher quality of community level care and integrated care coordination. This results in improved health

utilization outcomes reflected though reduced preventable hospitalizations and lower rates of institutionalization (see outcomes below).

Figure 11.2: MLTSS Driver Diagram

Aim	Primary Drivers	Secondary Drivers
1.A. Improve access, utilization, and quality of ambulatory/community level care. 1.B. Improve quality of life. 1.C. Improve community integration and avoid institutionalization.	Integrated care	MCO care managers <ul style="list-style-type: none"> • Conduct care planning for members • Oversee provision of services by MCO contracted providers • Promote integrated plan for providing physical health, behavioral health, and LTSS
	Provision of HCBS and HRSN services	<ul style="list-style-type: none"> • Housing supports¹²² • Nutrition related programs (nutritional counseling, pantry stocking, grocery provision) • Respite • Caregiver counseling
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="width: 40%; border-top: 1px solid black; position: relative;"> <div style="position: absolute; left: -10px; top: -5px;">←</div> </div> <div style="width: 20%; text-align: center;">Causality</div> <div style="width: 40%; border-top: 1px solid black; position: relative;"> <div style="position: absolute; right: -10px; top: -5px;">←</div> </div> </div>		

We next detail the hypotheses and corresponding research questions. These are also summarized in Table 11.2.

Hypothesis 2.1: Medicaid coverage of long-term care services and supports (hereafter MLTSS) will result in improved access to, and quality of, care and support more individuals to remain in the community instead of institutions.

Research Question 2.1a: What are the trends in utilization and quality of care within the MLTSS population (i.e., inpatient hospitalizations, avoidable hospitalizations, ED visits, avoidable ED visits, and all cause broken bones (e.g., hip fractures))? How do these trends vary across different subgroups (e.g., race/ethnicity, gender, marital status, functional status, presence of comorbidities)?

Research Question 2.1b: What are the trends in spending within the MLTSS population related to avoidable hospitalizations and ED visits and levels and balance of spending on nursing facilities and community LTSS?

Research Question 2.1c: What are the trends in institutionalization within the MLTSS population (e.g., facility admission and facility admission followed by community discharge)?

¹²² Details on the extent and evaluation design of housing supports can be found in the housing supports chapter.

Hypothesis 2.2: Trends in LTSS utilization within the MLTSS population will improve including services aimed at addressing health related social needs (HRSN) (e.g., nutrition insecurity) and caregiver support.

Research Question 2.2a: What are the trends in take-up and utilization of caregiver support, respite services, and nutrition-related programs? How do these trends vary across different subgroups (e.g., race/ethnicity, gender, marital status, functional status, presence of comorbidities)?

Research Question 2.2b: Are there differences in who is referred to caregiver support programs by demographic characteristics (e.g., race/ethnicity, gender, language spoken, immigration status, marital status, functional status, presence of comorbidities)?

Hypothesis 2.3: Among caregivers who receive counseling, nutrition, and respite services, caregivers will experience a reduction in caregiver stress and burnout.

Research Question 2.3a: What are the trends of caregiver health, depression and anxiety, caregiving-related stress, and overall well-being among caregivers who receive support services? How do trends vary across different subgroups (e.g., race/ethnicity, gender, marital status, functional status, presence of comorbidities)?

Research Question 2.3b: How do those who receive counseling and respite services describe stressors and stress relievers in relation to their caregiving work? Do experiences differ by caregiver demographic characteristics (e.g., race/ethnicity, gender, language spoken, immigration status, marital status, functional status, presence of comorbidities)?

Hypothesis 2.4: The implementation of the caregiver supports program will vary in its effectiveness at meeting the needs of caregivers who receive the services.

Research Question 2.4a: What barriers, facilitators, and suggestions for improvement do caregivers and other key informants identify with the caregiver supports program?

2.1 Methodology

Outcomes:

We will assess the outcomes listed in Table 11.1 below.

Table 11.1: Inventory of Measures

Measure		Brief Description
Utilization of Care		
1.	Inpatient hospitalizations	Individuals receive inpatient hospital treatment for surgery or for nonsurgical medical treatment.
2.	Emergency department (ED) treat-and-release visits	Individuals seek ambulatory care in the emergency department for surgery or for nonsurgical medical treatment.
3.	Institutional transitions: MLTSS admissions to a	Rates of admission to a facility for short-term stay with discharge to community, medium-term stay with

	facility from a hospital or the community	discharge to community, or long-term stay with no discharge to the community. ¹²³
Quality		
4.	Avoidable hospitalizations	Rates of ACS inpatient (IP) hospitalizations that may occur due to inadequate ambulatory/primary care within communities. ¹²⁴
5.	Avoidable ED visits	Avoidable treat-and-release ED visits that may occur due to inadequate ambulatory/primary care within communities, part of AHRQ's Safety Net Monitoring Toolkit (AHRQ 2016a; AHRQ 2016b).
6.	Inpatient hospitalization or ED visit for broken bone (e.g., hip fracture)	Rates of inpatient hospitalizations and ED visits that may occur due to a broken bone (e.g., hip fracture) and differences by select demographic characteristics. ¹²⁵
Spending		
7.	Spending related to avoidable hospitalizations and ED visits	Payments on facility claims for inpatient and treat-and-release ED visits that may occur due to inadequate ambulatory/primary care within communities, inflation adjusted. ¹²⁶
8.	Spending related to long-term care in community and nursing facilities	Payments on facility claims for nursing home stay (e.g., custodial revenue code) and community-based LTSS (e.g., LTSS service codes). ¹²⁷
Caregiver Supports		

¹²³ Jacqueline Allen et al., "User Experience and Care for Older People Transitioning from Hospital to Home: Patients' and Carers' Perspectives," *Health Expectations* 21, no. 2 (2018): 518–27, <https://doi.org/10.1111/hex.12646>; Jacqueline B. LaManna et al., "Early and Intermediate Hospital-to-Home Transition Outcomes of Older Adults Diagnosed With Diabetes," *The Diabetes Educator* 42, no. 1 (February 1, 2016): 72–86, <https://doi.org/10.1177/0145721715620020>; Addie Middleton et al., "New Institutionalization in Long-Term Care After Hospital Discharge to Skilled Nursing Facility," *Journal of the American Geriatrics Society* 66, no. 1 (2018): 56–63, <https://doi.org/10.1111/jgs.15131>.

¹²⁴ Jayasree Basu, Bernard Friedman, and Helen Burstin, "Managed Care and Preventable Hospitalization among Medicaid Adults," *Health Services Research* 39, no. 3 (June 2004): 489–510, <https://doi.org/10.1111/j.1475-6773.2004.00241.x>; A. B. Bindman et al., "Preventable Hospitalizations and Access to Health Care," *JAMA* 274, no. 4 (July 26, 1995): 305–11; J. Billings et al., "Impact of Socioeconomic Status on Hospital Use in New York City," *Health Affairs (Project Hope)* 12, no. 1 (1993): 162–73, <https://doi.org/10.1377/hlthaff.12.1.162>; Daniel L. Howard et al., "Racially Disproportionate Admission Rates for Ambulatory Care Sensitive Conditions in North Carolina," *Public Health Reports* 122, no. 3 (2007): 362–72.

¹²⁵ "Patient Safety Indicator 08 (PSI 08) In Hospital Fall with Hip Fracture Rate" (Agency for Healthcare Research and Quality, July 2021).

¹²⁶ "CPI Inflation Calculator," U.S. Bureau of Labor Statistics, accessed September 6, 2023, https://www.bls.gov/data/inflation_calculator.htm.

¹²⁷ Sujoy Chakravarty et al., "Examining the Effect of the NJ FamilyCare Comprehensive Demonstration on Access to Care, Quality, and Cost of Care: Draft Interim Evaluation Report" (Rutgers Center for State Health Policy, February 2022), <https://cshp.rutgers.edu/publications/examining-the-effect-of-the-nj-familycare-comprehensive-demonstration-on-access-to-care-quality-and-cost-of-care-draft-interim-evaluation-report>.

9.	Respite services	Number of individuals utilizing respite services annually and average number of days of respite services used per calendar year per individual. ¹²⁸
10.	Counseling	Individuals receive counseling services.
11.	Caregiver stress and burnout	Individual ratings on caregiver health (CDC-rating), depression and anxiety (PHQ-4 ¹²⁹), caregiving-related stress (Kingston Caregiver Stress Scale ¹³⁰ or University of Washington Caregiver Stress Scale ¹³¹), overall well-being (Perceived Support Scale ¹³²).
Nutritional Supports		
12.	Services associated with nutrition-related programs	Nutrition-related programs to be measured: Nutrition counseling and education for MLTSS members, pantry stocking, and grocery provision.

For hypotheses 2.1 & 2.2 and research questions 2.1a-2.2b

Study population: These hypotheses relate to trends in utilization, spending, and quality health care as well as caregiver services available only to the MLTSS population, thus there is no available comparison group.

Analytic strategy: We will conduct analyses of adjusted trends, calculating estimates for outcome measures on a quarterly or annual basis (as appropriate) to examine utilization and quality of care (i.e., inpatient hospitalizations, avoidable hospitalizations, ED visits, avoidable ED visits, and all cause broken bones (e.g., hip fractures)), spending, institutionalization (e.g., facility admission and facility admission followed by community discharge), and service utilization (e.g., caregiver support, respite services, and nutrition-related programs) over the demonstration period.

We will examine several cohorts of individuals enrolled in MLTSS starting in different baseline periods (e.g., 2018-2019, 2021-2022) and then investigate changes in outcomes over the current demonstration period (2023-2028). We will estimate regression models for each study outcome,

¹²⁸ Chakravarty et al.

¹²⁹ Amit Sapra et al., “Using Generalized Anxiety Disorder-2 (GAD-2) and GAD-7 in a Primary Care Setting,” *Cureus* 12, no. 5 (n.d.): e8224, <https://doi.org/10.7759/cureus.8224>; Kurt Kroenke et al., “An Ultra-Brief Screening Scale for Anxiety and Depression: The PHQ-4,” *Psychosomatics* 50, no. 6 (2009): 613–21, <https://doi.org/10.1176/appi.psy.50.6.613>.

¹³⁰ R Hopkins and L Kilik, “The Kingston Caregiver Stress Scale,” 2016, www.kingstonscales.org; Lindy A. Kilik and Robert W. Hopkins, “The Relationship between Caregiver Stress and Behavioural Changes in Dementia,” *OBM Geriatrics* 3, no. 2 (May 2019): 1–19, <https://doi.org/10.21926/obm.geri.1902052>; Tatiana Sadak et al., “Psychometric Evaluation of Kingston Caregiver Stress Scale,” *Clinical Gerontologist* 40, no. 4 (2017): 268–80, <https://doi.org/10.1080/07317115.2017.1313349>.

¹³¹ Dagmar Amtmann et al., “Development and Validation of the University of Washington Caregiver Stress and Benefit Scales for Caregivers of Children with or without Serious Health Conditions,” *Quality of Life Research* 29, no. 5 (May 1, 2020): 1361–71, <https://doi.org/10.1007/s11136-019-02409-0>.

¹³² N. Krause and K. Markides, “Measuring Social Support among Older Adults,” *International Journal of Aging & Human Development* 30, no. 1 (1990): 37–53, <https://doi.org/10.2190/CY26-XCKW-WY1V-VGK3>.

using member characteristics (e.g., age, sex, race/ethnicity). Analyses will additionally control for eligibility pathway, noting whether a member qualified for MLTSS through a Qualified Income Trust. Post hoc marginal analysis will be applied to generate adjusted trends over time based on these models (i.e., using predictive margins). We will use line graphs and tables to describe results. Given adequate sample size, the adjusted trends will also be stratified by subgroups of interest such as race/ethnicity, gender, marital status, functional status, presence of comorbidities, and Chronic Illness and Disability Payment System (CDPS) risk score. Additionally, this analysis will conduct adjusted trend analyses of utilization outcomes among a subgroup of MLTSS members who receive the new services (e.g., nutritional and/or caregiver support services).

The cohort approach compares trends for a fixed cohort of individuals over time to ensure that observed changes in utilization are not due to changes in population composition resulting from beneficiaries newly enrolling or disenrolling from the program. There are some individual characteristics such as age or comorbid conditions that change over time and this could account for changes in service utilization. Thus, change in disease diagnoses and burden of illness over time will be adjusted for by controlling for health status, such as through accounting for CDPS risk score. Additionally, we will estimate yearly rates of utilization for all beneficiaries enrolled in MLTSS without restricting the sample to a cohort of beneficiaries by using a repeated cross-sectional approach. While the cohort analysis mitigates the likelihood for differences in the composition of the sample over time, the cross-sectional analysis will offer a larger sample size and, as a result, more statistical power to detect differences.

In addition to claims-based information on clinical characteristics, we will explore the usability of data from the NJ Choice Assessment,¹³³ which provides information on the extent of beneficiary needs, disability, and severity as well as living and caregiving arrangements and family structure. The NJ Choice Assessment is conducted annually by MCOs and would be complementary to the claims-based data. Depending on feasibility of linking this data, this information would be used to deepen analysis related to facility admissions and discharges to the community as well as for specific population groups identified based on claims-based indicators of clinical complexity (e.g., I/DD, mental health, dementia/cognitive impairment, etc.). NJ Choice Assessment data would complement Claims and Encounter data by providing a more comprehensive picture of an MLTSS member's living and caregiving arrangements as well as activities of daily living (ADL) and instrumental activities of daily living (IADLs) that are not well captured by Claims and Encounter records. Thus, using NJ Choice Assessment data, we can stratify cohort and cross-sectional trend analysis by degree of disability and functional status (e.g., ADLs, IADLs, etc.) as well as extent of caregiver support.

