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

State Demonstrations Group

February 16, 2022

Lisa Olson
Medicaid Director
State of Wisconsin Department of Health Services
1 West Wilson Street
Room 350, PO Box 309
Madison, WI 53701-0309

Dear Ms. Olson:

The Centers for Medicare & Medicaid Services (CMS) completed its review of the Evaluation Design, which is required by the Special Terms and Conditions (STCs), specifically, STCs #24 and #64, of Wisconsin's section 1115 demonstration, "BadgerCare Reform" (Project No: 11-W-00293/5), effective through December 31, 2023. CMS has determined that the Evaluation Design, which was submitted on July 26, 2019 and revised on September 20, 2021, meets the requirements set forth in the STCs and our Evaluation Design guidance, and therefore, approves the state's Evaluation Design.

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

Please note that an Interim Evaluation Report, consistent with the approved Evaluation Design, is due to CMS one year prior to the expiration of the demonstration, or at the time of the extension application, if the state chooses to extend the demonstration. Likewise, a Summative Evaluation Report, consistent with this approved Evaluation Design, is due to CMS within eighteen months of the end of the demonstration period. In accordance with 42 CFR § 431.428 and the STCs, we look forward to receiving updates on evaluation activities in the demonstration monitoring reports.

We appreciate our continued partnership with Wisconsin on the BadgerCare Reform section 1115 demonstration. If you have any questions, please contact your CMS demonstration team.

Sincerely,

Danielle Daly -S

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Date: 2022.02.16 05:52:12 -05'00'

Danielle Daly
Director
Division of Demonstration Monitoring and Evaluation

cc: Mai Le-Yuen, State Monitoring Lead, CMS Medicaid and CHIP Operations Group

CENTERS FOR MEDICARE & MEDICAID SERVICES
WAIVER LIST

NUMBER: **11-W-00293/5**

TITLE: **Wisconsin BadgerCare Reform**

AWARDEE: **Wisconsin Department of Health Services**

Title XIX Waiver Authority

All requirements of the Medicaid program expressed in law, regulation, and policy statement, not expressly waived in this list, shall apply to the affected populations, as described for the demonstration project from October 31, 2018 through December 31, 2018, as these two waivers will sunset on December 31, 2018.

Under the authority of section 1115(a)(1) of the Social Security Act (the Act), the following waivers of the state plan requirements contained in section 1902 of the Act are granted in order to enable Wisconsin to implement the Wisconsin BadgerCare Reform Medicaid section 1115 demonstration.

1. Provision of Medical Assistance Eligibility — **Section 1902 (a)(8)** **Section 1902(a)(10)**

To the extent needed to enable the state to enforce premium payment requirements under the demonstration by not providing medical assistance for a period of three months for adults that qualify for Medicaid only under section 1925, or sections 1902(e)(1) and 1931(c)(1), of the Act whose eligibility has been terminated as a result of not paying the required monthly premium.

2. Premiums — **Section 1902(a)(14) insofar as it incorporates section 1916** **Section 1902(a)(52)**

To the extent needed to permit the state to impose monthly premiums based on household income on individuals that qualify for Medicaid only under Transitional Medical Assistance (TMA). This waiver allows the state to apply premiums to TMA Adults with income above 133 percent of the federal poverty level (FPL) starting from the date of enrollment, and to TMA Adults with income from 100-133 percent of the FPL starting after the first six calendar months of TMA coverage.

CENTERS FOR MEDICARE & MEDICAID SERVICES
EXPENDITURE AUTHORITY

NUMBER: **11-W-00293/5**

TITLE: **Wisconsin BadgerCare Reform Section 1115 Demonstration**

AWARDEE: **Wisconsin Department of Health Services**

Under the authority of section 1115(a)(2) of the Social Security Act (the Act), expenditures made by the state for the items identified below, which are not otherwise included as expenditures under section 1903 of the Act, incurred during the period of this demonstration, shall be regarded as expenditures under the state's title XIX plan.

The following expenditure authority shall enable the state to operate its BadgerCare Reform section 1115 Medicaid demonstration beginning October 31, 2018 through December 31, 2023.

1. **Childless Adults Demonstration Population.** Expenditures for health care-related costs for eligible non-pregnant, uninsured adults ages 19 through 64 years who have family incomes up to 95 percent of the federal poverty level (FPL) (effectively 100 percent of the FPL including the five percent disregard), who are not otherwise eligible under the Medicaid State plan, other than for family planning services or for the treatment of Tuberculosis, and who are not otherwise eligible for Medicare, Medical Assistance, or the State Children's Health Insurance Program (CHIP).

2. **Former Foster Care Youth from Another State.** Expenditures to extend eligibility for full Medicaid state plan benefits to former foster care youth who are defined as individuals under age 26, that were in foster care under the responsibility of a state other than Wisconsin or tribe in such other state on the date of attaining 18 years of age (or such higher age as the state has elected for termination of federal foster care assistance under title IV-E of the Act), were enrolled in Medicaid on that date, and are now applying for Medicaid in Wisconsin.

3. **Residential and Inpatient Treatment Services for Individuals with Substance Use Disorder.** Expenditures for otherwise covered services furnished to otherwise eligible individuals who are primarily receiving treatment and withdrawal management services for substance use disorder (SUD) who are short-term residents in facilities that meet the definition of an institution for mental diseases (IMD).

All requirements of the Medicaid program expressed in law, regulation, and policy statement, not expressly identified as not applicable in the list below, shall apply to the Childless Adults Demonstration Population beginning October 31, 2018, through December 31, 2023.

Title XIX Requirements Not Applicable to the Demonstration Population:

1. Freedom of Choice **Section 1902(a)(23)(A)**

To the extent necessary to enable the state to require enrollment of eligible individuals in managed care organizations.

2. Premiums **Section 1902(a)(14) insofar as it incorporates 1916 and 1916A**

To the extent necessary to the state to charge an $8 monthly premium to the childless adult population with household incomes over 50 percent of the FPL, up to and including 100 percent of the FPL.

3. Comparability **Section 1902(a)(17)/Section 1902(a)(10)(B)**

To the extent necessary to enable the state to vary monthly premiums for the childless adult population based on health behaviors and health risk assessment completion.

To the extent necessary to enable the state to establish a non-emergency use of the emergency department copayment of $8 for the childless adult population.

4. Eligibility **Section 1902(a)(10) and 1902(a)(52)**

To the extent necessary to enable the state to deny eligibility and prohibit reenrollment for up to six months for the childless adults population who are disenrolled for failure to pay premiums.

To the extent necessary to enable the state to deny eligibility for the childless adults population who does not complete a health risk assessment.

CENTERS FOR MEDICARE AND MEDICAID SERVICES
SPECIAL TERMS AND CONDITIONS

NUMBER: 11-W-00293/5

TITLE: Wisconsin BadgerCare Reform

AWARDEE: Wisconsin Department of Health Services

I. PREFACE

The following are the Special Terms and Conditions (STCs) to enable Wisconsin (state) to operate the Badger Care Reform section 1115(a) BadgerCare demonstration. The Centers for Medicare & Medicaid Services (CMS) has granted waivers of requirements under section 1902(a) of the Social Security Act (the Act), and expenditure authorities authorizing federal matching of demonstration costs not otherwise matchable, which are separately enumerated. These STCs set forth in detail the nature, character, and extent of federal involvement in the demonstration and amendments and the state's obligations to CMS related to this demonstration and amendments. The STCs are effective October 31, 2018 and the BadgerCare Reform demonstration is approved through December 31, 2023.

The STCs have been arranged into the following subject areas:

I. Preface
II. Program Description and Objectives
III. General Program Requirements
IV. Eligibility
V. Benefits
VI. Cost Sharing (Premiums, Copays, and Healthy Behavior Incentive)
VII. Delivery System
VIII. General Reporting Requirements
IX. General Financial Requirements
X. Monitoring Budget Neutrality for the Demonstration
XI. Evaluation of the Demonstration

Additional attachments have been included to provide supplementary information and guidance for specific STCs.

Attachment A. Summary of Cost-sharing for TMA Adults Only
Attachment B. Substance Use Disorder Implementation Plan Protocol
Attachment C. Substance Use Disorder Monitoring Protocol
Attachment D. Developing the Evaluation Design
Attachment E Preparing the Interim and Summative Evaluation Reports
Attachment F. Evaluation Design
Attachment G. Monitoring Protocol

Attachment H. Tribal Consultation Plan

II. PROGRAM DESCRIPTION AND OBJECTIVES

With the implementation of the Affordable Care Act provisions, that will provide federally-funded subsidies to help individuals and families purchase private health insurance, Wisconsin saw the BadgerCare Reform amendment as an opportunity to reduce the uninsured rate and encourage beneficiaries to access coverage in the private market.
The Wisconsin BadgerCare Reform amendment provided state plan benefits, other than family planning services and tuberculosis-related services, to childless adults who had effective family incomes up to 100 percent of the Federal Poverty Level (FPL) (effective income is defined to include the five (5) percent disregard), and permitted the state to charge premiums to adults who were only eligible for Medicaid through the Transitional Medical Assistance eligibility group (hereinafter referred to as "TMA Adults") with incomes above 133 percent of the FPL starting from the first day of enrollment and to TMA Adults from 100-133 percent of the FPL after the first six (6) calendar months of TMA coverage.

The BadgerCare Reform amendment allowed the state to provide health care coverage for the childless adult population at or below an effective income of 100 percent of the FPL with a focus on improving health outcomes, reducing unnecessary services, and improving the cost-effectiveness of Medicaid services. Additionally, the amendment enabled the state to test the impact of providing TMA to individuals who were paying a premium that aligned with the insurance affordability program in the Marketplace based upon their household income when compared to the FPL.

In accordance with CMS' November 21, 2016 CMCS Informational Bulletin (CIB), *Section 1115 Demonstration Opportunity to Allow Medicaid Coverage to Former Foster Care Youth Who Have Moved to a Different State*, the BadgerCare Reform demonstration was amended in December 2017 to add coverage of former foster care youth defined as individuals under age 26 who were in foster care in another state or tribe of such other state when they turned 18 (or such higher age as the state has elected for termination of federal foster care assistance under title IV-E of the Act), were enrolled in Medicaid at that time or at some point while in such foster care, and are now applying for Medicaid in Wisconsin. With the addition of this population, Wisconsin has a new demonstration goal to increase and strengthen overall coverage of former foster care youth and improve health outcomes for this population.

The 2017 amendment request was prompted by the Wisconsin 2015-2017 Biennial Budget (Act 55), which required the Wisconsin Department of Health Services (DHS) to request an amendment to the BadgerCare Reform amendment in order to apply a number of new policies to the childless adult population. Act 55 requirements included: establishing monthly premiums, establishing lower premiums for members engaged in healthy behaviors, requiring completion of a health risk assessment, limiting a member's eligibility to no more than 48 months, and requiring as a condition of eligibility that an applicant or member complete a drug screening, and if indicated, a drug test and treatment; however, a drug test as a condition of eligibility and a 48-month limit are not part of this approval. Policies not required by Act 55, but included in the amendment request in order to meet the program objectives involve charging an increased copayment for non-emergent use of the emergency department utilization for childless adults, and providing full

coverage of residential substance use disorder treatment for all BadgerCare Plus and Medicaid members.

III. GENERAL PROGRAM REQUIREMENTS

1. **Compliance with Federal Non-Discrimination Laws.** The state must comply with applicable federal civil rights laws relating to non-discrimination in services and benefits in its programs and activities. These include, but are not limited to, the Americans with Disabilities Act of 1990 (ADA), Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973 (Section 504), the Age Discrimination Act of 1975, and section 1557 of the Affordable Care Act (Section 1557). Such compliance includes providing reasonable modifications to individuals with disabilities under the ADA, Section 504, and Section 1557 with eligibility and documentation requirements, understanding program rules and notices, and meeting other program requirements necessary to obtain and maintain benefits.

2. **Compliance with Medicaid Law, Regulation, and Policy.** All requirements of the Medicaid program, expressed in law, regulation, and written policy, not expressly waived or identified as not applicable in the waiver and expenditure authority documents (of which these terms and conditions are part), apply to the demonstration.

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

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

    a. To the extent that a change in federal law, regulation, or policy requires either a reduction or an increase in federal financial participation (FFP) for expenditures made under this demonstration, the state must adopt, subject to CMS approval, a modified budget neutrality agreement for the demonstration, as well as a modified allotment neutrality worksheet as necessary to comply with such change. Further, the state may seek an amendment to the demonstration (as per STC 7 of this section) as a result of the change in FFP.

    b. If mandated changes in the federal law require state legislation, unless otherwise prescribed by the terms of the federal law, the changes must take effect on the day such state legislation becomes effective, or on the last day such legislation was required to be in effect under the law, whichever is sooner.

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

6. **Changes Subject to the Amendment Process.** If not otherwise specified in these STCs, changes related to eligibility, enrollment, benefits, enrollee rights, delivery systems, cost sharing, Evaluation Design, sources of non-federal share of funding, budget neutrality, and other comparable program elements must be submitted to CMS as amendments to the demonstration. All amendment requests are subject to approval at the discretion of the Secretary in accordance with section 1115 of the Act. The state must not implement changes to these elements without prior approval by CMS either through an approved amendment to the Medicaid state plan or amendment to the demonstration. Amendments to the demonstration are not retroactive and FFP, whether administrative or service-based expenditures, will not be available for changes to the demonstration that have not been approved through the amendment process set forth in STC 7, except as provided in STC 3.

7. **Amendment Process.** Requests to amend the demonstration must be submitted to CMS for approval no later than 120 days prior to the planned date of implementation of the change and may not be implemented until approved. CMS reserves the right to deny or delay approval of a demonstration amendment based on non-compliance with these STCs, including but not limited to failure by the state to submit required elements of a viable amendment request as found in this STC, and failure by the state to submit reports required in the approved STCs and other deliverables in a timely fashion according to the deadlines specified herein. Amendment requests must include, but are not limited to, the following:

    a. A detailed description of the amendment including impact on beneficiaries, with sufficient supporting documentation;

    b. A data analysis worksheet which identifies the specific "with waiver" impact of the proposed amendment on the current budget neutrality agreement. Such analysis shall include total computable "with waiver" and "without waiver" status on both a summary and detailed level through the current approval period using the most recent actual expenditures, as well as summary and detail projections of the change in the "with waiver" expenditure total as a result of the proposed amendment, which isolates (by Eligibility Group) the impact of the amendment;

    c. An explanation of the public process used by the state consistent with the requirements of STC 13; and,

    d. If applicable, a description of how the Evaluation Design will be modified to incorporate the amendment provisions.

8. **Extension of the Demonstration.** States that intend to request a demonstration extension under sections 1115(e) or 1115(f) of the Act must submit extension applications in

accordance with the timelines contained in statute. Otherwise, no later than twelve months prior to the expiration date of the demonstration, the Governor or Chief Executive Officer of the state must submit to CMS either a demonstration extension request that meets federal requirements at 42 Code of Federal Regulations (CFR) 431.412(c) or a transition and phase-out plan consistent with the requirements of STC 9.

9. **Demonstration Phase Out.** The state may only suspend or terminate this demonstration in whole, or in part, consistent with the following requirements:

   a. Notification of Suspension or Termination. The state must promptly notify CMS in writing of the reason(s) for the suspension or termination, together with the effective date and a transition and phase-out plan. The state must submit a notification letter and a draft transition and phase-out plan to CMS no less than six months before the effective date of the demonstration's suspension or termination. Prior to submitting the draft transition and phase-out plan to CMS, the state must publish on its website the draft transition and phase-out plan for a 30-day public comment period. In addition, the state must conduct tribal consultation in accordance with STC 13, if applicable. Once the 30-day public comment period has ended, the state must provide a summary of each public comment received, the state's response to the comment, and how the state incorporated the received comment into the revised transition and phase-out plan.

   b. Transition and Phase-out Plan Requirements. The state must include, at a minimum, in its transition and phase-out plan the process by which it will notify affected beneficiaries, the content of said notices (including information on the beneficiary's appeal rights), the process by which the state will conduct administrative reviews of Medicaid eligibility prior to the termination of the demonstration for the affected beneficiaries, and ensure ongoing coverage for those beneficiaries whether currently enrolled or determined to be eligible individuals, as well as any community outreach activities, including community resources that are available.

   c. Transition and Phase-out Plan Approval. The state must obtain CMS approval of the transition and phase-out plan prior to the implementation of transition and phase-out activities. Implementation of transition and phase-out activities must be no sooner than 14 days after CMS approval of the transition and phase-out plan.

   d. Transition and Phase-out Procedures. The state must comply with all applicable notice requirements found in 42 CFR, part 431 subpart E, including sections 431.206, 431.210, 431.211, and 431.213. In addition, the state must assure all applicable appeal and hearing rights afforded to demonstration beneficiaries as outlined in 42 CFR, part 431 subpart E, including sections 431.220 and 431.221. If a demonstration beneficiary requests a hearing before the date of action, the state must maintain benefits as required in 42 CFR 431.230. In addition, the state must conduct administrative renewals for all affected beneficiaries in order to determine if they qualify for Medicaid eligibility under a different eligibility category prior to termination as discussed in October 1, 2010, State Health Official Letter #10-008 and as required under 42 C.F.R. 435.916(f)(1). For individuals determined ineligible for Medicaid, the state must determine potential eligibility for other insurance affordability programs and comply with the procedures set forth in 42 CFR 435.1200(e).

e. Exemption from Public Notice Procedures, 42 CFR Section 431.416(g). CMS may expedite the federal and state public notice requirements under circumstances described in 42 CFR 431.416(g).

f. Enrollment Limitation during Demonstration Phase-Out. If the state elects to suspend, terminate, or not extend this demonstration, during the last six months of the demonstration, enrollment of new individuals into the demonstration must be suspended.

g. Federal Financial Participation (FFP). FFP will be limited to normal closeout costs associated with the termination or expiration of the demonstration including services, continued benefits as a result of beneficiaries' appeals, and administrative costs of disenrolling participants.

10. Expiring Demonstration Authority. For demonstration authority that expires prior to the demonstration's expiration date, the state must submit a demonstration authority expiration plan to CMS no later than six months prior to the applicable demonstration authority's expiration date, consistent with the following requirements:

a. Expiration Requirements. The state must include, at a minimum, in its demonstration authority expiration plan the process by which it will notify affected beneficiaries, the content of said notices (including information on the beneficiary's appeal rights), the process by which the state will conduct administrative reviews of Medicaid eligibility prior to the termination of the demonstration authority for the affected beneficiaries, and ensure ongoing coverage for eligible individuals, as well as any community outreach activities.

b. Expiration Procedures. The state must comply with all applicable notice requirements found in 42 CFR, part 431 subpart E, including sections 431.206, 431.210, 431.211, and 431.213. In addition, the state must assure all applicable appeal and hearing rights are afforded to demonstration beneficiaries as outlined in 42 CFR, part 431 subpart E, including sections 431.220 and 431.221. If a demonstration beneficiary requests a hearing before the date of action, the state must maintain benefits as required in 42 CFR 431.230. In addition, the state must conduct administrative renewals for all affected beneficiaries in order to determine if they qualify for Medicaid eligibility under a different eligibility category prior to termination as discussed in October 1, 2010, State Health Official Letter #10-008 and required under 42 C.F.R. 435.916(f)(1). For individuals determined ineligible for Medicaid, the state must determine potential eligibility for other insurance affordability programs and comply with the procedures set forth in 42 CFR 435.1200(e).

c. Federal Public Notice. CMS will conduct a 30-day federal public comment period consistent with the process outlined in 42 CFR 431.416 in order to solicit public input on the state's demonstration authority expiration plan. CMS will consider comments received during the 30-day period during its review and approval of the state's demonstration authority expiration plan. The state must obtain CMS approval of the demonstration authority expiration plan prior to the implementation of the expiration

activities. Implementation of expiration activities must be no sooner than fourteen (14) days after CMS approval of the demonstration authority expiration plan.

d. Federal Financial Participation (FFP). FFP will be limited to normal closeout costs associated with the expiration of the demonstration authority including services, continued benefits as a result of beneficiaries' appeals, and administrative costs of disenrolling participants.

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

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

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

    The state must also comply with tribal and Indian Health Program/Urban Indian Health Organization consultation requirements at section 1902(a)(73) of the Act, 42 CFR 431.408(b), State Medicaid Director Letter #01-024, or as contained in the state's approved Medicaid State Plan, when any program changes to the demonstration, either through amendment as set out in STC 7 or extension, are proposed by the state.
    The state must also comply with the Public Notice Procedures set forth in 42 CFR 447.205 for changes in statewide methods and standards for setting payment rates.

14. **Federal Financial Participation (FFP).** No federal matching for expenditures, both administrative and service, for this demonstration will take effect until the effective date identified in the demonstration approval letter, or if later, as expressly stated within these STCs.

15. **Common Rule Exemption.** The state shall ensure that the only involvement of human subjects in research activities that may be authorized and/or required by this demonstration is for projects which are conducted by or subject to the approval of CMS, and that are designed to study, evaluate, or otherwise examine the Medicaid or CHIP program – including procedures for obtaining Medicaid or CHIP benefits or services, possible changes in or

alternatives to Medicaid or CHIP programs and procedures, or possible changes in methods or levels of payment for Medicaid benefits or services. The Secretary has determined that this demonstration as represented in these approved STCs meets the requirements for exemption from the human subject research provisions of the Common Rule set forth in 45 CFR 46.101(b)(5).

IV. ELIGIBILITY

16. **State Plan Eligibility Groups Affected By the Demonstration.** The state plan populations affected by this demonstration are outlined in Table 1, which summarizes each specific group of individuals and specifies the authority under which they are eligible for coverage and the name of the eligibility and expenditure group under which expenditures are reported to CMS and the budget neutrality expenditure agreement is constructed.

17. **Demonstration Expansion Eligibility Groups.** Table 1 summarizes the specific groups of individuals, and specifies the authority under which they are eligible for coverage. Table 1 also specifies the name of the eligibility and expenditure group under which expenditures are reported to CMS and the budget neutrality expenditure agreement is constructed. Demonstration Population 2 in Table 1 is made eligible for the demonstration by virtue of the expenditure authorities expressly granted in this demonstration. Coverage of Demonstration Population 2 is subject to Medicaid laws and regulations (including all enrollment requirements described in paragraph b. below) unless otherwise specified in the "Title XIX Requirements Not Applicable to the Demonstration Population" section of the expenditure authorities document for this demonstration.

Table 1: Eligibility Groups Affected by the Demonstration			
Medicaid State Plan Mandatory Groups	Federal Poverty Level and/or Other Qualifying Criteria	Funding Stream	Expenditure and Eligibility Group Reporting
Population 1. Parents and caretaker relatives who are non-pregnant, those who do not qualify for Medicaid on the basis of disability, and whose effective family income is above 100 percent FPL and who qualify for TMA under section 1925 of the Act	Parents and caretaker relatives eligible for Medicaid under Wisconsin's Medicaid State plan under section 1925 of the Act or 1931(c)(1) of the Act.	Title XIX	TMA Adults
Demonstration Expansion Groups	Federal Poverty Level and/or Other Qualifying Criteria	Funding Stream	Expenditure and Eligibility Group Reporting

Population 2. Non-pregnant childless individuals Age 19 through 64 with an effective monthly income that does not exceed 100 percent FPL	• Ages 19 through 64 • Effective monthly income at or below 100 percent of the FPL • Not pregnant • Do not qualify for any other full-benefit Medicaid or CHIP eligibility group • Are not receiving Medicare • Childless adults may have children, but do not qualify as a parent or caretaker relative (e.g., either the children are not currently living with them or those children living with them are 19 years of age or older) • Fully complete a Health Risk Assessment (HRA)	Title XIX	BC Reform Adults
Population 3. Former Foster Care Youth ("FFCY") from Another State	• Individuals under age 26, who we were in foster care under the responsibility of a state other than Wisconsin or a tribe in such other state when they turned 18 or such higher age as the state has elected for termination of federal foster care assistance under title IV-E of the Act), were enrolled in Medicaid at that time or at some point while in such foster care, are now applying for Medicaid in Wisconsin, and are not otherwise eligible for Medicaid.	Title XIX	FFCY

V. BENEFITS

18. Wisconsin BadgerCare Demonstration. All enrollees in this demonstration (as described in Section IV) will receive benefits as specified in the Medicaid state plan, to the extent that such benefits apply to those individuals. Beneficiaries in Demonstration Population 2 will not receive family planning services or tuberculosis-related services. In addition, beneficiaries in the Demonstration Population 2 will not receive pregnancy related services, but instead must be administratively transferred to the pregnant women group in the state plan if they are

pregnant. Refer to the state plan for additional information on benefits. Former foster care youth from another state receive full Medicaid State Plan benefits.

19. **Opioid Use Disorder (OUD)/Substance Use Disorder (SUD) Program**. Effective upon CMS' approval of the SUD Implementation Protocol, the demonstration benefit package for all Wisconsin Medicaid recipients will include OUD/SUD treatment services, including short term residential services provided in residential and inpatient treatment settings that qualify as an Institution for Mental Diseases (IMD), which are not otherwise matched expenditures under section 1903 of the Act. The state will be eligible to receive FFP for Wisconsin Medicaid recipients residing in IMDs under the terms of this demonstration for coverage of medical assistance, including OUD/SUD benefits that would otherwise be matchable if the beneficiary were not residing in an IMD. Wisconsin will aim for a statewide average length of stay of 30 days in residential treatment settings, to be monitored pursuant to the SUD Monitoring Protocol as outlined in STC 21 below, to ensure short-term residential treatment stays. Under this demonstration, beneficiaries will have access to high quality, evidence-based OUD and other SUD treatment services ranging from medically supervised withdrawal management to on-going chronic care for these conditions in cost-effective settings while also improving care coordination and care for comorbid physical and mental health conditions.

    The coverage of OUD/SUD treatment services and withdrawal management during short term residential and inpatient stays in IMDs will expand Wisconsin's current SUD benefit package available to all Wisconsin Medicaid recipients as outlined in Table 2. Room and board costs are not considered allowable costs for residential treatment service providers unless they qualify as impatient facilities under section 1905(a) of the Act.

Table 2: Wisconsin OUD/SUD Benefits Coverage with Expenditure Authority

SUD Benefits	Wisconsin Medicaid Authority	Expenditure Authority
Outpatient Services	State Plan	n/a
Intensive Outpatient Services	State Plan	n/a
Medication Assisted Treatment	State Plan (Individual services covered)	Services provided to individuals in IMDs
Residential Treatment Services	State Plan (Individual services covered)	Services provided to individuals in IMDs
Inpatient Services	State Plan (Individual services covered)	Services provided to individuals in IMDs
Medically Supervised Withdrawal Management	State Plan	Services provided to individuals in IMDs

20. **SUD Implementation Plan Protocol.** The state must submit a SUD Implementation Plan Protocol within ninety (90) days after approval of the SUD program under this demonstration approval. The state may not claim FFP for services provided in IMDs until CMS has approved the SUD Implementation Plan Protocol. Once approved, the Implementation Plan Protocol will be incorporated into the STCs, as Attachment B, and once incorporated, may be altered only with CMS approval. After approval of the Implementation Plan Protocol, FFP will be available prospectively, not retrospectively. Failure to submit an Implementation Plan Protocol or failure to obtain CMS approval will be considered a material failure to comply with the terms of the demonstration project as described in 42 CFR 431.420(d) and, as such,

would be grounds for termination or suspension of the SUD program under this demonstration. Failure to progress in meeting the milestone goals agreed upon by the state and CMS will result in funding deferral. At a minimum, the SUD Implementation Protocol will describe the strategic approach and detailed project implementation plan, including timetables and programmatic content where applicable, for meeting the following milestones which reflect the key goals and objectives of the SUD program in this demonstration:

a. Access to Critical Levels of Care for OUD and other SUDs: Service delivery for new benefits, including residential treatment and withdrawal management, within 12-24 months of OUD/SUD program demonstration approval;

b. Use of Evidence-based SUD-specific Patient Placement Criteria. Establishment of a requirement that providers assess treatment needs based on SUD-specific, multidimensional assessment tools, such as the American Society of Addiction Medicine (ASAM) Criteria or other assessment and placement tools that reflect evidence-based clinical treatment guidelines within 12-24 months of OUD/SUD program demonstration approval;

c. Patient Placement. Establishment of a utilization management approach such that beneficiaries have access to SUD services at the appropriate level of care and that the interventions are appropriate for the diagnosis and level of care, including an independent process for reviewing placement in residential treatment settings within 12-24 months of SUD program demonstration approval;

d. Use of Nationally Recognized SUD-specific Program Standards to set Provider Qualifications for Residential Treatment Facilities. Currently, residential treatment service providers must be a licensed organization, pursuant to the residential service provider qualifications described in Wisconsin administrative code. The state will establish residential treatment provider qualifications in licensure, policy or provider manuals, managed care contracts or credentialing, or other requirements or guidance that meet program standards in the ASAM Criteria or other nationally recognized, SUD-specific program standards regarding in particular the types of services, hours of clinical care, and credentials of staff for residential treatment settings within 12-24 months of OUD/SUD program demonstration approval;

e. Standards of Care. Establishment of a provider review process to ensure that residential treatment providers deliver care consistent with the specifications in the ASAM Criteria or other comparable, nationally recognized SUD program standards based on evidence-based clinical treatment guidelines for types of services, hours of clinical care, and credentials of staff for residential treatment settings within 12-24 months of SUD program demonstration approval;

f. Standards of Care. Establishment of a requirement that residential treatment providers offer MAT on-site or facilitate access to MAT off-site within 12-24 months of SUD program demonstration approval.

g. Sufficient Provider Capacity at each Level of Care, including Medication Assisted Treatment for OUD. An assessment of the availability of providers in the key levels of

care throughout the state, or in the regions of the state participating under this demonstration, including those that offer MAT within 12 months of SUD program demonstration approval.

h. Implementation of Comprehensive Treatment and Prevention Strategies to Address Opioid Abuse and OUD. Implementation of opioid prescribing guidelines along with other interventions to prevent prescription drug abuse and expand coverage of and access to naloxone for overdose reversal as well as implementation of strategies to increase utilization and improve functionality of prescription drug monitoring programs;

i. SUD Health IT Plan**.** Implementation of the milestones and metrics as detailed in STC 32.

j. Improved Care Coordination and Transitions between levels of care. Establishment and implementation of policies to ensure residential and inpatient facilities link beneficiaries with community-based services and supports following stays in these facilities within 24 months of SUD program demonstration approval.

21. SUD Monitoring Protocol. The state must submit a SUD Monitoring Protocol within one hundred fifty (150) calendar days after approval of the SUD program under this demonstration. The SUD Monitoring Protocol must be developed in cooperation with CMS and is subject to CMS approval. Once approved, the SUD Monitoring Protocol will be incorporated into the STCs, as Attachment C. At a minimum, the SUD Monitoring Protocol will include reporting of the average length of stay for residential treatment and reporting relevant to each of the program implementation areas listed in STC 20. The protocol will also describe the data collection, reporting and analytic methodologies for performance measures identified by the state and CMS for inclusion. The SUD Monitoring Protocol will specify the methods of data collection and timeframes for reporting on the state's progress on required measures as part of the general reporting requirements described in STC 38 of the demonstration. In addition, for each performance measure, the SUD Monitoring Protocol will identify a baseline, a target to be achieved by the end of the demonstration and an annual goal for closing the gap between baseline and target expressed as percentage points. Where possible, baselines will be informed by state data, and targets will be benchmarked against performance in best practice settings. CMS will closely monitor demonstration spending on services in IMDs to ensure adherence to budget neutrality requirements. Progress on the performance measures identified in the SUD Monitoring Protocol will be reported via the quarterly and annual monitoring reports.

22. Mid-Point Assessment. The state must conduct an independent mid-point assessment of the demonstration. The assessor must collaborate with key stakeholders, including representatives of MCOs, SUD treatment providers, beneficiaries, and other key partners in the design, planning and conducting of the mid-point assessment. The assessment will include an examination of progress toward meeting each milestone and timeframe approved in the SUD Implementation Plan Protocol, and toward closing the gap between baseline and target each year in performance measures as approved in the SUD Monitoring Protocol. The assessment will also include a determination of factors that affected achievement on the milestones and performance measure gap closure percentage points to date, and a determination of selected factors likely to affect future performance in meeting milestones

and targets not yet met and about the risk of possibly missing those milestones and performance targets. For each milestone or measure target at medium to high risk of not being met, the assessor will provide, for consideration by the state, recommendations for adjustments in the state's implementation plan or to pertinent factors that the state can influence that will support improvement. The assessor will provide a report to the state that includes the methodologies used for examining progress and assessing risk, the limitations of the methodologies, its determinations and any recommendations. A copy of the report will be provided to CMS. CMS will be briefed on the report. For milestones and measure targets at medium to high risk of not being achieved, the state will submit to CMS modifications to the SUD Implementation Plan Protocol and SUD Monitoring Protocols for ameliorating these risks subject to CMS approval.

23. **SUD Evaluation.** The SUD Evaluation will be subject to the same requirements as the overall demonstration evaluation, as listed in sections VIII General Reporting Requirements and XII Evaluation of the Demonstration of the STCs.

24. **SUD Evaluation Design.** The state must submit, for CMS review and approval, a revision to the Evaluation Design to include the SUD program, no later than one-hundred-and-eighty (180) calendar days after the effective date of these amended STCs. Failure to submit an acceptable and timely Evaluation Design along with any required monitoring, expenditure, or other evaluation reporting will subject the state to a $5 million deferral. The state must use an independent evaluator to design the evaluation.

    a. Evaluation Design Approval and Updates. The state must submit a revised draft Evaluation Design within sixty (60) calendar days after receipt of CMS' comments. Upon CMS approval of the draft Evaluation Design, the document will be included as an attachment to these STCs. Per 42 CFR 431.424(c), the state will publish the approved Evaluation Design within thirty (30) calendar days of CMS approval. The state must implement the Evaluation Design and submit a description of its evaluation implementation progress in each of the Quarterly Reports and Annual Reports, including any required Rapid Cycle Assessments specified in these STCs. Once CMS approves the Evaluation Design, if the state wishes to make changes, the state must submit a revised Evaluation Design to CMS for approval.

    b. Evaluation Questions and Hypotheses Specific to SUD Program. The state must follow the general evaluation questions and hypotheses requirements as specified in guidance provided in Attachment D (Developing the Evaluation Design) of the STCs. In addition, hypotheses for the SUD program should include an assessment of the objectives of the SUD component of this section 1115 demonstration, to include, but is not limited to: initiation and compliance with treatment, utilization of health services (emergency department and inpatient hospital settings), and a reduction in key outcomes such as deaths due to overdose. The hypothesis testing should include, where possible, assessment of both process and outcome measures. Proposed measures should be selected from nationally-recognized sources and national measures sets, where possible. Measures sets could include CMS's Core Set of Health Care Quality Measures for Children in Medicaid and CHIP, Consumer Assessment of Health Care Providers and Systems (CAHPS), the Initial Core Set of

Health Care Quality Measures for Medicaid-Eligible Adults and/or measures endorsed by National Quality Forum (NQF).

25. **SUD Health Information Technology (Health IT).** The state will provide CMS with an assurance that it has a sufficient health IT infrastructure/"ecosystem" at every appropriate level (i.e. state, delivery system, health plan/MCO and individual provider) to achieve the goals of the demonstration—or it will submit to CMS a plan to develop the infrastructure/capabilities. This "SUD Health IT Plan," or assurance, will be submitted as a component of the State Medicaid Health IT Plan (SMHP), and included as a section of the state's "Implementation Plan" to be approved by CMS. The SUD Health IT Plan will detail the necessary health IT capabilities in place to support beneficiary health outcomes to address the SUD goals of the demonstration. The plan will also be used to identify areas of SUD health IT ecosystem improvement.

    a. The SUD Health IT section of the Implementation plan will include implementation milestones and dates for achieving them (see Attachment B).

    b. The SUD Health IT Plan must be aligned with the state's broader State Medicaid Health IT Plan (SMHP) and, if applicable, the state's Behavioral Health (BH) "Health IT" Plan.

    c. The SUD Health IT Plan will describe the state's goals, each DY, to enhance the state's prescription drug monitoring program's (PDMP).[1]

    d. The SUD Health IT Plan will address how the state's PDMP will enhance ease of use for prescribers and other state and federal stakeholders.[2] This will also include plans to include PDMP interoperability with a statewide, regional or local Health Information Exchange. Additionally, the SUD Health IT Plan will describe ways in which the state will support clinicians in consulting the PDMP prior to prescribing a controlled substance—and reviewing the patients' history of controlled substance prescriptions—prior to the issuance of a Controlled Substance Schedule II (CSII) opioid prescription.

    e. The SUD Health IT Plan will, as applicable, describe the state's capabilities to leverage a master patient index (or master data management service, etc.) in support of SUD care delivery. Additionally, the SUD Health IT Plan must describe current and future capabilities regarding PDMP queries—and the state's ability to properly match patients receiving opioid prescriptions with patients in the PDMP. The state will also indicate current efforts or plans to develop and/or utilize current patient index capability that supports the programmatic objectives of the demonstration.

[1] Prescription drug monitoring programs (PDMP) are electronic databases that track controlled substance prescriptions in states. PDMPs can provide health authorities timely information about prescribing and patient behaviors that contribute to the "opioid" epidemic and facilitate a nimble and targeted response.
[2] *Ibid*.

f. The SUD Health IT Plan will describe how the activities described in (a) through (e) above will support broader state and federal efforts to diminish the likelihood of long-term opioid use directly correlated to clinician prescribing patterns.[3]

g. In developing the Health IT Plan, states should use the following resources.

   i. States may use resources at Health IT.Gov (https://www.healthit.gov/playbook/opioid-epidemic-and-health-it/) in "Section 4: Opioid Epidemic and Health IT."

   ii. States may also use the CMS 1115 Health IT resources available on "Medicaid Program Alignment with State Systems to Advance HIT, HIE and Interoperability" at https://www.medicaid.gov/medicaid/data-and-systems/hie/index.html. States should review the "1115 Health IT Toolkit" for health IT considerations in conducting an assessment and developing their Health IT Plans.

   iii. States may request from CMS technical assistance to conduct an assessment and develop plans to ensure they have the specific health IT infrastructure with regards to PDMP plans and, more generally, to meet the goals of the demonstration.

h. The state will include in its Monitoring Protocol (see STC 21) an approach to monitoring its SUD Health IT Plan which will include performance metrics provided by CMS or State defined metrics to be approved in advance by CMS.

i. The state will monitor progress, each DY, on the implementation of its SUD Health IT Plan in relationship to its milestones and timelines—and report on its progress to CMS in in an addendum to its Annual Reports (see STC 38).

j. As applicable, the state should advance the standards identified in the 'Interoperability Standards Advisory—Best Available Standards and Implementation Specifications' (ISA) in developing and implementing the state's SUD Health IT policies and in all related applicable State procurements (e.g., including managed care contracts) that are associated with this demonstration.

k. Where there are opportunities at the state- and provider-level (up to and including usage in MCO or ACO participation agreements) to leverage federal funds associated with a standard referenced in 45 CFR 170 Subpart B, the state should use the federally-recognized standards, barring another compelling state interest.

l. Where there are opportunities at the state- and provider-level to leverage federal funds associated with a standard not already referenced in 45 CFR 170 but included in the ISA, the state should use the federally-recognized ISA standards, barring no other compelling state interest.

[3] Shah, Anuj, Corey Hayes and Bradley Martin. *Characteristics of Initial Prescription Episodes and Likelihood of Long-Term Opioid Use — United States, 2006–2015*. MMWR Morb Mortal Wkly Rep 2017;66.

26. Deferral of Federal Financial Participation (FFP) from IMD claiming for Insufficient Progress Toward Milestones. Up to $5,000,000 in FFP for services in IMDs may be deferred if the state is not making adequate progress on meeting the milestones and goals as evidenced by reporting on the milestones in the Implementation Protocol and the required performance measures in the Monitoring Protocol agreed upon by the state and CMS. Once CMS determines the state has not made adequate progress, up to $5,000,000 will be deferred in the next calendar quarter and each calendar quarter thereafter until CMS has determined sufficient progress has been made.

VI. COST SHARING (PREMIUMS, COPAYS, AND HEALTHY BEHAVIOR INCENTIVE)

27. Cost sharing. For all enrollees in this demonstration, cost sharing must be in compliance with Medicaid requirements that are set forth in statute, regulation and policies and be reflected in the state plan, except for premiums for Demonstration Population 1 (TMA Adults), and except for copayments for non-emergency use of the ED for Demonstration Population 2.

a. Premiums for Demonstration Population 1 (TMA Adults). TMA Adults with income of 133 percent of the FPL or greater are subject to monthly premiums based on the sliding scale as outlined in Attachment A from the date of enrollment. TMA Adults with effective income over 100 percent but less than 133 percent of the FPL are subject to monthly premiums based on a sliding scale starting six calendar months after the date of enrollment. There will be a 30-day grace period for non-payment of the monthly premium before being disenrolled. Eligibility and enrollment for TMA will be terminated for a maximum period of three months for demonstration participants who fail to make a required premium payment before the end of the grace period. However, a participant may re-enroll at any point during this three -month period by paying owed premiums. After the three-month period of non-eligibility, TMA Adults must be reenrolled in TMA on request, even if they have an outstanding unpaid premiums, provided their respective 12-month TMA period has not yet expired. The three-month period of non-eligibility does not toll the 12-month TMA period. If section 1925 of the Act sunsets or is otherwise inapplicable and TMA is then available only for a four month extension, Demonstration Population 1 individuals may not re-enroll in TMA. No premium may be charged during the three-month period of non-eligibility, and nonpayment of premiums that remain unpaid from a prior TMA enrollment period may not be used as a basis for terminating a beneficiary's enrollment during a subsequent period of TMA enrollment after the three-month period of non-eligibility.

i. Premiums for TMA Adults whose income changes after time of application (i.e., decreases or increases, including an increase in which the individual's income increases to 200 percent of the FPL or more), but before his/her annual redetermination, will be recalculated after the individual has reported the change. Once the state has calculated an individual's new monthly premium amount based on the sliding scale outlined in Attachment A, the state will provide the individual with at least a 10-day notice prior to effectuating the new monthly premium amount. If income increases to 133 percent FPL or more for TMA demonstration

enrollees who had income under 133 percent FPL when their TMA began, premiums will be due immediately after the 10-day notice.

ii. Consistent with 42 CFR 447.56, American Indians and Alaska Natives (AI/AN) who are eligible to receive or who have received an item or services furnished by an Indian health care provider or through referral under contract health services are exempt from the premium amounts outlined above.

iii. TMA adults may be disenrolled for failure to pay premiums after a 30-day grace period. Once they are disenrolled, they will be restricted from re-enrollment during a three month period of non-eligibility. They may enroll in Medicaid under another eligibility group if they become eligible under such other eligibility group during the three-month non-eligibility period. At any point during this three-month period, they may pay the owed premiums to re-enroll in TMA for the remainder of the 12-month TMA extension period and be re-enrolled. After the three-month period, they may re-enroll for TMA for the remainder of the 12-month TMA extension period, if requested, even if they have an outstanding unpaid premiums from the prior TMA enrollment period. In this case, nonpayment of premiums that remain unpaid from the prior TMA enrollment period may not be used as a basis for terminating the beneficiary's enrollment during the subsequent period of TMA enrollment.

STC 27(a) will sunset on December 31, 2018 and demonstration premiums will no longer be charged to the TMA adults after this date.

b. Premiums for Demonstration Population 2. For individuals in demonstration population 2, a monthly premium payment is required for those with monthly household income above 50 percent of the FPL. Monthly premium amounts are divided into the following two income tiers:

Table 3: Income Tiers for Monthly Premiums for Demonstration Population 2	
Monthly Household Income	**Monthly Premium Amount**
0 to 50 percent of the FPL	No premium
Above 50 percent of the FPL	$8 per household

i. Beneficiaries with household income up to 50 percent of the FPL are exempt from paying monthly premiums. AI/AN who are eligible to receive or who have received an item or services furnished by an Indian health care provider or through referral under contract health services are also exempt from the monthly premiums outlined above, consistent with section 1916(j) of the Act and with 42 CFR 447.56.

ii. Beneficiaries in Demonstration Population 2 may be disenrolled for failure to pay premiums only at annual redetermination. The state will notify beneficiaries who have unpaid premium amounts for the coverage year and provide a reasonable opportunity for the beneficiary to pay before disenrolling the beneficiary for the next coverage year. If a beneficiary is disenrolled at annual redetermination for

failure to pay premiums who would have continued to have a premium requirement during the next coverage year if not disenrolled, the beneficiary will be subject to a period of non-eligibility for up to six months. Such a beneficiary may reenroll at any time prior to the end of the six-month period if he or she pays all owed premiums, or if his or her situation changes such that he or she would no longer be subject to a premium requirement. After the six-month period, the beneficiary may be re-enrolled in BadgerCare upon request, if he or she meets all program rules, even if he or she continues to have unpaid premiums from the prior period of enrollment.

c. The state will monitor and include in the quarterly report information related to disenrollments from the demonstration, including due to nonpayment of premiums.

28. Healthy Behavior Incentives. Beneficiaries enrolled in Demonstration Population 2 who are subject to a premium requirement will have their household premium requirement reduced by up to 50 percent if they demonstrate that they do not engage in behaviors that increase health risks ("health risk behaviors"). For beneficiaries who do not demonstrate that they do not engage in health risk behaviors, but attest to actively managing their behavior(s) and/or that they have a health condition that causes them to engage in one or more health risk behaviors, the premium will also be reduced by up to half. For beneficiaries who do not demonstrate that they do not engage in health risk behaviors and do not attest that they are actively managing their behavior(s) and/or that they have a health condition that causes them to engage in one or more health risk behaviors, the standard premium will apply. Beneficiaries will have the opportunity to update and self-attest to any changed health risk behavior or conditions that affect health risk behaviors at a minimum on an annual basis, when eligibility is re-determined. Health risk behaviors include, but are not limited to, excessive alcohol consumption, failure to engage in dietary, exercise, and other lifestyle (or "healthy") behaviors in attempt to attain or maintain a healthy body weight, illicit drug use, failure to use a seatbelt, and tobacco use. To identify beneficiaries who are engaging in health risk behaviors, individuals will be asked to complete a Health Risk Assessment (HRA) when applying for coverage under the demonstration or, for current beneficiaries, no sooner than 12 months after waiver approval. Beneficiaries will also use the HRA to self-attest to their active management of a health risk behavior and/or to having an underlying health condition that causes them to engage in one or more health risk behaviors, if either of these is applicable.

Because health risk is assessed at an individual level, a married couple may include one beneficiary who qualifies for a premium reduction and one beneficiary who does not. If this happens, the household premium would be reduced by 25 percent. If both beneficiaries qualify for a premium reduction, the household's premium would be reduced by 50 percent.

Beneficiaries enrolled in Demonstration Population 2 must fully complete a HRA to be determined eligible for coverage at application and renewal. If an individual fails to answer all questions on the HRA, eligibility for the demonstration will be denied, but there is no period of non-eligibility and that individual can re-apply at any time.

29. Copayments for Use of the Emergency Department. Individuals in Demonstration Population 2 are required to pay a copayment for each non-emergent use of the emergency

room (ER). This copayment shall be charged consistent with 1916A(e)(1) of the Act and 42 CFR 447.54.

a. Under the provisions of section 1916A(e) of the Act, the state has the authority to impose a copayment for services received at a hospital emergency room if the services are not emergency services.

b. As provided under 42 CFR 447.54, the amount of this co-pay will be $8 for each non-emergent use of the emergency department.

c. The individual must receive an appropriate medical screening examination under section 1867—the Emergency Medical Treatment and Labor Act, or EMTALA provision of the Act.

d. Providers cannot refuse treatment for nonpayment of the co-payment.

e. AI/AN who are currently receiving or who have ever received an item or services furnished by an Indian health care provider or through referral under contract health services are exempt from the copayment requirements outlined above, consistent with section 1916(j) of the Act and 42 CFR 447.56.

VII. DELIVERY SYSTEM

30. General. Demonstration Populations 1 and 2 will be enrolled in the managed care organizations (MCO) that are currently contracted to provide health care services to the existing Medicaid and BadgerCare programs in most of the state to serve persons eligible under this demonstration. Demonstration enrollees will be required to join a MCO as a condition of eligibility, as long as there is at least one MCO available in their county of residence, and the county has been granted a rural exception under Medicaid State plan authority. The state may mandate enrollment into the single MCO in the counties that have been granted the rural exception by CMS. If the county has not been granted a rural exception, the state must offer the option of either MCO enrollment or Medicaid fee-for-service. All demonstration eligible beneficiaries must be provided a Medicaid card, regardless of MCO enrollment. MCOs may elect to provide a MCO specific card to MCO enrollees as well. The state must comply with the managed care regulations published at 42 CFR §438. Capitation rates shall be developed and certified as actuarially sound, in accordance with 42 CFR §438.6. No FFP is available for activities covered under contracts and/or modifications to existing contracts that are subject to 42 CFR §438 requirements prior to CMS approval of this demonstration authority as well as such contracts and/or contract amendments. The state shall submit any supporting documentation deemed necessary by CMS. The state must provide CMS with a minimum of sixty (60) days to review and approve changes. CMS reserves the right, as a corrective action, to withhold FFP (either partial or full) for the demonstration, until the contract compliance requirement is met.

VIII. GENERAL REPORTING REQUIREMENTS

31. Deferral for Failure to Submit Timely Demonstration Deliverables. CMS may issue deferrals in the amount of $5,000,000 per deliverable (federal share) when items required by

these STCs (e.g., required data elements, analyses, reports, design documents, presentations, and other items specified in these STCs (hereafter singularly or collectively referred to as "deliverable(s)") are not submitted timely to CMS or found to not be consistent with the requirements approved by CMS. Specifically:

a. Thirty (30) days after the deliverable was due, CMS will issue a written notification to the state providing advance notification of a pending deferral for late or non-compliant submissions of required deliverables.

b. For each deliverable, the state may submit a written request for an extension to submit the required deliverable. Extension requests that extend beyond the current fiscal quarter must include a Corrective Action Plan (CAP).

    i. CMS may decline the extension request.

    ii. Should CMS agree in writing to the state's request, a corresponding extension of the deferral process described below can be provided.

    iii. If the state's request for an extension includes a CAP, CMS may agree to or further negotiate the CAP as an interim step before applying the deferral.

c. The deferral would be issued against the next quarterly expenditure report following the written deferral notification.

d. When the state submits the overdue deliverable(s) that are accepted by CMS, the deferral(s) will be released.

e. As the purpose of a section 1115 demonstration is to test new methods of operation or services, a state's failure to submit all required deliverables may preclude a state from renewing a demonstration or obtaining a new demonstration.

f. CMS will consider with the state an alternative set of operational steps for implementing the intended deferral to align the process with the state's existing deferral process, for example what quarter the deferral applies to, and how the deferral is released.

32. Submission of Post-approval Deliverables. The state must submit all deliverables as stipulated by CMS and within the timeframes outlined within these STCs.

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

a. Revise the reporting templates and submission processes to accommodate timely compliance with the requirements of the new systems;

b. Ensure all 1115, T-MSIS, and other data elements that have been agreed to for reporting and analytics are provided by the state; and

c. Submit deliverables to the appropriate system as directed by CMS.

34. General Financial Requirements. The state must comply with all general financial requirements under title XIX, including reporting requirements related to monitoring budget neutrality, set forth in Section X of these STCs.

35. Reporting Requirements Related to Budget Neutrality. The state must comply with all reporting requirements for monitoring budget neutrality set forth in Section XI of these STCs.

36. Monitoring Protocol. The state must submit to CMS a Monitoring Protocol no later than one hundred fifty (150) calendar days after approval of the demonstration. Once approved, the Monitoring Protocol will be incorporated into the STCs, as Attachment G.

At a minimum, the Monitoring Protocol will affirm the state's commitment to conduct quarterly and annual monitoring in accordance with CMS' template. Any proposed deviations from CMS' template should be documented in the Monitoring Protocol. The Monitoring Protocol will describe the quantitative and qualitative elements on which the state will report through quarterly and annual monitoring reports. For quantitative metrics (e.g., performance metrics as described in STC 38(b)), CMS will provide the state with a set of required metrics, and technical specifications for data collection and analysis. The Monitoring Protocol will specify the methods of data collection and timeframes for reporting on the state's progress as part of the quarterly and annual monitoring reports. For the qualitative elements (e.g, operational updates as described in STC 38(a)), CMS will provide the state with guidance on narrative and descriptive information which will supplement the quantitative metrics on key aspects of the demonstration policies. The quantitative and qualitative elements will comprise the state's quarterly and annual monitoring reports.

37. Tribal Consultation Plan. The state must consult with federally recognized tribal governments and with Indian health care providers, and through consultation, identify any tribal concerns. The plan and timeline are due to CMS within 60 calendar days after approval of this demonstration and will be incorporated into the STCs, as Attachment I. CMS will work with the state if we determine changes are necessary to the state's submission, or if issues are identified as part of the review.

38. Monitoring Reports. The state must submit three (3) Quarterly Reports and one (1) Annual Report each DY. The information for the fourth quarterly report should be reported as distinct information within the Annual Report. The Quarterly Reports are due no later than sixty (60) calendar days following the end of each demonstration quarter. The Annual Report is due no later than ninety (90) calendar days following the end of the DY. The reports will include all required elements as per 42 CFR 431.428, and should not direct readers to links outside the report. Additional links not referenced in the document may be listed in a Reference/Bibliography section. The Monitoring Reports must follow the framework to be provided by CMS, which will be organized by milestones. The framework is subject to change as monitoring systems are developed/evolve, and be provided in a structured manner that supports federal tracking and analysis.

a. Operational Updates - The operational updates will focus on progress towards meeting the milestones identified in CMS' framework. Additionally, per 42 CFR 431.428, the Monitoring Reports must document any policy or administrative difficulties in operating the demonstration. The reports shall provide sufficient information to document key challenges, underlying causes of challenges, how challenges are being addressed, as well as key achievements and to what conditions and efforts successes can be attributed. The discussion should also include any issues or complaints identified by beneficiaries; lawsuits or legal actions; unusual or unanticipated trends; legislative updates; and descriptions of any public forums held. The Monitoring Report should also include a summary of all public comments received through post-award public forums regarding the progress of the demonstration.

b. Performance Metrics – The performance metrics will provide data to demonstrate how the state is progressing towards meeting the milestones identified in CMS's framework. The performance metrics will reflect all components of the state's demonstration, and may include, but are not limited to, measures associated with eligibility and coverage. Per 42 CFR 431.428, the Monitoring Reports must document the impact of the demonstration in providing insurance coverage to beneficiaries and the uninsured population, as well as outcomes of care, quality and cost of care, and access to care. This may also include the results of beneficiary satisfaction surveys, if conducted, and grievances and appeals. The required monitoring and performance metrics must be included in the Monitoring Reports, and will follow the framework provided by CMS to support federal tracking and analysis.

c. Budget Neutrality and Financial Reporting Requirements – Per 42 CFR 431.428, the Monitoring Reports must document the financial performance of the demonstration. The state must provide an updated budget neutrality workbook with every Monitoring Report that meets all the reporting requirements for monitoring budget neutrality set forth in the General Financial Requirements section of these STCs, including the submission of corrected budget neutrality data upon request. In addition, the state must report quarterly and annual expenditures associated with the populations affected by this demonstration on the Form CMS-64. Administrative costs should be reported separately.

d. Evaluation Activities and Interim Findings. Per 42 CFR 431.428, the Monitoring Reports must document any results of the demonstration to date per the evaluation

hypotheses. Additionally, the state shall include a summary of the progress of evaluation activities, including key milestones accomplished, as well as challenges encountered and how they were addressed.

39. **Corrective Action.** If monitoring indicates that demonstration features are not likely to assist in promoting the objectives of Medicaid, CMS reserves the right to require the state to submit a corrective action plan to CMS for approval. This may be an interim step to withdrawing waivers or expenditure authorities, as outlined in STC 11.

40. **Close-Out Report.** Within 120 days after the expiration of the demonstration, the state must submit a draft Close-Out Report to CMS for comments.

    a. The draft report must comply with the most current guidance from CMS.

    b. The state will present to and participate in a discussion with CMS on the Close-Out report.

    c. The state must take into consideration CMS' comments for incorporation into the final Close-Out Report.

    d. The final Close-Out Report is due to CMS no later than thirty (30) days after receipt of CMS' comments.

    e. A delay in submitting the draft or final version of the Close-Out Report may subject the state to penalties described in STC 31.

41. **Monitoring Calls.** CMS will convene periodic conference calls with the state.

    a. The purpose of these calls is to discuss ongoing demonstration operation, to include (but not limited to), any significant actual or anticipated developments affecting the demonstration. Examples include implementation activities, enrollment and access, budget neutrality, and progress on evaluation activities.

    b. CMS will provide updates on any pending actions, as well as federal policies and issues that may affect any aspect of the demonstration.

    c. The state and CMS will jointly develop the agenda for the calls.

42. **Post Award Forum.** Pursuant to 42 CFR 431.420(c), within six (6) months of the demonstration's implementation, and annually thereafter, the state shall afford the public with an opportunity to provide meaningful comment on the progress of the demonstration. At least thirty (30) days prior to the date of the planned public forum, the state must publish the date, time and location of the forum in a prominent location on its website. The state must also post the most recent annual report on its website with the public forum announcement. Pursuant to 42 CFR 431.420(c), the state must include a summary of the comments in the Monitoring Report associated with the quarter in which the forum was held, as well as in its compiled Annual Report.

43. Transformed Medicaid Statistical Information Systems Requirements (T-MSIS). The state shall comply with all T-MSIS milestones and associated timelines indicated below. Failure to meet these milestones on the below timeline will result in a deferral, as described in STC 31:

a. By December 31, 2018 state will address and correct all post go-live corrective actions (except waiver population reporting).

b. By January 31, 2019, state will achieve and maintain currency in T-MSIS data reporting.

c. By June 30, 2019 state will implement corrective action for waiver reporting.

IX. GENERAL FINANCIAL REQUIREMENTS.

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

44. Quarterly Financial Reports. The state must provide quarterly title XIX expenditure reports using Form CMS-64, to separately report total title XIX expenditures for services provided through this demonstration under section 1115 authority. CMS shall provide title XIX FFP for allowable demonstration expenditures, only as long as they do not exceed the pre-defined limits on the costs incurred, as specified in Section XI of the STCs.

45. Reporting Expenditures under the Demonstration. The following describes the reporting of expenditures subject to the budget neutrality agreement:

a. Tracking Expenditures. In order to track expenditures under this demonstration, the state will report demonstration expenditures through the Medicaid and state Children's Health Insurance Program Budget and Expenditure System (MBES/CBES), following routine CMS-64 reporting instructions outlined in section 2500 and Section 2115 of the state Medicaid Manual. All demonstration expenditures subject to the budget neutrality limit, including baseline data and member months, must be reported each quarter on separate Forms CMS-64.9 WAIVER and/or 64.9P WAIVER, identified by the demonstration project number assigned by CMS (including the project number extension, which indicates the DY in which services were rendered or for which capitation payments were made). For monitoring purposes, cost settlements must be recorded on the appropriate prior period adjustment schedules (Forms CMS-64.9 Waiver) for the Summary Line 10B, in lieu of Lines 9 or 10C. For any other cost settlements (i.e., those not attributable to this demonstration), the adjustments should be reported on lines 9 or 10C, as instructed in the State Medicaid Manual. The term, “expenditures subject to the budget neutrality limit,” is defined below.

b. Cost Settlements. For monitoring purposes, cost settlements attributable to the demonstration must be recorded on the appropriate prior period adjustment schedules (Form CMS-64.9P Waiver) for the Summary Sheet Line 10B, in lieu of Lines 9 or 10C. For any cost settlement not attributable to this demonstration, the adjustments should be reported as otherwise instructed in the State Medicaid Manual.

c. Cost Sharing Contributions. Premiums and other applicable cost sharing contributions from enrollees that are collected by the state from enrollees under the demonstration must be reported to CMS each quarter on Form CMS-64 Summary Sheet line 9.D, columns A and B. In order to assure that these collections are properly credited to the demonstration, premium and cost-sharing collections (both total computable and federal share) should also be reported by DY on the Form CMS-64 Narrative. In the calculation of expenditures subject to the budget neutrality expenditure limit, premium collections applicable to demonstration populations will be offset against expenditures. These section 1115 premium collections will be included as a manual adjustment (decrease) to the demonstration's actual expenditures on a quarterly basis.

d. Pharmacy Rebates. Using specific medical status codes, the state has the capacity to use its MMIS system to stratify manufacturer's rebate revenue that should be assigned to net demonstration expenditures for BC Reform Adults. The state will generate a demonstration-specific rebate report to support the methodology used to assign rebates to the demonstration. The state will report the portion of rebate revenue assigned to BC Reform Adults on the appropriate Forms CMS-64.9 WAIVER. This revenue will be distributed as state and federal revenue consistent with the federal matching rates under which the claim was paid. Budget neutrality will reflect the net cost of prescriptions.

e. Federally Qualified Health Center Settlement Expenses. Using specific medical status codes, the state will assign FQHC settlement expenses to claims covered under the demonstration for BC Reform Adults and will report these costs on the appropriate Forms CMS-64.9 WAIVER. The state will be able to generate reports using MMIS data to show the assignment of these settlement payments to demonstration expenditures.

f. Mandated Increase in Physician Payment Rates in 2013 and 2014. Section 1202 of the Health Care and Education Reconciliation Act of 2010 (Pub. Law 110-152) requires state Medicaid programs to pay physicians for primary care services at rates that are no less than what Medicare pays, for services furnished in 2013 and 2014. The federal government provides a federal medical assistance percentage of 100 percent for the claimed amount by which the minimum payment exceeds the rates paid for those services as of July 1, 2009. The state will exclude from the budget neutrality test for this demonstration the portion of the mandated increase for which the federal government pays 100 percent. These amounts must be reported on the base forms CMS-64.9, 64.21, or 64.21U (or their "P" counterparts), and not on any waiver form.

g. Use of Waiver Forms for Medicaid. For each DY, separate Forms CMS-64.9 Waiver and/or 64.9P Waiver shall be submitted reporting expenditures for individuals enrolled in the demonstration (Section XI of these STCs). The state must complete separate waiver forms for the following Medicaid eligibility groups/waiver names:

    i. "BC Reform Adults"

    ii. "TMA Adults"

    iii. "FFCY"

iv. "SUD"

h. Demonstration Year Definition. The Demonstration Years (DYs) will be defined as follows:

January 1, 2014 through December 31, 2014	Demonstration Year 1 (DY1)
January 1, 2015 through December 31, 2015	Demonstration Year 2 (DY2)
January 1, 2016 through December 31, 2016	Demonstration Year 3 (DY3)
January 1, 2017 through December 31, 2017	Demonstration Year 4 (DY4)
January 1, 2018 through December 31, 2018	Demonstration Year 5 (DY5)
January 1, 2019 through December 31, 2019	Demonstration Year 6 (DY6)
January 1, 2020 through December 31, 2020	Demonstration Year 7 (DY7)
January 1, 2021 through December 31, 2021	Demonstration Year 8 (DY8)
January 1, 2022 through December 31, 2022	Demonstration Year 9 (DY9)
January 1, 2023 through December 31, 2022	Demonstration Year 10 (DY10)

46. Administrative Costs. The state must track administrative costs for state-approved workforce programs under Section V. Administrative costs, including state-approved workforce programs under Section V, will not be included in the budget neutrality limit, but the state must separately track and report additional administrative costs that are directly attributable to the demonstration, using Forms CMS-64.10 Waiver and/or 64.10P Waiver, with waiver name Local Administration Costs ("ADM").

47. Claiming Period. All claims for expenditures subject to the budget neutrality limit (including any cost settlements) must be made within two (2) years after the calendar quarter in which the state made the expenditures. Furthermore, all claims for services during the demonstration period (including any cost settlements) must be made within two (2) years after the conclusion or termination of the demonstration. During the latter two-year period, the state must continue to identify separately net expenditures related to dates of service during the operation of the section 1115 demonstration on the Form CMS-64 and Form CMS-21 in order to properly account for these expenditures in determining budget neutrality.

48. Reporting Member Months. The following describes the reporting of member months for demonstration populations:

a. For the purpose of calculating the budget neutrality expenditure cap and for other purposes, the state must provide to CMS, as part of the quarterly report required under STC 38, the actual number of eligible member months for BadgerCare Reform Demonstration adults and separately the actual number of eligible member months for former foster care youth (i.e. FFCY). The state must submit a statement accompanying the quarterly report, which certifies the accuracy of this information.

To permit full recognition of "in-process" eligibility, reported counts of member months may be subject to revisions after the end of each quarter. Member month counts may be revised retrospectively as needed.

b. The term "eligible member months" refers to the number of months in which persons are eligible to receive services. For example, a person who is eligible for three (3) months contributes three (3) eligible member months to the total. Two individuals who are eligible for two (2) months each contribute two (2) eligible member months to the total, for a total of four (4) eligible member months.

49. Standard Medicaid Funding Process. The standard Medicaid funding process must be used during the demonstration. The state must estimate matchable demonstration expenditures (total computable and federal share) subject to the budget neutrality expenditure cap and separately report these expenditures by quarter for each federal fiscal year on the Form CMS-37 for both the Medical Assistance Payments (MAP) and State and Local Administration Costs (ADM). CMS will make federal funds available based upon the state's estimate, as approved by CMS. Within thirty (30) days after the end of each quarter, the state must submit the Form CMS-64 quarterly Medicaid expenditure report, showing Medicaid expenditures made in the quarter just ended. The CMS will reconcile expenditures reported on the Form CMS-64 quarterly with federal funding previously made available to the state, and include the reconciling adjustment in the finalization of the grant award to the state.

50. Extent of FFP for the Demonstration. Subject to CMS approval of the source(s) of the non-Federal share of funding, CMS will provide FFP at the applicable federal matching rate for the demonstration as a whole as outlined below, subject to the limits described in Section X of these STCs:

a. Administrative costs, including those associated with the administration of the demonstration.

b. Net expenditures and prior period adjustments of the Medicaid program that are paid in accordance with the approved state plan.

c. Medical Assistance expenditures made under section 1115 demonstration authority, including those made in conjunction with the demonstration, net of enrollment fees, cost sharing, pharmacy rebates, and all other types of third party liability or CMS payment adjustments.

51. Sources of Non-Federal Share. The state must certify that the matching non-federal share of funds for the demonstration is state/local monies. The state further certifies that such funds shall not be used as the match for any other federal grant or contract, except as permitted by law. All sources of non-federal funding must be compliant with section 1903(w) of the Act and applicable regulations. In addition, all sources of the non-federal share of funding are subject to CMS approval.

a. CMS may review the sources of the non-federal share of funding for the demonstration at any time. The state agrees that all funding sources deemed unacceptable by CMS shall be

addressed within the time frames set by CMS.

b. Any amendments that impact the financial status of the program shall require the state to provide information to CMS regarding all sources of the non-federal share of funding, including up to date responses to the CMS standard funding questions

c. The state assures that all health care-related taxes comport with section 1903(w) of the Act and all other applicable federal statutory and regulatory provisions, as well as the approved Medicaid state plan.

52. State Certification of Funding Conditions. The state must certify that the following conditions for non-Federal share of demonstration expenditures are met:

a. Units of government, including governmentally operated health care providers, may certify that state or local tax dollars have been expended as the non-federal share of funds under the demonstration.

b. To the extent the state utilizes certified public expenditures (CPEs) as the funding mechanism for title XIX (or under section 1115 authority) payments, CMS must approve a cost reimbursement methodology. This methodology must include a detailed explanation of the process by which the state would identify those costs eligible under title XIX (or under section 1115 authority) for purposes of certifying public expenditures.

c. To the extent the state utilizes CPEs as the funding mechanism to claim federal match for payments under the demonstration, governmental entities to which general revenue funds are appropriated must certify to the state the amount of such tax revenue (state or local) used to satisfy demonstration expenditures. The entities that incurred the cost must also provide cost documentation to support the state's claim for federal match.

d. The state may use intergovernmental transfers to the extent that such funds are derived from state or local tax revenues and are transferred by units of government within the state. Any transfers from governmentally operated health care providers must be made in an amount not to exceed the non-federal share of title XIX payments.