For hypotheses 2.3 and 2.4 and research questions 2.3a-2.3b and 2.4a

Study population: These hypotheses relate to MLTSS members who utilize the Caregiver Supports Program (1 or more sessions).

¹³³ This assessment is collected only for the MLTSS population and the ABD population getting Medical Day services, and collection was suspended during the pandemic years.

Data Collection: After a consultative protocol refinement process between CSHP, DMAHS and the MCOs, we will develop our strategy to collect primary data from caregivers. We will hire a survey research contractor to serve as a trusted third party to handle Medicaid member identifiers and to conduct a confidential caregiver survey.

Survey sample selection and participant recruitment will take place in 4 steps:

1. Based on criteria (e.g., demographic, clinical, utilization, MCO) established during the protocol development, CSHP will select a stratified random sample of MLTSS members who may be supported by caregivers eligible for the Caregiver Supports Program from de-identified Medicaid claims and encounter data held by the Center and/or, if feasible, NJ choice assessment data.
2. CSHP will then send a list of Rutgers unique study IDs for the sampled MLTSS members to DMAHS which will in turn send a file to the third-party survey vendor which includes the Rutgers study ID and member identifiers (names, addresses, telephone, and other contact information). *The vendor will not receive Medicaid claims or encounter data.*
3. The vendor will contact families to request their voluntary participation in the survey. An initial letter of invitation will be followed up with a reminder postcard and, possibly, telephone or email reminders. The letter/postcard will be on Rutgers or DMAHS letterhead and will include the unique and one-time use Survey ID and a QR code to access the survey. The survey will include a screener for qualified caregivers (i.e., those eligible for Caregiver Supports Surveys) followed by a 15–20 minute survey (described below). If feasible and necessary, telephone surveys may be utilized to increase recruitment and accessibility.
4. The vendor will securely send completed survey responses to CSHP. The response files will include the Rutgers study ID but *no personal identifiers* of members or caregivers. CSHP will then link the survey responses to de-identified claims and encounter records for analysis.

A total of 300-400 completed surveys will be collected via web and, possibly telephone, with certain subgroups oversampled (e.g., members with a history of high use of avoidable hospital services, older adults, rural residents, etc.). The survey component will be voluntary and brief; a screener to identify qualified caregivers will take less than 5 minutes to complete and the full caregiver survey will take approximately 15-20 minutes to complete and will include about 25 questions. The survey will be available in English and Spanish. Qualifying participants will be offered \$25 per completed survey (incentive limited to one per eligible family).

The survey questionnaire will be developed in consultation with key informants and subject matter experts. We anticipate that respondents will be asked to indicate caregiving intensity (e.g., number of hours a week) and whether they received or attempted to access counseling services. This will be followed by questions related to caregiver health (CDC-rating), depression and anxiety (PHQ-

4¹³⁴), caregiving-related stress (Kingston Caregiver Stress Scale¹³⁵ or University of Washington Caregiver Stress Scale¹³⁶), overall well-being (Perceived Support Scale¹³⁷), cultural and linguistic appropriateness of services, and satisfaction arranging counseling and respite services. To adjust estimates, the survey will collect basic information on demographics, beneficiary characteristics including functional status and presence of comorbidities, and family structure and living arrangement. The survey will also ask caregiver participants if they would consent to participate in a more in-depth interview or focus group. Consenting participants will provide contact information for follow-up. See Appendix Exhibit 11.2 for a complete draft of the caregiver survey instrument.

Among a sample of consenting caregivers, in-depth individual or focus group interviews will be conducted using semi-structured, open-ended questions that probe caregivers on their experiences and satisfaction accessing caregiving services, identifying barriers and opportunities to improve service delivery. Interviews will supplement data gathered from the surveys, offering insights into program implementation as well as caregiving experiences. See Appendix Exhibit 11.3 for the proposed question bank for in-depth caregiver interviews. Up to 30 caregiver interviews of approximately 45-60 minutes will be completed, with attention to diversity by race/ethnicity, age, gender, MCO, and geography. In-depth interview participants will receive a \$50 incentive. Interviews will be conducted virtually over Zoom and transcribed. If feasible and necessary, telephone or in-person interviews may be utilized to increase participation and accessibility.

In addition to the caregiver interviews, we will conduct up to 15 interviews with program informants after survey and interview results are available – approximately 2 at each MCO (n=10), with 5 reserved for DMAHS staff and other state or local subject matter experts. Stakeholder interviews will offer additional insight into administrative burden and program implementation barriers and facilitators. The interview guides will be developed in consultation with key informants and subject matter experts [see Appendix Exhibit A1 for the proposed question bank]. Key informant interviewees who are participating in their professional roles (e.g., DMAHS and MCO staff) will not be offered participation incentives, but others (e.g., community advocates) will receive a \$50 participation incentive.

Analytic strategy: We will measure the association of caregiver stress with the implementation of the caregiver supports program in addition to measuring the facilitators and barriers of the program itself. The unique study IDs used in the survey will be linked to the claims/encounter data for analysis and if feasible, the NJ choice assessment data (see above for more details on the NJ choice assessment). We will present both a bivariate and multiple-regression based approach to describe cross-sectional by member and caregiver characteristics (e.g., member age, race/ethnicity, urban/rural location, and disability; and caregiver relationships and demographics).

¹³⁴ Sapra et al., “Using Generalized Anxiety Disorder-2 (GAD-2) and GAD-7 in a Primary Care Setting”; Kroenke et al., “An Ultra-Brief Screening Scale for Anxiety and Depression.”

¹³⁵ Hopkins and Kilik, “The Kingston Caregiver Stress Scale”; Kilik and Hopkins, “The Relationship between Caregiver Stress and Behavioural Changes in Dementia”; Sadak et al., “Psychometric Evaluation of Kingston Caregiver Stress Scale.”

¹³⁶ Amtmann et al., “Development and Validation of the University of Washington Caregiver Stress and Benefit Scales for Caregivers of Children with or without Serious Health Conditions.”

¹³⁷ Krause and Markides, “Measuring Social Support among Older Adults.”

We will first create bar charts or line diagrams to examine trends in measures of caregiver stress and burnout over time. Next, we will use a regression model to examine changes in outcomes related to caregiver supports participation, adjusted for demographics and beneficiary characteristics. Standard errors will be cluster-corrected by zip codes to adjust for non-independence of observations.

If take up is sufficient in the programs for the new service utilization outcomes (e.g., caregiver support, respite services, and nutrition-related programs) introduced during this demonstration period, we will consider applying interrupted time series (segmented regression analysis) in addition to the adjusted trend analysis, described above. This analysis would look at trends in ratings of caregiver stress and burnout before and after the implementation of the caregiver support programs taking into account the time since the intervention.

Regarding the in-depth interviews, NVivo or similar software will be used to analyze for themes. A general inductive approach will be used to allow for themes to emerge.¹³⁸ Where appropriate, themes will be categorized as a barrier or facilitator to provide a coherent analysis to MCOs on the implementation of the caregiver supports program.

¹³⁸ Thomas, D. R. (2006). A General Inductive Approach for Analyzing Qualitative Evaluation Data. *American Journal of Evaluation*, 27(2), 237–246.

Table 11.2: Summary of Questions, Hypotheses and Methodology

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic Methods
<i>Hypothesis 2.1: Medicaid coverage of long-term care services and supports (hereafter MLTSS) will result in improved access to and quality of care and support more individuals to remain in the community instead of institutions.</i>				
RQ2.1a: What are the trends in utilization and quality of care within the MLTSS population (i.e., inpatient hospitalizations, avoidable hospitalizations, ED visits, avoidable ED visits, and all cause broken bones (e.g., hip fractures))? How do these trends vary across different subgroups (e.g., race/ethnicity, gender, marital status, functional status, presence of comorbidities)?	<ul style="list-style-type: none"> -Inpatient hospitalizations and ED utilization -Avoidable hospitalizations and avoidable ED visits -All cause broken bones (e.g., hip fractures) -Impacts by demographic characteristics 	-No comparison group.	<ul style="list-style-type: none"> -Medicaid Fee-for-Service and Encounter Claims Records. -NJ choice assessment data, where available for linkage. 	Adjusted analysis of trends, descriptive, cross-sectional and cohort analysis
RQ2.1b: What are the trends in spending within the MLTSS population related to avoidable hospitalizations and ED visits and levels and balance of spending on nursing facilities and community LTSS?	<ul style="list-style-type: none"> -Spending related to avoidable hospitalizations and ED visits -Spending related to long-term care in community and nursing facilities 	As above	As above	As above
RQ2.1c: What are the trends in institutionalization within the MLTSS population (e.g., facility admission and facility admission followed by community discharge)?	<ul style="list-style-type: none"> -Rates of discharges from a facility for short-term stay with discharge to community, medium-term stay with discharge to community, or long-term stay with no discharge to community 	As above	As above	As above

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic Methods
<i>Hypothesis 2.2: Trends in LTSS utilization within the MLTSS population will improve including services aimed at addressing health related social needs (HRSN) (e.g., nutrition insecurity) and caregiver support.</i>				
RQ2.2a: What are the trends in take-up and utilization of caregiver support, respite services, and nutrition-related programs? How do these trends vary across different subgroups (e.g., race/ethnicity, gender, marital status, functional status, presence of comorbidities)?	<ul style="list-style-type: none"> -Number of individuals utilizing respite services annually and average number of days of respite services used per calendar year per individual -Individuals receive counseling services -Nutrition counseling and education for MLTSS members -Home delivered meals -Pantry stocking -Grocery provision -Counseling and respite services by demographic characteristics 	<ul style="list-style-type: none"> -No comparison group since these services are restricted to MLTSS beneficiaries. -This analysis will focus on the number of individuals utilizing caregiver and nutritional support services out of the total MLTSS population. 	<ul style="list-style-type: none"> -Medicaid Fee-for-Service and Encounter Claims Records. -NJ choice assessment data where available for linkage. 	Adjusted analysis of trends, descriptive, cross-sectional and cohort analysis
RQ2.2b: Are there differences in who is referred to caregiver support programs by demographic characteristics (e.g., race/ethnicity, gender, language spoken, immigration status, marital status, functional status, presence of comorbidities)?	-Referrals to counseling and respite services by demographic characteristics	As above	As above	As above
<i>Hypothesis 2.3: Among caregivers who receive counseling and respite services, caregivers will experience a reduction in caregiver stress and burnout.</i>				

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic Methods
RQ2.3a: What are the trends of caregiver health, depression and anxiety, caregiving-related stress, and overall well-being among caregivers who receive support services? How do trends vary across different subgroups (e.g., race/ethnicity, gender, marital status, functional status, presence of comorbidities)?	Interview questions eliciting responses on caregiving work, stresses, and stress relievers	-Caregivers who participate in the Caregiver Supports Program (1 or more sessions).	-Interviews 4-7 months after referral. -NJ choice assessment data where available for linkage.	Qualitative inductive theme identification; segmented regression analysis (interrupted time series) if take-up is sufficient.
RQ2.3b: How do those who receive counseling and respite services describe stressors and stress relievers in relation to their caregiving work? Do experiences differ by caregiver demographic characteristics (e.g., race/ethnicity, gender, language spoken, immigration status, marital status, functional status, presence of comorbidities)?	As above	As above	As above	As above
Hypothesis 2.4: The implementation of the caregiver supports program will vary in its effectiveness at meeting the needs of caregivers who receive the services.				
RQ2.4a: What barriers, facilitators, and suggestions for improvement do caregivers and other key informants identify with the caregiver supports program?	Interview questions about barriers, facilitators, and improvement suggestions.	-Caregivers who participate in the Caregiver Supports Program (1 or more sessions).	-Caregivers: interviews 4-7 months after referral.	Qualitative inductive theme identification

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic Methods
		-MCOs, DMAHS staff, other state and local experts.	-Other key informants: interviews after preliminary survey and interview results are available. -NJ choice assessment data where available for linkage.	

Table 11.3 shows an activity timeline for the research activities.

Table 11.3 Key Milestones, Managed Long Term Services and Supports (MLTSS) Program

Analytic Activity	Year 1 2025	Year 2 2026	Year 3 2027	Year 4 2028	Year 5 2029	Year 6 2030
1. Qualitative implementation assessment	Plan for key informant interviews – consult on informant list and finalize recruitment strategy and materials Finalize and test question bank for key informant interviews	Conduct and analyze key informant interviews (n=30)	Finish conducting and analyzing key informant interviews Complete interim analysis	Conduct analysis		Complete analysis

Analytic Activity	Year 1 2025	Year 2 2026	Year 3 2027	Year 4 2028	Year 5 2029	Year 6 2030
2. Quality of care, health service utilization, and spending assessment: Link and analyze MMIS and NJ Choice Assessment data (RQ2.1a-RQ2.1c, RQ2.2a, RQ2.2b)	Define appropriate population and customized metrics for MMIS analysis (includes program cost variables) Execute data use agreements to link MMIS and NJ Choice Assessment datasets and begin data linkage	Finalize linkage of MMIS NJ Choice Assessment datasets and conduct baseline analysis	Update linkage & complete interim analysis	Update linkage & analysis	Update linkage & complete analysis	Complete analysis
3. Beneficiary experience assessment (RQ2.3a, RQ2.3b, RQ2.4a)		Identify survey vendor and execute contract Finalize survey instrument and member list	Work with vendor to conduct member surveys (n=300-400) Begin to analyze member surveys Plan for in-depth caregiver interviews based on survey participants (e.g., finalize and test question bank for caregiver interviews)	Continue to analyze member surveys Conduct and analyze in-depth caregiver interviews (n=30) Prepare question bank for final round of key informant interviews	Finish conducting and analyzing caregiver interviews Conduct and analyze additional key informant interviews (n=10, 2 per MCO, 5 DMAHS staff and/or state or local subject matter experts)	Complete analysis

Analytic Activity	Year 1 2025	Year 2 2026	Year 3 2027	Year 4 2028	Year 5 2029	Year 6 2030
			Complete interim analysis			
4. Submit reports to CMS			Interim report			Final report

RQ=Research Question.

NOTE: Evaluation project years are March-Feb. (subject to change depending on date of authorization to begin).

C. Methodological Limitations

This analysis has several limitations. First, the initiatives lack appropriate comparison groups such that findings from this analysis cannot be used to make causal inference. Additionally, our claims-based metrics may not account for clinical factors such as severity that may also impact the likelihood of outcomes. In an effort to address this limitation, we will stratify models by CDPS risk score to capture health status. The absence of comparison groups may raise the risk that external forces that emerge during the demonstration period could have an impact on outcomes that are unrelated to MLTSS policy. To address this limitation, we will examine trends in appropriate non-MLTSS groups who may be vulnerable to the effects of systemic trends. We will use the results of analyses described above for RQ 2.1a and 2.2b and consult with DMAHS and other subject matter experts to determine the non-MLTSS populations and outcomes which could be affected by such external trends.

Our cohort analysis may be subject to small sample size due to decedents. The sample size will be larger in repeated cross-sectional analysis, but characteristics of individuals determining service utilization may change over time. Lastly, the extent to which we can incorporate NJ Choice Assessment data will depend on availability and amenability to claims-based linkage. If NJ Choice data can be utilized, we anticipate some discrepancies between 2023 and 2024 when the assessment tool changed as well as limitations related to the timeliness of assessment administration complicated by external factors.

To analyze the caregiver supports program using surveys, we will need reliable contact information for the beneficiaries and/or their caregivers. If MCOs do not have caregiver names, we will consider addressing the invitation to participate in the surveys to the LTSS member “and family”. However, this could lead to confidentiality concerns and will be considered as a last resort if unable to reach the caregivers independently. Survey participation will depend first on program take-up and then on caregiver availability, interest, and willingness to participate. Given the nature of caregiving responsibilities, many may not have time to participate, and those whose MCO MLTSS member has passed away may be negatively affected by grief and/or administrative factors relating to the passing. Survey participants as a result may skew as those with more resources and support (i.e., with more time to participate in a survey) or those with access to internet to take the survey. Depending on the sample size of this group, analyses may exclude caregivers of members who are deceased or a subgroup analysis may be conducted. If feasible and necessary, telephone surveys may be utilized to increase recruitment and accessibility. Additionally, surveys are subject to recall bias and there could be a misalignment in information provided (i.e., caregiving hours) across the survey and NJ choice assessment, if linked successfully. If program and/or evaluation take-up is too low by the time of the interim report to mount a meaningful analysis, CSHP will pivot to using its planned incentive resources for caregiver focus groups recruited from caregiver support organizations to complement existing data.

Supplemental Appendix

Appendix Exhibit 11.1: In-Depth Key Informant Implementation Interviews

[Goal: 60 Minutes]

Purpose of the Interview

I am speaking with you today because you were identified as a key informant in the State's Managed Long-Term Services and Supports program, "the MLTSS program." The MLTSS program is a Medicaid 1115 demonstration project that started in 2014. The overarching goal of the program was to help Medicaid (NJ FamilyCare) beneficiaries age in place (e.g., remain in a community-based dwelling as they age) and rebalance Medicaid long-term care by shifting focus from nursing home care to home and community-based services.

The MLTSS program has been renewed for the 2023-2028 demonstration period and has expanded to include several new caregiver and nutritional support programs. These changes include:

- 1. Individual and/or facilitated peer group **counseling** through a licensed behavioral health provider for eligible caregivers who provide care for a beneficiary with MLTSS benefits,*
- 2. Expansion of the **respite program** to provide up to 90 days of respite per calendar year,*
- 3. Expansion of the **nutritional supports services** to go beyond home delivered meals, which includes:*
 - o One-time pantry stocking for any Medicaid eligible beneficiary who is transitioning from an institution,*
 - o Short-term provision of groceries to beneficiaries who have their usual source of food disrupted or who are experiencing an acute behavioral health episode,*
 - o Nutritional education and skills development (i.e., training how to shop for groceries on a budget, preparation of a meal, healthy well-balanced alternatives.)*

*We are interested in your experiences with the MLTSS program thus far as a {say role: **administrator, subject matter expert, provider, advocate**} and any recommendations you have to make the program better.*

Question Bank

[Interviewer: If the participant only has knowledge of one of the programs (e.g., nutrition vs caregiver supports), they will only be asked about that aspect (i.e., food vendor would be asked about the nutritional supports program).]

- 1. First, tell me a little bit about your specific role or relationship to the MLTSS program and how long you've been in that role?*
- 2. Which key entities are collaborating to implement and operationalize the nutritional and caregiver supports programs, how were they identified, and what are their main roles?
Probe: How and why have the roles or participation of those key entities changed throughout the demonstration period?*

3. Thinking about the nutritional and caregiver supports programs and how they were rolled out, what are 1-2 recommendations you would make to ensure the State meets its goals of supporting older New Jersey Medicaid beneficiaries age in place?

Probe: What strategies were used to overcome barriers? What components of the program worked well? What should be changed?

4. Thinking about participation in the nutritional and caregiver supports programs, what are some facilitators and barriers that you have observed beneficiaries experience? What does this information suggest about the need for refinements to beneficiary and provider outreach?

5. What strategies or tools did you use to identify beneficiaries to participate in the nutritional and caregiver supports programs? How, if at all, and why have these strategies been adapted? What lessons has the state learned about promising practices for identifying and engaging beneficiaries?

Probe: Are eligible beneficiaries utilizing the expanded support services? If there has been low take up of the programs, do you have any ideas as to why?

6. Do participating beneficiaries stay enrolled in the nutritional and caregiver supports programs? What do you think are some reasons beneficiaries might drop out of the program?

That concludes the series of questions about the specific new components to the MLTSS program. Now I want to give you a chance to comment on the program as a whole.

7. What infrastructure are key entities developing or acquiring using 1115 demonstration funds? What did the state learn about promising practices to build infrastructure to support health-related social needs (HRSN) screening, case management, and service delivery?

Probe: How, if at all, did the 1115 demonstration establish a process to share and receive results among key entities? How, if at all, have health care providers modified their clinical practice in response to this information?

8. Since MLTSS was implemented in 2014, have you noted any changes in the health of older New Jersey Medicaid beneficiaries or specific demographic groups that you work with? Please describe.

9. Have you seen MLTSS evolve since 2014? How? Are there additional supports or improvements that are needed to make MLTSS successful? If so, what are they?

10. Before we close, is there something else about the nutritional or caregiver support programs that you would like to share?

11. Who else might I talk to get insights?

Demographics

I'd like to end with some basic demographic questions to help us describe who we interviewed. Remember, your personal identification will not be linked with any of your answers. You may choose to skip any of these questions.

12. What is your formal training?
13. How many years have you worked at {organization name}?
14. How many years have you worked in health care?
15. What is your gender identity?
16. Do you identify as Hispanic or Latino?
17. What is your race?

Thank you for taking the time to talk to us. We learned so much about how the new components of the MLTSS program are going. If you have additional comments or questions, please don't hesitate to contact us.

Appendix Exhibit 11.2: Full Caregiver Survey

[Goal: 25-30 Minutes]

You are being invited to participate in this survey because you are a caregiver for someone enrolled in Medicaid who has a benefit called Managed Long-Term Services and Supports (MLTSS). MLTSS gives the person you care for a dedicated care manager through their NJ FamilyCare Managed Care Organization and services and supports like personal care assistance and home-delivered meals. Your experiences and voice are important to understanding how we can better support caregivers of people with Medicaid insurance.

SCREENER: <5 minutes

1. **Would you prefer to complete this survey in English or Spanish?** [translated to both languages]
 - ☐ English
 - ☐ Spanish -> GO TO SPANISH TRANSLATED SURVEY

Source: New question

The next two questions are to help us make sure we are asking about things that are relevant to you.

2. **Do you help take care of someone who has Medicaid insurance (NJ FamilyCare) and a benefit called Managed Long-Term Services and Supports (MLTSS)? MLTSS gives the person you care for a dedicated care manager through their NJ FamilyCare Managed Care Organization and services and supports like personal care assistance and meals delivered to their home.**
 - ☐ Yes
 - ☐ No

Source: New question

3. **Do you spend at least 10 hours a week taking care of this person, on average? Your best estimate is fine.**
 - ☐ Yes
 - ☐ No
 - ☐ Don't know/Not sure

Source: New question

Caregiving

1. During the past 30 days, did you provide regular care or assistance to a friend or family member who has a health problem or disability?

- ☐ Yes
- ☐ No [Go to question 9]
- ☐ Don't know/not sure [Go to question 9]
- ☐ Caregiving recipient died in the past 30 days [Skip to next module]
- ☐ Refused [Go to question 9]

Source: [9-item BRFSS Caregiver module](#)

2. What is their relationship to you? For example, are they your (mother or daughter or father or son)?

- ☐ Mother
- ☐ Father
- ☐ Mother-in-law
- ☐ Father-in-law
- ☐ Child
- ☐ Husband
- ☐ Wife
- ☐ Same-sex partner
- ☐ Brother or brother-in-law
- ☐ Sister or sister-in-law
- ☐ Grandmother
- ☐ Grandfather
- ☐ Grandchild
- ☐ Other relative
- ☐ Non-relative/family friend
- ☐ Unmarried partner
- ☐ Don't know/Not sure
- ☐ Refused

Source: 9-item BRFSS Caregiver module

3. For how long have you provided care for that person? Would you say...

- ☐ Less than 30 days
- ☐ 1 month to less than 6 months
- ☐ 6 months to less than 2 years
- ☐ 2 years to less than 5 years
- ☐ More than 5 years
- ☐ Don't know/Not sure
- ☐ Refused

Source: 9-item BRFSS Caregiver module

4. In an average week, how many hours do you provide care or assistance? Would you say...

- ☐ Up to 8 hours per week
- ☐ 9 to 19 hours per week
- ☐ 20 to 39 hours per week
- ☐ 40 hours or more
- ☐ Don't know/Not sure
- ☐ Refused

Source: 9-item BRFSS Caregiver module

5. What is the main health problem, long-term illness, or disability that the person you care for has? Please choose which one of these conditions is the *major* problem.

- ☐ Arthritis/Rheumatism
- ☐ Asthma
- ☐ Cancer
- ☐ Chronic respiratory conditions such as Emphysema or COPD
- ☐ Alzheimer's disease, Dementia, and other Cognitive Impairment Disorders
- ☐ Developmental Disabilities such as Autism, Down's Syndrome, and Spina Bifida
- ☐ Diabetes
- ☐ Heart Disease, Hypertension
- ☐ Human Immunodeficiency Virus Infection (HIV)
- ☐ Mental Illnesses, such as Anxiety, Depression, or Schizophrenia
- ☐ Other organ failure or diseases such as kidney or liver problems
- ☐ Substance Abuse or Addiction Disorders
- ☐ Injuries, including broken bones
- ☐ Traumatic brain injury
- ☐ Stroke
- ☐ Old age/infirmity/frailty
- ☐ Other
- ☐ Don't know/Not sure
- ☐ Refused

Source: Modified from 9-item BRFSS Caregiver module

[Skip to question 7 if response to question 5 is 5 (Alzheimer's disease, dementia, or other cognitive impairment disorder)]

6. Does the person you care for also have Alzheimer's disease, Dementia, or other Cognitive Impairment Disorder?

- ☐ Yes

- ☐ No
- ☐ Don't know/Not sure
- ☐ Refused

Source: 9-item BRFSS Caregiver module

7. In the past 30 days, did you provide care for this person by...
Managing personal care such as giving medications, feeding, dressing, or bathing?

- ☐ Yes
- ☐ No
- ☐ Don't know/Not sure
- ☐ Refused

Source: 9-item BRFSS Caregiver module

8. In the past 30 days, did you provide care for this person by...
Managing household tasks such as cleaning, managing money, or preparing meals?

- ☐ Yes
- ☐ No
- ☐ Don't know/Not sure
- ☐ Refused

Source: 9-item BRFSS Caregiver module

9. In the next 2 years, do you expect to provide care or assistance to a friend or family member who has a health problem or disability?