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

X. MONITORING BUDGET NEUTRALITY FOR THE DEMONSTRATION

53. **Limit on Title XIX Funding.** The state shall be subject to a limit on the amount of federal title XIX funding that the state may receive on selected Medicaid expenditures during the period of approval of the demonstration. The limit is determined by using the per capita cost method and budget neutrality expenditure limits are set on a yearly basis with a cumulative budget neutrality expenditure limit for the length of the entire demonstration. The data supplied by the state to CMS to set the annual caps is subject to review and audit, and if found to be inaccurate, will result in a modified budget neutrality expenditure limit. CMS' assessment of the state's compliance with these annual limits will be done using the Schedule C report from the CMS-64.

54. **Risk.** The state will be at risk for the per capita cost (as determined by the method described below) for demonstration populations as defined in Section IV, but not at risk for the number of participants in the demonstration population. By providing FFP without regard to enrollment in the demonstration populations, CMS will not place the state at risk for changing economic conditions that impact enrollment levels. However, by placing the state at risk for the per capita costs of current eligibles, CMS assures that the demonstration expenditures do not exceed the levels that would have been realized had there been no demonstration.

55. **Calculation of the Budget Neutrality Limit.** For the purpose of calculating the overall budget neutrality limit for the demonstration, an annual budget limit will be calculated for each DY on a total computable basis. The federal share of this limit will represent the maximum amount of FFP that the state may receive during the demonstration period for the types of demonstration expenditures described below. The federal share will be calculated by multiplying the total computable budget neutrality limit by the Composite Federal Share, which is defined in STC 56 below.

    The demonstration expenditures subject to the budget neutrality limit related to Demonstration Population 2 as described in STC 17 are those reported under the following Waiver Name: BC Reform Adults. The demonstration expenditures subject to the budget neutrality limit related to Demonstration Population 3 as described in STC 17 are those reported under the following Waiver Name: FFCY. The demonstration expenditures subject to the budget neutrality limit related to SUD as those reported under the following Waiver Name: SUD.

    For each DY, separate annual budget limits of demonstration service expenditures will be calculated based on projected PMPM expenditures for BC Reform Adults, Former Foster Care Youth, and SUD. The PMPM amounts for BC Reform Adults, Former Foster Care Youth, and SUD are shown on the table below.

MEG	TREND RATE	2018 DY 5 – PMPM	2019 DY 6 - PMPM	2020 DY 7 PMPM	2021 DY 8 – PMPM	2022 DY 9 – PMPM	2023 DY 10 PMPM
BC Reform Adults	4.7%	$710.95	$744.36	$779.35	$815.98	$854.33	$894.48

Former Foster Care Youth	3.7%	$2,538.20	$2,632.11	$2,729.50	$2,830.49	$2,935.22	$3,043.82
SUD	4.6%	$5,561	$5,816.81	$6,084.38	$6,364.26	$6,657.02	$6,963.24

56. Hypothetical Eligibility Group. BC Reform Adults (as related to Demonstration Population 2 defined under STC 17), SUD, and Former Foster Care Youth (Demonstration Population 3) are considered to be a hypothetical populations for budget neutrality. BC Reform Adults consist of individuals who could have been added to the Medicaid program through the state plan, but instead are covered through demonstration authority.

Former Foster Care Youth from Another State are individuals that were or would have been eligible for state plan coverage as described in the January 22, 2013 CMS notice of proposed rulemaking that permitted the option to cover formerly out-of-state former foster care youth up to age 26 pursuant to section 1902(a)(10)(A)(i)(IX) of the Act. This coverage is now only permissible under the authority of this section 1115 demonstration as outlined in the November 21, 2016 CIB on transition coverage for Former Foster Care Youth.

As part of the SUD initiative, the state may receive FFP for the continuum of services specified in Table 2 to treat OUD and other SUDs that are provided to Medicaid beneficiaries in an IMD. These are state plan services that would be eligible for reimbursement if not for the IMD exclusion. Therefore, they are being treated as hypothetical. The state may only claim FFP via demonstration authority for the services listed in Table 2 that will be provided in an IMD. However, the state will not be allowed to obtain budget neutrality "savings" from these services. Therefore, a separate expenditure cap is established for SUD services.

The budget neutrality expenditure limits for these populations reflect the expected costs for these populations and there is no requirement that the state produce savings from elsewhere in its Medicaid program to offset hypothetical population costs. States may not accrue budget neutrality "savings" from hypothetical populations.

57. Composite Federal Share Ratio. The Composite Federal Share is the ratio calculated by dividing the sum total of federal financial participation (FFP) received by the state on actual expenditures for BC Reform Adults during the approval period, as reported through the MBES/CBES and summarized on Schedule C (with consideration of additional allowable demonstration offsets such as, but not limited to, premium collections) by total computable demonstration expenditures for the same period as reported on the same forms. Should the demonstration be terminated prior to the end of the extension approval period, the Composite Federal Share will be determined based on actual expenditures for the period in which the demonstration was active. For the purpose of interim monitoring of budget neutrality, a reasonable estimate of Composite Federal Share may be developed and used through the same process or through an alternative mutually agreed upon method.

58. Future Adjustments to the Budget Neutrality Expenditure Limit. CMS reserves the right to adjust the budget neutrality expenditure limit to be consistent with enforcement of impermissible provider payments, health care related taxes, new federal statutes, or policy

interpretations implemented through letters, memoranda, or regulations with respect to the provision of services covered under the demonstration.

59. Enforcement of Budget Neutrality. CMS shall enforce budget neutrality over the life of the demonstration rather than on an annual basis. However, if the state's expenditures exceed the calculated cumulative budget neutrality expenditure cap on a PMPM basis by the percentage identified below for any of the demonstration years, the state must submit a corrective action plan to CMS for approval. The state will subsequently implement the approved corrective action plan.

Year	Cumulative target definition on a PMPM basis	Percentage
DY 1	Cumulative budget neutrality limit plus:	1 percent
DY 2	Cumulative budget neutrality limit plus:	0.75 percent
DY 3	Cumulative budget neutrality limit plus:	0.5 percent
DY 4	Cumulative budget neutrality limit plus:	0.25 percent
DY 5	Cumulative budget neutrality limit plus:	0 percent
DY 6	Cumulative budget neutrality limit plus:	0 percent
DY 7	Cumulative budget neutrality limit plus:	0 percent
DY 8	Cumulative budget neutrality limit plus:	0 percent
DY 9	Cumulative budget neutrality limit plus:	0 percent
DY 10	Cumulative budget neutrality limit plus:	0 percent

60. Exceeding Budget Neutrality. If at the end of the demonstration period the cumulative budget neutrality limit has been exceeded, the excess federal funds will be returned to CMS. If the demonstration is terminated prior to the end of the budget neutrality agreement, an evaluation of this provision will be based on the time elapsed through the termination date.

XI. EVALUATION OF THE DEMONSTRATION

61. Cooperation with Federal Evaluators. As required under 42 CFR 431.420(f), the state shall cooperate fully and timely with CMS and its contractors in any federal evaluation of the demonstration or any component of the demonstration. This includes, but is not limited to, commenting on design and other federal evaluation documents and providing data and analytic files to CMS, including entering into a data use agreement that explains how the data

and data files will be exchanged, and providing a technical point of contact to support specification of the data and files to be disclosed, as well as relevant data dictionaries and record layouts. The state shall include in its contracts with entities who collect, produce or maintain data and files for the demonstration, that they shall make such data available for the federal evaluation as is required under 42 CFR 431.420(f) to support federal evaluation. The state may claim administrative match for these activities. Failure to comply with this STC may result in a deferral being issued as outlined in STC 31.

62. **Independent Evaluator.** Upon approval of the demonstration, the state must begin to arrange with an independent party to conduct an evaluation of the demonstration to ensure that the necessary data is collected at the level of detail needed to research the approved hypotheses. The independent party must sign an agreement to conduct the demonstration evaluation in an independent manner in accord with the CMS-approved, draft Evaluation Design. When conducting analyses and developing the evaluation reports, every effort should be made to follow the approved methodology. However, the state may request, and CMS may agree to, changes in the methodology in appropriate circumstances.

63. **Draft Evaluation Design.** The state must submit, for CMS comment and approval, a draft Evaluation Design, no later than one hundred eighty (180) calendar days after approval of the demonstration. Any modifications to an existing approved Evaluation Design will not affect previously established requirements and timelines for report submission for the demonstration, if applicable.

    The draft Evaluation Design must be developed in accordance with the following CMS guidance (including but not limited to):

    a. Attachment D (Developing the Evaluation Design) of these STCs, technical assistance for developing SUD Evaluation Designs (as applicable, and as provided by CMS), and all applicable technical assistance on how to establish comparison groups to develop a draft Evaluation Design.

64. **Evaluation Design Approval and Updates.** The state must submit a revised draft Evaluation Design within sixty (60) calendar days after receipt of CMS' comments. Upon CMS approval, the approved Evaluation Design will be included as an attachment to these STCs. Per 42 CFR 431.424(c), the state will publish the approved Evaluation Design within thirty (30) calendar days of CMS approval. The state must implement the Evaluation Design and submit a description of its evaluation progress in each of the Monitoring Reports. Once CMS approves the Evaluation Design, if the state wishes to make changes, the state must submit a revised Evaluation Design to CMS for approval if the changes are substantial in scope; otherwise, in consultation with CMS, the state may include updates to the evaluation design in monitoring reports.

65. **Evaluation Questions and Hypotheses.** Consistent with Attachments D and E (Developing the Evaluation Design and Preparing the Interim and Summative Evaluation Reports) of these STCs, the evaluation documents must include a discussion of the evaluation questions and hypotheses that the state intends to test. Each demonstration component should have at least one evaluation question and hypothesis. The hypothesis testing should include, where possible, assessment of both process and outcome measures. Proposed measures should be selected from nationally-recognized sources and national measures sets, where possible. Measures sets could

include CMS's Core Set of Health Care Quality Measures for Children in Medicaid and CHIP, CMS' measure sets for eligibility and coverage, Consumer Assessment of Health Care Providers and Systems (CAHPS), the Initial Core Set of Health Care Quality Measures for Medicaid-Eligible Adults and/or measures endorsed by National Quality Forum (NQF).

66. **Evaluation Budget.** A budget for the evaluation shall be provided with the draft Evaluation Design. It will include the total estimated cost, as well as a breakdown of estimated staff, administrative, and other costs for all aspects of the evaluation such as any survey and measurement development, quantitative and qualitative data collection and cleaning, analyses, and report generation. A justification of the costs may be required by CMS if the estimates provided do not appear to sufficiently cover the costs of the design or if CMS finds that the design is not sufficiently developed, or if the estimates appear to be excessive.

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

    a. The Interim Evaluation Report will discuss evaluation progress and present findings to date as per the approved Evaluation Design.

    b. For demonstration authority that expires prior to the overall demonstration's expiration date, the Interim Evaluation Report must include an evaluation of the authority as approved by CMS.

    c. If the state is seeking to renew or extend the demonstration, the draft Interim Evaluation Report is due when the application for renewal is submitted. If the state made changes to the demonstration in its application for renewal, the research questions and hypotheses, and how the design was adapted should be included. If the state is not requesting a renewal for a demonstration, an Interim Evaluation Report is due one (1) year prior to the end of the demonstration. For demonstration phase outs prior to the expiration of the approval period, the draft Interim Evaluation Report is due to CMS on the date that will be specified in the notice of termination or suspension.

    d. The state must submit a revised Interim Evaluation Report sixty (60) calendar days after receiving CMS comments on the draft Interim Evaluation Report. Once approved by CMS, the state must post the final Interim Evaluation Report to the state's website.

    e. The Interim Evaluation Report must comply with Attachment E (Preparing the Interim and Summative Evaluation Reports) of these STCs.

68. **Summative Evaluation Report.** The draft Summative Evaluation Report must be developed in accordance with Attachment E (Preparing the Interim and Summative Evaluation Reports) of these STCs. The state must submit a draft Summative Evaluation Report for the demonstration's current approval period within eighteen (18) months of the end of the approval period represented by these STCs. The Summative Evaluation Report must include the information in the approved Evaluation Design.

a. Unless otherwise agreed upon in writing by CMS, the state shall submit a revised Summative Evaluation Report within sixty (60) calendar days of receiving comments from CMS on the draft.

b. Upon approval from CMS, the final Summative Evaluation Report must be posted to the state's Medicaid website within thirty (30) calendar days of approval by CMS.

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

70. **State Presentations for CMS.** CMS reserves the right to request that the state present and participate in a discussion with CMS on the Evaluation Design, the Interim Evaluation Report, and/or the summative evaluation.

71. **Public Access.** The state shall post the final documents (e.g., Monitoring Reports, Close Out Report, Approved Evaluation Design, Interim Evaluation Report, and Summative Evaluation Report) on the state's Medicaid website within thirty (30) calendar days of approval by CMS.

72. **Additional Publications and Presentations.** For a period of twelve (12) months following CMS approval of the final reports, CMS will be notified prior to presentation of these reports or their findings, including in related publications (including, for example, journal articles), by the state, contractor, or any other third party directly connected to the demonstration over which the state has control. Prior to release of these reports, articles, or other publications, CMS will be provided a copy including any associated press materials. CMS will be given ten (10) business days to review and comment on publications before they are released. CMS may choose to decline to comment or review some or all of these notifications and reviews. This requirement does not apply to the release or presentation of these materials to state or local government officials.

ATTACHMENT A: SUMMARY OF PREMIUMS FOR TMA ADULTS ONLY

Individuals affected by, or eligible under, the demonstration will be responsible for premium payments in accordance with the table below. These premiums will sunset on December 31, 2018.

TMA Adults (Demonstration Population 1)

Monthly Premium Amount based on FPL Percentage	Monthly Premium Amount as a Percentage of Income
100.01 – 132.99%	2.0%
133 – 139.99%	3.0%
140 – 149.99%	3.5%
150 – 159.99%	4.0%
160 – 169.99%	4.5%
170 – 179.99%	4.9%
180 – 189.99%	5.4%
190 – 199.99%	5.8%
200 – 209.99%	6.3%
210 – 219.99%	6.7%
220 – 229.99%	7.0%
230 – 239.99%	7.4%
240 – 249.99%	7.7%
250 – 259.99%	8.05%
260 – 269.99%	8.3%
270 – 279.99%	8.6%
280 – 289.99%	8.9%
290 – 299.99%	9.2%
300% and above	9.5%

State of Wisconsin
BadgerCare Reform Demonstration Project

Substance Use Disorder Implementation Protocol

September 24, 2019

Table of Contents

1.0 Introduction

Wisconsin's Section 1115 BadgerCare Reform Demonstration Waiver was approved on October 31, 2018. The approved waiver includes expansion of coverage for the continuum of Substance Use Disorder (SUD) treatment. Although Wisconsin Medicaid currently covers a robust array of treatment for members with SUD, including outpatient counseling, day treatment, psychosocial rehabilitation, medication-assisted treatment (MAT), and inpatient treatment, some gaps remain in the availability of clinically-appropriate, evidence-based treatment.

The waiver authorizes federal funding for treatment provided to Medicaid members in Institutions for Mental Diseases (IMD), allowing Wisconsin Medicaid to establish a residential treatment benefit that provides coverage in all state-certified residential programs, regardless of size. As a result, Wisconsin Medicaid members will have access to high quality, evidence-based opioid use disorder (OUD) and other SUD treatment services.

This document serves as the BadgerCare Reform Demonstration Waiver Implementation Protocol. In accordance with Standard Terms and Conditions (STC) #27 in the waiver, the implementation protocol describes the strategic approach and project plan to meet required milestones for SUD treatment reform in Wisconsin.

Specifically, Wisconsin Medicaid's overall goals for SUD treatment reform include:

1. Increased rates of identification, initiation and engagement in treatment for OUD and other SUDs;
2. Increased adherence to and retention in treatment for OUD and other SUDs;
3. Reductions in overdose deaths, particularly those due to opioids;
4. Reduced utilization of emergency departments and inpatient hospital settings for OUD and other SUD treatment where the utilization is preventable or medically inappropriate through improved access to other continuum of care services;
5. Fewer readmissions to the same or higher level of care where readmissions is preventable or medically inappropriate for OUD and other SUD; and
6. Improved access to care for physical health conditions among beneficiaries with OUD or other SUDs.

Wisconsin Medicaid has identified the following milestones to meet during the project implementation:

1. Access to critical levels of care for OUD and other SUDs;
2. Widespread use of evidence-based, SUD-specific patient placement criteria;
3. Use of nationally recognized, evidence-based, SUD program standards to set residential treatment provider qualifications;
4. Sufficient provider capacity at each level of care, including MAT;
5. Implementation of comprehensive treatment and prevention strategies to address opioid abuse and OUD; and
6. Improved care coordination and transitions between levels of care.

2.0 Milestone Completion

Over the course of the demonstration, Wisconsin Medicaid will work with internal and external stakeholders to develop, implement, and monitor SUD treatment initiatives designed to achieve the following milestones:

2.1 Access to Critical Levels of Care for OUD and Other SUDs

Wisconsin Medicaid will establish new coverage policies and enhance existing benefits to provide members access to the full continuum of care for SUD treatment. Currently, Wisconsin Medicaid's largest coverage gap is for the residential level of care. Under this demonstration, Wisconsin will develop coverage policies for residential facilities, including IMD facilities that are not otherwise eligible for matched expenditures under Section 1903 of the Social Security Act.

Following implementation of the new residential benefit by February 2020, Wisconsin Medicaid will reassess coverage for each level of care to identify any additional gaps or barriers to treatment. Initiatives to remove treatment barriers will be prioritized so that Wisconsin Medicaid members can access SUD treatment at the appropriate level of care.

The following table provides an overview of each critical level of care with current Wisconsin Medicaid coverage along with proposed changes.

Level of Care	Current State	Future State	Summary of Actions Needed
Outpatient Services	This is an existing service under the State Plan.	Continue to monitor and evaluate services and expenditures.	No immediate action. Will review coverage policies following implementation of residential benefit and update to State regulations.
Intensive Outpatient Services	This is an existing service under the State Plan.	Continue to monitor and evaluate services and expenditures.	No immediate action. Will review coverage policies following implementation of residential benefit and update to State regulations.
Medication Assisted Treatment	This is an existing service under the State Plan.	Continue to monitor and evaluate services and expenditures.	No immediate action. Will review coverage policies following implementation of residential benefit and update to State regulations.

Residential Treatment Services	The component services of Residential Treatment (e.g. outpatient counseling) are existing services under the State Plan.	Wisconsin Medicaid will develop a new benefit under this demonstration, designed to establish a bundled coverage and reimbursement approach for Residential Treatment. Wisconsin will enroll providers certified as transitional residential programs (Wisc. Admin. Code DHS 75.14) and medically monitored treatment services (Wisc. Admin. Code DHS 75.11). Although the regulations for these programs are not explicitly tied to ASAM guidelines, they align with the ASAM Level of Care 3. Transitional residential programs are most closely aligned with sub-level 3.1 and medically monitored treatment programs are most closely aligned with sub-level 3.7. Wisconsin's new benefit will cover both types of treatment programs.	Wisconsin Medicaid will establish coverage and reimbursement policies aligned with American Society of Addiction Medicine (ASAM) criteria and state regulations, including but not limited to: eligible provider criteria, medical necessity criteria, claims submission and reimbursement guidelines, and utilization management. Benefit design and implementation will be completed by February 2020.

Inpatient Services	This is an existing service under the State Plan.	Coverage for inpatient services will expand to include any previously excluded IMD providers.	Wisconsin Medicaid will provide coverage and reimbursement policy guidance to any facilities previously excluded from providing treatment due to categorization as an IMD. Policy guidance will be distributed to providers by November 2020.
Medically Supervised Withdrawal Management	This is an existing service under the State Plan.	Coverage for medically supervised withdrawal management will expand to include any previously excluded IMD providers.	Wisconsin Medicaid will provide coverage and reimbursement policy guidance to any facilities previously excluded from providing treatment due to categorization as an IMD. Policy guidance will be distributed to providers by November 2020.

2.2 Use of Evidence-based, SUD-specific Patient Placement Criteria

Wisconsin Medicaid establishes standards for the use of patient placement criteria in Administrative Code Chapter DHS 75, "Community Substance Abuse Service Standards." These standards already establish requirements for certified SUD treatment programs to use approved patient placement criteria. Further, the Wisconsin Department of Health Services (DHS) is currently drafting language to revise ch., DHS 75, including updated references to ASAM guidelines.

Milestone Criteria	Current State	Future State	Summary of Actions Needed
Implementation of requirement that providers assess treatment needs based on SUD-specific, multi-dimensional assessment tools that reflect evidence-based clinical treatment guidelines	Wis. Admin. Code ch. DHS 75 requires all certified programs to use the Wisconsin-Uniform Placement Criteria (UPC), ASAM patient placement criteria, or other similar patient placement criteria approved by the department. In practice, many certified programs are using the ASAM placement criteria. The WI UPC is a SUD-specific, multidimensional assessment tool first implemented in 1996. This tool established uniform definitions of levels of care, improved patient placement consistency, and established adoption of common standards of program admission, continued stay, and discharge criteria. Admission to a program is based on an intake procedure that includes screening, approved patient placement criteria, and initial assessment.	Wisconsin Medicaid will revise Wis. Admin. Code DHS 75 to update references to ASAM patient placement criteria and clarify whether any additional standards are approved.	The revisions to administrative code were authorized by Wisconsin's governor in July 2018. The new regulations will follow the state's rulemaking process. Listening sessions were held on 5/21/19, 5/23/19, 6/17/19, 6/20/19, 6/27/19, and 7/16/19. The input collected through these sessions is incorporated in rule drafting. A rule draft will then be shared with an Advisory Committee for discussion and comment. This phase of rulemaking will continue through 2019. Following revisions suggested by the Advisory Committee, the draft rule will be published for public comment and analysis of economic impact in 2020. Final rule approval by the Wisconsin legislature is anticipated by early 2021, but may occur sooner if comments on the draft are limited.

Implementation of a utilization management approach such that (a) beneficiaries have access to SUD services at the appropriate level of care (b) interventions are appropriate for the diagnosis and level of care (c) there is an independent process for reviewing placement in residential treatment settings	Wis. Admin. Code ch. DHS 75 requires all certified programs to establish intake procedures so that (a) individuals access services at the appropriate level of care and (b) interventions are appropriate for the diagnosis and level of care. DHS Division of Quality Assurance (DQA) (c) conducts site visits and documentation review to ensure providers comply with these standards. Certification reviews take place for the provider's initial application and renewal applications, including a site visit and license holder and employee background checks. Providers must update their program documentation at least annually and apply for certification renewal at least every 2 years. Wisconsin Medicaid requires prior authorization (PA) of SUD treatment for day treatment programs at the intensive outpatient level of care. PA requests are reviewed by licensed behavioral health clinicians to determine medical necessity, including determining that the	DQA will continue to survey certified SUD treatment programs for compliance with provider credentialing standards, including requirements for use of patient placement criteria. Wisconsin Medicaid will develop utilization management policies (e.g. service authorizations) for Medicaid reimbursement in the design of the residential treatment benefit. The benefit design team will establish policies that balance the need to verify a clinically-appropriate assessment has been performed prior to admitting the individual into residential treatment, including the use patient placement criteria, with the need to rapidly connect individuals with treatment to prevent recurrence of use. The Medicaid team consulted with residential treatment providers in July and August 2019 to solicit their input on the referral, screening, assessment, and admissions process for their programs. Using this information, the benefits team is developing	Wisconsin Medicaid will establish utilization management policies. Wisconsin Medicaid will publish authorization requests forms by December 2019 and provide training to residential treatment programs on request submission. Target date to implement coverage is no later than February 2020.

	requested treatment is at the appropriate level of care. Managed care organizations contracted with Wisconsin Medicaid can make decisions to provide or deny services on the basis of medical necessity and place appropriate limits on a service for the purpose of utilization management, but cannot define medical necessity in a way that is more restrictive than the definition used by Wisconsin Medicaid.	authorization guidelines for initial admittance to residential treatment and authorization guidelines for continued stays in residential treatment.	

2.3 Use of Nationally Recognized SUD-Specific Program Standards to Set Provider Qualifications for Residential Treatment Facilities

Wisconsin Medicaid establishes provider qualifications in Administrative Code ch. DHS 75, "Community Substance Abuse Service Standards". DHS is currently drafting language to revise ch. DHS 75, including updated references to evidence-based guidelines.

Milestone Criteria	Current State	Future State	Summary of Actions Needed
Implementation of residential treatment provider qualifications in licensure requirements, policy manuals, managed care contracts, or other guidance. Qualification should meet program standards in the ASAM Criteria or other nationally recognized, SUD-specific program standards regarding, in particular, **the types of services, hours of clinical care, and credentials of staff for residential treatment settings**	Wisconsin establishes residential treatment provider qualifications in Wisconsin Administrative Code. State standards currently describe the types of services, hours of clinical care, and credentials of staff for transitional residential treatment programs and medically monitored treatment programs. Wisconsin Medicaid intends to use these provider qualifications to determine provider eligibility to deliver residential treatment aligned with ASAM Level of Care 3.	The Wisconsin Division of Care and Treatment Services (DCTS) has begun work to update state administrative code to further align provider qualifications with nationally recognized standards.	The revisions to administrative code were authorized by Wisconsin's governor in July 2018. The new regulations will follow the state's rulemaking process. Listening sessions were held on 5/21/19, 5/23/19, 6/17/19, 6/20/19, 6/27/19, and 7/16/19. The input collected through these sessions is incorporated in rule drafting. A rule draft will then be shared with an Advisory Committee for discussion and comment. This phase of rulemaking will continue through 2019. Following revisions suggested by the Advisory Committee, the draft rule will be published for public comment and analysis of economic impact in 2020. Final rule approval by the Wisconsin legislature is anticipated by early 2021, but may occur sooner if comments on the draft are limited.

Implementation of a state process for reviewing residential treatment providers to ensure compliance with these standards	All community SUD programs seeking certification under Wisconsin's administrative code are certified by (DQA). DQA conducts site visits and documentation review to ensure providers comply with these standards.	DQA will continue to certify SUD treatment programs and monitor their compliance with state regulations.	No immediate action.
Implementation of requirement that residential treatment facilities offer MAT on-site or facilitate access off site.	There are no current requirements that residential treatment facilities offer MAT on-site or facilitate access off site.	The Wisconsin Division of Medicaid Services is working with partners in DCTS and DQA to determine the appropriate regulatory or policy document to establish a requirement for residential treatment facilities to offer MAT on-site or facilitate access off site. Staff will consider available options, including establishing regulatory requirements in state administrative code or reimbursement requirements in Medicaid coverage policies. Staff will assess the impact of the options on current and potential treatment programs and determine which approach will maximize the availability of residential SUD treatment in Wisconsin while ensuring individuals in treatment have access to evidence-based treatment approaches.	DHS staff will implement the requirement by November 2020.

2.4 Sufficient Provider Capacity at Critical Levels of Care including for Medication Assisted Treatment for OUD

Wisconsin Medicaid will use data from the state's Medicaid Management Information System (MMIS) to evaluate provider capacity. Additional information regarding the data collection, reporting, and analytic methodologies will be described in the SUD Monitoring Protocol.

Milestone Criteria	Current State	Future State	Summary of Actions Needed
Completion of assessment of the availability of providers enrolled in Wisconsin Medicaid and accepting new patients in the following critical levels of care throughout the state (or at least in participating regions of the state) including those that offer MAT: • Outpatient services • Intensive outpatient services • MAT (medications as well as counseling and other services) • Intensive care in residential and inpatient settings • Medically supervised withdrawal management	Wisconsin Medicaid currently enrolls healthcare professionals and programs in categories aligned with their state licensure or certification. Wisconsin will use a combination of DEA registration, state program certification, and state licensure information collected during provider enrollment to identify SUD treatment providers, including those that offer MAT.	As Wisconsin Medicaid updates licensure or certification requirements, including revisions to Wis. Admin. Code ch. DHS 75, it will update its methodology to assign the new provider credentials with the appropriate level of care.	Wisconsin will complete baseline measurements for provider capacity at each level of care by November 2019.

2.5 Implementation of Comprehensive Treatment and Prevention Strategies to Address Opioid Abuse andOUD

Wisconsin Medicaid has and continues to make broad efforts across the state to address the drug abuse epidemic sweeping our communities. Initiatives included Medicaid program coverage revisions as well as broader community initiatives to address opioid addiction. The Wisconsin legislature enacted 30 bills for system improvements directly related to substance use disorders under the Heroin, Opioid Prevention and Education (HOPE) Agenda.

In Wisconsin, controlled substance dispensing initiatives resulted in a 29% decline in opioid prescriptions (1.5 million fewer prescriptions), a 19% decline in benzodiazepines (445,000 fewer prescriptions), and a flat trend in stimulant prescriptions from 2015 to 2018.

Milestone Criteria	Current State	Future State	Summary of Actions Needed
Implementation of opioid prescribing guidelines along with other interventions to prevent opioid abuse	Wisconsin Medicaid established prescribing guidelines in alignment with Centers for Disease Control and Prevention (CDC) guidance. The Wisconsin Medical Examining Board (MEB) published Opioid Prescribing Guidelines in 2016. The MEB published updated guidelines in 2018. Wisconsin Medicaid's Drug Utilization Review (DUR) Board has been focused on opioid related activities. These activities include targeted intervention focused on opioid prescribing when a member's medication use may be outside of published guidance (i.e., CDC Opioid Prescribing Guidelines). Wisconsin Medicaid has drug/drug related criteria that is used to send physicians education letters alerting them to a clinical concern and pharmacies receive a drug/drug alert informing them of a clinical concern before the medication is dispensed. Wisconsin Medicaid has an opioid script limit of five prescription fills a	Continue to monitor and evaluate.	No immediate action.

	month for opioids and some quantity limits for certain opioid products. There is a process in place for the pharmacy to receive an override in case a member needs to exceed the limits for clinically appropriate reasons.		
Expanded coverage of, and access to, naloxone for overdose reversal.	2013 Wisconsin Act 200 established expanded access to naloxone, allowing pharmacies to dispense naloxone via a standing order. In August 2016, DHS issued a statewide standing order allowing any pharmacy to use the order to dispense naloxone. Wisconsin Medicaid covers Naloxone as a preferred drug and does not require prior authorization for coverage. In 2018, Wisconsin Medicaid expanded reimbursement policy to allow Opioid Treatment Programs to be reimbursed for dispensing naloxone.	Continue to monitor and evaluate.	No immediate action.
Implementation of strategies to increase utilization and improve functionality of prescription drug monitoring programs	See attachment A for additional detail.	See attachment A for additional detail.	See attachment A for additional detail.

2.6 Improved Care Coordination and Transitions between Levels of Care

Milestone Criteria	Current State	Future State	Summary of Actions Needed
Additional policies to ensure coordination of care for co-occurring physical and mental health conditions	Current certification requirements for community SUD treatment programs include requirements for assessment, referral, and aftercare services that are designed to ensure all health needs for an individual in treatment are identified and addressed. Wisconsin Medicaid integrates the majority of behavioral health services into its risk-based contracts for managed care. This approach to contracting ensures the managed care entity meets coverage requirements for both physical and behavioral health conditions and coordinates services across these domains.	Wisconsin Medicaid will continue to evaluate the array of services carved into its risk-based managed care contracts to further integrate physical and mental health services. The new residential SUD benefit will be carved into acute managed care plans effective January 2020 to ensure coordination between physical and behavioral health services. Wisconsin Medicaid will also identify opportunities to develop more intensive care coordination models for individuals with SUD, including health homes or other intensive care coordination models. Initial analysis of the health home model for enhanced core coordination for individuals with SUD will be completed in 2020.	Wisconsin Medicaid will revise acute managed care contracts by January 2020 and conduct ongoing monitoring through managed care provider network and quality monitoring.

3.0 Implementation Administration

Please see below for the Wisconsin Medicaid's point of contact for the Implementation Plan.

Name and Title: Sophia Lee, Behavioral Health Analyst, Division of Medicaid Services
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4.0 Relevant Documents

No additional documents.

Attachment A – SUD Health Information Technology (IT) Plan

Section I.

This section is a continuation of milestone 5 to detail the use of the Prescription Drug Monitoring Program (PDMP) and the State Medicaid Health IT Plan (SMHP). As described in Table 1, Wisconsin Medicaid has developed and implemented an enhanced prescription drug monitoring program (ePDMP).

Wisconsin Medicaid recognizes the value of developing new and innovative tools to connect individuals with timely and appropriate SUD treatment and reduce administrative burden for treatment providers and other healthcare partners. The DHS eHealth Team conducts a Health Information Technology (HIT) landscape assessment each year to evaluate current HIT capabilities and define strategies Wisconsin Medicaid can pursue to advance health IT maturity and objectives.

Initial research identified key priorities to assess and further the adoption and use of HIT among treatment providers, including the need to conduct a behavioral health specific HIT landscape assessment, develop consent management tools to facilitate the flow of clinical information, and improve access to care through telehealth delivery of services. Details on Wisconsin Medicaid's strategic approach to these priorities will be included in an upcoming version of the SMHP.

Wisconsin Medicaid provides assurance that there is existing health IT infrastructure that may be leveraged in conjunction with future HIT initiatives to accomplish the goals of this demonstration.