- ☐ Yes
- ☐ No
- ☐ Don't know/Not sure
- ☐ Refused

Source: 9-item BRFSS Caregiver module

Mental Health

10. Over the last 2 weeks, how often have you been bothered by feeling nervous, anxious, or on edge?

- ☐ Not at all

- Several days
- More than half the days
- Nearly every day

Source: PHQ-4

11. Over the last 2 weeks, how often have you been bothered by not being able to stop or control worrying?

- Not at all
- Several days
- More than half the days
- Nearly every day

Source: PHQ-4

12. Over the past 2 weeks, how often have you been bothered by feeling down, depressed or hopeless?

- Not at all
- Several days
- More than half the days
- Nearly every day

Source: PHQ-4

13. Over the last 2 weeks, how often have you been bothered by having little interest or pleasure in doing things? [Select ONE]

- Not at all
- Several days
- More than half the days
- Nearly every day

Source: PHQ-4

Caregiver Stress

*For the next few questions, please choose the response that best describes how you **usually** feel about caregiving. By caregiving we mean all aspects of taking care of your friend or family member - that is providing help and support (typically unpaid) for their physical, psychological, or developmental needs. When choosing your answers consider how having a friend or family member you take care of affects all areas of your life.*

14. How much are your finances strained because of caregiving?

- Not at all

- A little bit
- Somewhat
- Quite a bit
- Very much

Source: [8+2 Item UW Caregiver Stress Scale](#)

15. How difficult is it for you to get a good night's sleep because of caregiving?

- Not at all
- A little bit
- Somewhat
- Quite a bit
- Very much

Source: 8+2 Item UW Caregiver Stress Scale

16. How difficult is it to find time to spend with your friends because of caregiving?

- Not at all
- A little bit
- Somewhat
- Quite a bit
- Very much

Source: 8+2 Item UW Caregiver Stress Scale

17. How much do you feel always “on call” because of caregiving?

- Not at all
- A little bit
- Somewhat
- Quite a bit
- Very much

Source: 8+2 Item UW Caregiver Stress Scale

18. How difficult is it for you to take care of yourself because of caregiving?

- Not at all
- A little bit
- Somewhat
- Quite a bit
- Very much

Source: 8+2 Item UW Caregiver Stress Scale

19. How difficulty is it to do activities you like to do because of caregiving?

- Not at all
- A little bit
- Somewhat
- Quite a bit
- Very much

Source: 8+2 Item UW Caregiver Stress Scale

20. On a typical day, how often do you feel overwhelmed by caregiving?

- Never
- Rarely
- Somewhat
- Often
- Always

Source: 8+2 Item UW Caregiver Stress Scale

21. How often do you feel socially isolated because of caregiving?

- Never
- Rarely
- Somewhat
- Often
- Always

Source: 8+2 Item UW Caregiver Stress Scale

22. How often do you need to miss work because of caregiving?

- N/A (I don't currently work) [\[Go to 22a\]](#)
- Never
- Rarely
- Somewhat
- Often
- Always

Source: Modified from 8+2 Item UW Caregiver Stress Scale

22a. Did you quit your job to take care of your friend or family member?

- Yes
- No
- Don't know/Not sure

Source: New question

23. How much does caregiving strain your relationship with your partner?

- N/A (I don't have a partner)
- Never
- Rarely
- Somewhat
- Often
- Always

Source: 8+2 Item UW Caregiver Stress Scale

24. In the last 1 year did you or the person you care for use one (or more) of the following programs or services? [Check all that apply]

- Respite services (such as a short stay in a nursing facility) through the Caregiver Supports Program -> GO TO RESPITE QUESTIONS
- Counseling through the Caregiver Supports Program -> GO TO COUNSELING QUESTIONS
- Nutritional Supports (such as one-time pantry stocking, short-term provision of groceries, nutritional education) -> GO TO NUTRITION QUESTIONS
- Don't know/Not sure
- Refused

Source: New question

Respite Program

25. The Medicaid respite program provides up to 90 days per participant per calendar year. How many days of respite did the person you care for use last year? Your best estimate is fine.

- Less than 7 days
- 7-14 days
- 15-30 days
- 31-50 days
- 51-70 days
- More than 70 days
- I did not use any respite services in the last year.
- Don't know/Not sure
- Refused

Source: New question

26. Where was most of the respite care provided?

- At home
- In a nursing home facility

- ☐ Somewhere else (PLEASE SPECIFY): _____
- ☐ Don't know/Not sure

Source: New question

27. How would you rate the help you got from the {MCO} case manager who enrolled you in the respite program? Would you say...

- ☐ Excellent
- ☐ Very good
- ☐ Good
- ☐ Fair
- ☐ Poor
- ☐ Don't know/Not sure
- ☐ Refused

Source: Modified from [CAHPS Home- and Community-Based Survey 1.0](#)

28. How would you rate the care your {friend or family member} received from the respite program? Would you say...

- ☐ Excellent
- ☐ Very good
- ☐ Good
- ☐ Fair
- ☐ Poor
- ☐ Don't know/Not sure
- ☐ Refused

Source: Modified from [CAHPS Home- and Community-Based Survey 1.0](#)

29. Would you recommend the respite program to your family and friends if they needed respite services?

- ☐ Definitely no
- ☐ Probably no
- ☐ Probably yes
- ☐ Definitely yes
- ☐ Don't know/Not sure
- ☐ Refused

Source: Modified from [CAHPS Home- and Community-Based Survey 1.0](#)

Counseling Services

30. The Caregiver Supports Program provides individual and/or facilitated peer group counseling through a licensed behavioral health provider. Caregivers may receive unlimited counseling sessions as needed. Did you receive counseling through this program?

- ☐ Yes
- ☐ No [Go to 29b]
- ☐ Don't know/Not sure [Go to 29b]
- ☐ Refused [Go to 29b]

Source: New question

29b. If you did not receive counseling through this program, why not? [Check ALL that apply]

- ☐ I do not want or need counseling
- ☐ Difficult to find time or difficult to schedule
- ☐ Concerns about cost
- ☐ Could not find a licensed behavioral health provider
- ☐ Did not know about this program
- ☐ Still planning to sign up, just haven't yet
- ☐ Already receiving counseling services, but not through this program
- ☐ I do not provide 10 or more hours a week of unpaid care
- ☐ I have other coverage that would pay for counseling, so I am not eligible
- ☐ I have not received a recommendation from the NJ FamilyCare care manager to get counseling
- ☐ Some other reason (PLEASE SPECIFY): _____

Source: New question

31. How many sessions did you receive through the counseling program? Your best estimate is fine.

- ☐ |_____| sessions [Range: 0-100]
- ☐ Don't know/Not sure
- ☐ I didn't use any counseling services.
- ☐ Refused

Source: New question

30b. Did you receive as many counseling sessions as you wanted to?

- ☐ Yes, and I am still receiving counseling services

- Yes, and I am no longer receiving counseling services
- No
- Don't know/Not sure
- Refused

Source: New question

32. How would you rate the help you got from the {MCO} case manager who enrolled you in the counseling program? Would you say...

- Excellent
- Very good
- Good
- Fair
- Poor
- Don't know/Not sure
- Refused

Source: Modified from [CAHPS Home- and Community-Based Survey 1.0](#)

33. How would you rate your experience with the counseling services? Would you say...

- Excellent
- Very good
- Good
- Fair
- Poor
- Don't know/Not sure
- Refused

Source: New question

34. Would you recommend the counseling program to your family and friends if they needed counseling services?

- Definitely no
- Probably no
- Probably yes
- Definitely yes
- Don't know/Not sure
- Refused

Source: Modified from [CAHPS Home- and Community-Based Survey 1.0](#)

Nutritional Supports

35. There are additional nutritional benefits available through the Managed Long-Term Services and Supports (MLTSS) program. Which, if any, of the following services did your {friend or family member} receive? [Check ALL that apply]

- ☐ Buying food supplies when my {friend or family member} came home from a nursing home or long-term hospital stay
- ☐ Buying groceries for up to 30 days when my {friend or family member} wasn't able to get groceries for themselves
- ☐ Nutritional education or counseling on things like healthy meal preparation and tips for getting food on a budget
- ☐ Receiving home delivered meals
- ☐ Don't know/Not sure
- ☐ I didn't use any nutritional benefits
- ☐ Refused

Source: New question

36. Is your {friend or family member} enrolled in the Supplemental Nutrition Assistance Program (SNAP)? SNAP provides food benefits to people to supplement their grocery budget.

- ☐ Yes
- ☐ No
- ☐ Don't know/Not sure
- ☐ Refused

Source: New question

37. How would you rate the help you got from the {MCO} case manager who enrolled you in one of the nutrition programs? Would you say...

- ☐ Excellent
- ☐ Very good
- ☐ Good
- ☐ Fair
- ☐ Poor
- ☐ Don't know/Not sure
- ☐ Refused

Source: Modified from [CAHPS Home- and Community-Based Survey 1.0](#)

38. How would you rate your experience with the nutrition services? Would you say...

- ☐ Excellent
- ☐ Very good
- ☐ Good
- ☐ Fair
- ☐ Poor
- ☐ Don't know/Not sure
- ☐ Refused

Source: New question

39. Would you recommend the nutrition services to your family and friends if they needed these types of nutrition support?

- ☐ Definitely no
- ☐ Probably no
- ☐ Probably yes
- ☐ Definitely yes
- ☐ Don't know/Not sure
- ☐ Refused

Source: Modified from [CAHPS Home- and Community-Based Survey 1.0](#)

Demographics

The last series of questions are meant to learn more about you and your family.

40. What is your age?

- ☐ [DROP DOWN: 18-100] years

Source: BRFSS

39a. [If no answer above] Would you be willing to tell us whether it's between...

- ee. 18 – 24
- ff. 25 – 34
- gg. 35 – 44
- hh. 45 – 54
- ii. 55 – 64
- jj. 65 or over
- kk. Prefer not to say

Source: *New question*

41. How do you describe your gender? [Select ONE]

- ☐ Female
- ☐ Male
- ☐ Trans Male/Trans Man
- ☐ Trans Female/Trans Woman
- ☐ Genderqueer/Gender Nonconforming
- ☐ Prefer to self-describe, please specify: [open field]
- ☐ Prefer not to say

Source: [Q7-8 Two Step Gender Identity](#)

42. What sex were you assigned when you were born, such as on your original birth certificate? [Select ONE]

- ☐ Female
- ☐ Male
- ☐ Prefer not to say

Source: *Q7-8 Two Step Gender Identity*

43. What is your current marital status? [Select ONE]

- ☐ Married or living with a partner
- ☐ Widowed, divorced, or separated
- ☐ Never married
- ☐ Don't know/Not sure
- ☐ Refused

Source: [NHANES](#)

44. Would you say that in general your health is...

- ☐ Excellent
- ☐ Very good
- ☐ Good
- ☐ Fair
- ☐ Poor
- ☐ Don't know/Not sure
- ☐ Refused

Source: [BRFSS](#)

45. What was your approximate total household income last year, including income from all sources such as wages, salaries, Social Security or retirement benefits, help from relatives and so forth. Can you share the amount before taxes?

- ☐ \$0 _____ \$200,000 or more (Slider scale)
- ☐ Don't know/Not sure
- ☐ Prefer not to say

Source: Modified NHANES, slider scale only possible with online survey

44a. [If no answer to above] Could you tell us if your total annual income from all sources last year, before taxes, was: [Select ONE] [DROP DOWN]

- ☐ \$0 to \$16,000
- ☐ \$16,001 to \$20,000
- ☐ \$20,001 to \$24,000
- ☐ \$24,001 to \$28,000
- ☐ \$28,001 to \$32,000
- ☐ \$32,001 to \$40,000
- ☐ \$40,001 to \$48,000
- ☐ \$48,001 to \$57,000
- ☐ \$57,001 to \$60,000
- ☐ \$60,001 to \$73,000
- ☐ \$73,001 to \$85,000
- ☐ \$85,001 to \$97,000
- ☐ \$97,001 to \$109,000
- ☐ \$109,001 to \$121,000
- ☐ \$121,001 or more

Source: Modified PRAMS with additional income bands above \$85,000

46. How many children (less than 18 years of age) live in your household? Only include children who are living with you at least 50% of the time.

- ☐ [DROP DOWN: None to 10+] Children

Source: BRFSS 2019; 50% of time from [Urban Institute Wellbeing and Basic Needs Survey](#)

47. How many adults (18 years of age or older), including yourself, live in your household? Only include adults who are living with you at least 50% of the time.

- ☐ [DROP DOWN: 1 to 10+] Adults

Source: BRFSS 2019

48. What is the highest grade or level of school you completed or the highest degree you have received?

- ☐ Did not finish high school
- ☐ High school graduate/GED or equivalent
- ☐ Some college or AA degree
- ☐ College graduate or above
- ☐ Don't know/Not sure
- ☐ Refused

Source: Modified NHANES with abbreviated options (collapsed less than 9th grade and 9-11th grade)

49. Which of the following describes your race? You can select as many as apply.

- ☐ White (e.g., German, Irish, English, Italian, Polish, French)
- ☐ Hispanic, Latino, or Spanish (e.g., Mexican, Puerto Rican, Cuban, Dominican)
- ☐ Black or African American (e.g., Jamaican, Haitian, Nigerian, Ethiopian, Somalian)
- ☐ Asian (e.g., Asian Indian, Chinese, Filipino, Vietnamese, or other Asian origin groups)
- ☐ Native American, American Indian, or Alaska Native
- ☐ Pacific Islander or Native Hawaiian
- ☐ Middle Eastern or North African (e.g., Lebanese, Iranian, Egyptian, Syrian, Moroccan, Algerian)
- ☐ Some other race, ethnicity, or origin (PLEASE SPECIFY):

- ☐ Don't know/Not sure
- ☐ Refused

Source: [Modified Pew and Census/CDC](#)

50. In what country were you born?

- ☐ Born in 50 U.S. states or Washington, D.C.
- ☐ Other
- ☐ Don't know/Not sure
- ☐ Refused

Source: NHANES

51. About how many years have you lived in the United States? [For less than a year, enter 1 year]

- [DROP DOWN: 1-90] years

Source: [California Health Interview Survey and American Community Survey](#)

52. What is the ZIP code where you currently live?

- [OPEN FIELD]

Source: *Modified BRFSS 2019*

53. What is the name of the county where you currently live?

- [OPEN FIELD]

Source: *New question*

54. How would you describe the community where you currently live?

- Rural
- Suburban
- Urban
- Don't know/Not sure
- Refused

Source: *Modified from Pew*

55. Would you be willing to participate in a more in-depth interview or focus group to discuss your experience as a caregiver and any Medicaid programs or services you might have participated in in your role as a caregiver?

- Yes [\[Go to 54a\]](#)
- No
- Don't know/Not sure [\[Go to 54a\]](#)
- Refused

Source: *New question*

54a. What is the best phone number to reach you?

- [OPEN FIELD]

Source: *New question*

54b. What is the best email to reach you?

- [OPEN FIELD]

Source: New question

54c. When are you typically be available to meet? This will be used to schedule the interview or focus group (via Zoom or similar video conferencing tool).

(Indicate all availability)

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Morning (After 9am-12pm)							
Afternoon (After 12pm-4pm)							
Evening (After 4pm-9pm)							
Night (After 9pm-11pm)							

56. Do you have any suggestions for Medicaid about how to improve the services available to you or the person you care for?

- [OPEN FIELD]

Source: New question

Appendix Exhibit 11.3: In-Depth Caregiver Interviews

[Goal: 60 Minutes]

Thank you for meeting with me. Today, we will be discussing caregiver support programs in New Jersey. We asked to speak with you because you help take care of someone enrolled in Medicaid who has a benefit called Managed Long-Term Services and Supports (MLTSS). MLTSS gives the person you care for a dedicated care manager through their NJ FamilyCare Managed Care Organization and services and supports like personal care assistance and home-delivered meals. We will talk about getting services and supports, and your experience as a friend or family member of someone who needs help at home.

This interview won't take more than an hour and we will focus on ways to improve services for caregivers and your loved ones in New Jersey. The information you share today will not be linked with any of your personal information.

Question Bank

1. First, tell me a little bit about yourself and the person you are taking care of.
Probe: How long have you been taking care of this person? What kinds of things do you do for them? Are there other people who help?
2. Many people hope to stay in their home as they get older. Have you ever talked with the person you are taking care of about what they want as they get older? Can you share a little about what they told you about their wishes?
Probe: What do you think would influence their decision to stay in their home?
3. Can you share with me if there is anything that would make it impossible for you to continue helping?
Probe: What are some of your concerns as they get older?
4. It often takes a village to care for someone as they get older. Can you describe what kinds of support you have that make your life as a caregiver easier? This might be family or friends who help out, a visiting nurse or home care services, adult day care, or similar programs.
Probe: Have you used any support programs covered by Medicaid in the last year? If so, which ones? *[Interviewer: Explain services in detail as necessary (e.g., counseling, respite, or nutrition)]*

The next set of questions will be about your experiences using the Medicaid programs you have used in the last year.

Respite program question bank

[Interviewer: Only ask this set of questions if the participant used respite services]

1. Can you share a bit about your experience using the respite services? What encouraged you to use the respite benefit in the first place?
Probe: How would you describe your experience scheduling a respite stay for your {friend or family member}? Were there times that you wanted to schedule a respite stay, but couldn't? What happened? What would you say to those who want to improve the respite program?
2. **[If they received respite in a facility]** Now I'd like to hear a little bit about your experience with the facility itself. What were your impressions of the facility and the care your loved one received during their respite stay?
Probe: How convenient was the facility? What was your impression of the staff at the facility? Would you recommend the facility to others in need of respite?
3. How do you feel like using respite care helped you in your role as a caregiver?
Probe: What situations did you rely on respite services? Was it to schedule a trip or simply to take a break?

Counseling program question bank

[Interviewer: Only ask this set of questions if the participant used counseling services]

1. Can you share a bit about your experience with the counseling services? What encouraged you to use the counseling services in the first place?

The next set of questions are about your experience with the counseling provider who you saw through the counseling program.

2. How would you describe your experience finding a mental health provider?
Probe: What were some of the challenges/obstacles? What are some ways that your MCO case manager might have helped?
3. What is/was your relationship with your mental health provider?
Probe: What kind of needs do you feel like they are/were able to meet? Is/was your mental health provider from the same racial or ethnic group as you? Were you able to find a provider who could meet with you in the language or location that was best for you?
4. How do you feel like seeing a mental health provider helped you in your role as a caregiver?
Probe: What would you say to those who want to improve the counseling program?

Nutritional program question bank

[Interviewer: Only ask this set of questions if the participant used nutrition services]

1. Can you tell me about your experience using the nutrition services that you or the person you're caring for received?
Probe: What prompted you or your loved one to seek these services out?

2. Can you share a little bit about the food itself that your loved one received? What kinds of groceries or meals were delivered?
Probe: How did the food taste? Were they able to get food that met their dietary needs? How was the timing of the meal or grocery delivery?
3. Most of these services are short-term, how do they get their nutrition needs met now?
Probe: {If enrolled in a program like SNAP or something similar} How did they find out about and get enrolled in, these services? Do they wish they could continue receiving the services they received in the short-term? What would you say to those who want to improve the nutrition program?

Close

1. Is there anything that you wish you and the person you care for had more help with? Is there anything else about the nutritional or caregiver support programs that you would like to share?
2. How regularly do you speak with your case manager about getting the services you (and the person you take care of) need? How could you and the person you care for be more involved in the planning process?
3. What would you like New Jersey systems leaders (like the directors of Medicaid, the governor's office, and state agencies) to know about what it is like to be a caregiver? What improvements should be made (this includes policies, services, and systems)?

I'd like to end with some basic demographic questions to help us describe who we interviewed. Remember, your personal identification will not be linked with any of your answers. You may choose to skip any of these questions.

4. How old are you?
5. What is your gender identity?
6. Do you identify as Hispanic or Latino?
7. What is your race?

Thank you for taking the time to talk to us. We learned so much about how we can better support caregivers. If you have additional comments or questions, please don't hesitate to contact us.

12. Administrative Simplifications for LTSS

A. General Background Information

Qualified Income Trusts

The adoption of Qualified Income Trusts (QITs)¹³⁹ in December 2014 established an option to fulfill the spend-down provision for individuals deemed eligible for nursing facility level-of-care which was originally proposed in New Jersey's §1115 Waiver. QITs allow incomes above 300% of the Supplemental Security Federal Benefit Rate (FBR) (\$2,742 as of January 2023)¹⁴⁰ be disregarded for financial eligibility purposes for clinically eligible individuals. Income above the threshold must be deposited into a QIT bank account each month in order to be disregarded.

As per 42 CFR, §435.725 and §435.726, all individuals receiving long-term services and supports (LTSS) must contribute to their monthly cost of care. The required monthly contribution is determined by adding all sources of income minus allowable expenses such as personal needs allowances, community spouse maintenance and dependent allowances, room and board, and state approved uncovered medical expenses for Home and Community Based Service (HCBS) settings. The monthly cost of care may be paid out of the QIT account.

Prior to the Waiver, spend-down for higher income applicants was only available for nursing facility residents (a medically needy designation), which may have led people with incomes higher than the eligibility threshold to choose nursing facilities when community-based services would be appropriate, at a higher cost to the state. QITs created a new eligibility pathway for long-term care services in home and community settings for such individuals. The introduction of the QIT mechanism required discontinuing new enrollment in the Medically Needy program. The discontinuation of the Medically Needy program could have posed a disadvantage to existing enrollees residing in nursing facilities since the resource limits for eligibility are lowered to the community levels (\$2,000 for an individual or \$3,000 for a couple). However, the state grandparented all individuals enrolled in the Medically Needy program prior to December 2014 so they could maintain their Medicaid eligibility under the prior resource limits (\$4,000 for an individual or \$6,000 for a couple).

Figure 12.1 shows the primary and secondary drivers leading to the aim of preventing nursing home admissions.

Figure 12.1. QIT Aims Driver Diagram

Aim	Primary Drivers	Secondary Drivers
Prevent nursing home admissions of residents who have limited assets but higher incomes than	Access to Medicaid HCBS	QITs for clinically eligible individuals with income above 300% to spend down their resources on long-term supports and services (delivered in their homes/communities or in a

¹³⁹ See <https://www.state.nj.us/humanservices/dmahs/clients/mtrusts.html> (accessed September 7, 2023)

¹⁴⁰ See https://www.state.nj.us/humanservices/dmahs/info/resources/medicaid/2023/23-01_Income_and_Resource_Standards_for_Medicaid_Only.pdf Table B, row V (accessed September 7, 2023).

would normally qualify for Medicaid		nursing facility) to become eligible for Medicaid.
Causality		

Transfer of Assets Self-Attestation

Medicaid eligibility for long-term care services requires that applicants not transfer any assets or resources for less than fair market value during the five years preceding their date of application. Applicants are required to furnish all of their bank statements and any other relevant financial documentation proving compliance with this requirement before eligibility can be granted. Where the market value of asset transfers cannot be established, a penalty period is imposed delaying eligibility for long-term care services.¹⁴¹ This process requires time and effort both for applicants, to procure all the necessary documentation, and for eligibility workers, who must review the documentation and assess the ramifications for the application.

Under the demonstration, individuals with income at or below 100% of the Federal Poverty Level (FPL) applying for institutional or home and community-based services are permitted to self-attest that they have made no disqualifying asset transfers during the past five years. This attestation is a sworn statement documented on an addendum to the Medicaid application used by County Welfare Agencies for new entrants, or collected during the financial eligibility determination conducted by Managed Care Organizations for existing beneficiaries moving into Managed Long-Term Services and Supports (MLTSS) after July 1, 2014. This form, which was approved for use in December 2012, eliminates the need for the time intensive five-year lookback process, and was intended to expedite eligibility approvals for very low-income applicants.¹⁴² Audits in previous years showed no evidence of any asset transfers.

Figure 12.2 shows the primary and secondary drivers leading to the aim of expediting access to Medicaid services for very low-income applicants.

Figure 12.2. Self-attestation Aims Driver Diagram

Aim	Primary Drivers	Secondary Drivers
Expedited access to Medicaid services for very low-income applicants; time savings for applicants and eligibility workers.	Expedite Medicaid financial eligibility approvals for very low-income applicants.	Self-attestation by persons below 100% FPL of no asset transfers for less than fair market value during the 5 years preceding application date.
Causality		

¹⁴¹ See https://www.nj.gov/humanservices/dmahs/info/resources/medicaid/2023/23-04_Increase_in_the_Penalty_Divisor_Effective_Apr-23.pdf

¹⁴² See [Medicaid Communication No. 12-18: Addendum to PA-1G Medicaid Application, Transfer of Assets Self-Attestation Form \(2012\)](#); [Medicaid Communication No. 12-18: Addendum to PA-1G Medicaid Application, Transfer of Assets Self-Attestation Form \(2013\)](#) and [Medicaid Communication No. 16-01: Self-Attestation Process for NJ FamilyCare ABD Eligibility, Update to Medicaid Communication 13-02 \(2016\)](#).

Financial Eligibility Determination Pilot Program, NJ Office of the Public Guardian (OPG)

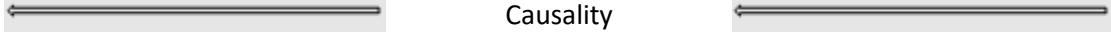
Effective as of July 25, 2019, for individuals under the guardianship of the New Jersey Office of the Public Guardian (OPG) applying for Medicaid coverage, the state will provide an expedited financial eligibility determination by allowing OPG to attest that the individual's resources are less than the \$2,000 resource limit due to financial obligations not yet paid. The OPG is a state agency that serves as guardian for legally incapacitated individuals aged 60 and older (as deemed by NJ Superior Court). The Office makes all decisions for the individuals in its care, including medical, financial and legal decisions. All individuals served have serious cognitive limitations that render them unable to provide meaningful information about their income and assets. Furthermore, in most cases there are no involved or helpful family members or friends to assist with this process. OPG staff must therefore attempt to piece together each individual's financial profile with minimal or no background information. As of April 2023, OPG served as guardian for roughly 1,700 individuals. Over the course of each year, hundreds of these individuals pass away and are replaced by other older adults who require protection. When needed, OPG will submit a Medicaid eligibility application on behalf of the individuals it serves. DMAHS has established two units in Salem and Cumberland counties to process these applications, which typically process 20-40 applications at a time. OPG and DMAHS have pursued numerous efficiencies so that seniors in need of Medicaid services can receive them rather than staying inappropriately in acute care settings or being at risk in community settings without support.

Financial eligibility rules for individuals under the guardianship of the OPG are the same as for other individuals applying for Medicaid. The state must use Asset Verification System (AVS) and other electronic verification tools to verify known financial resources and identify unknown financial resources both at application and at redetermination. After the individual's obligations are paid, for individuals determined to have been ineligible for Medicaid services due to exceeding the resource limit, the state will be responsible for funding services provided to the ineligible individual for the determination period which relied upon the OPG attestation and no FFP may be claimed for the individual.