Table 1.
State HIT / PDMP Assessment & Plan

Milestone Criteria	Current State	Future State	Summary of Actions Needed
Prescription Drug Monitoring Program (PDMP) Functionalities			
Enhanced interstate data sharing to better track patient specific prescription data	Wisconsin Medicaid is connected to the National Association of Boards of Pharmacy (NABP) Prescription Monitoring Interconnect (PMPi) and is currently sharing data with 18 other states. Wisconsin Medicaid is in the process of connecting to RxCheck, an additional data sharing hub.	Wisconsin Medicaid will be connected to a second interstate data sharing hub in 2019 and will continue to connect with additional compatible states for interstate data sharing. Work is underway to ensure interstate data can be presented to end users who access PDMP reports from within the workflow of their	PDMP is awaiting determination from NABP about whether there will be a modified memorandum of understanding to address whether it is allowable for interstate data to be presented to end users who access the PDMP reports from within their EHR workflow. The timeline for

		electronic health record (EHR).	connecting to the additional data sharing hub is dependent on interstate coordination. Additional information on progress for interstate data sharing will be provided to CMS as Implementation Updates via quarterly monitoring reporting.
Enhanced "ease of use" for prescribers and other state and federal stakeholders	Wisconsin Medicaid developed and launched a new PDMP application in 2017 with extensive input from stakeholders to improve the PDMP's ease of use. The new web application streamlines registration and reduces the number of clicks for healthcare users to access patient reports. Analytics and visualizations are used in patient reports to bring the most relevant information from a patient's PDMP prescription history to the immediate attention of the user. Wisconsin has also developed a single sign on service offering for prescribers to be able to access patient reports from within their electronic medical record.	PDMP continues to gather feedback from stakeholders about desirable enhancements to continue to improve ease of use. This feedback has been developed as part of a user-led enhancement grant project through the U.S. Department of Justice, Bureau of Justice Assistance.	The user-led enhancement grant project will finalize the selection of any enhancements by October 2019.

Enhanced connectivity between the state's PDMP and any statewide, regional or local health information exchange	The Wisconsin Statewide Health Information Network is one of the entities that offer the single sign on connection to the PDMP from within the community health record.	Continue to monitor and evaluate.	No immediate action.
Enhanced identification of long-term opioid use directly correlated to clinician prescribing patterns [1](see also "Use of PDMP" #2 below)	Long term opioid therapy is currently one of the data-driven alerts that are included in the patient report to help inform prescribers of concerning elements of their patients' prescription history. Alerts figure not only on patient reports but also on prescriber metrics reports that are available to prescribers as a self-assessment tool, to medical coordinators who oversee prescribers, and to the boards that review PDMP data to look for outlying prescribing practices.	PDMP is considering inclusion of an analytics-driven alert to flag patients who are opioid naïve/do not have history of long-term opioid use.	No immediate action.
Current and Future PDMP Query Capabilities			
Facilitate the state's ability to properly match patients receiving opioid prescriptions with patients in the PDMP (i.e. the state's master patient index (MPI) strategy with regard to PDMP query)	The PDMP uses data quality software to perform patient matching.	Continue to monitor and evaluate.	No immediate action.

[1] Shah A, Hayes CJ, Martin BC. Characteristics of Initial Prescription Episodes and Likelihood of Long-Term Opioid Use — United States, 2006–2015. MMWR Morb Mortal Wkly Rep 2017;66:265–269. DOI: http://dx.doi.org/10.15585/mmwr.mm6610a1.

Use of PDMP – Supporting Clinicians with Changing Office Workflows / Business Processes			
Develop enhanced provider workflow / business processes to better support clinicians in accessing the PDMP prior to prescribing an opioid or other controlled substance to address the issues which follow	Wisconsin Medicaid has developed a single sign on (SSO) service offering for prescribers to be able to access patient reports from within their electronic medical record. Analytics and visualizations are used in patient reports.	Continue to monitor and evaluate.	No immediate action.
Develop enhanced supports for clinician review of the patients' history of controlled substance prescriptions provided through the PDMP—prior to the issuance of an opioid prescription	State law requires prescribers to review the PDMP prior to issuing a prescription order for a controlled substance. When prescribers review their patients' reports, they see alerts and visualizations based on analytics bring the most relevant information from a patient's PDMP prescription history to the immediate attention of the user.	Continue to monitor and evaluate.	No immediate action.
Master Patient Index / Identity Management			
Enhance the master patient index (or master data management service, etc.) in support of SUD care delivery.	The PDMP uses data quality software to perform patient matching.	Continue to monitor and evaluate.	No immediate action.

Overall Objective for Enhancing PDMP Functionality & Interoperability			
Leverage the above functionalities / capabilities / supports (in concert with any other state health IT, technical assistance or workflow effort) to implement effective controls to minimize the risk of inappropriate opioid overprescribing—and to ensure that Wisconsin Medicaid does not inappropriately pay for opioids	The Wisconsin Department of Safety and Professional Services sends a monthly data extract to DHS for purposes delineated in a Data Use Agreement between the two agencies. The medical coordinator role in PDMP allows those who oversee prescribers to view non-patient-identifiable prescribing practice assessment metrics for the patients they oversee, which allows them to better identify prescribers that may present an opportunity for education about safe opioid prescribing practices. Prescribers can view their own metrics to see how their prescribing compares to their peers of the same specialty, and prescribing boards review similar metrics to help identify critically dangerous prescribing practices for further investigation and possible disciplinary action.	Continue to monitor and evaluate.	No immediate action.

Attachment A, Section II – Implementation Administration

Please see below for Wisconsin Medicaid's point of contact for the SUD Health IT Plan.

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Attachment A, Section III – Relevant Documents

No additional documentation.

ATTACHMENT C

What follows are the "SUD planned metrics," "SUD planned subpopulations," and "SUD reporting schedule" tabs from the SUD monitoring protocol workbook (part A). The full workbook is available in spreadsheet format on Medicaid.gov.

Medicaid Section 1115 SUD Demonstration Monitoring Protocol - Planned metrics
State: Wisconsin
Demonstration Name: BadgerCare Reform

Substance Use Disorder (SUD) Planned Metrics

Standard information on CMS-provided metrics											Baseline, annual goals, and demonstration target			Alignment with CMS-provided technical specifications manual		Phased-in metrics reporting		
#	Metric name	Metric description	Milestone or reporting topic*	Metric type	Reporting category	Data source	Measurement period	Reporting frequency	Reporting priority	State will report (Y/N)	Baseline reporting period (MM/DD/YYYY-MM/DD/YYYY)	Annual goal	Overall demonstration target	Attest that planned reporting matches the CMS-provided technical specifications manual (Y/N)	Explanation of any deviations from the CMS-provided technical specifications manual (different data source, definition, codes, target population, etc.)	State plans to phase in reporting (Y/N)	Report in which metric will be phased in (Format SUD DY#; Ex. DY1Q3)	Explanation of any plans to phase in reporting over time
3	Medicaid Beneficiaries with SUD Diagnosis (monthly)	Number of beneficiaries who receive MAT or a SUD-related treatment service with an associated SUD diagnosis during the measurement period and/or in the 11 months before the measurement period	Assessment of need and qualification for SUD treatment services	CMS-constructed	Other monthly and quarterly metric	Claims	Month	Quarterly	Required	Y					1 - WI Medicaid does not have access and cannot provide subpopulation breakouts by criminal justice status. WI will research the feasibility of obtaining criminal justice status data and report on the feasability in a future report to CMS. 2 - WI will report data for remaining subpopulation categories and determine subpopulation categories based on the beneficiary characteristics as of the last day of the data period.			
4	Medicaid Beneficiaries with SUD Diagnosis (annually)	Number of beneficiaries who receive MAT or a SUD-related treatment service with an associated SUD diagnosis during the measurement period and/or in the 12 months before the measurement period	Assessment of need and qualification for SUD treatment services	CMS-constructed	Other annual metric	Claims	Year	Annually	Required	Y	01/01/2021-12/31/2021	Increase	Increase	N		Y		
5	Medicaid Beneficiaries Treated in an IMD for SUD	Number of beneficiaries with a claim for inpatient/residential treatment for SUD in an IMD during the measurement period.	Milestone 2	CMS-constructed	Other annual metric	Claims	Year	Annually	Required	Y	01/01/2021-12/31/2021	Increase	Increase	Y		N		
6	Any SUD Treatment	Number of beneficiaries enrolled in the measurement period receiving any SUD treatment service, facility claim, or pharmacy claim during the measurement period	Milestone 1	CMS-constructed	Other monthly and quarterly metric	Claims	Month	Quarterly	Required	Y	01/01/2021-12/31/2021	Increase	Increase	Y		N		
7	Early Intervention	Number of beneficiaries who used early intervention services (such as procedure codes associated with SBIRT) during the measurement period	Milestone 1	CMS-constructed	Other monthly and quarterly metric	Claims	Month	Quarterly	Required	Y	01/01/2021-12/31/2021	Increase	Increase	Y		Y		1 - WI Medicaid does not have access and cannot provide subpopulation breakouts by criminal justice status. WI will research the feasibility of obtaining criminal justice status data and report on the feasability in a future report to CMS. 2 - WI will report data for remaining subpopulation categories and determine subpopulation categories based on the beneficiary characteristics as of the last day of the data period.
8	Outpatient Services	Number of beneficiaries who used outpatient services for SUD (such as outpatient recovery or motivational enhancement therapies, step down care, and monitoring for stable patients) during the measurement period	Milestone 1	CMS-constructed	Other monthly and quarterly metric	Claims	Month	Quarterly	Required	Y	01/01/2021-12/31/2021	Increase	Increase	Y	WI will add following procedure codes to the data pull: •H0002 •H0004	Y		1 - WI Medicaid does not have access and cannot provide subpopulation breakouts by criminal justice status. WI will research the feasibility of obtaining criminal justice status data and report on the feasability in a future report to CMS. 2 - WI will report data for remaining subpopulation categories and determine subpopulation categories based on the beneficiary characteristics as of the last day of the data period.
9	Intensive Outpatient and Partial Hospitalization Services	Number of beneficiaries who used intensive outpatient and/or partial hospitalization services for SUD (such as specialized outpatient SUD therapy or other clinical services) during the measurement period	Milestone 1	CMS-constructed	Other monthly and quarterly metric	Claims	Month	Quarterly	Required	Y	01/01/2021-12/31/2021	Increase	Increase	N		Y		1 - WI Medicaid does not have access and cannot provide subpopulation breakouts by criminal justice status. WI will research the feasibility of obtaining criminal justice status data and report on the feasability in a future report to CMS. 2 - WI will report data for remaining subpopulation categories and determine subpopulation categories based on the beneficiary characteristics as of the last day of the data period.
10	Residential and Inpatient Services	Number of beneficiaries who use residential and/or inpatient services for SUD during the measurement period	Milestone 1	CMS-constructed	Other monthly and quarterly metric	Claims	Month	Quarterly	Required	Y	01/01/2021-12/31/2021	Increase	Increase	N		Y		
11	Withdrawal Management	Number of beneficiaries who use withdrawal management services (such as outpatient, inpatient, or residential) during the measurement period	Milestone 1	CMS-constructed	Other monthly and quarterly metric	Claims	Month	Quarterly	Required	Y	01/01/2021-12/31/2021	Increase	Increase	N	WI will use procedure code H0018 to capture this metric.	N		1 - WI Medicaid does not have access and cannot provide subpopulation breakouts by criminal justice status. WI will research the feasibility of obtaining criminal justice status data and report on the feasability in a future report to CMS. 2 - WI will report data for remaining subpopulation categories and determine subpopulation categories based on the beneficiary characteristics as of the last day of the data period.
12	Medication-Assisted Treatment	Number of beneficiaries who have a claim for MAT for SUD during the measurement period	Milestone 1	CMS-constructed	Other monthly and quarterly metric	Claims	Month	Quarterly	Required	Y	01/01/2021-12/31/2021	Increase	Increase	N		Y		1 - WI Medicaid does not have access and cannot provide subpopulation breakouts by criminal justice status. WI will research the feasibility of obtaining criminal justice status data and report on the feasability in a future report to CMS. 2 - WI will report data for remaining subpopulation categories and determine subpopulation categories based on the beneficiary characteristics as of the last day of the data period.
13	SUD Provider Availability	The number of providers who were enrolled in Medicaid and qualified to deliver SUD services during the measurement period	Milestone 4	CMS-constructed	Other annual metric	Provider enrollment database; Claims	Year	Annually	Required	Y	01/01/2021-12/31/2021	Increase	Increase	N		Y		
14	SUD Provider Availability - MAT	The number of providers who were enrolled in Medicaid and qualified to deliver SUD services during the measurement period and who meet the standards to provide buprenorphine or methadone as part of MAT	Milestone 4	CMS-constructed	Other annual metric	Provider enrollment database; Claims; SAMHSA datasets	Year	Annually	Required	Y	01/01/2021-12/31/2021	Increase	Increase	Y		N		
15	Initiation and Engagement of Alcohol and Other Drug Dependence Treatment (IET-AD) [NCQA; NQF #0004; Medicaid Adult Core Set; Adjusted HEDIS measure]	Percentage of beneficiaries age 18 and older with a new episode of alcohol or other drug (AOD) abuse or dependence who received the following: • Initiation of AOD Treatment—percentage of beneficiaries who initiate treatment through an inpatient AOD admission, outpatient visit, intensive outpatient encounter or partial hospitalization, telehealth, or medication treatment within 14 days of the diagnosis • Engagement of AOD Treatment—percentage of beneficiaries who initiated treatment and who were engaged in ongoing AOD treatment within 34 days of the initiation visit	Milestone 6	Established quality measure	Annual metric that is an established quality measure	Claims	Year	Annually	Required	Y	01/01/2021-12/31/2021	Increase	Increase	Y		N		
17(1)	Follow-up after Emergency Department Visit for Alcohol or Other Drug Dependence (FUA-AD) [NCQA; NQF #3488; Medicaid Adult Core Set; Adjusted HEDIS measure][9]	The following diagnosis cohorts are reported for Percentage of ED visits for beneficiaries age 18 and older with a principal diagnosis of AOD abuse or dependence who had a follow-up visit for AOD abuse or dependence. Two rates are reported: - Percentage of ED visits for which the beneficiary received follow-up within 30 days of the ED visit (31 total days). - Percentage of ED visits for which the beneficiary received follow-up within 7 days of the ED visit (8 total days).	Milestone 6	Established quality measure	Annual metric that is an established quality measure	Claims	Year	Annually	Required	Y	01/01/2021-12/31/2021	Increase	Increase	Y		N		
17(2)	Follow-up after Emergency Department Visit for Mental Illness (FUM-AD) [NCQA; NQF #0576; Medicaid Adult Core Set; Adjusted HEDIS measure][9]	Percentage of ED visits for beneficiaries age 18 and older with a principal diagnosis of mental illness or intentional self-harm and who had a follow-up visit for mental illness. Two rates are reported: - Percentage of ED visits for mental illness for which the beneficiary received follow-up within 30 days of the ED visit (31 total days). - Percentage of ED visits for mental illness for which the beneficiary received follow-up within 7 days of the ED visit (8 total days).	Milestone 6	Established quality measure	Annual metric that is an established quality measure	Claims	Year	Annually	Required	Y	01/01/2021-12/31/2021	Increase	Increase	Y		N		
18	Use of Opioids at High Dosage in Persons Without Cancer (OHD-AD) [PQA, NQF #2940; Medicaid Adult Core Set]	Percentage of beneficiaries age 18 and older who received prescriptions for opioids with an average daily dosage greater than or equal to 90 morphine milligram equivalents (MME) over a period of 90 days or more. Beneficiaries with a cancer diagnosis, sickle cell disease diagnosis, or in hospice are excluded.	Milestone 5	Established quality measure	Annual metric that is an established quality measure	Claims	Year	Annually	Required	Y	01/01/2021-12/31/2021	Decrease	Decrease	Y		N		
21	Concurrent Use of Opioids and Benzodiazepines (COB-AD) [PQA, NQF #3389; Medicaid Adult Core Set]	Percentage of beneficiaries age 18 and older with concurrent use of prescription opioids and benzodiazepines. Beneficiaries with a cancer diagnosis, sickle cell disease diagnosis, or in hospice are excluded.	Milestone 5	Established quality measure	Annual metric that is an established quality measure	Claims	Year	Annually	Required	Y	01/01/2021-12/31/2021	Decrease	Decrease	Y		N		
22	Continuity of Pharmacotherapy for Opioid Use Disorder [USC; NQF #3175]	Percentage of adults 18 years of age and older with pharmacotherapy for OUD who have at least 180 days of continuous treatment	Milestone 1	Established quality measure	Annual metric that is an established quality measure	Claims	Year	Annually	Required	Y	01/01/2020-12/31/2021	Increase	Increase	Y		N		
23	Emergency Department Utilization for SUD per 1,000 Medicaid Beneficiaries	Total number of ED visits for SUD per 1,000 beneficiaries in the measurement period	Milestone 5	CMS-constructed	Other monthly and quarterly metric	Claims	Month	Quarterly	Required	Y	01/01/2021-12/31/2021	Decrease	Decrease	Y		N		
24	Inpatient Stays for SUD per 1,000 Medicaid Beneficiaries	Total number of inpatient stays per 1,000 beneficiaries in the measurement period	Other SUD-related metrics	CMS-constructed	Other monthly and quarterly metric	Claims	Month	Quarterly	Required	Y	01/01/2021-12/31/2021	Decrease	Decrease	Y		N		

Standard information on CMS-provided metrics											Baseline, annual goals, and demonstration target			Alignment with CMS-provided technical specifications manual		Phased-in metrics reporting		
#	Metric name	Metric description	Milestone or reporting topic[a]	Metric type	Reporting category	Data source	Measurement period	Reporting frequency	Reporting priority	State will report (Y/N)	Baseline reporting period (MM/DD/YYYY-MM/DD/YYYY)	Annual goal	Overall demonstration target	Attest that planned reporting matches the CMS-provided technical specifications manual (Y/N)	Explanation of any deviations from the CMS-provided technical specifications manual (different data source, definition, codes, target population, etc.)	State plans to phase in reporting (Y/N)	Report in which metric will be phased in (Format SUB DYQ; Ex. DY1Q3)	Explanation of any plans to phase in reporting over time
25	Readmissions Among Beneficiaries with SUD	The rate of all-cause readmissions during the measurement period among beneficiaries with SUD	Milestone 6	CMS-constructed	Other annual metric	Claims	Year	Annually	Required	Y	01/01/2021-12/31/2021	Decrease	Decrease	Y		N		
26	Overdose Deaths (count)	Number of overdose deaths during the measurement period among Medicaid beneficiaries living in a geographic area covered by the demonstration. The state is encouraged to report the cause of overdose death as specifically as possible (for example, prescription vs. illicit opioid).	Other SUD-related metrics	CMS-constructed	Other annual metric	State data on cause of death	Year	Annually	Required	Y	01/01/2021-12/31/2021	Decrease	Decrease	N	The state of Wisconsin will be able to provide data for this metric pending approval by the Department of Public Health (DPH) Data Governance board. Wisconsin can provide the additional OUD data breakouts but please note that those counts maybe incomplete as this data is not always available in the death records.	Y		The state of Wisconsin will be able to provide data for this metric pending approval by the Department of Public Health (DPH) Data Governance board. Wisconsin can provide the additional OUD data breakouts but please note that those counts maybe incomplete as this data is not always available in the death records.
27	Overdose Deaths (rate)	Rate of overdose deaths during the measurement period among adult Medicaid beneficiaries living in a geographic area covered by the demonstration. The state is encouraged to report the cause of overdose death as specifically as possible (for example, prescription vs. illicit opioid).	Milestone 5	CMS-constructed	Other annual metric	State data on cause of death	Year	Annually	Required	Y	01/01/2021-12/31/2021	Decrease	Decrease	N	The state of Wisconsin will be able to provide data for this metric pending approval by the Department of Public Health (DPH) Data Governance board. Wisconsin can provide the additional OUD data breakouts but please note that those counts maybe incomplete as this data is not always available in the death records.	Y		The state of Wisconsin will be able to provide data for this metric pending approval by the Department of Public Health (DPH) Data Governance board. Wisconsin can provide the additional OUD data breakouts but please note that those counts maybe incomplete as this data is not always available in the death records.
32	Access to Preventive/ Ambulatory Health Services for Adult Medicaid Beneficiaries with SUD [Adjusted HEDIS measure]	The percentage of Medicaid beneficiaries with SUD who had an ambulatory or preventive care visit during the measurement period.	Other SUD-related metrics	Established quality measure	Annual metric that is an established quality measure	Claims	Year	Annually	Required	Y	01/01/2021-12/31/2021	Increase	Increase	Y		N		
36	Average Length of Stay in IMDs	The average length of stay for beneficiaries discharged from IMD inpatient/residential treatment for SUD.	Milestone 2	CMS-constructed	Other annual metric	Claims; State-specific IMD database	Year	Annually	Required	Y	01/01/2021-12/31/2021	Decrease	No more than 30 days	Y		N		
Q1	Providers Utilization of the Prescription Drug Monitoring Program (PDMP)	Number of PDMP users, number of checks	Health IT	State-specific	Other quarterly and monthly metric	PDMP	Month	Quarterly	Required	Y	01/01/2021-12/31/2021	Increase	Increase			N		
Q2	Production of SUD based "Clinical Alerts" (PDMP)	Number of clinical alerts sent electronically by the PDMP to providers	Health IT	State-specific	Other quarterly and monthly metric	PDMP	Month	Quarterly	Required	Y	01/01/2021-12/31/2021	Increase	Increase			N		
Q3	Individuals connected to alternative therapies for pain management	Alternative therapies for pain management such as: chiropractic care, physical therapy, and osteopathic manipulative therapy (OMT)	Health IT	State-specific	Other annual metric	Claims	Year	Annually	Required	Y	01/01/2021-12/31/2021	Increase	Increase			N		

[a] There are no CMS-provided metrics related to milestone 3

[b] Rates 1 and 2 reported for Metric #17(1) correspond to rates 2 and 3 for Metric #17 from Version 1.1 of the the Medicaid Section 1115 Substance Use Disorder Demonstrations: Technical Specifications for Monitoring

[c] Rates 1 and 2 reported for Metric #17(2) correspond to rates 1 and 2 for Metric #17 from Version 1.1 of the the Medicaid Section 1115 Substance Use Disorder Demonstrations: Technical Specifications for Monitoring

Medicaid Section 1115 SUD Demonstrations Protocol (Part A) - Planned Subpopulations (Version 5.0)

State	Wisconsin
Demonstration Name	BadgerCare Reform

Substance Use Disorder (SUD) Planned Subpopulations

Planned subpopulation reporting						Alignment with CMS-provided technical specifications manual			
						Subpopulations		Relevant metrics	
Subpopulation category	Subpopulations	Reporting priority	Relevant metrics	Subpopulation type	State will report (Y/N)	Attest that planned subpopulation reporting within each category matches the description in the CMS-provided technical specifications manual (Y/N)	If the planned reporting of subpopulations does not match (i.e., column G = "N"), list the subpopulations state plans to report (Format: comma separated)	Attest that metrics reporting for subpopulation category matches CMS-provided technical specifications manual (Y/N)	If the planned reporting of relevant metrics does not match (i.e., column I = "N"), list the metrics for which state plans to report for each subpopulation category (Format: metric number, comma separated)
EXAMPLE: *Age group* ***(Do not delete or edit this row)***	*EXAMPLE:* *Children <18, adults 18–64, and older adults 65+*	*EXAMPLE:* *Required*	*EXAMPLE:* *Metrics #1-3, 6-12, 23, 24, 26, 27*	*EXAMPLE:* *CMS-provided*	*EXAMPLE:* *Y*	*EXAMPLE:* *N*	*EXAMPLE:* *Children/Young adults 12-21, Adults 21-65*	*EXAMPLE:* *N*	*EXAMPLE:* *1, 2, 3*
Age group	Children <18, adults 18–64, and older adults 65+	Required	Metrics #1-3, 6-12, 23, 24, 26, 27	CMS-provided	Y	Y		Y	
Dual–eligible status	Dual-eligible (Medicare-Medicaid eligible), Medicaid only	Required	Metrics #1-3, 6-12	CMS-provided	Y	Y		Y	
Pregnancy status	Pregnant, Not pregnant	Required	Metrics #1-3, 6-12	CMS-provided	Y	Y		Y	
		Required	Metrics #1-3, 6-12	CMS-provided	N	N	1 - WI Medicaid does not have access and cannot provide subpopulation breakouts by criminal justice status. WI will research the feasibility of obtaining criminal justice status data and report on the feasability in a future report to CMS. 2 - WI will report data for remaining subpopulation categories and determine subpopulation categories based on the beneficiary characteristics as of the last day of the data period.		
Criminal justice status	Criminally involved, Not criminally involved								
OUD population	Opioid diagnosis	Recommended	Metrics #2-12, 23, 24, 26, 27, 36	CMS-provided	Y	Y		Y	
[Insert row(s) for any state-specific subpopulation(s)]									

Medicaid Section 1115 SUD Demonstrations Monitoring Protocol (Part A) - Reporting Schedule (Version 5.0)

State: Wisconsin

Demonstration Name: BadgerCare Reform

Instructions:

(1) In the reporting periods input table (Table 1), use the prompt in column A to enter the requested information in the corresponding row of column B. All report names and reporting periods should use the format DY#Q# or CY# and all dates should use the format MM/DD/YYYY with no spaces in the cell. The information entered in these cells will auto-populate the SUD demonstration reporting schedule in Table 2. All cells in the input table must be completed in entirety for the standard reporting schedule to be accurately auto-populated.

(2) Review the state's reporting schedule in the SUD demonstration reporting schedule table (Table 2). For each of the reporting categories listed in column E, select Y or N in column G, "Deviation from standard reporting schedule (Y/N)" to indicate whether the state plans to report according to the standard reporting schedule. If a state's planned reporting does not match the standard reporting schedule for any quarter and/or reporting category (i.e. column G= "Y"), the state should describe these deviations in column H, "Explanation for deviations (if column G="Y")" and use column I, "Proposed deviations from standard reporting schedule," to indicate the SUD measurement periods with which it wishes to overwrite the standard schedule (column F). All other columns are locked for editing and should not be altered by the state.

Table 1. Reporting Periods Input Table

	Demonstration reporting periods/dates
Dates of first SUD reporting quarter:	
Reporting period (Format SUD DYQ; Ex. DY1Q1)	DY1Q1
Start date (MM/DD/YYYY)[a]	01/01/2021
End date (MM/DD/YYYY)	03/31/2021
Broader section 1115 demonstration reporting period correponding with the first SUD reporting quarter, if applicable. If there is no broader demonstration, fill in the first SUD reporting period. (Format DYQ; Ex. DY3Q1)	DY8Q1
First SUD report due date (per STC) (MM/DD/YYYY)	05/30/2021
First SUD report in which the state plans to report annual metrics that are established quality measures (EQMs)	
Baseline period for EQMs (Format CY; Ex. CY2019)	CY2021
SUD DY and Q associated with report (Format SUD DYQ; Ex. DY1Q1)	DY2Q2
Start date (MM/DD/YYYY)	04/01/2022
End date (MM/DD/YYYY)	06/30/2022
Dates of last SUD reporting quarter:	
Start date (MM/DD/YYYY)	10/01/2023
End date (MM/DD/YYYY)	12/31/2023

Table 2. SUD Demonstration Reporting Schedule

Dates of SUD reporting quarter (MM/DD/YYYY - MM/DD/YYYY) Start date	End date	Report due (per STC) (MM/DD/YYYY)	Broader section 1115 reporting period, if applicable; else SUD reporting period (Format DYQ; Ex. DY1Q3)	Reporting category	For each reporting category, measurement period for which information is captured in monitoring report per standard reporting schedule (Format DYQ; Ex. DY1Q3)[b] SUD	Deviation from standard reporting schedule (Y/N)	Explanation for deviations (if column G="Y")	Proposed deviations from standard reporting schedule (Format DYQ; Ex. DY1Q3)
01/01/2021	03/31/2021	05/30/2021	DY8Q1	Narrative information	DY1Q1			
				Grievances and appeals	DY1Q1			
				Other monthly and quarterly metrics				
				Annual metrics that are established quality measures				
				Other annual metrics				
04/01/2021	06/30/2021	08/29/2021	DY8Q2	Narrative information	DY1Q2			
				Grievances and appeals	DY1Q2			
				Other monthly and quarterly metrics	DY1Q1	Y	6-month claims lag for all planned metrics	
				Annual metrics that are established quality measures				
				Other annual metrics				
07/01/2021	09/30/2021	11/29/2021	DY8Q3	Narrative information	DY1Q3			
				Grievances and appeals	DY1Q3			
				Other monthly and quarterly metrics	DY1Q2	Y	6-month claims lag for all planned metrics	DY1Q1
				Annual metrics that are established quality measures				
				Other annual metrics				
10/01/2021	12/31/2021	03/31/2022	DY8Q4	Narrative information	DY1Q4			
				Grievances and appeals	DY1Q4			
				Other monthly and quarterly metrics	DY1Q3	Y	6-month claims lag for all planned metrics	DY1Q2

Start date	End date	(MM/DD/YYYY)	(Format DYQ; Ex. DY1Q3)	Reporting category	SUD	(Y/N)	(if column G="Y") (Format DYQ; Ex. DY1Q3)
				Annual metrics that are established quality measures			
				Other annual metrics			
01/01/2022	03/31/2022	05/30/2022	DY9Q1	Narrative information	DY2Q1		
				Grievances and appeals	DY2Q1		
				Other monthly and quarterly metrics	DY1Q4	Y	6-month claims lag for all planned metrics DY1Q3
				Annual metrics that are established quality measures			
				Other annual metrics	DY1	Y	6-month claims lag for all planned metrics
04/01/2022	06/30/2022	08/29/2022	DY9Q2	Narrative information	DY2Q2		
				Grievances and appeals	DY2Q2		
				Other monthly and quarterly metrics	DY2Q1	Y	6-month claims lag for all planned metrics DY1Q4
				Annual metrics that are established quality measures	CY2021	N	
				Other annual metrics		Y	6-month claims lag for all planned metrics DY1
07/01/2022	09/30/2022	11/29/2022	DY9Q3	Narrative information	DY2Q3		
				Grievances and appeals	DY2Q3		
				Other monthly and quarterly metrics	DY2Q2	Y	6-month claims lag for all planned metrics DY2Q1
				Annual metrics that are established quality measures		N	
				Other annual metrics			

Start date	End date	(MM/DD/YYYY)	(Format DYQ; Ex. DY1Q3)	Reporting category	SUD	(Y/N)	(if column G="Y")	(Format DYQ; Ex. DY1Q3)
10/01/2022	12/31/2022	03/31/2023	DY9Q4	Narrative information	DY2Q4			
				Grievances and appeals	DY2Q4			
				Other monthly and quarterly metrics	DY2Q3	Y	6-month claims lag for all planned metrics	DY2Q2
				Annual metrics that are established quality measures				
				Other annual metrics				
01/01/2023	03/31/2023	05/30/2023	DY10Q1	Narrative information	DY3Q1			
				Grievances and appeals	DY3Q1			
				Other monthly and quarterly metrics	DY2Q4	Y	6-month claims lag for all planned metrics	DY2Q3
				Annual metrics that are established quality measures				
				Other annual metrics	DY2	Y	6-month claims lag for all planned metrics	
04/01/2023	06/30/2023	08/29/2023	DY10Q2	Narrative information	DY3Q2			
				Grievances and appeals	DY3Q2			
				Other monthly and quarterly metrics	DY3Q1	Y	6-month claims lag for all planned metrics	DY2Q4
				Annual metrics that are established quality measures	CY2022	N		
				Other annual metrics		Y	6-month claims lag for all planned metrics	DY2
07/01/2023	09/30/2023	11/29/2023	DY10Q3	Narrative information	DY3Q3			
				Grievances and appeals	DY3Q3			
				Other monthly and quarterly metrics	DY3Q2	Y	6-month claims lag for all planned metrics	DY3Q1
				Annual metrics that are established quality measures		N		
				Other annual metrics				
10/01/2023	12/31/2023	03/30/2024	DY10Q4	Narrative information	DY3Q4			
				Grievances and appeals	DY3Q4			
				Other monthly and quarterly metrics	DY3Q3	Y	6-month claims lag for all planned metrics	DY3Q2
				Annual metrics that are established quality measures				
				Other annual metrics				

Start date	End date	(MM/DD/YYYY)	(Format DYQ; Ex. DY1Q3)	Reporting category	SUD	(Y/N)	(if column G="Y") (Format DYQ; Ex. DY1Q3)
01/01/2024	03/31/2024	05/30/2024	DY11Q1	Narrative information			
				Grievances and appeals			
				Other monthly and quarterly metrics		Y	6-month claims lag for all planned metrics DY3Q3
				Annual metrics that are established quality measures			
				Other annual metrics			
04/01/2024	06/30/2024	08/29/2024	DY11Q2	Narrative information			
				Grievances and appeals			
				Other monthly and quarterly metrics			
				Annual metrics that are established quality measures			
				Other annual metrics			
07/01/2024	09/30/2024	11/29/2024	DY11Q3	Narrative information			
				Grievances and appeals			
				Other monthly and quarterly metrics			
				Annual metrics that are established quality measures			
				Other annual metrics			
10/01/2024	12/31/2024	03/31/2025	DY11Q4	Narrative information			
				Grievances and appeals			
				Other monthly and quarterly metrics			
				Annual metrics that are established quality measures			
				Other annual metrics			

Start date	End date	(MM/DD/YYYY)	(Format DYQ; Ex. DY1Q3)	Reporting category	SUD	(Y/N)	(if column G="Y")	(Format DYQ; Ex. DY1Q3)
01/01/2025	03/31/2025	05/30/2025	DY12Q1	Narrative information				
				Grievances and appeals				
				Other monthly and quarterly metrics				
				Annual metrics that are established quality measures				
				Other annual metrics				
04/01/2025	06/30/2025	08/29/2025	DY12Q2	Narrative information				
				Grievances and appeals				
				Other monthly and quarterly metrics				
				Annual metrics that are established quality measures				
				Other annual metrics				
07/01/2025	09/30/2025	11/29/2025	DY12Q3	Narrative information				
				Grievances and appeals				
				Other monthly and quarterly metrics				
				Annual metrics that are established quality measures				
				Other annual metrics				
10/01/2025	12/31/2025	03/31/2026	DY12Q4	Narrative information				
				Grievances and appeals				
				Other monthly and quarterly metrics				
				Annual metrics that are established quality measures				
				Other annual metrics				
Add rows for all additional demonstration reporting quarters								

Notes:

[a] **SUD demonstration start date**: For monitoring purposes, CMS defines the start date of the demonstration as the *effective date* listed in the state's STCs at time of SUD demonstration approval. For example, if the state's STCs at the time of SUD demonstration approval note that the demonstration is effective January 1, 2020 – December 31, 2025, the state should consider January 1, 2020 to be the start date of the demonstration. Note that that the effective date is considered to be the first day the state may begin its SUD demonstration. In many cases, the effective date is distinct from the approval date of a demonstration; that is, in certain cases, CMS may approve a section 1115 demonstration with an effective date that is in the future. For example, CMS may approve an extension request on 12/15/2020, with an effective date of 1/1/2021 for the new demonstration period. In many cases, the effective date also differs from the date a state begins implementing its demonstration. Please see Appendix A of the Monitoring Protocol Instructions for more information on determining demonstration quarter timing.

[b] The auto-populated reporting schedule in Table 2 outlines the data the state is expected to report for each demonstration year and quarter. However, states are not expected to begin reporting any metrics data until after protocol approval. The state should see Section B of the Monitoring Report Instructions for more information on retrospective reporting of data following protocol approval.

1. Title page for the state's substance use disorder (SUD) demonstration or the SUD component of the broader demonstration

The state should complete this title page as part of its monitoring protocol. This form should be submitted as the title page for all monitoring reports. The content of this table should stay consistent over time. Definitions for certain rows are below the table.

State	Wisconsin
Demonstration name	BadgerCare Reform
Approval period for section 1115 demonstration	10/31/2018 - 12/31/2023
SUD demonstration start date[a]	10/31/2018
Implementation date of SUD demonstration, if different from SUD demonstration start date[b]	02/01/2021
SUD (or if broader demonstration, then SUD-related) demonstration goals and objectives	Wisconsin seeks to achieve the following: 1. Increased rates of identification, initiation, and engagement in treatment. 2. Increased adherence to and retention in treatment. 3. Reductions in overdose deaths, particularly those due to opioids. 4. Reduced utilization of emergency departments and inpatient hospital settings for treatment where utilization is preventable or medically inappropriate through improved access to other continuum of care services. 5. Fewer readmissions to the same or higher level of care where the readmission is preventable or medically inappropriate. 6. Improved access to care for physical health conditions among Medicaid beneficiaries.

[a] SUD demonstration start date: For monitoring purposes, CMS defines the start date of the demonstration as the *effective date* listed in the state's STCs at time of SUD demonstration approval. For example, if the state's STCs at the time of SUD demonstration approval note that the SUD demonstration is effective January 1, 2020 – December 31, 2025, the state should consider January 1, 2020 to be the start date of the SUD demonstration. Note that the effective date is considered to be the first day the state may begin its SUD demonstration. In many cases, the effective date is distinct from the approval date of a demonstration; that is, in certain cases, CMS may approve a section 1115 demonstration with an effective date that is in the future. For example, CMS may approve an extension request on 12/15/2020, with an effective date of 1/1/2021 for the new demonstration period. In many cases, the effective date also differs from the date a state begins implementing its demonstration.

[b] **Implementation date of SUD demonstration:** The date the state began claiming federal financial participation for services provided to individuals in institutions for mental disease.

2. Acknowledgement of narrative reporting requirements

☒ The state has reviewed the narrative questions in the Monitoring Report Template provided by CMS and understands the expectations for quarterly and annual monitoring reports. The state will provide the requested narrative information (with no modifications).

3. Acknowledgement of budget neutrality reporting requirements

☒ The state has reviewed the Budget Neutrality Workbook provided by the CMS demonstration team and understands the expectations for quarterly and annual monitoring reports. The state will provide the requested budget neutrality information (with no modifications).

4. Retrospective reporting

The state is not expected to submit metrics data until after protocol approval, to ensure that data reflects the monitoring plans agreed upon by CMS and the state. Prior to monitoring protocol approval, the state should submit quarterly and annual monitoring reports with narrative updates on implementation progress and other information that may be applicable, according to the requirements in its STCs.

For a state that has monitoring protocols approved after one or more initial quarterly monitoring report submissions, it should report metrics data to CMS retrospectively for any prior quarters of the section 1115 SUD demonstration that precede the monitoring protocol approval date. A state is expected to submit retrospective metrics data—provided there is adequate time for preparation of these data— in its second monitoring report submission that contains metrics. The retrospective report for a state with a first SUD DY of less than 12 months, should include data for any baseline period quarters preceding the demonstration, as described in Part A of the state's monitoring protocols (see Appendix B of the instruction for further guidance determining baseline periods for first SUD DYs that are less than 12 months.) If a state needs additional time for preparation of these data, it should propose an alternative plan (i.e., specify the monitoring report that would capture the data) for reporting retrospectively on its section 1115 SUD demonstration.

In the monitoring report submission containing retrospective metrics data, the state should also provide a general assessment of metrics trends from the start of its demonstration through the end of the current reporting period. The state should report this information in Part B of its report submission (Section 3: Narrative information on implementation, by milestone and reporting topic). This general assessment is not intended to be a comprehensive description of every trend observed in the metrics data. Unlike other monitoring report submissions, for instance, the state is not required to describe all metric changes (+ or - greater than 2 percent). Rather, the assessment is an opportunity for a state to provide context on its retrospective metrics data and to support CMS's review and interpretation of these data. For example, consider a state that submits data showing an increase in the number of medication-assisted treatment (MAT) providers (Metric #14) over the course of the retrospective reporting period. This state may decide to highlight this trend for CMS in Part B of its report (under Milestone 4) by briefly summarizing the trend and explaining that during this period, a grant supporting training for new MAT providers throughout its state was implemented.

For further information on how to compile and submit a retrospective report, the state should review Section B of the Monitoring Report Instructions document.

☒ The state will report retrospectively for any quarters prior to monitoring protocol approval as described above, in the state's second monitoring report submission that contains metrics after protocol approval.

☐ The state proposes an alternative plan to report retrospectively for any quarters prior to monitoring protocol approval: *Insert narrative description of proposed alternative plan for retrospective reporting. The state should provide justification for its proposed alternative plan.*

ATTACHMENT D: DEVELOPING THE EVALUATION DESIGN

Introduction

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

Expectations for Evaluation Designs

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

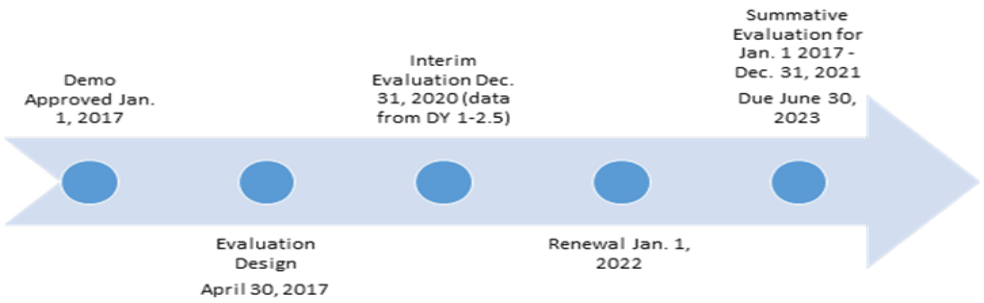
All states with Medicaid section 1115 demonstrations are required to conduct an evaluation, and the Evaluation Design is the roadmap for conducting the evaluation. The roadmap begins with the stated goals for the demonstration followed by the measurable evaluation questions and quantifiable hypotheses, all to support a determination of the extent to which the demonstration has achieved its goals. When conducting analyses and developing the evaluation reports, every effort should be made to follow the approved methodology. However, the state may request, and CMS may agree to, changes in the methodology in appropriate circumstances.

The format for the Evaluation Design is as follows:

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

Submission Timelines

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



Required Core Components of All Evaluation Designs
The Evaluation Design sets the stage for the Interim and Summative Evaluation Reports. It is important that the Evaluation Design explain the goals and objectives of the demonstration, the hypotheses related to the demonstration, and the methodology (and limitations) for the evaluation. A copy of the state's Driver Diagram (described in more detail in paragraph B2 below) should be included with an explanation of the depicted information.

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

1) The issue/s that the state is trying to address with its section 1115 demonstration and/or expenditure authorities, the potential magnitude of the issue/s, and why the state selected this course of action to address the issue/s (e.g., a narrative on why the state submitted an 1115 demonstration proposal).

2) The name of the demonstration, approval date of the demonstration, and period of time covered by the evaluation;

3) A brief description of the demonstration and history of the implementation, and whether the draft Evaluation Design applies to an amendment, extension, renewal, or expansion of, the demonstration;

4) For renewals, amendments, and major operational changes: A description of any changes to the demonstration during the approval period; the primary reason or reasons for the change; and how the Evaluation Design was altered or augmented to address these changes.

5) Describe the population groups impacted by the demonstration.

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

1) Describe how the state's demonstration goals are translated into quantifiable targets for improvement, so that the performance of the demonstration in achieving these targets could be measured.
2) Include a Driver Diagram to visually aid readers in understanding the rationale behind the cause and effect of the variants behind the demonstration features and intended outcomes. A driver diagram is a particularly effective modeling tool when working

to improve health and health care through specific interventions. The diagram includes information about the goal of the demonstration, and the features of the demonstration. A driver diagram depicts the relationship between the aim, the primary drivers that contribute directly to achieving the aim, and the secondary drivers that are necessary to achieve the primary drivers for the demonstration. For an example and more information on driver diagrams: https://innovation.cms.gov/files/x/hciatwoaimsdrvrs.pdf.

3) Identify the state's hypotheses about the outcomes of the demonstration:
   a. Discuss how the evaluation questions align with the hypotheses and the goals of the demonstration;
   b. Address how the research questions / hypotheses of this demonstration promote the objectives of Titles XIX and/or XXI.

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

This section provides the evidence that the demonstration evaluation will use the best available data; reports on, controls for, and makes appropriate adjustments for the limitations of the data and their effects on results; and discusses the generalizability of results. This section should provide enough transparency to explain what will be measured and how. Specifically, this section establishes:

1) *Evaluation Design* – Provide information on how the evaluation will be designed. For example, will the evaluation utilize a pre/post comparison? A post-only assessment? Will a comparison group be included?

2) *Target and Comparison Populations* – Describe the characteristics of the target and comparison populations, to include the inclusion and exclusion criteria. Include information about the level of analysis (beneficiary, provider, or program level), and if populations will be stratified into subgroups. Additionally discuss the sampling methodology for the populations, as well as support that a statistically reliable sample size is available.

3) *Evaluation Period* – Describe the time periods for which data will be included.

4) *Evaluation Measures* – List all measures that will be calculated to evaluate the demonstration. Include the measure stewards (i.e., the organization(s) responsible for the evaluation data elements/sets by "owning", defining, validating; securing; and submitting for endorsement, etc.) Include numerator and denominator information. Additional items to ensure:
   a. The measures contain assessments of both process and outcomes to evaluate the effects of the demonstration during the period of approval.
   b. Qualitative analysis methods may be used, and must be described in detail.
   c. Benchmarking and comparisons to national and state standards, should be used, where appropriate.

d. Proposed health measures could include CMS's Core Set of Health Care Quality Measures for Children in Medicaid and CHIP, Consumer Assessment of Health Care Providers and Systems (CAHPS), the Initial Core Set of Health Care Quality Measures for Medicaid-Eligible Adults and/or measures endorsed by National Quality Forum (NQF).
e. Proposed performance metrics can be selected from nationally recognized metrics, for example from sets developed by the Center for Medicare and Medicaid Innovation or for meaningful use under Health Information Technology (HIT).
f. Among considerations in selecting the metrics shall be opportunities identified by the state for improving quality of care and health outcomes, and controlling cost of care.

5) *Data Sources* – Explain where the data will be obtained, and efforts to validate and clean the data. Discuss the quality and limitations of the data sources.

   If primary data (data collected specifically for the evaluation) – The methods by which the data will be collected, the source of the proposed question/responses, the frequency and timing of data collection, and the method of data collection. (Copies of any proposed surveys must be reviewed with CMS for approval before implementation).

6) *Analytic Methods* – This section includes the details of the selected quantitative and/or qualitative measures to adequately assess the effectiveness of the demonstration. This section should:
   a. Identify the specific statistical testing which will be undertaken for each measure (e.g., t-tests, chi-square, odds ratio, ANOVA, regression). Table A is an example of how the state might want to articulate the analytic methods for each research question and measure.
   b. Explain how the state will isolate the effects of the demonstration (from other initiatives occurring in the state at the same time) through the use of comparison groups.
   c. A discussion of how propensity score matching and difference in differences design may be used to adjust for differences in comparison populations over time (if applicable).
   d. The application of sensitivity analyses, as appropriate, should be considered.

7) *Other Additions* – The state may provide any other information pertinent to the Evaluation Design of the demonstration.

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

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data Sources	Analytic Methods
Hypothesis 1				

Research question 1a	-Measure 1 -Measure 2 -Measure 3	-Sample e.g. All attributed Medicaid beneficiaries -Beneficiaries with diabetes diagnosis	-Medicaid fee-for-service and encounter claims records	-Interrupted time series
Research question 1b	-Measure 1 -Measure 2 -Measure 3 -Measure 4	-sample, e.g., PPS patients who meet survey selection requirements (used services within the last 6 months)	-Patient survey	Descriptive statistics
Hypothesis 2				
Research question 2a	-Measure 1 -Measure 2	-Sample, e.g., PPS administrators	-Key informants	Qualitative analysis of interview material

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

E. Special Methodological Considerations – CMS recognizes that there may be certain instances where a state cannot meet the rigor of an evaluation as expected by CMS. In these instances, the state should document for CMS why it is not able to incorporate key components of a rigorous evaluation, including comparison groups and baseline data analyses. Examples of considerations include:

1) When the state demonstration is:
    a. Long-standing, non-complex, unchanged, or
    b. Has previously been rigorously evaluated and found to be successful, or
    c. Could now be considered standard Medicaid policy (CMS published regulations or guidance)

2) When the demonstration is also considered successful without issues or concerns that would require more regular reporting, such as:
    a. Operating smoothly without administrative changes; and
    b. No or minimal appeals and grievances; and
    c. No state issues with CMS-64 reporting or budget neutrality; and
    d. No Corrective Action Plans (CAP) for the demonstration.

F. Attachments

1) **Independent Evaluator.** This includes a discussion of the state's process for obtaining an independent entity to conduct the evaluation, including a description of the qualifications that the selected entity must possess, and how the state will assure

no conflict of interest. Explain how the state will assure that the Independent Evaluator will conduct a fair and impartial evaluation, prepare an objective Evaluation Report, and that there would be no conflict of interest. The Evaluation Design should include "No Conflict of Interest" signed by the independent evaluator.

2) **Evaluation Budget.** A budget for implementing the evaluation shall be provided with the draft Evaluation Design. It will include the total estimated cost, as well as a breakdown of estimated staff, administrative, and other costs for all aspects of the evaluation. Examples include, but are not limited to: the development of all survey and measurement instruments; quantitative and qualitative data collection; data cleaning and analyses; and reports generation. A justification of the costs may be required by CMS if the estimates provided do not appear to sufficiently cover the costs of the draft Evaluation Design or if CMS finds that the draft Evaluation Design is not sufficiently developed.

3) **Timeline and Major Milestones.** Describe the timeline for conducting the various evaluation activities, including dates for evaluation-related milestones, including those related to procurement of an outside contractor, if applicable, and deliverables. The Final Evaluation Design shall incorporate an Interim and Summative Evaluation. Pursuant to 42 CFR 431.424(c)(v), this timeline should also include the date by which the Final Summative Evaluation report is due.

ATTACHMENT E: PREPARING THE INTERIM AND SUMMATIVE EVALUATION REPORTS

Introduction

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

Expectations for Evaluation Reports

Medicaid section 1115 demonstrations are required to conduct an evaluation that is valid (the extent to which the evaluation measures what it is intended to measure), and reliable (the extent to which the evaluation could produce the same results when used repeatedly). To this end, the already approved Evaluation Design is a map that begins with the demonstration goals, then transitions to the evaluation questions, and to the specific hypotheses, which will be used to investigate whether the demonstration has achieved its goals. States should have a well-structured analysis plan for their evaluation. With the following kind of information, states and CMS are best poised to inform and shape Medicaid policy in order to improve the health and welfare of Medicaid beneficiaries for decades to come. When conducting analyses and developing the evaluation reports, every effort should be made to follow the approved methodology. However, the state may request, and CMS may agree to, changes in the methodology in appropriate circumstances. When submitting an application for renewal, the Interim Evaluation Report should be posted on the state's website with the application for public comment. Additionally, the Interim Evaluation Report must be included in its entirety with the application submitted to CMS.

Intent of this Attachment

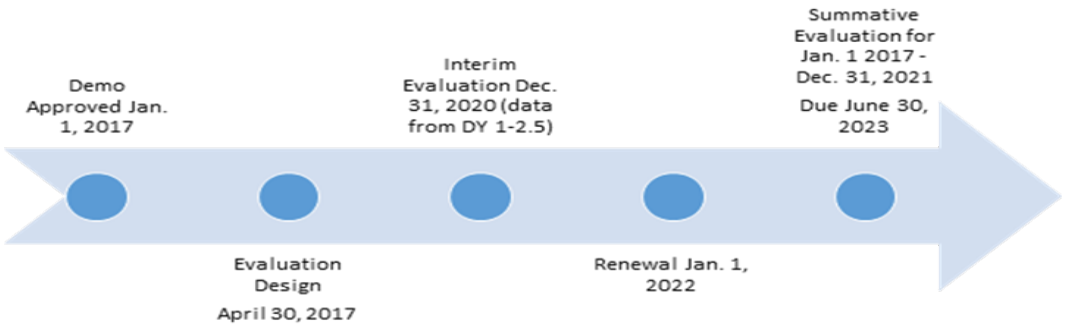
Title XIX of the Social Security Act (the Act) requires an evaluation of every section 1115 demonstration. In order to fulfill this requirement, the state's submission must provide a comprehensive written presentation of all key components of the demonstration, and include all required elements specified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

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

A. Executive Summary;
B. General Background Information;
C. Evaluation Questions and Hypotheses;
D. Methodology;
E. Methodological Limitations;
F. Results;

G. Conclusions;
H. Interpretations, and Policy Implications and Interactions with Other State Initiatives;
I. Lessons Learned and Recommendations; and
J. Attachment(s).

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



Required Core Components of Interim and Summative Evaluation Reports
The section 1115 Evaluation Report presents the research about the section 1115 Demonstration. It is important that the report incorporate a discussion about the structure of the Evaluation Design to explain the goals and objectives of the demonstration, the hypotheses related to the demonstration, and the methodology for the evaluation. A copy of the state's Driver Diagram (described in the Evaluation Design Attachment) must be included with an explanation of the depicted information. The Evaluation Report should present the relevant data and an interpretation of the findings; assess the outcomes (what worked and what did not work); explain the limitations of the design, data, and analyses; offer recommendations regarding what (in hindsight) the state would further advance, or do differently, and why; and discuss the implications on future Medicaid policy. Therefore, the state's submission must include:

A. **Executive Summary** – A summary of the demonstration, the principal results, interpretations, and recommendations of the evaluation.

B. **General Background Information about the Demonstration** – In this section, the state should include basic information about the demonstration, such as:
   1) The issues that the state is trying to address with its section 1115 demonstration and/or expenditure authorities, how the state became aware of the issue, the potential magnitude of the issue, and why the state selected this course of action to address the issues.

2) The name of the demonstration, approval date of the demonstration, and period of time covered by the evaluation.
3) A brief description of the demonstration and history of the implementation, and if the evaluation is for an amendment, extension, renewal, or expansion of, the demonstration.
4) For renewals, amendments, and major operational changes: A description of any changes to the demonstration during the approval period; whether the motivation for change was due to political, economic, and fiscal factors at the state and/or federal level; whether the programmatic changes were implemented to improve beneficiary health, provider/health plan performance, or administrative efficiency; and how the Evaluation Design was altered or augmented to address these changes.
5) Describe the population groups impacted by the demonstration.

C. **Evaluation Questions and Hypotheses** – In this section, the state should:
1) Describe how the state's demonstration goals were translated into quantifiable targets for improvement, so that the performance of the demonstration in achieving these targets could be measured. The inclusion of a Driver Diagram in the Evaluation Report is highly encouraged, as the visual can aid readers in understanding the rationale behind the demonstration features and intended outcomes.
2) Identify the state's hypotheses about the outcomes of the demonstration;
   a. Discuss how the goals of the demonstration align with the evaluation questions and hypotheses;
   b. Explain how this Evaluation Report builds upon and expands earlier demonstration evaluation findings (if applicable); and
   c. Address how the research questions / hypotheses of this demonstration promote the objectives of Titles XIX and XXI.

D. **Methodology** – In this section, the state is to provide an overview of the research that was conducted to evaluate the section 1115 demonstration consistent with the approved Evaluation Design. The Evaluation Design should also be included as an attachment to the report. The focus is on showing that the evaluation builds upon other published research (use references), and meets the prevailing standards of scientific and academic rigor, and the results are statistically valid and reliable.

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

This section provides the evidence that the demonstration evaluation used the best available data and describes why potential alternative data sources were not used; reported on, controlled for, and made appropriate adjustments for the limitations of the data and their effects on results; and discusses the generalizability of results. This section should provide enough transparency to explain what was measured and how. Specifically, this section establishes that the approved Evaluation Design was followed by describing:
1) *Evaluation Design* – Will the evaluation be an assessment of: pre/post, post-only, with or without comparison groups, etc?

2) *Target and Comparison Populations* – Describe the target and comparison populations; include inclusion and exclusion criteria.
3) *Evaluation Period* – Describe the time periods for which data will be collected
4) *Evaluation Measures* – What measures are used to evaluate the demonstration, and who are the measure stewards?
5) *Data Sources* – Explain where the data will be obtained, and efforts to validate and clean the data.
6) *Analytic Methods* – Identify specific statistical testing which will be undertaken for each measure (t-tests, chi-square, odds ratio, ANOVA, regression, etc.).
7) *Other Additions* – The state may provide any other information pertinent to the evaluation of the demonstration.

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

F. **Results** – In this section, the state presents and uses the quantitative and qualitative data to show to whether and to what degree the evaluation questions and hypotheses of the demonstration were achieved. The findings should visually depict the demonstration results (tables, charts, graphs). This section should include information on the statistical tests conducted.

G. **Conclusions** – In this section, the state will present the conclusions about the evaluation results.
1) In general, did the results show that the demonstration was/was not effective in achieving the goals and objectives established at the beginning of the demonstration?

2) Based on the findings, discuss the outcomes and impacts of the demonstration and identify the opportunities for improvements. Specifically:
   a. If the state did not fully achieve its intended goals, why not? What could be done in the future that would better enable such an effort to more fully achieve those purposes, aims, objectives, and goals?

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

I. **Lessons Learned and Recommendations** – This section of the Evaluation Report involves the transfer of knowledge. Specifically, the "opportunities" for future or revised demonstrations to inform Medicaid policymakers, advocates, and stakeholders is just as significant as identifying current successful strategies. Based on the evaluation results:
1) What lessons were learned as a result of the demonstration?

2) What would you recommend to other states which may be interested in implementing a similar approach?

J. Attachment

1) Evaluation Design: Provide the CMS-approved Evaluation Design

ATTACHMENT F: EVALUATION DESIGN

Wisconsin's Medicaid & BadgerCare Plus Health Coverage
CMS § 1115 Waiver Provisions for 2019-2023

Evaluation Design Report

Revised Version 3
Based on CMS Review and Comments

Submitted to the
Wisconsin Department of Health Services

September 15, 2021

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The preparation of this design report benefited from regular consultation with staff of the Wisconsin Department of Health Services

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ABBREVIATIONS & GLOSSARY OF TERMS

ACS	American Community Survey
BRFSS	Behavioral Risk Factor Surveillance Survey
CARES	Wisconsin Medicaid's Eligibility and Enrollment System
CE	Community Engagement: Requirements for Medicaid program beneficiaries to participate in employment, training, education, or other qualifying activities
CLA	Childless Adults: Adults without dependent children who are eligible for Wisconsin's BadgerCare program
CMS	U.S. Centers for Medicare and Medicaid Services
DHS	Wisconsin Department of Health Services
DiD	Difference-in-Differences method
DOL	U.S. Department of Labor
FPL	Federal Poverty Level
FSET	Food Share Employment and Training program: Required activities for non-excluded able-bodied adults who receive nutrition support benefits.
HIPAA	Health Insurance Portability and Accountability Act: Federal law governing privacy of patient and consumer health information
IRP	University of Wisconsin-Madison Institute for Research on Poverty: independent evaluators for Wisconsin's Medicaid waiver
ITS	Interrupted Time Series method
RD	Regression Discontinuity method
SAHIE	Small Area Health Insurance Estimates
SID	State Inpatient Databases
SNAP	Supplemental Nutrition Assistance Program, called "FoodShare" in Wisconsin
SUD	Substance Use Disorder
TANF	Temporary Assistance for Needy Families
TEDS-A	Treatment Episode Data Set – Admissions
UI	Unemployment Insurance
WHIO	Wisconsin Health Information Organization: Wisconsin's private sector, voluntary all-payer claims database

WAIVER PROVISION IMPLEMENTATION DATES: REFERENCE KEY

The Wisconsin Department of Health Services (DHS) has been adjusting the dates for implementation of the various waiver provisions, with some initial programmatic delays, the onset of the COVID-19 public health emergency in March 2020, and finally the withdrawal of CMS approval for the community engagement requirements in April 2021. (See, for reference, Attachment A: Waiver approval letter, waiver provisions.) Specific evaluation elements have undergone adjustments as changes occur to the implementation of the waiver provisions. (Table 1)

The Evaluation Design Report submitted in December 2019 did not reference specific dates but, rather, tied various evaluation elements to implementation milestones. In 2020, several evaluation documents were submitted to DHS and CMS that describe changes to the evaluation plan under changing circumstances. Finally, in 2021, the Evaluation Design Report was revised to reflect the new set of approved waiver provisions. The changes are reviewed in Attachment B: CMS Comments and UW/DHS Responses.

Table 1. Waiver Provisions' Implementation Status as of January 2021

Waiver Provision	Time Frame/Status
Community Engagement	Suspended during PHE
Launch member communications	Initiated in November 2019, through February 2020, then suspended
Employability assessment and plan (App/ACCESS)	Suspended, then approval was withdrawn for the CE requirements provision by CMS on April 6, 2021
Activity reporting portal (App/ACCESS) soft-launch	
Member notices begin	
Member reporting of CE begins CLAs	
E&T program in place for CLAs	
48-month clock begins CLAs	
HRA/HNA	Suspended during PHE
HRA (Treatment Needs Questionnaire) and HNA questions added to the application process	HNA and Treatment Needs Questionnaire added to enrollment process in February 2020, and suspended in mid-March 2020, upon declaration of PHE. Data had been collected for that brief time frame.
Premiums	Suspended during PHE
Member communication begins	Initiated in November 2019, through February 2020, then suspended
First premiums charged/premium payment begins	Suspended
ED Co-Payment	Delayed, then Commenced July 1, 2020
Member notices begin	Implementation delayed, with member notices delivered in May-June 2020
First co-payments charged	July 1, 2020
SUD Program	Start February 1, 2021
Residential treatment benefit begins	Implementation delayed, with implementation launched February 2021
Coverage of current SUD services within IMD settings	

I. EXECUTIVE SUMMARY

The University of Wisconsin-Madison Institute for Research on Poverty is conducting an evaluation of the Wisconsin BadgerCare Reform Demonstration Project, as proposed by the Wisconsin Department of Health Services (DHS) and approved by the federal Centers for Medicare and Medicaid Services (CMS). The evaluation uses quasi-experimental study designs to assess how the provisions of Wisconsin's Medicaid § 1115 Waiver Demonstration, for the period CY2019-CY2023, affect two Medicaid populations: (1) childless adults (CLAs) with an effective income at or below 100% of the federal poverty level (FPL), and (2) all Medicaid beneficiaries eligible for an expanded coverage of treatment services for substance use disorders (SUD).

The evaluation addresses the waiver demonstration provisions defined by DHS and approved by CMS for a five-year demonstration period, ending December 31, 2023. (Attachment A. Approved Waiver) Hypotheses and associated research questions focus on the following provisions and programmatic changes:

- Extension of a full Medicaid benefit for adults without dependent children ("childless adults") with incomes up to and including 100% FPL.
- Premiums for childless adults with incomes greater than 50% up to and including 100% FPL as a condition of enrollment.
- A period of non-eligibility for up to six months for childless adults who do not pay the required premium, with on-ramps to reactivate coverage during the non-eligibility period.
- An $8 co-payment for non-emergency use of the emergency department.
- Required completion of a health risk assessment as a condition of eligibility for childless adults.
- Opportunity for reduced premiums for childless adults based on the health risks and healthy behaviors reported on health risk and needs assessments.
- Expanded coverage for substance use disorders including a residential treatment benefit and coverage for existing services when they are provided in an institution of mental disease (IMD) specifically including medically supervised withdrawal management, inpatient services, and medication-assisted treatment (MAT).

The evaluation requires administrative data from the Wisconsin DHS pertaining to application and enrollment, claims and encounters, health risk and needs assessments, premium payments, and vital statistics (for example, death records). The evaluation team also uses several other sources of administrative data, including Wisconsin's all-payer claims database and unemployment insurance data, along with state and national population survey data. Three separate beneficiary surveys, occurring in CY2020, CY2022, and CY2024, will provide an important source of primary data for evaluation of multiple hypotheses and research questions.

The COVID-19 public health emergency led the state to suspend implementation of several waiver provisions. In adhering to provisions of the federal Families First Coronavirus Response Act, the state

Medicaid agency has generally not conducted eligibility redeterminations or disenrollments since March 28, 2020. The pandemic-related and other changes to the waiver implementation include the following:

- Suspended the emergency department co-payment, and then initiated it on July 1, 2020.
- During the entire period of the federally-designated public health emergency (PHE):
    - Suspended premium co-payments, including those for childless adults with incomes between 51-100% FPL.
    - Suspended community-engagement/work requirements reporting and start-up.
    - Suspended requirement for completion of the Health Risk Assessment and Treatment Needs Question, which had been implemented for the month of March 2020.
- Delayed initiation of the SUD waiver provision, as the state addressed various policy and programmatic details. The SUD residential treatment benefit was implemented on February 1, 2021.

This evaluation design report, originally submitted in 2019, has been updated to reflect those changes along with responses to CMS comments received throughout CY2020. (See Attachment B: CMS Comments and UW/DHS Responses.) The report describes how the evaluation plan has been adjusted to account for the change in the waiver's implementation, and for the unusual pandemic circumstances as they might affect Medicaid enrollment, health care use, and other data trends.

In April 2021, CMS withdrew approval for the community engagement requirement provision of the waiver. The evaluation design report has been updated to reflect this provision's withdrawal. Although it was never implemented, because members received some communications about this requirement prior to its suspension at the beginning of the COVID-19 pandemic, we have retained some references to this former provision where appropriate.

This multi-disciplinary evaluation team, with collaborating scholars from several universities, has conducted Medicaid section 1115 waiver evaluations for over a decade, and has published a wide range of Medicaid-related research and evaluation studies. The investigators bring expertise and skills with the full range of health services and econometric methods needed to assure a rigorous independent evaluation. The Wisconsin Medicaid agency lays out ambitious goals with this demonstration waiver, and the evaluation will contribute important findings for state and federal Medicaid policy.

WAIVER PROVISIONS AND HYPOTHESES

Provision 1: Medicaid benefits to non-elderly childless adults (CLAs) up to 100% FPL.

- H1.1. Expansion of benefits to non-elderly childless adults will reduce the state's uninsured rate.
- H1.2. Expansion of benefits to CLAs will lead to their increased access to medical care.
- H1.3. Expansion of benefits to CLAs will lead to lower provision of uncompensated care by hospitals.
- H1.4. Additional requirements of the current demonstration may increase administrative costs.

Provision 2: Health Assessment linked to eligibility and premiums

- H2.1. Beneficiaries for whom the health assessment has eligibility and premium consequences will reduce risky behaviors and engage in healthier behaviors.
- H2.2. The health assessment will increase the number of beneficiaries receiving treatment for substance-use disorders
- H2.3. The requirement to answer the health assessment as a condition of eligibility will discourage some potential beneficiaries from enrolling in Medicaid.

Provision 3: Premiums for childless adult beneficiaries ages 19-64 with income 50% through 100% FPL; $8 co-payment for non-emergent use of the emergency department for childless adults

- H3.1. Beneficiaries who are required to make premium payments will gain familiarity with a common feature of commercial health insurance.
- H3.2. The imposition of premium requirements for childless adults will reduce enrollment in Medicaid.
- H3.3. The imposition of premium requirements for childless adults will increase enrollment in commercial insurance following exits from Medicaid.
- H3.4. The imposition of premium requirements for childless adults will lead to pent-up demand for medical care among beneficiaries disenrolled due to failure to pay premiums.
- H3.5. The imposition of a co-payment for non-emergent use of the emergency department will lead to more appropriate uses of medical care among childless adults enrolled in Medicaid.
- H3.6. Hospitals vary in how they implement the required co-payment for non-emergency use of the ED.

Provision 4: Substance Use Disorder (SUD) Demonstration Waiver: Expansion of coverage of substance abuse disorder treatment services*

- Q4.1. Does the waiver increase the supply of SUD providers for Medicaid enrollees?
- Q4.2. Does the waiver increase access to, and use of, newly covered SUD services for Medicaid enrollees?
- Q4.3. Does the waiver change Medicaid enrollees' use of existing covered SUD services?
- Q4.4. Does the waiver reduce the rate of drug overdose deaths among Medicaid enrollees including opioid-related deaths?
- Q4.5. What are the patterns and trends in Medicaid costs associated with the SUD demonstration waiver?