Attestations from the OPG will be accepted only for 12 months and may not be used to renew eligibility beyond that regardless of whether or not the OPG has completed settling the individual's financial obligations. If the OPG settles the individual's accounts within 180 calendar days after the 12 month deadline, and the state determines the individual was eligible for Medicaid during the eligibility period, the state may claim FFP for the 12 month eligibility period. If the OPG settles the individual's accounts after 180 days, the state not claim FFP for the 12 month eligibility window, regardless of whether or not the individual was eligible. For individuals determined to have been ineligible for Medicaid due to exceeding the income or resource limit during the 12 month window, the state will be responsible for funding services provided to the ineligible individual for the 12 months and no FFP may be claimed for the individual. If FFP was claimed for the individual prior to the determination of ineligibility, the state is required to return the FFP. The OPG must maintain records of individuals for whom the expedited financial eligibility determination is utilized and report to the state when the OPG settles the account of an individual who has been made eligible based on the OPG's attestation. The state must also maintain records of the results of the asset verification process throughout the demonstration approval period.

Figure 12.3 shows the primary and secondary drivers leading to the aim of expediting access to Medicaid services for individuals served by OPG.

Figure 12.3. OPG Expedited Financial Eligibility Pilot Aims Driver Diagram

Aim	Primary Drivers	Secondary Drivers
Expedite access to Medicaid services for individuals served by OPG.	Medicaid eligibility office able to process expedited approval.	OPG attestation of asset levels for individuals they serve.
		

B. Evaluation Questions and Hypotheses

Hypothesis 1: Utilizing Qualified Income Trusts will allow more individuals to qualify for Medicaid and will increase the number of Medicaid long-term care recipients in community settings.

Research Question 1a: How many members have qualified for Medicaid due to the QIT provision? Was there a change in the number of or characteristics of individuals qualifying for Medicaid due to this provision?

Hypothesis 2: Eliminating the look-back period at time of application for transfer of assets for applicants or beneficiaries seeking LTSS whose income is at or below 100% of the FPL will simplify Medicaid eligibility and enrollment processes without compromising program integrity.

Research Question 2a: How many members have attested to no asset transfers during the 5-year look-back period? Was there a change in the number or characteristics of individuals qualifying for Medicaid due to this provision?

Hypothesis 3: Allowing OPG to attest to asset levels for individuals they serve will expedite access to Medicaid services for these individuals.

Research Question 3a: For how many members did OPG attest regarding asset levels? Was there a change in the number or characteristics of individuals qualifying for Medicaid due to this provision?

C. Methodology

In past waiver/demonstration evaluations, it has not been possible to identify individuals qualifying for Medicaid through QIT or self-attestation in the eligibility and claims files, limiting the evaluator's analytic scope. With this demonstration, we will explore the potential to create a linkage to QIT and self attestation in the claims files. If this linkage is possible and sample sizes are sufficient, we may conduct additional subgroup analyses (e.g., demographic or geographic characteristics), providing more nuance to the evaluation and understanding of the QIT and self-attestation programs.

QITs: The evaluator requests data for individuals using QITs by year, county, setting (e.g., nursing home, assisted living, and home and community-based settings), program (such as MLTSS), and individual demographic characteristics in order to examine trends. The evaluator also requests data on QIT use for each year (e.g., amounts, services).

Self-attestations: The evaluator requests data on self-attestations filed by quarter or year by MCOs, county welfare agencies, and any other mechanism through which attestations can be filed, together with other information the state may have about attesting individuals, such as their program, county, setting, and demographics.

OPG attestations: The evaluator requests data on OPG attestations filed by quarter or year, together with other information the state may have about relevant individuals, such as their program, county, setting, and demographics.

The evaluator will present a descriptive analysis of trends over time for QITs, self-attestations, and OPG attestations overall and by subgroups such as programs, counties, settings, and demographic groups.

Table 12.1: Summary of Questions, Hypotheses and Methodology

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic Methods
<i>Hypothesis 1: Utilizing Qualified Income Trusts will allow more individuals to qualify for Medicaid and will increase the number of Medicaid long-term care recipients in community settings.</i>				
RQ1a: How many members have qualified for Medicaid due to the QIT provision? Was there a change in the number of individuals or in the mix of individuals qualifying for Medicaid due to this provision?	Number and trends of individuals using QITs, and their county, setting of care, and program (if available)	Individuals using QITs	DMAHS administrative data and discussions with state staff	Descriptive trends over time overall and by subgroups such as programs, counties, settings, and demographic groups
<i>Hypothesis 2: Eliminating the look back period at time of application for transfer of assets for applicants or beneficiaries seeking long term services and supports whose income is at or below 100% of the FPL will simplify Medicaid eligibility and enrollment processes without compromising program integrity.</i>				
RQ2a: How many members have attested to no asset transfers during the 5-year look-back period? Was there a change in the number of individuals or in the mix of individuals qualifying for Medicaid due to this provision?	Number of self-attestations received by state, county welfare agencies, and MCOs. Audit results for sampled self-attestations	Individuals providing self-attestation	DMAHS administrative data and discussions with state staff	Descriptive trends over time overall and by subgroups such as programs, counties, settings, and demographic groups
<i>Hypothesis 3: Allowing OPG to attest to asset levels for individuals they serve will expedite access to Medicaid services for these individuals.</i>				
RQ3a: For how many members did OPG attest regarding asset levels? Was there a change in the number of individuals or in the mix of individuals qualifying for Medicaid due to this provision?	Number of attestations made by OPG.	Individuals for whom OPG attests asset levels	DMAHS/OPG administrative data and discussions with state staff	Descriptive trends over time overall and by subgroups such as programs, counties, settings, and demographic groups

Table 12.2 shows an activity timeline for the research activities.

Table 12.2 Key Milestones, Administrative Simplifications for LTSS

Analytic Activity	Year 1 2025	Year 2 2026	Year 3 2027	Year 4 2028	Year 5 2029	Year 6 2030
1. RQ1a: Measuring members qualifying for MLTSS due to QIT (if not getting through enhanced claim /encounter data)		Request updated report, review, and discuss any questions with state staff	Complete interim analysis	Request updated report, review, and discuss any questions with state staff		Complete analysis
2. RQ2a: Measuring members doing self-attestations (SA) (if not getting through enhanced claim /encounter data)		Review SA numbers reported to CMS and request/review audit or enriched SA findings, discuss any questions with state staff.	Complete interim analysis	Review SA numbers reported to CMS and request/review audit or enriched SA findings, discuss any questions with state staff.		Complete analysis
3. RQ3a: Measuring members for whom OPG attests (if not getting through enhanced claim /encounter data)		Review OPG numbers reported to CMS and request/review enriched OPG findings, discuss any questions with state staff	Complete interim analysis	Review OPG numbers reported to CMS and request/review enriched OPG findings, discuss any questions with state staff		Complete analysis
4. Submit reports to CMS			Interim report			Final report

OPG=Office of the Public Guardian; RQ=Research Question; SA=self attestation.

NOTE: Evaluation project years are March-Feb. (subject to change depending on date of authorization to begin).

D. Methodological Limitations

The evaluator's ability to examine outcomes may be limited by data availability. In past waiver/demonstration evaluations, it has not been possible to identify individuals qualifying for Medicaid under these QIT and expedited eligibility provisions in the eligibility and claims files, limiting the evaluation's analytic scope. With this demonstration, we will explore creating a linkage to QIT and self-attestation in the claims files, which may allow for a richer subgroup analysis. However, data for the self-attestation process may not be reliable during the public health emergency when face-to-face clinical assessment were waived. Additionally, this analysis relies on descriptive trends and results cannot be used to draw causal relationships. Even if this linkage is not possible, aggregated records requested in this plan will allow for evaluation of essential trends in these program provisions.

13. Demonstration Cost Assessment (*new section*)

A. General Background Information

The components of New Jersey's Section 1115 demonstration may moderate health services expenditures by reducing avoidable utilization, and some components may lead to lower uncompensated care costs borne by health services providers. At the same time, the demonstration authorizes spending on new services and will generate administrative costs related to intervention implementation and operations. The demonstration Special Terms and Conditions (STC 13.5)¹⁴³ requires assessment of these costs, specifically including:

- 1) Administrative cost of demonstration implementation and operation,
- 2) Budgetary effects of health-related social needs (HSRN) services,
- 3) Overall Medicaid service expenditures,
- 4) Uncompensated care and associated costs for populations eligible for continuous eligibility, and
- 5) Yearly long-term services and supports (LTSS) and home and community-based services (HCBS) spending throughout the demonstration period.

STC 13.5 further requires that cost analyses assess the demonstration's effects on the fiscal sustainability of the state's Medicaid program. This chapter describes the plan to assess demonstration costs, as specified in STC 13.5.

B. Evaluation Questions and Hypotheses

We posit that the implementation of the demonstration components described in chapters 1-12 of this design plan will, to varying degrees, reduce avoidable and overall Medicaid expenditures and increase the provision of newly authorized services and generate administrative costs. The overall aim of the demonstration is to improve service quality, access and outcomes, while ensuring financial sustainability of New Jersey's Medicaid program. A thorough cost assessment is needed to measure the spectrum of new costs and savings resulting from the demonstration.

The evaluation strategy described below builds on those described in chapters 1-12 of this plan, including drawing on the driver diagrams and logic models provided in those chapters. These plans describe analytic strategies for evaluating potential cost savings through hypothesized reductions in avoidable health services utilization (e.g., preventable hospitalizations, reduced emergency department visits). The hypotheses enumerated in this chapter, complements and augments those provided in the other chapters to ensure comprehensive, rigorous assessment of demonstration costs.

This chapter adds an assessment of administrative costs. Implementation of the demonstration components requires development of new policies and systems, leading to non-recurring start-up

¹⁴³ <https://www.medicaid.gov/medicaid/section-1115-demonstrations/downloads/nj-1115-familcar-compr-demonstr-aprvl-09132023.pdf>. Page 115

administrative expenditures, and generating ongoing operational costs. These administrative costs may include added staff effort, and, in some cases, new contractual or related expenses.

The research questions below also complement those provided in chapters 1-12 to ensure thorough assessment of added costs for new demonstration services and potential savings from care improvements and reductions in avoidable utilization.

Further, two demonstration components (postpartum eligibility extension and continuous eligibility for MAGI adults, described in chapters 3 and 6 above, respectively) have potential to reduce uncompensated costs borne by providers of care for individuals who gain coverage under those extensions. The proposed strategy for evaluating demonstration effects on uncompensated care described below focuses on delivery of charity care by New Jersey hospitals for two reasons. First, hospitals represent the largest source of uncompensated care,¹⁴⁴ in part because unlike other types of providers, they are required by law to provide care regardless of patients' ability to pay.¹⁴⁵ Private healthcare providers typically provide little charity care. For instance, one study showed that uncompensated costs are equivalent to less than 1% of revenues for private physician practices.¹⁴⁶ Second, data from New Jersey's Hospital Care Payment Assistance (Charity Care) Program permit rigorous assessment of the most likely impacts of demonstration eligibility expansions on the delivery of uncompensated care. Hospital outpatients and inpatients are entitled to free or reduced cost care in New Jersey if they meet certain eligibility requirements including that they are not eligible for Medicaid and have family incomes below 300% of the federal poverty level.¹⁴⁷ This group overlaps substantially with those subject to 12-month Medicaid eligibility expansions authorized under the demonstration, which may result in uncompensated care spending reductions.

Evaluation Questions and Hypotheses

Hypothesis 1: Implementation and operation of the demonstration components will increase administrative cost, including non-recurring start-up costs and ongoing operational costs.

Research Question 1a: What are the non-recurring administrative costs associated with the initiation of each demonstration component, including added staff effort and non-personnel expenses?

Research Question 1b: What are the ongoing administrative costs associated with operation of each demonstration component, including added staff effort and non-personnel expenses?

¹⁴⁴ Hadley J, Holahan J. How Much Medical Care Do the Uninsured Use, And Who Pays For It? A large amount of money from existing government sources is potentially available to finance expanded insurance coverage. Health Affairs. 2003;22(Suppl1):W3-66.

¹⁴⁵ The federal Emergency Medical Treatment & Labor Act (EMTALA) requires hospitals to provide stabilization care for emergency services (including active labor) regardless of ability to pay. New Jersey law goes beyond EMTALA by requiring hospitals to provide all medically necessary care (see <https://www.nj.gov/health/hcf/subsidies/>).

¹⁴⁶ Gruber J, Rodriguez D. How much uncompensated care do doctors provide? Journal of Health Economics. 2007 Dec 1;26(6):1151-69.

¹⁴⁷ See <https://www.nj.gov/health/charitycare/>.

Hypothesis 2: The demonstration components, to varying degrees, will generate costs for new services or extended eligibility that will be offset by lower spending for other Medicaid health services resulting from improved accessibility or quality of care (e.g., reduced spending on avoidable hospitalization or ED use).

Research Question 2a: What are the added costs for new services or periods of eligibility authorized under each demonstration component?

Research Question 2b: What are changes in non-demonstration health services expenditures associated with implementation of each demonstration components (e.g., offsetting savings from improved accessibility or quality of care)?

Research Question 2c: What are the net changes in spending for each demonstration component (i.e., spending on new services or eligibility net of changes in non-demonstration-related spending overall)?

Hypothesis 3: The extension of 12 months continuous eligibility to postpartum women and beneficiaries who are Medicaid eligible based on the Modified Adjusted Gross Income (MAGI) standard will reduce hospital charity care costs for affected populations.