* Consistent with the CMS guidance for evaluation of SUD waivers, the evaluation for the SUD portion is organized around evaluation questions, with specific hypotheses following each question (as shown in Section IIIE)

II. DEMONSTRATION WAIVER AND EVALUATION BACKGROUND

The University of Wisconsin-Madison Institute for Research on Poverty (IRP) is conducting an evaluation of the Wisconsin BadgerCare Reform Demonstration Project, as proposed by the Wisconsin Department of Health Services (DHS) and approved by the federal Centers for Medicare and Medicaid Services (CMS). BadgerCare is Wisconsin's combined Medicaid and Children's Health Insurance Program (CHIP) for low-income families and for adults without dependent children.

IIA. Waiver Overview and Target Populations

The 2018 Wisconsin waiver primarily concerns adults without dependent children, referred to as childless adults (CLAs), and also includes a substance use disorder (SUD) provision that applies to the entire Medicaid population. CMS approved the waiver provisions on October 31, 2018, with an approval period through December 31, 2023. The various provisions take effect gradually throughout the calendar years 2019-2021.[1]

Childless Adults Waiver Provisions

The BadgerCare Reform demonstration waiver authorizes Wisconsin to provide a full Medicaid benefit package to non-pregnant, non-disabled, non-elderly childless adults with incomes of up to and including 100% FPL. This coverage began under a prior waiver, initiated in April 2014, and the current demonstration approval continues coverage for this population for five years.

The 2018 waiver also includes several other important features, also subject to evaluation. Childless adults with incomes greater than 50% and up to and including 100% FPL are required to pay a premium as a condition of eligibility. They are subject to termination and a period of non-eligibility for up to six months if they do not pay the required premium by the end of their certification period, with on-ramps to reactivate coverage during the non-eligibility period. The waiver introduces an $8 co-payment for non-emergent use of the emergency department for childless adults. It requires completion of a health risk assessment as a condition of eligibility for childless adults and offers opportunities for reduced premiums based on the health risks and healthy behaviors reported on health risk and needs assessments.

The original waiver allowed Wisconsin to require these childless adult beneficiaries, ages 19 through 49, with certain exceptions, to participate in, document, and report 80 hours per month of community engagement activities. Qualifying activities included employment, self-employment, in-kind work, job training, or community service. The community engagement incentive was not to apply to beneficiaries ages 50 and older. Medicaid beneficiaries subject to the community engagement requirement, but who have not met the community engagement requirements for 48 aggregate months (without qualifying for an exemption), would have been disenrolled from Medicaid at the end of their certification period and

[1] For additional detail regarding the 2018 WI Medicaid waiver and the Special Terms and Conditions, see Wisconsin Department of Health Services. Section 11115 BadgerCare Reform Demonstration Waiver. Available at https://www.dhs.wisconsin.gov/badgercareplus/waivers-cla.htm

unable to re-enroll as a childless adult for six months. However, if that individual reapplied for Medicaid during that six-month period of non-eligibility and is found eligible under another Medicaid eligibility group, the individual would be enrolled into Medicaid. Early information about this provision was communicated to members, but the requirement was suspended and later approval for the provision was withdrawn by CMS, so it has never been in effect.

SUD Waiver Provision

This demonstration waiver also includes a substance use disorder (SUD) program available to all Wisconsin Medicaid beneficiaries. The SUD program expands coverage for substance use disorder treatment in facilities that qualify as institutions for mental diseases (IMDs) for all Medicaid enrollees. The provision authorizes a new residential treatment benefit and coverage for existing services when provided in an institution of mental disease (IMD) specifically including medically supervised withdrawal management, inpatient services, and medication-assisted treatment (MAT). The purpose of the program is to ensure that a broad continuum of care is available to Wisconsin Medicaid beneficiaries with a substance use disorder, helping improve the quality, care, and health outcomes for those Medicaid beneficiaries. The State of Wisconsin identifies this waiver provision as part of a comprehensive statewide strategy to combat substance use disorders and drug overdose.

COVID-Related Changes to Waiver Implementation

The federal Families First Coronavirus Response Act, in providing increased Medicaid funding for states during the federally declared public health emergency (PHE), includes a continuous coverage provision that prohibits Medicaid agencies from terminating coverage for most enrollees during the PHE. Wisconsin has been adhering to this provision and, as of March 2020, has not terminated Medicaid coverage during the PHE unless an enrollee requests termination, moves out of state, or dies. As well, states may not impose conditions of eligibility more restrictive than those in place as of January 1, 2020.

This policy placed in suspension many of the existing waiver's provisions. As well, Medicaid beneficiaries would normally be required to complete annual eligibility renewals, report changes in income and other circumstances, and otherwise respond to requests for information when the Medicaid agency identifies a potential need to verify income. The state will prepare re-activate this process in CY2021, at the end of the federally-declared public health emergency. But, since March 2020, virtually no Medicaid disenrollments have occurred.

In summary, the following changes occurred to the implementation of the waiver's provisions:

- Suspended the emergency department co-payment, and then initiating it on July 1, 2020.
- During the entire period of the federally-designated PHE:
    - Suspended premium co-payments, including those for childless adults with incomes between 51-100% FPL.
    - Suspended community-engagement/work requirements reporting and start-up.
    - Suspended requirement for completion of the Health Risk Assessment and Treatment Needs Question, which had been implemented for the month of March 2020.

- Delayed initiation of the SUD waiver provision, as the state addressed various policy and programmatic details. The SUD residential treatment benefit was implemented in February 2021.
- CMS withdrawal of permission for the community engagement requirements in April 2021

The evaluation team has adjusted its data collection and analysis plan in response to the changes in waiver implementation and approval. Memos submitted by the evaluation team review these changes. (Attachment B: CMS Comments and UW/DHS Responses) These changes are incorporated into this updated Design Report.

IIB. Evaluation Team Background and Qualifications

Our team has conducted and published studies on a broad range of Medicaid-related evaluation and research topics, addressing coverage and care utilization, labor market impacts, crowd-out of private insurance, premiums, restrictive non-enrollment periods, health needs assessments, application and enrollment systems, and churning.[2] Sponsors of this team's work include the state and federal governments, foundations, and private sector concerns. We have conducted the CMS-required evaluations of Wisconsin's BadgerCare demonstration § 1115 waivers that were approved in 2008, 2012, and 2014, of Wisconsin's SeniorCare prescription drug program, and of the Medicaid medical homes for high risk pregnant women.

The multi-disciplinary team of faculty and staff researchers is based at the University of Wisconsin-Madison, in the Institute for Research on Poverty, with the following collaborating faculty investigators: Dr. Marguerite Burns, a health services researcher in the UW School of Medicine and Public Health; Dr. Laura Dague, an economist at Texas A&M University's Bush School of Government & Public Service; Dr. Thomas DeLeire, an economist at the Georgetown University McCourt School of Public Policy; Dr. Brendan Saloner, a health services researcher at Johns Hopkins University Bloomberg School of Public Health; Dr. Justin Sydnor, an economist at the UW School of Business; and Dr. Alyssa Tilhou, a physician and health services researcher at Boston University in the Department of Family Medicine.

IIC. Evaluation Design Approach and Methods

The evaluation of the demonstration waiver will involve a variety of analytic approaches. We describe below the three approaches that cut across most components of the evaluation design. Further detail regarding the application of these methods to specific evaluation questions is included in the Section III of this evaluation design report, in addition to methods that are unique to a given question or hypothesis.

Section III, below, also details the planned changes to the evaluation plan that account for the pandemic circumstances and the state's delay in implementing various waiver provisions. In general, we will treat 2020 carefully in any analytical models that rely on across-time comparisons, including allowing for flexibility in modeling time and excluding 2020 from the models. Where relevant, we will be using 2019

[2] Information about the team's work is available here: https://www.irp.wisc.edu/health-policy/

rather than 2020 as baseline for analyses of the pre-period and for secondary data. Any comparisons over time will account for differences in the pool of beneficiaries enrolled in 2020 and later.

We also consider how the beneficiary pool and outcomes in 2021 and later will be affected by the pandemic. Instead of previously planned use of ITS models, we place greater emphasis on DiD, regression discontinuity (RD), and other models that use a simultaneous comparison group, because they are better able to control for pandemic impacts. The evaluation will use time period indicators in regression models that control for pandemic months or estimate treatment effects for periods before, during, and after the public health emergency period. Planned analyses include robustness checks. We will also, as appropriate, consider sensitivity analyses that keep the analytic sample constant in order to isolate the demonstration impact from changing characteristics of Medicaid beneficiaries.

Difference-in-Differences (DiD) Method

The objective in evaluating a treatment's effect on an outcome is to find the difference between the improvement (or degradation) in an outcome in the presence of the treatment to the change in an outcome that would have occurred in the absence of the treatment. In the group of individuals who receive the treatment, this counterfactual change—the amount that an outcome would have improved absent the treatment—is not observed. Therefore, this counterfactual change must be estimated somehow.

A popular method applied to estimate this change is the difference-in-differences (DiD) approach. In this approach, two populations of subjects, treatment and control, are observed at two points in time: at baseline, before the intervention is applied, and at follow-up, after the intervention is applied to the treatment population. The outcome is measured in each population at each time. The average effect of the treatment is estimated by subtracting the change in outcomes in the control group from the change in outcomes in the treatment group. The control group thus provides the counterfactual for the trend that would have occurred in the treatment group in the absence of the intervention.

DiD can be implemented either by literally taking averages and subtracting, as described above, or via regression modeling. The advantages of using a regression framework is that a researcher can incorporate more than one time period before and after intervention into the empirical analysis and can adjust for potential confounders arising from differences in demographic and baseline health characteristics and time trends. For continuous outcomes, a linear regression model takes the form:

$$(1) \qquad Outcome_{it} = \alpha + \beta T_i + \delta post_t + \lambda T_i \times post_t + \gamma X_{it} + \varepsilon_{it}$$

where $Outcome_{it}$ is the outcome measure of interest for subject *i* at time *t*; T_i takes the value of 1 if subject *i* is in the treatment group, and 0 otherwise; and post_t equals 1 if time *t* is after the treatment/intervention was applied, and equals 0 otherwise. The interaction term, $T_i \times \text{post}_t$, equals 1 for members in the treatment group after the treatment has been applied. X_{it} represents a set of control variables for subject *i* at time *t*, such as demographic and health characteristics. These

characteristics are either measured in the baseline period or considered not to be directly influenced by the treatment. The average effect of the treatment/intervention is measured by the estimate of the coefficient λ. Where feasible and appropriate, the set of control variables may include county by year fixed effects to address the potential for time-varying geographic differences to help isolate the demonstration impact.

One can readily generalize this regression framework to deal with non-continuous outcome variables such as discrete outcomes, proportions, or percentages. A major advantage of using this DiD regression approach is that it can yield an estimate unbiased by time-invariant differences between treatment and comparison group individuals when covariates are included to control for initial heterogeneity of treatment and comparison groups. We will also include specifications that allow for heterogeneity in the effect by year (defining *post* as indicator variables for year) to observe the impact of the demonstration in years during and right after the COVID-19 pandemic and in later years when the pandemic has further subsided, where appropriate.

It will not generally be possible to create control groups that perfectly match the treatment groups on all observable correlates related to the various outcomes of interest. Consequently, the distribution of the characteristics of subjects will, to some extent, differ between treatment and control groups. To create unbiased estimates of intervention effects in the presence of such heterogeneity and to improve the precision of our estimates, we will implement matching methods such as propensity score matching and the more general approach of "cell matching."

In cell matching, sample members in treatment and comparison groups are allocated to cells based on values of their covariates which have been determined to be potential factors influencing outcomes (e.g., age, gender, region, race, health status, etc.). Cells, then, comprise persons with similar values of combination of covariates. Given this homogeneity within cells, treatment effects can essentially be estimated by cell using the simple variant of DiD methods described above, and an average treatment effects for a population can be estimated by weighting cell estimates by the proportions of the population deemed to occupy each cell.

Regression Discontinuity (RD)

Regression Discontinuity (RD) is generally regarded as a strong program evaluation design.[3,4] The RD takes the following form:

$$(1) \qquad Y_i = \alpha + \theta(X_i - x_0) + \tau W_i + \gamma(X_i - x_0)W_i + \epsilon_i,$$

[3] Lee, David S., and Thomas Lemieux.2010. Regression Discontinuity Designs in Economics. *Journal of Economic Literature* 48, No. 2 (2010): 281-355.

[4] Abadie, Alberto, and Matias D. Cattaneo. 2018. Econometric Methods for Program Evaluation." *Annual Review of Economics* 10: 465-503.

Implemented via local linear regression with triangular kernel weights, where all observations outside the bandwidth h (more than h away from x_0) are discarded. Here, Y_i is the outcome under consideration, X_i is the running variable that determines whether the individual is subject to the treatment (e.g., age of the member), x_0 is the cutoff level of *X*, , W_i is an indicator for whether or not the individual was subject to the treatment (e.g., subject to premiums) and equals zero if not and 1 if so, and ϵ_i is a random error term. The treatment effect of interest is τ. The coefficients θ and γ allow the slope of the regression to differ on either side of the cutoff x_0. The design also allows us to control for potentially confounding covariates.

Interrupted Time Series (ITS) Estimation

We had planned to assess outcome changes before and after implementation of the demonstration waiver within the enrollee population using an Interrupted Time Series (ITS) model, an approach that is commonly relied upon to ascertain outcomes when an intervention or policy is implemented for an entire population at the same time. In an ITS model, a researcher can segment outcome data into pre- and post-waiver components in a linear regression specification and quantify the differences between the two segments by testing the change in levels (absolute change in outcome) and slopes (rate of change in outcome) before and after program enrollment. This specification can also adjust for autocorrelation properties of error terms in empirical specification of the sort illustrated below:

$$(2) \qquad \text{Outcome}_{it} = \alpha + \delta \text{post}_t + \gamma X_{it} + \varepsilon_{it}$$

In this framework, the effect of the change in treatment is estimated by the regression estimator of δ. The framework can allow differences in the trend in outcomes trend between pre- and post-treatment periods by interacting post_t with the time trend variable(s) in X_{it}. Additionally, treatment effects may be permitted to differ among individuals by interacting post_t with other elements of X_{it}.

The pandemic-related disruptions, however, hinder the use of data from CY2020 (and perhaps 2021), in an ITS model. We have generally abandoned previously planned use of ITS models, placing greater emphasis on DiD, regression discontinuity (RD), and other models that use a comparison group because they are better able to control for pandemic impacts.

IID. Data Sources

The evaluation of the demonstration waiver will rely on multiple data sources, including state and national administrative data, population survey data, and a beneficiary survey. These data elements are described below. The specific sources that will be used to evaluate each provision, and the outcomes derived from each source, are noted in the relevant sections of this evaluation design report.

1. All Payer Claims Database, WHIO.[5] The Wisconsin Health Information Organization, known as WHIO, is private-sector-operated, voluntary, multi-payer claims database. WHIO includes Medicaid along with commercial insurance covering most of Wisconsin's population. It is missing

[5] Wisconsin Health Information Organization. Datamart Guide Version 2.1. 2014. Optum, Inc: Waltham, MA.

Medicare fee-for-service, self-funded employers whose third-party administrators do not submit claims, and individuals insured by national or border state companies (examples include HealthPartners, Aetna, and Cigna). The WHIO data have both a claims file and a member enrollment file, which permits us to track unique individuals' enrollment in health insurance regardless of whether members actually incur claims. WHIO does not release identifiable data, so it is not possible to link these data directly to Medicaid administrative data in order to identify the Medicaid sample. Rather, we will use the member file to identify both the Medicaid and privately insured samples.

Note: In 2019, the WHIO hired a new contractor to collect and construct the all-payer-claims database. We do not expect that the change in contractor will impede the use of these data longitudinally; however, we will confirm that there have been no changes in the methodology for data construction that would introduce bias into the study designs when technical information is available from the new contractor. In the evaluation, the WHIO provides a source for a within state comparison group of commercially insured individuals to complement the primary designs. Thus, in the unlikely event that the new WHIO data are not usable, our capacity to answer the research question will not be affected.

2. American Community Survey. The American Community Survey (ACS), a nationally representative survey conducted by the U.S. Census Bureau, contains state-level geographic identifiers. The survey asks about sources of health insurance coverage in the previous year, including Medicaid coverage, private group and non-group insurance, Medicare, and military coverage. The survey is administered annually and is publicly available with only a short lag.

3. Behavioral Risk Factor Surveillance System (BRFSS)**.** Run by the Centers for Disease Control and Prevention, the BRFSS is a set of state-level surveys that collect data from all 50 states and the District of Columbia on the health and health behaviors of U.S. residents. The survey also collects information on health insurance coverage, though not the source of that coverage, and on employment. The data are available at the state level and with roughly a two-year lag.

4. CARES*.* Wisconsin CARES is the state's online eligibility and enrollment portal for public benefits, including Medicaid, TANF, and FoodShare (SNAP). We use data from CARES to attain longitudinal administrative data pertaining to enrollment. Demographic information includes age, sex, educational attainment, county of residence, income, and income sources. CARES data also include reason codes associated with disenrollment, and "premium payment files" that contain monthly information on the dollar amount of premium owed, whether it was paid, and the date of payment.

5. Hospital Cost Reports. These reports are submitted annually to CMS by all acute-care and critical access hospitals. Data on uncompensated care (UCC) are reported in Worksheet S-10 of Form CMS-2552-10, which was first used beginning in May 2010. UCC is the sum of two reported items: the cost of charity care provided to uninsured patients (line 23 column 1) and the cost of

non-Medicare bad-debt expense (line 29). As needed, we will supplement Hospital Cost Report data with Wisconsin data on hospital uncompensated care available from the Wisconsin Hospital Association.[6]

6. Marketplace Enrollment. CMS public use files provide data on enrollment at the zip code and county level, by FPL, in ACA Marketplace plans for each annual open enrollment period. These data do not allow matching on the individual level, but may be used to demonstrate trends in enrollment at various income levels over time.

7. Medicaid Beneficiary Survey. Described in detail in Section IIE. Primary Data Collection, below.

8. National Survey of Substance Abuse Treatment Services (N-SSATS).[7] The Substance Abuse and Mental Health Services Administration (SAMHSA) conducts this annual survey to provide a census of facilities nationwide that provide substance abuse treatment and collect data on their location in each state and characteristics including populations served, available services, and whether the facility accepts Medicaid as a payer.

9. Other Wisconsin Medicaid Administrative Data. The Wisconsin Medicaid agency will provide the data from the health risk and health needs assessments, including completion rates and substantive response information.

10. Small Area Health Insurance Estimates (SAHIE). The SAHIE program was created to develop model-based estimates of health insurance coverage for counties and states. SAHIE data can be used to analyze geographic variation in health insurance coverage, as well as disparities in coverage by race/ethnicity, sex, age and income levels that reflect thresholds for state and federal assistance programs.

11. Wisconsin Mental Health and Substance Use Needs Assessment.[8] The Wisconsin Division of Care and Treatment Services publishes this report biannually. It provides county-specific indicators of SUD treatment needs and available resources.

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[6] Uncompensated care for Wisconsin hospitals is reported by the Wisconsin Hospital Association annually, available here: https://www.whainfocenter.com/uploads/PDFs/Publications/Uncompensated/Uncompensated_2017.pdf ; Other financials for WI hospitals available here: https://www.whainfocenter.com/services/publications/?ID=49

[7] Substance Abuse and Mental Health Services Administration. National Survey of Substance Abuse Treatment Services. Information available at: https://www.samhsa.gov/data/data-we-collect/nssats-national-survey-substance-abuse-treatment-services

[8] Wisconsin Department of Health Services, Division of Care and Treatment Services. 2017 Wisconsin Mental Health and Substance Use Needs Assessment. July 2018. P-00613. Accessed 6/27/19 at https://www.dhs.wisconsin.gov/publications/p00613-17.pdf

12. Wisconsin Family Health Survey. The Wisconsin Family Health Survey is an annual statewide random-sample telephone survey of all household residents. This survey includes topics such as health insurance coverage, health status, health problems, and use of health care services. It is currently available from 2008 through 2017 (and we will add additional years as they become available).

13. Wisconsin Medicaid claims and encounter data. We will obtain claims and encounter data from the State's MMIS claims database. These data files include detailed ICD-10 diagnostic codes. The claims and encounter data contain detailed information on diagnoses, procedure, and billing codes from which we will construct outcomes measures of health care use.

14. State Inpatient Databases (SID). The SIDs are part of the Healthcare Cost and Utilization Project (HCUP). The SID includes inpatient and emergency department discharge records from community hospitals in participating states. SID files encompass all patients, regardless of payer. The SID contain a core set of clinical and nonclinical information on all patients, including individuals covered by Medicare, Medicaid, or private insurance, as well as those who are uninsured. We will use Wisconsin data from 2012 through 2017, the last year of data currently available (and will add additional years of data as they become available). We will also obtain data from the same years for two Midwestern states that expanded Medicaid (Michigan and Minnesota) and three states that did not expand Medicaid (Florida, North Carolina, and Kansas).

15. Treatment Episode Data Set – Admissions (TEDS-A).[9] The TEDS-A is a national dataset that includes substance abuse treatment admission-level data for facilities that receive state funds or federal block grant funds to provide alcohol and/or drug treatment services. The dataset is structured at the admission-level and includes many characteristics of each admission including patient demographics, dates of admission, payer, services received, and the state in which facility is located. This dataset is published approximately two-years after the close of the calendar year (e.g., May 2019 for the 2017 dataset).

16. Unemployment Insurance Wage and Benefits Records (UI). UI wage and benefits records are longitudinal administrative data from the UI earnings reporting system, with individual-level measures of reported quarterly employment, wages, and firm industry code. These data may be matched to Medicaid administrative enrollment data from CARES, to identify an individual's employment status regardless of whether they are currently enrolled in Medicaid.

17. Wisconsin Death Records. The State Registrar in the WIDHS collects vital statistics death data. The source of these data are death certificates filed with the WIDHS. Cause of death is coded according to ICD-10. We will examine resident deaths, specifically all deaths that occurred in Wisconsin within the Wisconsin resident population. Conditional on approval by the WI DHS, we

[9] Substance Abuse and Mental Health Services Administration. Treatment Episode Data Set. Accessed 6/27/19 at https://www.samhsa.gov/data/data-we-collect/teds-treatment-episode-data-set.

will link death records to Medicaid enrollment date to identify deaths among Medicaid enrollees.

18. Wisconsin Third Party Liability (TPL) Database. TPL is an individual-level database that contains all enrollees in state health insurance programs who are covered by a private health insurance plan. We can match individuals in TPL using social security numbers. This database may not contain information on whether individuals were covered by health insurance provided by a self-funded employer (whose policies are not subject to state regulation).

19. U.S. Department of Labor (DOL) Self-Insured Firms list: To assess whether enrollees may have access to health insurance coverage through a self-funded employer, we can connect CARES cases to their employers by linking CARES through SSNs to a database of quarterly earnings records from Wisconsin's UI system. Next, we can use FEINs (obtained from UI) to link to data from the DOL that comes from the required reporting of self-insured firms to the Internal Revenue Service. The DOL data cover the universe of self-insured employers within the United States. We have previously obtained these data through a Freedom of Information Act request, and we will use the process again for this project. From these data, we can infer coverage from a self-insured firm.

IIE. Primary Data Collection: Medicaid Beneficiary Survey

A survey of current and former Medicaid beneficiaries provides the opportunity to examine the respondents' experiences specifically in relation to the waiver provisions, including several domains not well-suited to measurement with administrative data or other state and national data. These domains include perceptions and understanding of various waiver provisions, reported reasons for changes in enrollment status or health care use, reported health status over different enrollment entry and exit spells, and knowledge of and interest in various services (such as SUD treatment).

The evaluation design includes use of a survey at three separate points in the five-year evaluation period, in CY2020, 2022, and 2023-24 (Table 6). This design report provides detail about the first survey, including sample construction, data collection, and next steps. The evaluation plan, under the highly fluid policy environment, relies on an agile project management approach for design of the subsequent two beneficiary surveys. We expect to re-define the more specific parameters of the survey cohorts, instrument domains, and data collection as the dates for those next surveys draw near.

i. Survey Domains

The evaluation design includes plans to field cross-sectional surveys of beneficiaries at three separate points in the five-year evaluation period. Overall plans are as follows:

- Mixed mode (self-administered questionnaire (SAQ), web, and telephone)
- Surveys in the first and final round are sent to 15,000 people; Offered in Spanish and English
- Sample groups include childless adults and parents/caretakers, people with a history of SUD treatment, and previous Medicaid members who have left the program

- The second round of data collection will target a smaller group of individuals for open-ended qualitative interviews

The domains within the 2020/2021 survey instrument included the following:

- Health insurance coverage status – past year and current
- Medicaid eligibility and enrollment changes
- Health care needs, access and use
- Health status and health behaviors
- Access to care and use of services related to COVID-19
- Employment and workforce activities
- Awareness of waiver provisions
- Demographics

Questions were developed using items from previous surveys of Wisconsin Medicaid beneficiaries, from national surveys and from other state surveys of Medicaid beneficiaries. These include: the Behavioral Risk Factor and Surveillance System, the Urban Institute Health Reforming Monitoring Survey, Kaiser Family Foundation Health Tracking Polls, the National Health Interview Survey, the Michigan waiver's survey of Medicaid beneficiaries[10] and the Oregon Health Insurance Experiment[11].

Table 4 displays how the waiver provision and hypotheses relate to each of the survey domains.

We may adjust future survey questions and planned analyses depending on the outcomes of the 2020/2021 wave, and also to account for changes in the waiver implementation and in the Medicaid context and policy environment over the demonstration time period.

ii. Sample Construction and Data Collection

The original planned field date for the baseline survey was May 2020, but was delayed due to the postponement of waiver provisions and logistical challenges arising at the start of the COVID-19 pandemic. It was re-scheduled to begin in the first week of October 2020 and concluded in February 2021.

Beginning with the onset of the federal public health emergency in March 2020, we worked with our survey partner, NORC at the University of Chicago, to carefully reconsider the timing and schedule for fielding the survey. We explored different strategies for contacting and offering incentives to beneficiaries to participate in the survey, because the pandemic made data collection more challenging.

The revised timing of the 2020/2021 survey was designed to provide a baseline for the evolving timeline of state waiver provisions. While some of the waiver provisions remain suspended under the public health emergency, the state Medicaid agency has begun to implement some waiver provisions and has

[10] Healthy Michigan Voices Survey. https://ihpi.umich.edu/featured-work/healthy-michigan-plan-evaluation/healthy-michigan-voices-survey

[11] Oregon Health Insurance Experiment – Documents. https://www.nber.org/programs-projects/projects-and-centers/oregon-health-insurance-experiment/oregon-health-insurance-experiment-documents

been preparing for others. The emergency department co-payment took effect in July 2020. When other provisions would be activated has remained unclear. The ability to collect useful baseline data would be eroding as Medicaid members became exposed to any waiver provisions over time, motivating our decision to field the survey in early fall 2020.

The evaluation will include three rounds of data collection, but the timeline for this data collection has been revised. We concluded that it would not be feasible to postpone the first survey until late 2021, for a potential post-pandemic time frame. The original evaluation plan had specified two data collection rounds, one at the demonstration period start, in waiver year 01, and the other at the late stage in waiver year 04-05. CMS, in its response, requested that the evaluation plan add a third beneficiary survey or interview protocol, to occur at a mid-point, around year 02 of the waiver. The evaluation team then met this request, submitting a plan to field the added survey in 2022.

With the evaluation plan now entailing three surveys in a five-year period, the workplan schedule requires a continuous cycle of 1) survey planning and preparation, 2) data collection, and 3) data analysis and reporting. The evaluation has proceeded with baseline data collection in fall 2020, with plans for a second data collection effort scheduled for CY22.The fielding of the survey in fall 2020 included the addition of some items specific to the COVID-19 pandemic and the experience of Medicaid members under the pandemic circumstances, which will support the analysis of the administrative data.

The first survey data collection included the following contacts:

- Contact 1: A mailing was sent to 15,000 current and former Badger Care recipients following the sampling plan developed by UW. This mailing included a “push to web,” with a URL allowing individuals to complete the survey by the web.
- Contacts 2 and 3: NORC sends a self-administered questionnaire (SAQ) mailing to those respondents who have not yet completed the web survey (1 page cover letter, first class postage-paid return envelope, 16-page survey); then a follow-up second mailing of the SAQ to those respondents who have not yet completed the survey.
- Contact 4: NORC team of interviewers contact potential respondents who have not responded to the web survey invitation or the SAQ. NORC will place up to six calls to each sampled beneficiary in order to maximize response. When NORC encounters disconnected or invalid lines, it uses a proprietary database to search for other contact information (e.g., using contact information that is harvested by credit reporting agencies).

Table 2 shows the CY20 data collection timeline.

Table 2. Survey Data Collection Timeline

Milestone	Start	End	Weeks
Modified Contract start date	8/24/20		
Multi-mode Survey Data Collection			
Develop survey instrument	N/A	8/10/20	
Recruit and hire interviewers	8/10/20	9/21/20	6
Program, test, and deploy survey instrument and case management system	8/10/20	10/2/20	8
IRB submission and approval	8/24/20	9/21/20	4
Train interviewers	9/21/20	9/28/20	1
Survey Data Collection	10/5/20	1/25/21	16
Contact 1: Mail invitation to web survey	10/5/20	N/A	
Contact 2: Mail SAQ	10/19/20		
Contact 3: second mailing of SAQ	10/26/20		
Contact 4: Initiate telephone follow-up calling	12/1/20	1/25/21	8
Survey data delivery	1/26/21	3/22/21	8

Table 3 displays the sample groups included in the CY2020 survey. The main sample groups are based on eligibility and enrollment status.

The baseline survey, which sampled 15,750 people to be interviewed, includes a subgroup of individuals who had been enrolled as childless adults during the time frame from August 2019 through March 2020 but disenrolled from that coverage prior to April 2020. These individuals would otherwise have been subject to the waiver provisions had they remained enrolled. The inclusion of this cohort is intended to provide information about 1) the target population's understanding of the pending waiver provisions and 2) the degree to which the state notifications about upcoming implementation of the waiver (which occurred in the months prior to April 2020) may have affected these former members' continuing enrollment in Medicaid.

We ask both current and former beneficiaries the same set of questions so that we are able to measure different response outcomes; survey items such as questions 2 and 4 help us to assess current enrollment and reasons for leaving BadgerCare.

We also designed for inclusion of Spanish-language speakers, given the unique challenges – in health insurance and in employment -- that face this population. The survey recruited an oversample of Medicaid/BadgerCare members, adding 750 people to the survey sample who were identified (in the administrative data) as having Spanish as their primary language.

Table 3. Survey Sample Groups

Group	Composition	Sample	Spanish Language Over-Sample	Total Sample
A	Childless adults randomly sampled from the list of current enrollees at the time of the sample construction with incomes 0–49 FPL	2,135	107	2,242
B	Childless adults randomly sampled from the list of current enrollees at the time of the sample construction with incomes 50–100% FPL	2,300	115	2,415
C	(A subset of the other sample groups) All adults who have a diagnosis of a substance use disorder or a hospital/ED visit related to a substance use disorder in the prior 12 months based on recent claims	2,994	150	3,144
D	Childless adults who have been long-term enrolled (>24 months) in the program without a history of employment	2,203	110	2,313
E	Individuals who disenrolled from CLA and were likely to have been subject to the waiver provisions	2,375	119	2,494
F	Parents and caregivers who are not subject to the premium requirement, and will serve as a contemporaneous comparison group	2,993	149	3,142
Total Sample		**15,000**	**750**	**15,750**

The interim evaluation reports will detail the survey response rates across subpopulations, describe how the pandemic may have affected beneficiary responses, and outline efforts to improve data collection in the next survey waves. We will also continuously assess how any pandemic-related complications may affect the interpretation of survey results and other data analyses.

As noted, and particularly relevant to group E, the state suspended Medicaid disenrollment during the public health emergency. Medicaid disenrollments will resume once the PHE expires. The next round of data collection in CY22 will include a cohort of members who had previously been enrolled in Medicaid/BadgerCare at the start of the waiver, but were no longer enrolled at the point of the survey data collection.

The CY22 data collection plan includes a close-ended survey cohort of 1,500 randomly selected current and former Medicaid members:

- Formerly enrolled adults, who had been enrolled between October 1, 2019 and December 31, 2021.

- Medicaid members who enrolled in April-May 2020, during the COVID-19 pandemic (regardless of their CY22 enrollment status).
- Childless Adults and Parents/Caretaker Adults currently enrolled (at the time of the survey frame sample drawing), who had enrolled prior to policy implementation
- Childless Adults and Parents/Caretaker Adults currently enrolled (at the time of the survey frame sample drawing), who had enrolled after policy implementation

We will carefully assess the quality and representativeness of the data collected from the 2020 survey, and may adjust the sample frame and cohorts for the 2022 and 2024 surveys to assure that they match the goals at the time. Our plan for the second survey, in 2022, focuses on current and former member experience with the waiver implementation process and requirements, and will involve a set of semi-structured interviews to complement the survey protocol. The waiver implementation has, to date, been highly fluid, with several of the provisions remaining subject to change going forward. For this reason, and as noted above, we use an agile project management approach to planning for each of the three beneficiary surveys, and expect to re-define the more specific parameters of the survey cohorts, instrument domains, and data collection as the dates for those next surveys draw near.

iii. Weighting, Coding, and Analysis

After the baseline data are collected, we will construct survey weights. Following best practices in statistical survey, we will likely use "raking weights" (i.e., iterative proportional fitting)[12], as we did in our prior survey analysis. This method will allow us to adjust for non-response to the survey by adjusting on observed factors from the sample to make it match the sampling frame (e.g., in terms of age, sex, race/ethnicity, and rurality).

Survey weights will be designed to address two issues: purposeful over-sampling of subgroups and differential non-response (i.e., differences in the likelihood of different contacted individuals completing the survey). Survey weighting will take place in two steps. First, we will derive weights within each sampling group to upweight or downweight respondents to more closely resemble the known demographic characteristics of the population from which they were sampled. Raking weights work by first adjusting to make the sample weights adjust to the sampling frame on each factor (e.g., age), and then iteratively readjusting the weights to ensure strong match on additional factors (e.g., sex, race/ethnicity). This evaluation team used raking weights in prior beneficiary surveys fielded by this team in 2016 and 2018.

Second, we will create weights that will allow us to derive estimates of the prevalence of different indicators among all childless adults by upweighting or downweighting the survey groups (i.e., the survey strata) to their proportions in the childless adult population. Strata weights will not be required for parents and caregivers since we are pulling a simple random sample from this group.

[12] Battaglia, M. P., Izrael, D., Hoaglin, D. C., & Frankel, M. R. (2009). Practical considerations in raking survey data. *Survey Practice*, *2*(5), 1-10.

As with prior surveys, we will recode variables from their "raw" response categories to grouping that enhance their interpretability. We will also examine outlier values and ensure logical consistency, making data cleaning decisions that we will document for consumers of the survey.

Planned analytic tasks include the following:

- Conduct descriptive analysis with weighted and unweighted samples.
- Examine means and frequencies for all key study variables and compare differences across different study populations of interest (e.g., between childless adults and parents/caretakers).
- Focus some analyses on specific groups (e.g., use of substance use treatment among people with recent experiences of treatment).
- Run regression models to predict the likelihood of key study outcomes. For example, since age and sex may independently influence health care demand, we will include the variables in regression models examining group-level differences in health care use.
- Leverage data from historical surveys (e.g., 2018 waiver evaluation) to compare trends in outcomes that may be influenced by changes in program design over time.

After the survey is implemented, our design will allow us to link survey responses back to administrative data.

iv. Relationship of the Survey to Econometric Study Designs

The survey is designed to test for differences-in-differences (DiD) comparing different segments of the CLA population and to support descriptive analyses. Based on the survey sample groups A-F shown in **Table 3**. **Table 5** identifies how each of these study design group will be used for comparisons.

Notably, Provision 4 relates to a program change that is implemented statewide. Accordingly, we have no true comparison group within the state for the survey. For this hypothesis, we will not be able to implement a quasi-experimental comparison with study data and will therefore only implement descriptive analyses to identify rates of service use without attempting to draw causal inferences.

v. Power Calculations

Our difference-in-difference analysis will be conducted using a regression-based approach where random effect regression model is fit to estimate (for linear models) or (for dichotomous outcomes) $\Lambda(\Pr(y_{it}=1)) = \zeta + \phi Treat_i + \gamma t + \lambda Treat_i \times t + u_i$ where Λ is the logistic function that links the predicted probability into an expression of log-odds. The power analyses presented here evaluate the chance of a significant result on parameter λ.

Linear Models

For linear models, the effect size of standardized mean differences is defined as $\delta = \frac{\lambda}{\sigma_T}$, where σ_T is the residual variance defined as $\sigma_T = \sqrt{\sigma_u^2 + \sigma_e^2}$. The Intraclass correlation is defined as $ICC = \frac{\sigma_u^2}{\sigma_T^2}$, and the within-group standard deviation used in the random intercept model is (1-ICC; details in working paper). Based on work conducted by Hedberg (2020 working paper), the linear model minimum detectable effect size can be approximated by the following formula:

$$\delta = g(\alpha, \beta)\sqrt{\frac{\text{Deff}}{nT(P^2 - P)(Q^2 - Q)}(1 - ICC)}$$

Where g is a factor based on the desired level of significance (α) and power ($1 - \beta$). For .8 power and $\alpha = .05$, this factor is approximately 2.8. The other parameters include the ICC, a design effect due to weighting, the total number of respondents followed (n), the total number of time points ($T = 2$), the proportion of time points exposed to the program ($P = .5$) and the proportion of units exposed the program (Q).

Logistic Models

For logistic models fitting the probability of a positive response to a dichotomous outcome, the effect size is the estimated difference in the log-odds (λ), and its exponent expresses the odds-ratio as the effect size. Since the effect size is based only on the model coefficient, the difference in the log-odds (λ), the formulas for the minimum detectable effect size is adjusted by the square root of the inverse variance of the logistic (log-odds) distribution, which is $\frac{1}{\sqrt{\frac{\pi^2}{3}}} = \frac{\sqrt{3}}{\pi}$.

The minimum odds ratio formula contains additional elements, namely the square root of the variance of the logistic distribution, adding $\left(\frac{\pi}{\sqrt{3}}\right)$ s the within cluster variance.

$$\ln(OR) = \delta\sqrt{\frac{\pi^2}{3}} = g(\alpha, \beta)\sqrt{\frac{\left(\frac{\pi}{\sqrt{3}}\right)\text{Deff}}{nT(P^2 - P)(Q^2 - Q)}}$$

In addition, the design effect due to clustering is different. Since the ICC is employs the well-known variance of the logistic model ($\frac{\pi^2}{3}$) as the level 1 variance component, it is defined as $ICC = \frac{\sigma_u^2}{\sigma_u^2 + \frac{\pi^2}{3}}$, with the identity that $\sigma_u^2 = \left(\frac{\pi^2}{3}\right)\frac{ICC}{1-ICC}$, this will lead to another factor that must be applied to the linear minimum effect size to estimate the minimum difference in log odds.

$$\frac{V_{cluster}}{V_{srs}} = \frac{\sigma_u^2 + \frac{\pi^2}{3}}{\frac{\pi^2}{3}} = \frac{\left(\frac{\pi^2}{3}\right)\frac{ICC}{1-ICC} + \frac{\pi^2}{3}}{\frac{\pi^2}{3}} = 1 + \frac{ICC}{1-ICC}$$

The natural log of this minimum odds ratio is

$$\ln(OR) = g(\alpha,\beta)\sqrt{\frac{\left(\frac{\pi}{\sqrt{3}}\right)\text{Deff}}{nT(P^2-P)(Q^2-Q)}\left(1+\frac{ICC}{1-ICC}\right)}$$

For our hypothesis-testing difference-in-differences analyses, and as elaborated above, we expect to achieve an average response rate of 40%. That means that we would expect to have sample sizes of 840 for each of the groups A-E and 1800 in group F in each survey round.

Using a power calculation tool developed by a statistician at NORC.[13] we have conducted a power calculation to illustrate the minimum effect sizes (for linear and logit models) we would be powered to detect with these sample sizes. Specifically, we assume that we are testing two-sided hypotheses at an alpha level of .05 and are adopting a power level of 80%. We assume that each sample is drawn independently and there is no correlation among survey respondents across years. We also assume a weighting design effect of 1.25, which is similar to what is seen in other analyses of this type. Under these circumstances, we assume that we would obtain a minimum detectable effect of 0.11 standard deviations for linear models, and an odds ratio of 1.52. These calculations are for unconditional models without covariates. If the correlation between the covariates and the treatment indicator are small, power will improve. However, if the correlations are large, the benefit of covariates may be outweighed by the induced multicollinearity.

vi. Beneficiary Interviews

In addition to the surveys, the evaluation team plans to conduct a series of individual interviews with beneficiaries, in CY 2022, using a protocol designed and implemented by NORC at the University of Chicago for use in the evaluation of the Kentucky Medicaid 1115 waiver. The Kentucky waiver protocol had included surveys with 125 Medicaid beneficiaries. For Wisconsin's project, we have planned to conduct interviews with 25 beneficiaries. This number of interviews will yield sufficient information to inform the process and quality improvement aims attached to this component of the evaluation.

Respondents who complete and return the CY22 mail survey will be considered eligible for an in-person interview if they indicate willingness to be contacted for a follow-up interview. We will select potential interview sample members from two to three targeted geographic areas within the state of Wisconsin, from both urban and rural regions with an aim toward including diverse perspectives. The interview participants will receive a $50 participation incentive, designed to attract interest in participation. The

[13]Hedberg E. Optimal Time-points for Difference in Difference Models with Multiple Indicators and (Possibly) Repeated Cross Sections. NORC, Chicago. Unpublished Working Paper.

selection of participants will be finalized once the full universe of interested potential participants is identified.

We consider it important to seek diverse perspectives in the interview pool, along characteristics such as urban/rural residents, sex or gender identity, age, race, ethnicity, health status. But, for the intended purposes of the qualitative methods, we are not particularly concerned about statistical representation across each specific geographic area of the state.

The collection of interview data, using qualitative methods, is not expected to provide a fully representative sample of the state population. Rather, this approach to data collection is designed to answer questions about lived experiences, gathering narrative (rather than numeric) data, and analyzing these data thematically (rather than mathematically). These qualitative methods help to understand how people experience events, programs, policies and services, and how and why they may respond in various ways.

Such qualitative methods help evaluators to better understand the role of factors that are difficult to fully quantify or isolate, such as feelings, attitudes, social environments, relationships, and how these factors might affect individuals differently. Qualitative methods can be especially useful for constructing theories or generating hypotheses in areas in which causal pathways are unclear. In this way, our planned qualitative methods can help support or alter hypotheses and suggest underlying mechanisms to explain observed trends and otherwise measured outcomes.

Table 4. Survey Domains Relevant to Study Hypotheses

Hypothesis	Target population	Survey domain(s)	Survey question(s)
Provision 1: Provide state plan benefits, other than family planning and tuberculosis-related services, to non-elderly childless adults with family income of up to 100% FPL			
Hypothesis 1.2. The expansion of benefits to non-elderly childless adults (CLAs) will lead to increased access to medical care among poor CLAs.	CLA	• Health insurance status and recent history of uninsurance • Access and use of general medical care • Demographics and socioeconomic status	Self-reported access/barriers to care, utilization of care, self-reported quality of care, annual household income, recently uninsured status
Hypothesis 1.3. The expansion of benefits to CLAs will lead to lower provision of uncompensated care by hospitals.		• Health insurance status and recent history of uninsurance • Access and use of general medical care	Self-reported use of uncompensated care, recently uninsured status
Provision 2: Health Assessment Linked to Eligibility and Premiums			
Hypothesis 2.1 Beneficiaries for whom the health assessment has eligibility and premium consequences will reduce risky behaviors and engage in more healthy behaviors.	CLA	• Exercise, smoking, diet and other preventive health behaviors • Health status and chronic conditions • Access and utilization of general medical care • Knowledge and perceptions of current provisions of the waiver • Attitudes about consumerism and personal responsibility • Demographics and socioeconomic status	Self-reported eligibility for the premiums, knowledge and completion of HA, risk behaviors (e.g., tobacco use), healthy behaviors (e.g., exercise and seatbelt use), motivation and attempts to change behaviors

Hypothesis	Target population	Survey domain(s)	Survey question(s)
Hypothesis 2.2 The health assessment will increase the number of beneficiaries receiving treatment for substance-use disorders.		• Substance use and use disorders • Access and utilization of drug treatment • Exercise, smoking, diet and other preventive health behaviors • Health status and chronic conditions • Access and utilization of general medical care • Demographics and socioeconomic status	Substance use/use disorders, access and utilization of SUD treatment, interest and motivation to receive SUD treatment; self-reported eligibility for the premiums, ability to pay premiums
Provision 3: Implement premiums for childless adult beneficiaries ages 19-64 with income between 50% and 100% FPL; Allow termination and a period of non-eligibility for up to six months for childless adults who do not pay the required premium; Implement an $8 copayment for non-emergent use of the emergency department for childless adults			
Hypothesis 3.1. Beneficiaries who are required to make premium payments will gain familiarity with a common feature of commercial health insurance.	CLA	• Knowledge and perceptions of current provisions of the waiver • Attitudes about consumerism and personal responsibility • Demographics and socioeconomic status	Health insurance literacy; self-reported eligibility for the premiums, ability to pay premiums
Hypothesis 3.5. The imposition of a copayment for non-emergent use of the emergency department (ED) will lead to more appropriate uses of medical care among CLAs enrolled in Medicaid.		• Knowledge and perceptions of current provisions of the waiver • Attitudes about consumerism and personal responsibility • Demographics and socioeconomic status	Health insurance literacy; self-reported eligibility for the copayments, ability to pay copayments

Hypothesis	Target population	Survey domain(s)	Survey question(s)
Provision 4: Provide residential benefit for SUD treatment and coverage for existing SUD services when they are provided in an institution of mental disease (IMD).			
Hypothesis 4.2a. After implementation of the SUD demonstration waiver, enrollees' awareness of available SUD treatment services will increase over time	All Medicaid-Enrolled Adults	• Substance use and use disorders • Access and utilization of drug treatment • Knowledge and perceptions of current provisions of the waiver	Substance use/use disorders, access and utilization of SUD treatment, interest and motivation to receive SUD treatment
Hypothesis 4.3a. The SUD demonstration waiver will increase or have no effect on SUD outpatient services and pharmacotherapy treatment provided outside of IMD settings.		• Substance use and use disorders • Access and utilization of drug treatment • Knowledge and perceptions of current provisions of the waiver	Substance use/use disorders, access and utilization of SUD treatment, interest and motivation to receive SUD treatment
Hypothesis 4.3b. The SUD demonstration waiver will reduce use of hospital-based services, conditional on increased supply of SUD providers or increased use of new and existing covered SUD services.	All Medicaid-Enrolled Adults	• Access and utilization of general medical care • Substance use and use disorders • Access and utilization of drug treatment • Knowledge and perceptions of current provisions of the waiver	Self-reported access/barriers to care, utilization of care; substance use/use disorders, access and utilization of SUD treatment, interest and motivation to receive SUD treatment
Hypothesis 4.3c. The SUD demonstration waiver will increase use of health care for co-morbid physical and mental health conditions among enrollees with an SUD, conditional on increased supply of SUD providers or increased use of new and existing covered SUD services.		• Health status and chronic conditions • Access and utilization of general medical care • Substance use and use disorders • Access and utilization of drug treatment • Knowledge and perceptions of current provisions of the waiver	Self-reported access/barriers to care, utilization of care, quality of care; substance use/use disorders, access and utilization of SUD treatment, interest and motivation to receive SUD treatment

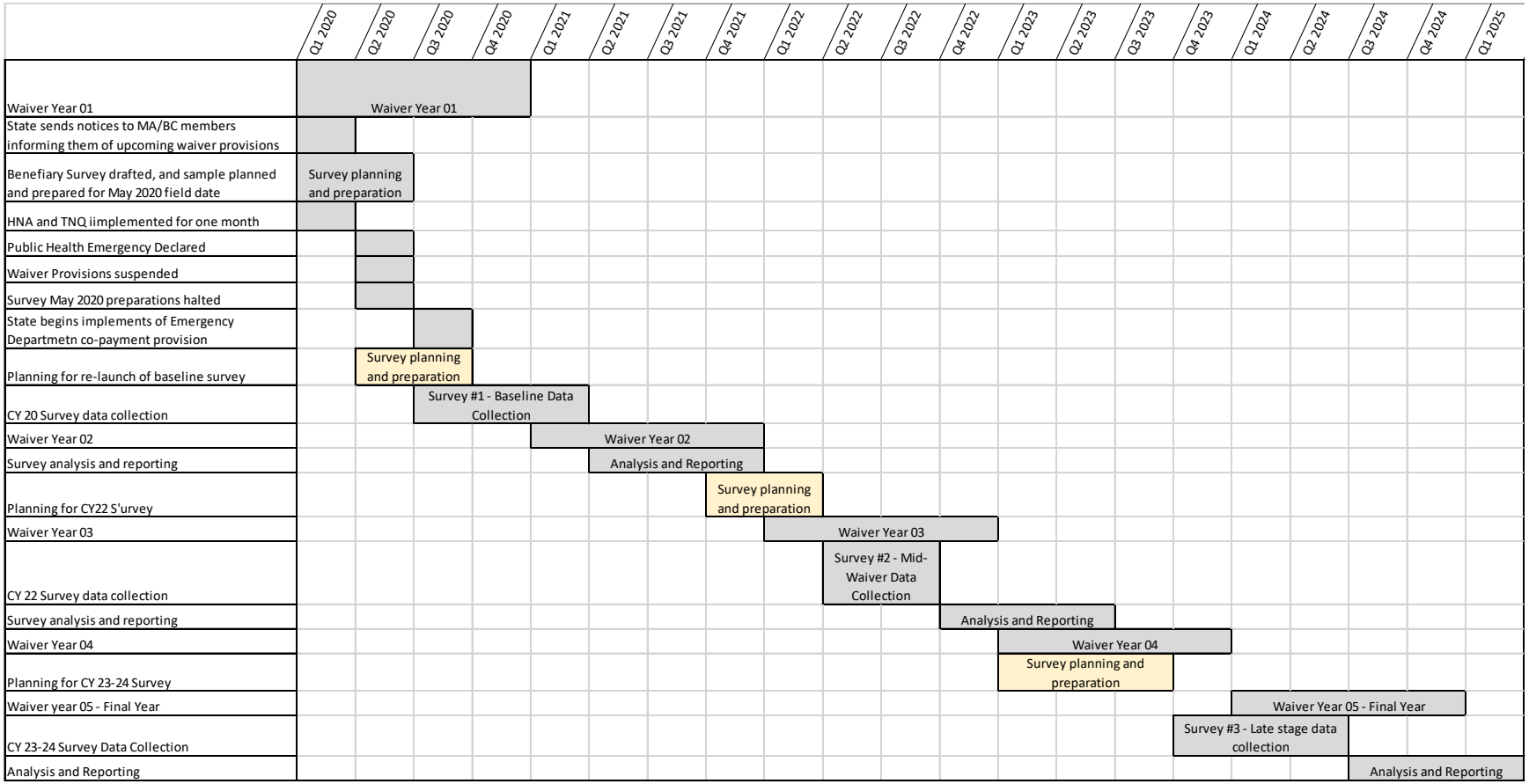
Hypothesis	Target population	Survey domain(s)	Survey question(s)
Hypothesis 4.3d. The SUD demonstration waiver will increase adherence to SUD treatment, conditional on increased supply of SUD providers or increased use of new and existing covered SUD services.		• Substance use and use disorders • Access and utilization of drug treatment • Knowledge and perceptions of current provisions of the waiver	Self-reported access/barriers to care, utilization of care; substance use/use disorders, access and utilization of SUD treatment, interest and motivation to receive SUD treatment

Table 5. Survey Study Design Comparisons

Provision	Primary treated group(s)	Primary comparison group(s)
Provision 1: Provide state plan benefits, other than family planning and tuberculosis-related services, to non-elderly childless adults with family income of up to 100% FPL		
Hypothesis 1.2. The expansion of benefits to non-elderly childless adults (CLAs) will lead to increased access to medical care among poor CLAs.	Groups A+B	Group E
Hypothesis 1.3. By expanding the safety net, the expansion of benefits to CLAs will lead to lower provision of uncompensated care by hospitals.	Groups A+B	Group E
Provision 2: Health Assessment Linked to Eligibility and Premiums		
Hypothesis 2.1 Beneficiaries for whom the health assessment has eligibility and premium consequences will reduce risky behaviors and engage in more healthy behaviors.	Groups A+B	Group E
Hypothesis 2.2 The health assessment will increase the number of beneficiaries receiving treatment for substance-use disorders.	Groups A+B	Group E
Provision 3: Implement premiums for childless adult beneficiaries ages 19-64 with income between 50% and 100% FPL; Allow termination and a period of non-eligibility for up to six months for childless adults who do not pay the required premium; Implement an $8 copayment for non-emergent use of the emergency department for childless adults		
Hypothesis 3.1. Beneficiaries who are required to make premium payments will gain familiarity with a common feature of commercial health insurance.	Groups B, D	Group A
Hypothesis 3.54. The imposition of a copayment for non-emergent use of the emergency department (ED) will lead to more appropriate uses of medical care among CLAs enrolled in Medicaid.	Groups B, D	Group A

Provision	Primary treated group(s)	Primary comparison group(s)
Provision 4: Provide residential treatment benefit for SUD and coverage for existing SUD services when they are provided in an institution of mental disease (IMD).		
Hypothesis 4.2a. After implementation of the SUD demonstration waiver, enrollees' awareness of available SUD treatment services will increase over time	Group A, B, C, F	None
Hypothesis 4.3a. The SUD demonstration waiver will increase or have no effect on SUD outpatient services and pharmacotherapy treatment provided outside of IMD settings.	Group A, B, C, F	None
Hypothesis 4.3b. The SUD demonstration waiver will reduce use of hospital-based services, conditional on increased supply of SUD providers or increased use of new and existing covered SUD services.	Group A, B, C, F	None
Hypothesis 4.3c. The SUD demonstration waiver will increase use of health care for co-morbid physical and mental health conditions among enrollees with an SUD, conditional on increased supply of SUD providers or increased use of new and existing covered SUD services.	Group A, B, C, F	None
Hypothesis 4.3d. The SUD demonstration waiver will increase adherence to SUD treatment, conditional on increased supply of SUD providers or increased use of new and existing covered SUD services.	Group A, B, C, F	None

Table 6. Beneficiary Surveys: Timeframe across the Waiver Demonstration Period



III. EVALUATION PROVISIONS, HYPOTHESES, AND QUESTIONS

Note regarding the COVID-19 pandemic's effect on the waiver evaluation:

Since the COVID-19 public health emergency declared on March 18, 2020, the Wisconsin Medicaid program has suspended the several of its waiver provisions, including premiums and the health needs assessment. We expect that these provisions will remain in suspension during the entire period of the federally-designated public health emergency. The state has implemented, as of July 2020, the provision requiring a copayment for emergency department services when identified as a non-emergency. The SUD residential treatment benefit was implemented in on February 1, 2021.

The evaluation team adjusted its data collection and analysis plan, previously detailed in the December 2019 version of the Design Report, in response to the change in waiver implementation. Generally, these revisions include greater flexibility in modeling time, the exclusion of 2020 from the baseline or pre-period, and dropping interrupted time series analyses as the assumption of a stable pre-trend is no longer tenable. The following sections outline in detail these changes to the evaluation plan including the effects of potential changes in the beneficiary pool. The team continues to monitor COVID-19 related secular and programmatic changes that may influence evaluation outcomes (e.g., expanded coverage for telehealth services, maintenance of eligibility, expanded access to subsidized Marketplace coverage, etc.). We will continue to analyze changes in enrollment and health care use patterns among the waiver populations that are associated with these programmatic and secular changes to inform if or how we need to account for such changes in the evaluation of the waiver provisions.

IIIA. Provision I: Coverage up to 100% FPL for Childless Adults

A1. General Background Information

Provision: Provide state plan benefits, other than family planning and tuberculosis-related services, to non-elderly childless adults with family income of up to 100% FPL.

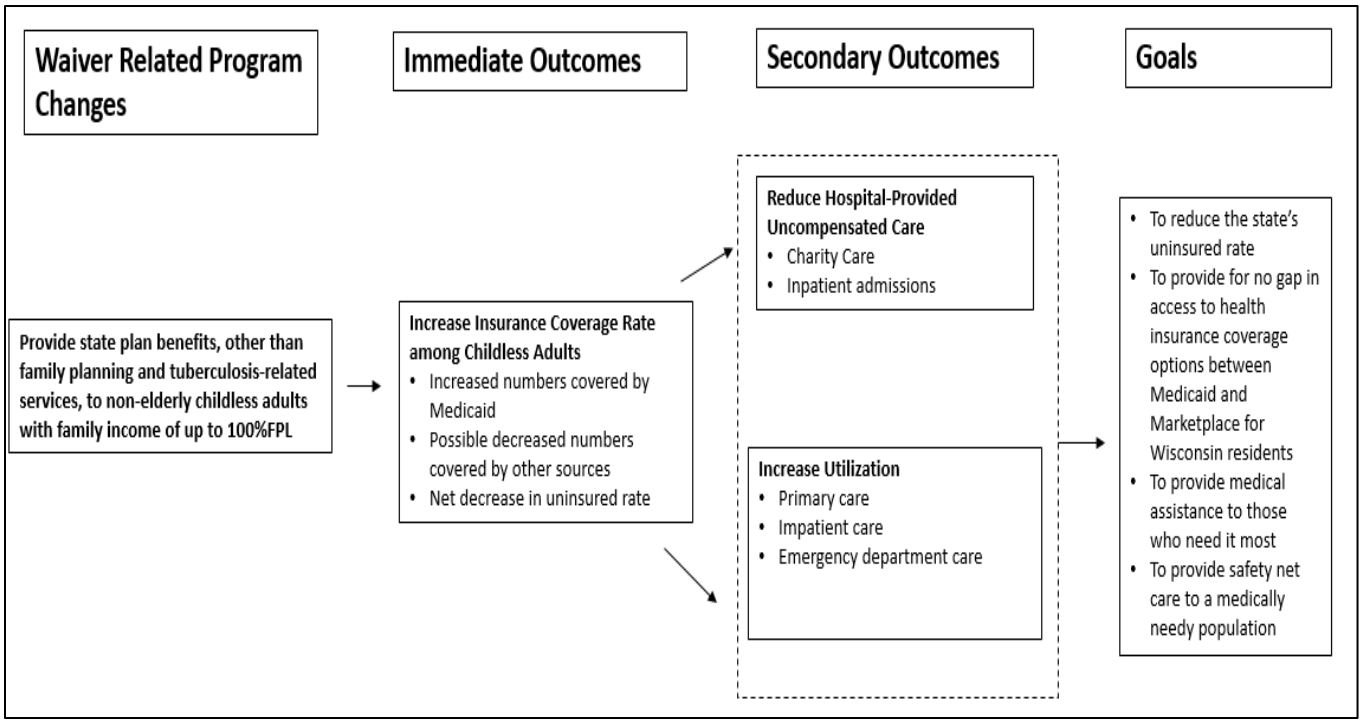
In April 2014, Wisconsin initiated a CMS-approved 1115 Demonstration Waiver that allowed federal Medicaid matching funds for providing health care coverage for childless adults between the ages of 19 and 64 years old who have income at or below 100% FPL. The childless adult population receives the standard benefit plan, which is the same benefit plan that covers parents, caregivers, and children. That waiver expired on December 31, 2018, and the new CMS waiver approved through 2023 extends this existing coverage for childless adults.

Medicaid program goal: To improve health outcomes and reduce unnecessary services. As well, by establishing an eligibility income limit at 100% FPL, rather than implementing a full ACA-authorized Medicaid expansion, the State of Wisconsin focused on "creating a program that is sustainable" and "available to those who need it most."

A2. Evaluation Questions and Hypotheses

A2.1. Driver Diagram

Figure 1. Driver Diagram for Childless Adults Coverage Expansion



A2.2. Hypotheses & Research Questions

Hypothesis 1.1. The expansion of benefits to non-elderly childless adults (CLAs) will reduce the state's uninsured rate.

Primary Research Question 1.1: Did the expansion of benefits to CLAs reduce the state's uninsured rate?

Q 1.1a. What are the trends in Wisconsin's adult uninsured rate and uninsured rate among CLAs?

Q 1.1b. How much did the change in the number of CLAs due to the Medicaid expansion contribute to the overall change in the adult uninsured rate in Wisconsin?

Hypothesis 1.2. The expansion of benefits to CLAs will lead to increased access to medical care among poor CLAs.

Primary Research Question 1.2: How did the CLA expansion affect the use of health care services?

Q 1.2a. Did the expansion of benefits to CLAs increase the use of primary care among poor CLAs in Wisconsin?

Q 1.2b. What are the short- and long-term effects of eligibility and coverage policies, including maintenance of eligibility, on Medicaid health service expenditures?

Hypothesis 1.3. By expanding the safety net, the expansion of benefits to CLAs will lead to lower provision of uncompensated care by hospitals.

Primary Research Question 1.3. Did the expansion of benefits to CLAs reduce the provision of uncompensated care (charity care plus bad debt) among Wisconsin acute care hospitals?

Q 1.3a. What are the trends in the provision of uncompensated care among Wisconsin hospitals and did it change along with the expansion of benefits to CLAs?

Q 1.3b. Did hospitals in areas with greater reductions in the number of uninsured CLAs experience differential changes in uncompensated care?

Hypothesis 1.4. Additional requirements of the current demonstration may increase administrative costs.

Primary Research Question 1. 4. What are the administrative costs incurred by the state and counties to implement and operate the demonstration?

Q1.4a What are the administrative costs incurred by the state to implement and operate the demonstration?

Q1.4b How did county income maintenance staff workloads change around implementation of the current demonstration?

A3. Methodology

A3.1. Evaluation design summary

We will use three analytic approaches to address the primary research question for evaluation of waiver provision 1, the expansion of Medicaid coverage to childless adults up to 100% FPL. These are ITS, DiD, and panel data models based on geographically contiguous and matched counties.

COVID-related note: Waiver provision 1 has been underway since 2014. Its evaluation does not rely on post 2020 data for causal inference and can include the pandemic and post-pandemic periods in a descriptive form. The evaluation of this provision can readily exclude the 2020 period and retain the use of ITS methods. However, because trends in the waiver population during the pandemic period and beyond are of interest to understand the remaining waiver provisions, we will also include a description of them, allowing for heterogeneity over time, when feasible.

The Design Table (**Table 7**) summarizes the key features of the evaluation design.

Table 7. Provision 1: Summary of Hypotheses, Questions, Data Sources, and Analytic Approaches for Evaluation of the Expansion of Medicaid Benefits to Childless Adults (CLAs)

Comparison strategy	Outcome measures	Data sources	Analytic approach	
			Original	**Revised**
Hypothesis 1.1: *The expansion of benefits to CLAs will reduce the state's uninsured rate.*				
Primary research question 1.1: Did the expansion of benefits to CLAs reduce the state's uninsured rate?				
Question 1.1a: What are the trends in Wisconsin's adult uninsured rate and uninsured rate among CLAs?				
CLAs prior to expansion	No source of insurance coverage	American Community Survey	ITS	This analysis will only rely on data prior to 2020.
	Covered by Medicaid/BadgerCare			
	Covered by private insurance	Family Health Survey		
	Other public coverage			
Question 1.1b: How much did the change in the number of CLAs due to the Medicaid expansion contribute to the overall change in the adult uninsured rate in Wisconsin?				
CLAs in other states	No source of insurance coverage	American Community Survey	DiD	Causal analysis will only rely on data prior to 2020; descriptive analysis of 2020 forward will be included.
	Covered by Medicaid/BadgerCare			
	Covered by private insurance	Behavioral Risk Factor Surveillance System		
	Other public coverage			
Adults in counties that neighbor Wisconsin	No source of insurance coverage	Small Area Health Insurance Estimates	Panel data models based on geographically contiguous and matched border counties	

Comparison strategy	Outcome measures	Data sources	Analytic approach	
			Original	Revised
Hypothesis 1.2: *The expansion of benefits to CLAs will lead to increased access to medical care among poor CLAs.*				
Primary research question 1.2: How did the CLA expansion affect the use of health care services?				
Question 1.2a: Did the CLA expansion increase the use of medical care among low-income CLAs in Wisconsin?				
CLAs in other states	Doctor Visits	Behavioral Risk Factor Surveillance System	DiD	Causal analysis will only rely on data prior to 2020; descriptive analysis of 2020 forward will be included.
	Dentist Visits			
	Health care access	Family Health Survey		
Adults in other states	Hospital stays	State Inpatient Databases	DiD	Causal analysis will only rely on data prior to 2020; descriptive analysis of 2020 forward will be included.
	Emergency department visits			
Parents and caregivers in Wisconsin	Self-reported utilization and access to care	Survey of beneficiaries	DiD	
Question 1.2b: What are the short- and long-term effects of eligibility and coverage policies, including maintenance of eligibility, on Medicaid health service expenditures?				
CLAs in other states	Total Medicaid-paid inpatient expenditures	State Inpatient Databases	DiD	This analysis will only rely on data prior to 2020.
	Per-person Medicaid-paid inpatient expenditures			
Parents and caregivers in Wisconsin	Total Medicaid-paid health care expenditures	State Medicaid Claims	DiD	Causal analysis will only rely on data prior to 2020; descriptive analysis of 2020 forward will be included.
	Per-person Medicaid-paid health care expenditures			

Comparison strategy	Outcome measures	Data sources	Analytic approach	
			Original	Revised
Hypothesis 1.3: *By expanding the safety net, the expansion of benefits to CLAs will lead to lower provision of uncompensated care by hospitals.*				
Primary research question 1.3: Did the CLA expansion reduce the provision of uncompensated care among Wisconsin acute care hospitals?				
Question 1.3a: What are the trends in the provision of uncompensated care among Wisconsin hospitals and did it change along with the expansion of benefits to CLAs?				
Hospitals prior to CLA expansion	Dollar amount of charity care provision Dollar amount of bad debt	CMS Hospital Cost Reports	ITS	This analysis will only rely on data prior to 2020.
Question 1.3b: Did hospitals in areas with greater reductions in the number of uninsured CLAs experience differential changes in uncompensated care?				
Hospitals in other states	Dollar amount of charity care provision Dollar amount of bad debt	CMS Hospital Cost Reports	DiD	Causal analysis will only rely on data prior to 2020; descriptive analysis of 2020 forward will be included.
Hospitals in neighboring geographic areas	Dollar amount of charity care provision Dollar amount of bad debt	CMS Hospital Cost Reports	Panel data models based on geographically contiguous and matched border areas	Causal analysis will only rely on data prior to 2020; descriptive analysis of 2020 forward will be included.
Hypothesis 1.4: *Additional requirements of the demonstration may increase administrative costs.*				
Primary research question 1.4: What are the administrative costs incurred by the state and counties to implement and operate the demonstration?				
Question 1.4a: What are the administrative costs incurred by the state to implement and operate the demonstration?				
N/A	Administrative costs associated with demonstration startup Ongoing administrative costs of demonstration operations	DHS-provided estimates of contract costs, staff-time equivalents, and other costs	Descriptive analysis of administrative costs over time	Unchanged
Question 1.4b: How did county income maintenance staff workloads change around implementation of the current demonstration?				
N/A	County administrative costs	County workload reporting data	Descriptive analysis of administrative costs over time	Unchanged

A3.2. Target and Comparison Populations

The target populations for the evaluation of waiver provision 1 include (i) CLAs in Wisconsin; (ii) adults in Wisconsin; and (iii) acute-care hospitals in Wisconsin.