Research Question 3a: What is the impact of postpartum continuous eligibility on hospital charity care costs for women in the 12 months following the end of pregnancy?

Research Question 3b: What is the impact of continuous eligibility for adults (ages 19-64) who are eligible based on the MAGI standard on hospital charity care costs for low-income adults?

C. Methodology

To evaluate the above hypotheses and research questions, the evaluation will synthesize cost-related¹⁴⁸ results of components 1-12 of this plan and contribute additional analyses to augment component-specific analyses to fully address the research questions in this chapter. Analyses will compare per beneficiary-per month cost trends before and after the implementation of the demonstration, adjusting for trends in comparison groups, where feasible.

Hypotheses 1, RQ 1

Study population for Hypothesis 1, RQ1a and b:

To examine administrative costs, the study will collect personnel cost of effort of state agency staff and non-personnel expenses related to the implementation and operation of each demonstration component.

¹⁴⁸ The terms “cost”, “spending”, “expenses”, and “expenditures” are used interchangeably except where noted.

Analytic strategy for Hypothesis 1, RQ1a and b:

Administrative cost data will be collected using spreadsheet templates for each demonstration component into which state staff will enter the following information:

- Staff member name/unit
- Dates during which effort was applied to the demonstration component
- Share of staff salary and fringe benefit expense allocated to the demonstration effort
- Allocated non-salary costs (e.g., rent, computing/technology expenses)
- Additional non-personnel related expenses (e.g., contractual costs)

Data will be collected retrospectively from the date CMS approved the demonstration and annually until the end of the demonstration period. Each submission will be reviewed for consistency and reasonableness and corrected as needed. Resulting cost estimates will be aggregated to the level of each demonstration component and distributed between start-up expenses (based on the period before demonstration implementation) and operating expenses (based on the period during the demonstration). Results will be adjusted for inflation.

Hypothesis 2, RQ 2

Study population for Hypothesis 2, RQ2a-c:

Study populations for each demonstration component are described in chapters 1-12 above.

Analytic strategy for Hypothesis 2, RQ2a-c:

Table 13.1 summarizes Medicaid services expenditure measures that are part of demonstration evaluation plans for each component described in chapters 1-12 above. In addition to the measures listed in the table, total spending and, where applicable but not included in the individual component plans (e.g., CHW pilots), spending on new benefits for relevant demonstration components will be evaluated. Where feasible, these analyses will employ the comparison groups and analytic methods specified in the component-specific evaluations. Net costs (savings) of each component will be calculated by subtracting new benefit costs (from RQ2a) from total expenditures for services other than the new demonstration services (from RQ2b). To assess cost and budget impacts of demonstration components, spending trends will be compared for the component-specific target populations for 2017-2019 (pre-demonstration, pre-pandemic) to the demonstration periods.

Because of major disruptions in health services utilization patterns during COVID-19 pandemic, spending trends for that period will be examined but not evaluated as part of the pre-demonstration baseline period¹⁴⁹ when assessing the budget and cost impacts.

Spending trends spanning these periods will be examined graphically (line charts showing total and for demonstration services spending) and using regression analyses adjusting for changes in population composition distributions over time. The trends will be calculated on a per-beneficiary

¹⁴⁹ Postpartum and MAGI 12-month continuous eligibility extensions will be evaluated after the end of the eligibility-related provisions of the COVID-19 Public Health Emergency.

per-month basis and adjusted for inflation. Analyses planned under the individual evaluation components (described in chapters 1-12 above, e.g., analyses of change in avoidable hospitalizations and ED visits in specific demonstration populations) will be used to explain and interpret aggregate spending trend analyses presented in this chapter.

Table 13.1: Summary of Spending Measures included in Evaluation Components 1-12

Components	Spending Measures	Analysis Strategy	Comparison group(s)	Component RQ#
1. Adjunct ASD Services Pilot	Pilot services	Trend analysis, subgroup comparisons	None	Ch.1-RQ1a
2. Children's Support Services (SED/I-DD)	Hospitalizations and ED visits	Trend analysis, subgroup comparisons	[RQ1] None; [RQ2] Eligible CSSP I/DD children, youths, and young adults who did not utilize HCBS	Ch.2-RQ1d & RQ2d
3. Postpartum Eligibility Extension	Hospitalizations, ED visits, and outpatient care (e.g., postpartum, well-visits, mental health, & dental visits) for the birthing persons and newborns in the 12 months after delivery or end of pregnancy	Trend analysis, subgroup comparisons	None	Ch 3-RQ1d
4. Home Visiting Pilot	Hospitalizations and ED visits (prenatal and postpartum periods (i.e., 12 months after delivery or end of pregnancy)) for birthing persons and newborns	Trend analysis, subgroup comparisons	Families enrolled in Medicaid and not enrolled in NJHV	CH 4-RQ2c
5. Medically Indicated Meals^	Hospitalizations, ED visits, and outpatient care (e.g., prenatal, postpartum, well-woman, and well-child visits, glucose screening) for birthing persons and newborns in the prenatal and postpartum periods (i.e., 12 months after delivery or end of pregnancy)	Trend analysis, subgroup comparisons, multi-variable regression analysis	Eligible women not receiving home-delivered meals	Ch 5-RQ2.3a
6. MAGI Eligibility Extension	Total and avoidable hospitalizations, ED visits, and outpatient care	Trend analysis, cross-sectional comparisons	Spending will be compared between the baseline, PHE, and policy implementation periods	Ch 6-RQ1b

7. CHW Pilots*	None			
8. Tenancy and Housing Services^	Total, demonstration housing benefits, non-housing benefits (e.g., hospitalization, ED visits, prescription drugs)	Trend analysis, subgroup comparisons, difference-in-differences analysis	Propensity matched beneficiaries not receiving demonstration housing supports	Ch 8-RQ3a
9. OUD/SUD	Total, Institutions for Mental Disease (IMD), hospitalizations, ED visits, outpatient, LTSS, prescription drugs	Trends analysis, subgroup comparisons	None	Ch 9-RQ4 & RQ6
10. Adult IDD Supports	Hospitalizations and ED visits	Trend analysis, subgroup comparisons	None	Ch 10-RQ1d & RQ2d
11. Managed Long-Term Services & Supports^	Avoidable hospitalizations and ED visits, LTSS in community (HCBS) and nursing facilities	Trend analysis, cross-sectional, cohort analysis	None	Ch 11-RQ2.1b
12. LTSS Admin. Simplification*	None			

RQ# = research question number, see respective evaluation plan chapter.

*Components #7 (Community Health Worker Pilots) and #12 (Administrative Simplification for LTSS) evaluation plans do not include spending metrics, see text in this chapter for spending evaluation plans.

^Demonstration components that include new HSRN benefits.

Hypotheses 3, RQ 3

Study population for Hypothesis 3, RQ3a and b:

The study population for this hypothesis includes patients receiving inpatient, ED, or outpatient care in a New Jersey acute care general hospital who are eligible for New Jersey's Hospital Care Payment Assistance (Charity Care) Program.¹⁵⁰ These patients are uninsured or underinsured, ineligible for Medicaid, and have a family income below 300% of the federal poverty level.

Analytic strategy for Hypothesis 3, RQ3a:

To evaluate the effect of providing 12-months continuous eligibility postpartum, trends in charity care delivered to cohorts of postpartum women will be compared for three periods: 1) before the 12-month continuous eligibility expansion (2017-2019), 2) the public health emergency (PHE) (February 2020-May 2023), and 3) the demonstration period (beginning no earlier than the end of the PHE). Assessment of cost impact of the demonstration will be informed by comparison of trends in the first to third period. The trend during the PHE will be used to provide context to the demonstration evaluation but cannot contribute to the baseline period given that eligibility redeterminations were suspended during that period.

Data for the analysis will be from the NJ Hospital Discharge Data Collection System (HDDCS),¹⁵¹ the state's all-payer hospital uniform billing record system, linked to records from the NJ Hospital Care Payment Assistance (Charity Care) Program. The HDDCS includes one record per inpatient stay, treat and release ED visit, and other outpatient visit and provides detailed information on charges, diagnoses, procedures performed, expected payer, and patient demographics. Charity Care program data includes variables indicating that individuals were certified as eligible for free or reduced cost services under New Jersey's charity care program and the cost of services to those patients priced at Medicaid rates.

Under NJ's Charity Care program, hospitals conduct eligibility determination for patients (subject to state audit) and are reimbursed a fraction of Medicaid rates based on a formula that considers each hospital's share of documented charity care delivered. Hospitals providing higher shares of documented charity care are paid a higher proportion of Medicaid rates for charity care services. Hospitals are expected to absorb the remaining unreimbursed cost of charity care.

For this evaluation, charity care costs will be assessed using two methods: 1) the sum of documented hospital charity care priced at Medicaid rates, and 2) the sum of cost of documented hospital charity care calculated using hospital-specific cost-to-charge ratios.¹⁵² The former allows comparison to Medicaid spending and does not vary by differences in cost structures among

¹⁵⁰ The charity program is described at <https://www.nj.gov/health/hcf/subsidies/>

¹⁵¹ Data dictionary available at https://iphd.rutgers.edu/sites/default/files/2022-06/data_dicDoh_UB_2021.pdf

¹⁵² Available at <https://hcup-us.ahrq.gov/db/ccr/costtocharge.jsp>

hospitals. The latter reflects costs from the hospitals' perspective, considering differences in their cost structures.

Spending trends spanning these periods will be examined graphically (line charts) and using regression analyses adjusting for changes in population composition distributions over time. The trends will be calculated for 12-month cohorts for women in the postpartum period on a per-beneficiary per-month basis and adjusted for inflation. To the extent supported by available charity care data, trends will be stratified by the federal poverty level of charity care recipients, as the lowest income charity care recipients are most likely to become eligible for Medicaid continuous eligibility.

Analytic strategy for Hypothesis 3, RQ3b:

The effects of 12-month continuous eligibility will be assessed using the same data sources and analytic strategy as the postpartum eligibility expansion (described above), with the following modification. The analysis of postpartum care charity care relies on index events (the end of pregnancies) to define cohorts of patients of interest, but no such events are available to establish a comparison group of patients in the baseline period who would have been MAGI eligible. Thus, charity care costs, measured using the two methods described above, will be compared for pre-demonstration and demonstration periods for all adults aged 19-64.

Sustainability Assessment

The contribution of the demonstration to the fiscal sustainability of NJFamilyCare, the state's Medicaid program, will be evaluated based on the cost analyses described in this chapter and informed by results of hypothesis tests that are conducted for each demonstration component (described in chapters 1-12 above).

Sustainability will be evident for any demonstration components that show net reductions in Medicaid spending (e.g., where savings from lower avoidable hospital utilization offsets costs of new demonstration services). Other components, where no net changes in cost are evident but where care quality or access improves may also be sustainable at current spending levels. Conversely, should evidence show that the cost of new benefits or administrative costs are not sufficiently offset by lower overall avoidable-use-related spending may be unsustainable. Where cost savings are not evident but where improvements in quality, accessibility or outcomes are, the evaluation will generate evidence to support policymaker decisions about whether improved care may be worth additional investments.

Sustainability findings drawing on analyses described in this chapter and informed by those from component-specific evaluations described in chapter 1-12 will be synthesized in deliverable reports. These reports will distinguish results for each component of the demonstration, including those involving new spending on benefits addressing HRSNs.

Table 13.2: Summary of Questions, Hypotheses and Methodology

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic Methods
<i>Hypothesis 1: Implementation and operation of the demonstration components will increase administrative cost, including non-recurring start-up costs and ongoing operational costs.</i>				
<p>RQ1a: What are the non-recurring administrative costs associated with the initiation of each demonstration component, including added staff effort and non-personnel expenses?</p> <p>RQ1b: What are the ongoing administrative costs associated with operation of each demonstration component, including added staff effort and non-personnel expenses?</p>	Personnel cost of effort of state agency staff and non-personnel expenses related to the implementation and operation of each demonstration component	N/A	<p>Spreadsheet templates for each demonstration component and each demonstration year; state staff will enter the following information:</p> <ul style="list-style-type: none"> • Staff member name/unit • Dates during which effort was applied • Share of staff salary and fringe benefit expense allocated to demonstration effort • Allocated non-salary costs (e.g., rent, computing/technology expenses) • Additional non-personnel related expenses (e.g., contractual costs) 	Summation and yearly inflation adjustment to document costs.
<i>Hypothesis 2: The demonstration components, to varying degrees, will generate <u>costs for new services</u> or <u>extended eligibility</u> that will be <u>offset</u> by lower spending for other Medicaid health services resulting from improved accessibility or quality of care (e.g., reduced spending on avoidable hospitalization or ED use).</i>				
RQ2a: What are the added costs for new services or periods of eligibility	See Table 13.1	See Table 13.1	MMIS claims/encounters	See Table 13.1

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic Methods
<p>authorized under each demonstration component?</p> <p>RQ2b: What are changes in non-demonstration health services expenditures associated with implementation of each demonstration components (e.g., offsetting savings from improved accessibility or quality of care)?</p> <p>RQ2c: What are the net changes in spending for each demonstration component (i.e., spending on new services or eligibility net of changes in non-demonstration-related spending overall)?</p>				
<i>Hypothesis 3: The extension of 12 months continuous eligibility to postpartum women and beneficiaries who are Medicaid eligible based on the Modified Adjusted Gross Income (MAGI) standard will reduce hospital charity care costs for affected populations.</i>				
RQ3a: What is the impact of postpartum continuous eligibility on hospital charity care costs for women in the 12 months following the end of pregnancy?	Trends in charity care delivered to cohorts of postpartum women for three periods: 1) before the 12-month continuous eligibility expansion (2017-2019), 2) the public health emergency (PHE) (February 2020-May 2023), and 3) the	Trends between 1st and 3 rd period	NJ Hospital Discharge Data Collection System (HDDCS, the state's all-payer hospital uniform billing record system), linked to records from the NJ Hospital Care Payment Assistance (Charity Care) Program.	Charity care costs to be assessed with two methods: 1) sum of documented hospital charity care priced at Medicaid rates; 2) sum of cost of documented hospital charity care using hospital-

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data sources	Analytic Methods
	demonstration period (beginning no earlier than the end of the PHE).			specific cost-to-charge ratios.
RQ3b: What is the impact of continuous eligibility for adults (ages 19-64) who are eligible based on the MAGI standard on hospital charity care costs for low-income adults?	Trends in charity care costs for pre-demonstration (2017-2022) to demonstration (2023-2028)	Trends pre-demonstration (2017-2022) to demonstration (2023-2028)	As above	As above

Table 13.3 shows an activity timeline for the research activities.

Table 13.3 Key Milestones, Demonstration Cost Assessment

Analytic Activity	Year 1 2025	Year 2 2026	Year 3 2027	Year 4 2028	Year 5 2029	Year 6 2030
1. RQ1a and b: administrative cost data	Finalize data collection template	Obtain data for interim analysis	Complete interim analysis; Update data	Update data	Update data; conduct analysis	Complete analysis
2. RQ2a-RQ2c: summarize costs across components		Finalize summary template; initiate analysis	Complete interim analysis		Finalize summary template; conduct analysis	Complete analysis
3. RQ3a and b: assessing effect of continuous eligibility for 2 populations (postpartum, MAGI adults)	Obtain all- payer hospital discharge and charity program data	Initiate analysis	Complete interim analysis		Update all- payer hospital discharge and charity program data; conduct analysis	Complete analysis
4. Submit reports to CMS			Interim report			Final report

RQ=Research Question.

NOTE: Evaluation project years are March-Feb. (subject to change depending on date of authorization to begin).

D. Methodological Limitations

The degree to which appropriate comparison groups are available for the Demonstration Cost Assessment varies by demonstration component (see Table 13.1 and the Limitations sections of the respective component evaluation plans in chapters 1-12). In addition to analyses employing available concurrent comparison groups, the cost analyses will compare cost trends before the demonstration (and pre-pandemic) to trends during the demonstration period. Regression analyses will enable adjustments for demographic changes over time in the beneficiary population. While these analyses do not enable causal inferences, they will provide valuable information to inform policy making.

As noted, the COVID-19 pandemic disrupted care utilization and spending patterns. To avoid drawing misleading conclusions about possible effects of demonstration activities, the period of the pandemic will be excluded from baseline trend analyses. Still, there is some risk that long-term changes in services used and costs may continue into the demonstration period. Caveats about possible long-term pandemic effects will be included in the discussion of evaluation results, as appropriate.

Healthcare spending may be subject to random fluctuations that are unrelated to demonstration activities, e.g., related to rare catastrophic illnesses, that will limit the interpretability of cost trends analysis, particularly for demonstration components affecting comparatively small groups of beneficiaries (e.g., CHW pilot projects). We will consider strategies to mitigate the impacts of such spending fluctuations, such as trimming outliers, but ultimately, such variability may limit conclusions that can be reasonably drawn from the cost assessment of some demonstration components.

Some services are provided through sub-capitation or fixed fee arrangements, which will limit beneficiary-level analyses using claims and managed care encounter records. Caveats about this limitation will be included in discussion of evaluation results.

Some cost or savings impacts may occur beyond the demonstration period. For example, increases in eligibility for HCBS services under the Qualified Income Trust demonstration may delay admissions to nursing facilities years after the policy change. Measuring such long-term cost impacts is beyond the scope of this evaluation but will be noted in evaluation findings as appropriate.

The demonstration may have impacts on administrative costs of non-state entities that cannot be measured using the methods proposed. For example, administrative simplifications described in chapter 12 may reduce the needs for resource-intensive monitoring and auditing by county social services entities or costs to families to document financial status. Measuring impacts on such administrative costs is beyond the scope of this evaluation but will be noted in evaluation findings as appropriate.

Data on uncompensated care are not available for non-hospital providers and are limited to hospital charity care for individuals below 300% of the federal poverty level (FPL). Records of hospital bad (i.e., uncollectible) debt from patients above that income threshold are not available.

As noted, hospitals provide the largest share of uncompensated care, including for hospital services used by uninsured individuals who are the focus of continuous eligibility expansions under postpartum or MAGI expansion. To the extent recorded in available data, charity care cost will be stratified by patient FPL level because those with the lowest incomes are most likely to be Medicaid beneficiaries who become eligible for continuous eligibility under the demonstration.

Finally, data from the NJ Hospital Care Payment Assistance (Charity Care) Program have not previously been used for analyses of the type proposed in this evaluation and may have unanticipated limitations. NJ Department of Health, which administers NJ's charity care, will assist in troubleshooting any such limitations. Results applying hospital cost-to-charge ratios are likely to be feasible, as this method has been frequently used in hospital costs studies, regardless of the suitability of charity care records for the evaluation.

Attachment 1: Budget

**Proposed Budget for the Medicaid 1115 Waiver Evaluation
Submitted by Rutgers Center for State Health Policy
May 9, 2025**

Requested categories	Period 1	Period 2	Period 3	Period 4	Period 5	Period 6	Cumulative
	03/01/25 02/28/26	03/01/26 02/28/27	03/01/27 02/29/28	03/01/28 02/28/29	03/01/29 02/28/30	03/01/30 06/30/30	
						* 3 months	
Research Faculty Salary	461,519	634,700	698,886	708,400	707,547	177,370	3,388,422
Research Staff Salary	1,076,597	1,139,430	1,201,859	1,270,892	1,191,402	289,952	6,170,133
Admin Staff Salary	56,835	204,583	210,237	215,663	221,251	55,668	964,236
Fringe	1,150,098	1,403,259	1,505,289	1,554,934	1,541,268	383,877	7,538,725
Data Collection	50,000	585,625	602,875	518,625	198,875	10,000	1,966,000
Data Access and Purchases	34,217	42,014	40,072	45,897	42,014	10,021	214,234
The Johns Hopkins Center of Excellence in Maternal and Child Health	-	201,788	201,788	201,788	201,788	50,448	857,600
Respondent Incentives	1,250	61,875	66,438	40,813	8,875	-	179,250
Other Non-personnel Costs	15,130	27,459	7,672	31,525	19,926	733	102,444
Administrative Costs	186,815						186,815
F&A	303,246	430,073	453,512	458,854	413,294	97,807	2,156,786
Total	3,335,707	4,730,806	4,988,627	5,047,391	4,546,239	1,075,875	23,724,645

Attachment 2: Project Workplan and Deliverable Summary

Draft Workplan

Chapter, Component	Claims prep detail	Year 1 - 2025	Year 2 - 2026 (cutoff for interim report)	Year 3 - 2027 *interim report due to CMS 6/30/27*	Year 4 - 2028	Year 5 - 2029
Youth Programs						
1. ASD Pilot	New population; 5 metrics (1 prior, 4 new)		Survey (Eng/Span; web/phone, mail recruit, 20min) through vendor, CSHP pulls list (about 2,000 eligible individuals currently), n=400 max (\$25)		Survey (Eng/Span; web/phone, mail recruit, 20min) through vendor, CSHP pulls list (about 2,000 eligible individuals currently), n=400 max (\$25)	
2. Children's Support Services Programs (SED, I/DD)	10 metrics (8 prior, 2 new)			Online screening survey (\$25), 4-6 focus groups of up to 10 people each, 60-90min (\$100)		

Chapter, Component	Claims prep detail	Year 1 - 2025	Year 2 - 2026 (cutoff for interim report)	Year 3 - 2027 *interim report due to CMS 6/30/27*	Year 4 - 2028	Year 5 - 2029
Maternity-related Components						
3. Postpartum Eligibility Extension	New population; 22 metrics (14 prior, 8 new)					
4. NJ Home Visiting Pilot	New population; 7 metrics (3 prior, 4 new), coordination with JHU					
5. Medically Indicated Meals Pilot	New population; 12 metrics (2 prior, 10 new)		Up to 20 key informant interviews (those unpaid by job paid \$50)			
Facilitating Access to Essential Health Services						
6. Continuous Eligibility for MAGI Adults	New population; 8 metrics (4 prior, 4 new)					

Chapter, Component	Claims prep detail	Year 1 - 2025	Year 2 - 2026 (cutoff for interim report)	Year 3 - 2027 *interim report due to CMS 6/30/27*	Year 4 - 2028	Year 5 - 2029
7. Community Health Worker (CHW) Pilot Programs	New population; Estimated 9 metrics (6 prior, 3 new)--develop 5 separate pilot populations plus try to roll them up, match data rec'd from 5 MCOs and surveys	Surveys (Eng/Span; web/phone, mail recruit; <u>enrollment + 12mo followup</u>) through vendor, MCO/DMAHS/CSHP create list, total N up to 400 each MCO at enrollment/followup (\$25) 15-25 key informant interviews	Continue surveys	Continue surveys	Continue surveys 15-25 key informant interviews Online CHW focus group screening survey (\$10) and 5 90 minute CHW focus groups (5-8 CHWs) (\$75)	Continue surveys – <i>figure out cutoff date</i>
8. Tenancy and Housing Supports	New population; 28 measures (11 prior, 17 new), match/analyze HMIS and other admin data)	20-30 KII, 45-60min 100 beneficiary interviews, 45-60min (\$75)	Continue interviewing as needed		20-30 KII, 45-60min 100 beneficiary interviews, 45-60min (\$75)	Continue interviewing as needed

Chapter, Component	Claims prep detail	Year 1 - 2025	Year 2 - 2026 (cutoff for interim report)	Year 3 - 2027 *interim report due to CMS 6/30/27*	Year 4 - 2028	Year 5 - 2029
		30 provider interviews, 45-60min (\$50)			30 provider interviews, 45-60min (\$50)	
9. OUD/SUD Program	20 metrics (15 prior, 5 new)				20-30 KII, 60-90min	
Long-Term Services for Adults						
10. Adult IDD Services: Supports and Community Care Programs	17 metrics (15 prior, 2 new)			Online screening survey (\$10), 4-6 focus groups of up to 10 people each, 60-90min (\$100)		
11. and 12. MLTSS plus administrative simplification for LTSS	19 metrics (5 prior, 14 new), plus match/analyze NJ Choice Data and Administrative Enrollment Measures (Qualified Income Trusts and			Survey (Eng/Span; web/phone, mail recruit, 5min screen, 25min survey) through vendor, CSHP pulls list, n=300-400 (\$25)	30 caregiver interviews, 45-60 min (\$50), 15 KII, (nonprofessionals \$50), 60 min	

Chapter, Component	Claims prep detail	Year 1 - 2025	Year 2 - 2026 (cutoff for interim report)	Year 3 - 2027 *interim report due to CMS 6/30/27*	Year 4 - 2028	Year 5 - 2029
	Attestation of no Asset Transfers)					
Cost Assessment						
13. Cost Assessment	All-payer hospital discharge and charity program data, plus data from other components	Administrative data collection template				

KII=key informant interview

Deliverable Listing and STC Crosswalk

All components will have:

- an interim evaluation report due date of 12/30/26 to DMAHS and 6/30/27 to CMS, and
- a summative evaluation report due date of 6/30/29 to DMAHS and 12/30/29 to CMS.

Component	STC sections
Overall Evaluation Findings Summary/Discussion	13.5
Adjunct Services Autism Spectrum Disorder (ASD) Pilot	5.12, 13.5(h)(i)
Children's Support Services Programs (SED, I/DD)	5.09, 5.10, 13.5(a)

Postpartum Eligibility Extension	5.15, 13.5(d)
New Jersey Home Visiting Pilot (NJHV) Program	5.13, 13.5(h)(ii)
Medically Indicated Meals Pilot	10.2(c)(2), 10.5(a), 13.5(f)
Continuous Eligibility for MAGI Adults	5.16, 13.5(c) and (e)
Community Health Worker (CHW) Pilot Programs	5.18, 13.5(h)(iii)
Tenancy and Housing Supports	10.2(a), 10.5(c), 13.5(f)
Opioid Use Disorder (OUD)/Substance Use Disorder (SUD) Program	6, 13.5(b)
Adult IDD Services: Supports and Community Care Programs	5.8, 5.11, 13.5(a)
Managed Long Term Services and Supports (MLTSS) Program	5.6, 13.5(a), (f) and (g)
Administrative Simplification for LTSS	QIT: 4.4, 13.5(a) Self-attestation: 4.4, 13.5(a) OPG: 5.14, 13.5(h)(iv)



RUTGERS HEALTH

Center for State Health Policy

Institute for Health, Health Care Policy and Aging Research

Center for State Health Policy
Rutgers, The State University of New Jersey
112 Paterson Street, 5th Floor
New Brunswick, NJ 08901

p. 848-932-3105
info@cshp.rutgers.edu
www.cshp.rutgers.edu