We will address each of the primary research questions as follows:

Q 1.1. "Did the CLA expansion reduce the state's uninsured rate?": Construct three comparison groups for CLAs subject to the CLA expansion. The first is CLAs in years prior to the CLA expansion (years prior to 2014). The second comparison group is CLAs from other states (both states that fully expanded Medicaid to 138% FPL and states that did not expand at all). The third comparison group is adults in counties that border Wisconsin.

Q 1.2. "How did the CLA expansion affect the use of health care services?": Construct three comparison groups: CLAs in other states, adults in other states, and parents and caregivers in Wisconsin BadgerCare who were consistently able to access comprehensive benefits.

Q 1.3. "Did the CLA expansion reduce the provision of uncompensated care among Wisconsin acute care hospitals?": Compare acute care hospitals in Wisconsin to three comparison groups of hospitals: hospitals in Wisconsin prior to the CLA expansion, hospitals in other states, and hospitals in geographic areas in other states that border Wisconsin.

Q 1.4. "What are the administrative costs incurred by the state and counties to implement and operate the demonstration?" No comparison group; descriptive analysis of administrative costs over time as reported by state records and through interviews.

Table 8. Provision 1 Data Sources

	Hypotheses
The American Community Survey (ACS). To estimate sources of health insurance coverage in the previous year among CLAs in Wisconsin and in comparison states.	H1.1
Behavioral Risk Factor Surveillance System (BRFSS). To estimate both health insurance coverage and measures of access to health care.	H1.1 H1.2
Small Area Health Insurance Estimates (SAHIE). To estimate health insurance coverage rates at the county level.	H1.1
Wisconsin Family Health Survey (FHS). To estimate Wisconsin rates of health insurance coverage, measures of health status, health problems, and use of health care services.	H1.1 H1.2
State Inpatient Databases (SID). Data on six states from the SID to measure inpatient stays and emergency department visits.	H1.2
Medicaid beneficiary survey. To assess CHA enrollees' experiences with barriers related to cost, availability, and benefit design.	H1.2
Hospital Cost Reports. To measure hospitals' provision of uncompensated care.	H1.3
State and Managed Care Administrative Records. To estimate the staff and other inputs for implementing and operating the demonstration.	H1.4
Interviews with state agency staff and partner organizations. To identify staff effort and administrative costs associated with implementing and operating the demonstration.	H1.4

A3.3. Evaluation Period

The evaluation period will include the years 2012 (prior to initial CLA coverage expansion), through 2023, including both a period prior to and a period following the launch of the new waiver in 2020. The Provision 1 analyses will apply to the current demonstration period while including the timeline of the 2014 initial expansion to the CLA population as relevant contextual background. Effects may differ across these time periods, which we will allow for in the analyses.

A3.4. Data Sources & Outcome Measures

The outcome measures for this evaluation are defined in **Table 7**. This evaluation will involve multiple data sources. They are noted in **Table 8**, along with the hypotheses for which these data will be used. Section IID, above, provides a full description of these data sources.

A3.5. Analytic Methods

We will address each of the primary research questions as follows:

Q1.1. "Did the CLA expansion reduce the state's uninsured rate?": Compare CLAs in Wisconsin both pre- and post-expansion. We will conduct interrupted time-series analyses (described below and in Section IIB) to determine whether the CLA expansion reduced the fraction of CLAs in the state who did not have any source of health insurance. Additional outcomes we will examine include sources of insurance coverage, including Medicaid/BadgerCare, private insurance, and other sources of public coverage (such as Medicare). We can construct these groups using data from the American Community Survey (ACS) and from Wisconsin's Family Health Survey.

We will also compare CLAs in Wisconsin with CLAs in other states using DiD (described below and in Section IIB). In particular, we will use the ACS to compare the change in the fraction of CLAs in Wisconsin without health insurance with the change in the fraction of CLAs in states that did not expand Medicaid and, similarly, with the change in states that fully expanded Medicaid. This analysis will also examine changes in sources of coverage (Medicaid/BadgerCare, private, other public).

We will compare adults in counties that border Wisconsin with adults in Wisconsin by geographically matching border counties in Wisconsin to their contiguous border counties in neighboring states and by estimating panel data models (described below) and using data from the Census Small Area Health Insurance Estimates program. These models will enable us to determine the effect of the CLA expansion on the fraction of adults without health insurance. Since all of Wisconsin's neighboring states implemented a full ACA Medicaid expansion (with the exception of Iowa), we will be comparing the CLA expansion to a full Medicaid expansion.

Q1.2. "Did the CLA expansion increase the use of medical care among poor CLAs in Wisconsin?" We will compare CLAs in Wisconsin with CLAs in other states using DiD and data from the BRFSS. Comparing adults in Wisconsin and in other states and using data from the SID, we will estimate DiD models on the number of hospital stays, and emergency department visits. We will undertake a similar comparison between parents and caregivers enrolled in Medicaid and CLAs enrolled in

Medicaid taking advantage of the historical data available in the Wisconsin Medicaid beneficiary survey (i.e., data that our team collected in 2014, 2016, and 2018).

Q1.3. "Did the CLA expansion reduce the provision of uncompensated care among Wisconsin acute care hospitals?": We will employ ITS, DiD, and panel data models on hospitals in geographically matched areas to determine the impact of the CLA expansion on the provision of charity care and on bad debt by hospitals.

Q1.4. "What are the administrative costs incurred by the state to implement and operate the demonstration?": We will perform a descriptive analysis of DHS-provided reports of contract costs, staff-time equivalents, and other administrative costs 1) to establish demonstration policies, typically incurred in the years prior to and including the initial year of the demonstration, 2) operate the ongoing demonstration, and 3) for state agencies partnering with Medicaid to implement and operate the demonstration.

Difference-in-Differences Method

When using data sources that span multiple states, and when we are able to construct comparison group of CLAs in other states, we will use DiD to compare changes in outcomes among CLAs in Wisconsin to that change among CLAs in other states. This method is described in Section IIC.[14] We will allow effects to differ over time.

ITS Estimation

It may not be possible to construct valid control groups to estimate each treatment effect, because the Medicaid program will implement select waiver provisions for all eligible beneficiaries at the same time, and may change implementation practices in light of information learned in the process of monitoring, rapid-cycle evaluation, shared learning, and quality/process improvement. These changes in implementation are intended to improve population outcomes, and evaluating these changes is an important component of the analysis. Consequently, to the extent that these changes affect an entire state's enrolled population, there will be no control group against which to compare. To account for this, we will also assess changes in outcomes for Wisconsin CLAs using time series models such as the ITS (ITS) model, which is described in Section IIC.[15] The pandemic-related disruptions in data do not affect the use of ITS for this provision, as we are able to use data entirely prior to that year to observe the effects of the policy change, which occurred in 2014.

[14]See Wing, C., Simon, K., & Bello-Gomez, R. A. (2018) Designing Difference in Difference Studies: Best Practices for Public Health Policy Research. Annual Review of Public Health 39(1):453-469; Dague L, Lahey JN. Causal Inference Methods: Lessons from Applied Microeconomics. 2019. Journal of Public Administration Research and Theory. 29(3): 511–529.

[15] See Kontopantelis E, Doran T, Springate DA, Buchan I, Reeves D. 2015. Regression-Based Quasi-Experimental Approach When Randomisation Is Not an Option: Interrupted Time Series Analysis BMJ. 350:h2750.

Panel Data Methods with Geographically Matched Border Counties

We will implement our panel data models on a geographically matched sample, following the local identification methodology of Dube, Lester, and Reich (2010)[16], and compare outcomes in adjacent counties that straddle a state border with Wisconsin. This local identification strategy relies on contiguous counties being similar in terms of population and market characteristics. We will use the U.S. Census County Adjacency File to identify all counties in states that are adjacent to one or more counties in Wisconsin. To estimate the effect of the CLA expansion on outcomes, we estimate the following fixed-effects regression on a sample of matched counties:

$$(1) \qquad y_{c,m,t} = \alpha + \gamma expansion_{c,m,t} + \varphi_m + \phi_c + \tau_t + e_{c,m,t}.$$

where $y_{c,m,t}$ is the outcome in county *c* in the matched-county pair *m* in year *t*, $expansion_{c,m,t}$ is a dummy variable indicating that county *c* in group *m* is in a Wisconsin following the CLA expansion, τ_t is a year fixed effect, φ_m is a matched-county pair fixed effect, and ϕ_c is a county fixed effect. We will allow effects to differ over time.

A4. Methodological Limitations

Because the CLA expansion was implemented at a single time statewide and without randomized controls, the evaluation relies on quasi-experimental methods.

IIIB. Provision 2: Health Assessment Linked to Eligibility and Premiums

B1. General Background Information

Provision: For childless adults, 1) require completion of a health risk assessment as a condition of eligibility and linked to potential reduction in premiums for those subject to premiums, and 2) provide a voluntary health needs assessment linked to potential reduction in premiums for those subject to premiums.

The Wisconsin Medicaid program had planned and did initiate this provision in February 2020. However, it was in effect only until March 18, 2020, the date of enactment of the federally public health emergency, at which point this provision were suspended.

Once re-activated, the target population for this provision includes childless adult applicants and beneficiaries. The two parts include 1) a single question, presented during the application process, which requires a response from any childless adult applicant as a condition of eligibility and is linked to premium reductions for childless adults who are subject to premiums, and 2) voluntary questions, linked

[16] Dube A, Lester TW, Reich M. 2010. Minimum Wage Effects Across State Borders: Estimates Using Contiguous Counties. The Review of Economics and Statistics. Vol. 92(4):945-964.

to premium reductions for childless adults who are subject to premiums (the childless adult population with incomes 50% through 100% FPL).

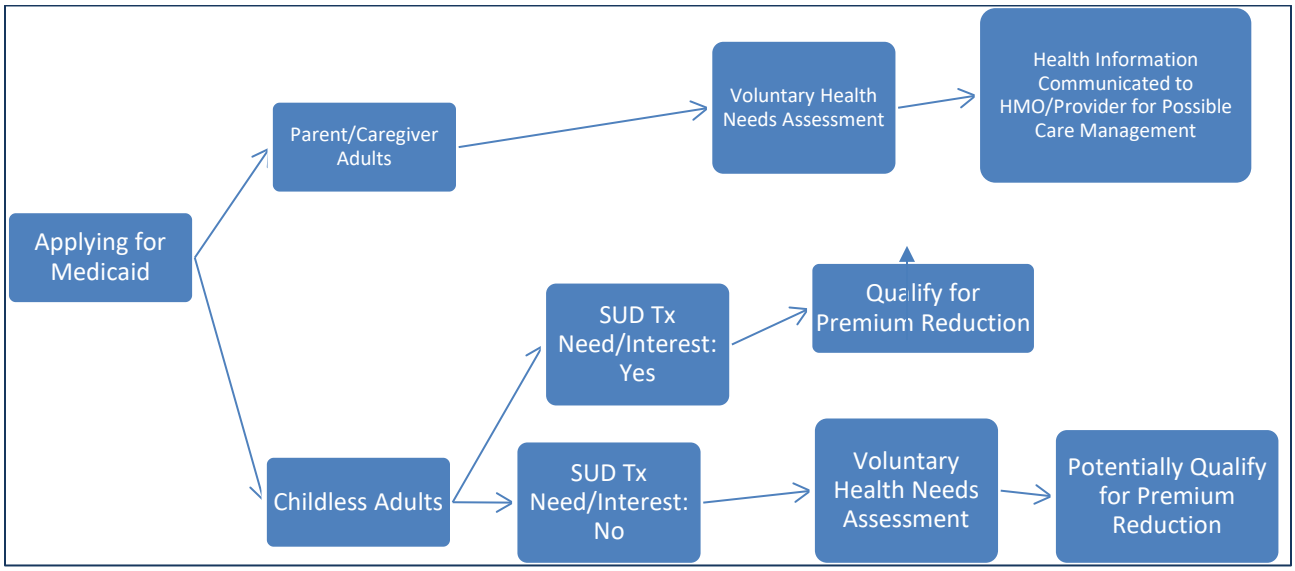
All childless adults applying for Medicaid will be asked, as part of the application process, a single question to assess the applicant's (or renewing beneficiary's) interest in receiving treatment for a substance use disorder. The state refers to this as the Treatment Needs Questionnaire (TNQ). Any response to the question satisfies the condition of eligibility. The Medicaid program will inform the beneficiary's HMO if s/he is interested in receiving treatment for a SUD. An affirmative response will also reduce the premium for CLAs that are subject to premiums. It is important to note that CLA applicants/beneficiaries will not be aware of any potential premium implications related to their response on their interest in receiving treatment for a substance use disorder. Notification of premium reductions will occur only after completion of the entire enrollment process. For this reason, any impact of the health assessment on treatment for SUDs will likely result from identification of the SUD and subsequent communication to the HMO for treatment follow up. The premium differentials are not a likely mechanism through which the health assessment could affect SUD treatment.

After the application, all CLAs will be invited to complete further questions within the voluntary component of the health assessment. The introductory text will inform the individual that completion of this portion of the assessment provides an opportunity to reduce the monthly premium for those income-eligible for premiums. The introductory text will also suggest that the question will be used to communicate care needs to the members' HMOs. The assessment will include questions about health-promoting behaviors (such as daily exercise), health risks (such as smoking), and about intention to reduce those risks through health care-seeking and/or behavior change. The substantive responses to these questions determine whether a premium-eligible CLA qualifies for a premium reduction.

The Medicaid program will also make this voluntary component of the health assessment available for any parent/caregiver applicant or adult BadgerCare Plus beneficiary who wishes to complete it. This beneficiary population is not subject to premiums. This group will see the same introductory language pertaining to the use of the health assessment for communicating with the HMOs and better managing their care plans.

Medicaid program goals: To improve beneficiaries' engagement in their health care choices by increasing their awareness of behaviors that might be detrimental to their health, while also encouraging them to make healthier choices.

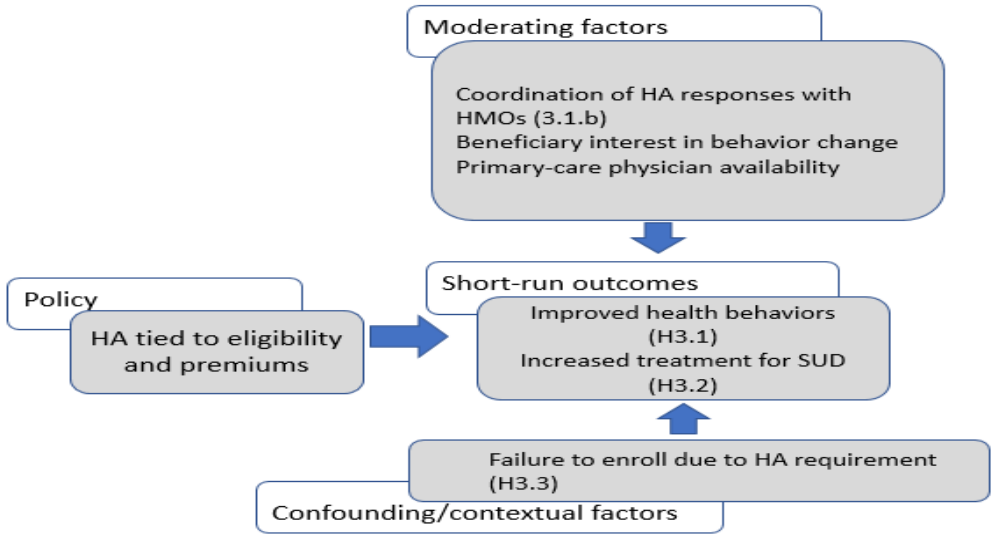
Figure 2. Health Assessment Pathways: Eligibility, Health Assessment, and Premium Reduction



B2. Evaluation Questions and Hypotheses

B2.1. Driver Diagram

Figure 3. Driver Diagram: Health Risk and Needs Assessment



B2.2. Hypotheses & Research Questions

This provision of the demonstration waiver will implement an assessment of health risks and needs that is linked to eligibility and premium reductions for childless adult beneficiaries. Childless adults (CLAs) are required to answer a question on their interest in treatment for substance-use disorders as a requirement of eligibility (the treatment needs questionnaire), and an affirmative response will reduce the premium for CLAs who are subject to the premium requirement. The voluntary health needs assessment includes additional questions assessing healthy behaviors (e.g., alcohol consumption, smoking, exercise). Answering the additional questions on healthy behaviors is not a requirement of eligibility, but CLAs with incomes greater than 50% and up to and including 100% will receive a premium reduction if their responses reveal that they engage in at least one risk-mitigating or healthy behavior.

Hypothesis 2.1. Beneficiaries for whom the health assessment has eligibility and premium consequences will reduce risky behaviors and engage in healthier behaviors.

Primary Research Question 2.1: Did CLA beneficiaries reduce risky health behaviors and increase healthy behaviors after the introduction of the health assessment?

Q 2.1.a. What fraction of CLA enrollees completed the second part of the health assessment? How does this compare to the fraction of non-CLA adult enrollees completing it?

Q 2.1.b. What is the distribution of healthy behaviors reported by CLAs completing the health assessment? What fraction of CLAs achieved a premium reduction based on their answers to the health assessment? How did these two patterns trend over time?

Q 2.1.c. How did the number of health behaviors reported by CLAs in the health assessment change from initial enrollment to reenrollment?

Q 2.1.d. Did the fraction of CLAs self-reporting higher alcohol consumption and low physical activity fall after the introduction of the health assessment?

Q 2.1.e. Did the fraction of CLAs receiving prescriptions for nicotine cessation medications (e.g., nicotine replacement therapies, bupropion, and varenicline) increase after the introduction of the health assessment?

Hypothesis 2.2. The health assessment will increase the number of beneficiaries receiving treatment for substance-use disorders.

Primary Research Question 2.2: Did implementation of the health assessment increase use of non-emergency, outpatient treatment for SUDs, and medication-assisted treatment for opioid use disorder in particular?

Hypothesis 2.3. The requirement to answer the health assessment as a condition of eligibility will discourage some potential beneficiaries from enrolling in Medicaid.

Primary Research Question 3.3: Did monthly new enrollments by CLAs in Medicaid fall after the introduction of the health assessment requirement?

Q 2.3a. Did the monthly fraction of incomplete applications increase among childless adult applicants and renewing beneficiaries after introduction of the health assessment as a condition of eligibility?

B2. Methodology

B2.1. Evaluation Design Summary

We will address the evaluation questions of this waiver provision, the implementation of a health assessment linked to eligibility and premium reductions for CLAs, using DiD, and simple pre-post regression comparisons.

COVID-related note: the Health Needs Assessment and Treatment Needs Question has been suspended during the federally-declared public health emergency. The evaluation of this provision will no longer involve an ITS. We will include analyses that exclude the pandemic period from the baseline period because of the potential for COVID-related disruptions and/or allow for heterogeneity in the treatment effect over time as appropriate. We believe that, due to the pandemic, it may be difficult to assess one of the research questions: Did monthly new enrollments by CLAs in Medicaid fall after the introduction of the health assessment requirement? The parallel trends assumption for enrollment between CLAs and Parents/Caregivers in a DiD analysis is more questionable in the current environment. We will analyze enrollment trends for these two groups during 2020 (when the provision was delayed but COVID disruptions were present) to help gauge whether parallel trends may be a reasonable assumption. Based on that analysis we will determine whether to include analysis of this question in our evaluation. Even if the analysis for the primary research question 3.3 cannot be completed, we will be able to investigate Q 3.3a that explores whether the fraction of incomplete applications changed for childless adults.

The Design Table (**Table 9**) summarizes the key features of the evaluation design.

Table 9. Provision 2: Summary of Hypotheses, Questions, Data Sources, and Analytic Approaches for Evaluation of HRA/HNA

Comparison strategy	Outcome measures	Data sources	Analytic approach	
			Original	Revised
Hypothesis 2.1: *Beneficiaries for whom the health assessment has eligibility and premium consequences will reduce risky behaviors and engage in more healthy behaviors.*				
Primary research question 2.1: Did CLA beneficiaries reduce risky health behaviors and increase healthy behaviors after the introduction of the health assessment?				
Question 2.1a: What fraction of CLA enrollees completed the second part of the health assessment? How does this compare to the fraction of non-CLA adult enrollees completing it?				
n.a. (descriptive)	Completion of health assessment	Wisconsin Medicaid Administrative Data	Descriptive analysis of completion rates	Unchanged
Question 2.1.b: What is the distribution of healthy behaviors reported by CLAs completing the health assessment? What fraction of CLAs achieved a premium reduction based on their answers to the health assessment? How did these two patterns trend over time?				
n.a. (descriptive)	Number of healthy behaviors reported in the health assessment	Wisconsin Medicaid Administrative Data	Descriptive analysis of numbers of healthy behaviors reported in health assessment	Unchanged
Question 2.1.c: How did the number of health behaviors reported by CLAs in the health assessment change from initial enrollment to reenrollment?				
CLAs in Wisconsin subject to the waiver at initial enrollment are comparison for same enrollee at reenrollment.	Number of healthy behaviors reported in the health assessment	Wisconsin Medicaid Administrative Data	Regression analysis of the change in number of healthy behaviors for re-enrollees relative to initial enrollment.	Unchanged, but the caveats on interpreting these patterns will be even stronger during the COVID-19 pandemic and recession.

Comparison strategy	Outcome measures	Data sources	Analytic approach	
			Original	Revised
Question 2.1.d: Did the fraction of CLAs self-reporting problems with alcohol consumption and low physical activity fall after the introduction of the health assessment?				
CLAs in Wisconsin prior to waiver.	Fraction of CLAs with a claim diagnosis code related to alcohol consumption	Wisconsin Medicaid Enrollment, Claims and Encounter Data	ITS	We no longer plan to do the ITS analysis due to 2020 COVID disruptions. We will instead focus our attention on the DiD analysis listed just below.
Parents/Caregivers and CLAs in Wisconsin not subject to premiums under the waiver (i.e., income < 50% FPL).	Fraction of CLAs with a claim diagnosis code related to alcohol consumption	Wisconsin Medicaid Enrollment, Claims and Encounter Data	DiD	Include models that exclude pandemic period from baseline.
Question 2.1.e: Did the fraction of CLAs receiving prescriptions for nicotine cessation medications (e.g., nicotine replacement therapies, bupropion, and varenicline) increase after the introduction of the health assessment?				
CLAs in Wisconsin prior to waiver.	Fraction of CLAs receiving prescription for nicotine replacement therapies	Wisconsin Medicaid Enrollment, Claims and Encounter Data	ITS	We no longer plan to do the ITS analysis due to 2020 COVID disruptions. We will instead focus our attention on the DiD analysis listed just below.
Parents/Caregivers and CLAs in Wisconsin not subject to premiums under the waiver (i.e., income < 50% FPL).	Fraction of CLAs receiving prescription for nicotine replacement therapies	Wisconsin Medicaid Enrollment, Claims and Encounter Data	DiD	Include models that exclude pandemic period from baseline.

Comparison strategy	Outcome measures	Data sources	Analytic approach	
			Original	Revised
Hypothesis 2.2: *The health assessment will increase the number of beneficiaries receiving treatment for substance-use disorders.*				
Primary research question 2.2: Did implementation of the health assessment increase use of non-emergency, outpatient treatment for SUDs, and medication-assisted treatment for opioid use disorder in particular?				
CLAs in Wisconsin prior to waiver.	Claims for outpatient substance-use services and prescription medications for substance use disorders (any claim for buprenorphine, naltrexone (oral), injectable naltrexone, buprenorphine/Naloxone or a HCPCs code for buprenorphine or buprenorphine/naloxone, methadone administration, or naltrexone).	Wisconsin Medicaid Enrollment, Claims and Encounter Data	ITS	No longer plan to do the ITS analysis due to 2020 COVID disruptions. We will instead focus our attention on the DiD analysis listed just below.
Parents/ Caregivers.	Claims for outpatient substance-use services and prescription medications for substance use disorders (any claim for buprenorphine, naltrexone (oral), injectable naltrexone, buprenorphine/Naloxone or a HCPCs code for buprenorphine or buprenorphine/naloxone, methadone administration, or naltrexone).	Wisconsin Medicaid Enrollment, Claims and Encounter Data	DiD	Include models that exclude pandemic period from baseline.
Hypothesis 2.3: *The requirement to answer the health assessment will discourage some potential beneficiaries from enrolling in Medicaid.*				
Primary research question 2.3: Did monthly new enrollments by CLAs in Medicaid fall after the introduction of the health assessment requirement?				
CLAs in Wisconsin prior to waiver.	Number of new Medicaid enrollments at the monthly level	CARES	ITS	We will no longer use ITS in this hypothesis, and will monitor the enrollment trends through early 2020 to determine whether parallel trends assumption may be reasonable for DiD analysis.
Parents/ Caregivers.	Number of new Medicaid Enrollments at the monthly level	CARES	DiD	
Question 2.3.a Did the fraction of incomplete applications increase among childless adult applicants and renewing beneficiaries after introduction of the health assessment as a condition of eligibility?				
Wisconsin CLAs prior to waiver.	Ratio of incomplete to total initiated applications at the monthly level	CARES	ITS	Transition this approach to a DiD with Parents/ Caregivers, include models in which the baseline does not include the pandemic period.

B2.2. Target and comparison populations

We will use the following approaches to answer each primary research question:

Q2.1. "Did CLA beneficiaries reduce risky health behaviors and increase healthy behaviors after the introduction of the health assessment?": We will use two primary analytic approaches: simple pre-post regression comparisons and DiD. The target population for this part of the demonstration waiver is CLAs. All CLAs are required to complete the first part of the health assessment to gain Medicaid eligibility, and for CLAs with income between 50% and 100% FPL both parts of the health assessment can result in premium reductions. For the simple pre-post regression, we will compare the group of CLAs subject to this waiver requirement after the waiver is implemented to the same group of CLAs prior to the implementation of the waiver. The analysis in 2.1.c looks simply at the change in reported number of healthy behaviors for a given CLA subject to the waiver provision between initial enrollment and reenrollment and can only be analyzed for those who reenroll. Due to pandemic-related disruptions in waiver implementation and data trends, we have abandoned plans also to use an ITS method.

For the DiD comparisons, we will compare the change in outcomes for CLAs with income between 50-100% FPL pre and post waiver to the changes in those same outcomes for two groups of Medicaid beneficiaries: (a) individuals who are not subject to the health assessment waiver requirements, parents and caregivers; and b) CLAs with incomes less than 50% of FPL, who are required to complete part 1 of the health assessment as a condition of eligibility but are not subject to the waiver's premium requirements and hence do not have a premium differential tied to their health assessment answers.

Primary research question 2.1 will also involve several supplementary descriptive analyses for which there are no comparison populations available (2.1.a – 2.1.b). These analyses will help to illuminate the extent to which each group considered above -- CLAs below 50% FPL, CLAs between 50%-100% FPL, and parents and caregivers -- are engaging with the health assessment.

Q2.2. "Did implementation of the health assessment increase use of non-emergency, outpatient treatment for SUDs, and medication-assisted treatment for opioid use disorder in particular"?: We will use DiD. The target population for this question is the full set of CLAs, including those with incomes below 50% of the FPL. These lower income CLAs, while not subject to the premium provisions of the waiver, are required to answer the first part of the health assessment on interest in treatment for substance-use disorders as a requirement for eligibility. For the DiD the comparison sample for this analysis is only the parents and caregivers population. Due to pandemic-related disruptions in waiver implementation and data trends, we have abandoned plans also to use an ITS method.

Q2.3. "Did new enrollments by CLAs in Medicaid fall after the introduction of the health assessment requirements?": We will use DiD, with the target population as the full set of CLAs, including those with incomes below 50% of the FPL. These lower income CLAs, while not subject to the premium provisions of the waiver, are required to answer the first part of the health assessment

on interest in treatment for substance-use disorders as a requirement for eligibility. As such, they are exposed to the health assessment and any deterrent effect of answering these questions could be expected for this population as well. For the DiD the comparison sample for this analysis is only the parent and caregiver population. In both cases we will use enrollment data at the monthly level and examine whether there are reductions in completed application rates in the months immediately following the launch of the health assessment. Due to pandemic-related disruptions in waiver implementation and data trends, we have abandoned plans also to use an ITS method.

B2.3. Evaluation Period

The evaluation period will include the years 2016 through 2023, which includes a pre-period before the demonstration waiver begins and continues through the waiver demonstration period. We will include models that exclude the pandemic period from the DiD analysis, to avoid COVID-related disruptions in the baseline, and the implementation period will commence once the provision is re-activated.

B2.4. Data Sources & Outcome Measures

The outcome measures for this evaluation are defined in **Table 9**. This evaluation will involve multiple data sources. They are noted in **Table 10**, below, along with the hypotheses for which these data will be used. Section IID, above, provides a full description of these data sources.

Table 90. Provision 2 Data Sources

	Hypotheses
Wisconsin Medicaid Administrative Data. Administrative data on health assessment completion and reporting will address Questions 2.1.a-2.1.c. These data will allow us to analyze both the patterns of enrollees engaging with the health assessment and the distributions of healthy behaviors reported. For Question 2.1.b. we will also see administrative data on the completion of health assessments administered by participating HMOs in years prior to this waiver provision.	H2.1
Wisconsin Beneficiary Survey. The survey will include questions designed to assess substance use and use disorder treatment, engaging in other risky behaviors (e.g., tobacco use), and physical activity. The responses to these questions will be used to answer Question 2.1.d.	H2.1
Medicaid claims, and encounter data. These data will track the use of nicotine replacement therapies as one of the key markers of treatment for risky behaviors that might be affected by the health assessment in Question 2.1.e. We will also use these data to investigate where the health assessment is associated with increased use of outpatient services for substance use disorders in Question 2.2.	H2.1 H2.2
CARES enrollment data. These data will track application and enrollment trends, and whether applicants abandon applications at any point during the application process when reaching specific questions pertaining to substance abuse or other health behaviors.	H2.3

B3.5. Analytic Methods

Q2.1. "Did CLA beneficiaries reduce risky health behaviors and increase healthy behaviors after the introduction of the health assessment?" We begin with a descriptive analysis of the patterns of responses to the health assessment itself. These analyses, described in Q2.1.a – 2.2.c, do not have a causal interpretation with a comparison group. For question 2.1.d we will use multiple approaches. First, we will use Medicaid Claims files to analyze the fraction of beneficiaries with at least one claim tied to a diagnosis code related to alcohol consumption. For this analysis we will use a DiD strategy (described in section IIB), comparing the change in this fraction with at least one alcohol-related diagnosis between the CLAs subject to the premium provision to the combined group of Parents/Caregivers and the CLAs between 0 and 50% of FPL. Due to pandemic-related disruptions in waiver implementation and data trends, we have abandoned plans also to use an ITS method.

We will also use a simple regression approach to compare whether self-reports of healthy behaviors from the Medicaid Beneficiary Survey differ between early waves of the survey, around the time of the launch of the waiver provision, and later waves of the survey after the implementation of the health assessment. We will also do this pre-post comparison using a DiD strategy (described in section IIB) using the parents and caregivers as well as CLAs with incomes below 50% of the FPL as comparison groups. For these analyses we will use the full random samples of these groups from the Medicaid Beneficiary Survey.

Finally, for Question 2.1.e we will use claims data to estimate how the introduction of the health assessment affected use of nicotine replacement therapies, using DiD design (described in section IIB, above), again using the parents and caregivers as well as the CLAs with incomes below 50% FPL as comparison groups for the DiD. Due to pandemic-related disruptions in waiver implementation and data trends, we have abandoned plans also to use an ITS method.

Q2.2. "Did implementation of the health assessment increase use of non-emergency, outpatient treatment for SUDs, and medication-assisted treatment for opioid use disorder in particular?" For this question we will analyze patterns of claims for outpatient substance-use services and medications for substance use disorders. Similar to Question 2.1. above, we will use DiD design. In this case, the DiD will use only the parents and caregivers (and not the CLAs with incomes below 50% FPL) because the requirement for answering the first part of the health assessment on substance use disorders is the same for all CLAs. Due to pandemic-related disruptions in waiver implementation and data trends, we have abandoned plans also to use an ITS method.

Q2.3. "Did new enrollments by CLAs in Medicaid fall after introduction of the health assessment requirement?" To answer this question we will analyze patterns of Medicaid enrollments at the monthly level using a DiD design. The comparison group – parents and caregiver adults -- is the same as 2.2 above. Due to pandemic-related disruptions in waiver implementation and data trends, we have abandoned plans also to use an ITS method.

B3. Methodological Limitations

Because the waiver provision will be implemented at a single time statewide and without randomized controls, the evaluation relies on quasi-experimental methods. There are two important limitations specific to the evaluation of the health assessment requirement. First, the health assessment will be available voluntarily to parents and caregiver populations. While there is no requirement that they engage with the health assessment, some may do so. This weakens our ability to use the parents and caregivers as a comparison sample for the difference-in-difference analysis described above for primary research questions 2.1-2.3. The descriptive analysis in questions 2.1.a-2.1.b will help illuminate the extent to which voluntary completion of the health assessment by parents and caregivers is a significant challenge for the evaluation strategy. A key requirement will be that the engagement with the health assessment is significantly higher for the CLAs subject to the waiver provision.

The second limitation is that Wisconsin's Medicaid-participating HMOs have been conducting their own health assessments with members prior to the implementation of this new waiver. This waiver provision replaces HMO-specific assessments with a newly designed Medicaid-level health assessment. The specific HMO-specific pre-waiver experience will vary across HMOs, which will require some of the analysis specified above to be conducted separately for different HMOs. Doing those splits will reduce the precision of estimates. The necessity of analyzing results separately by HMO will be clarified by the analysis in Questions 2.1.b.

IIIC. Provision 3: Premiums, Lock-out Periods, and ED Co-Payments

C1. General Background Information

Provision 3: Implement two cost-sharing components:

> 1) Premiums for CLA beneficiaries ages 19-64 with income between 50% and 100%FPL; and 2) For CLAs, require an $8 co-payment for non-emergent use of the hospital emergency department.

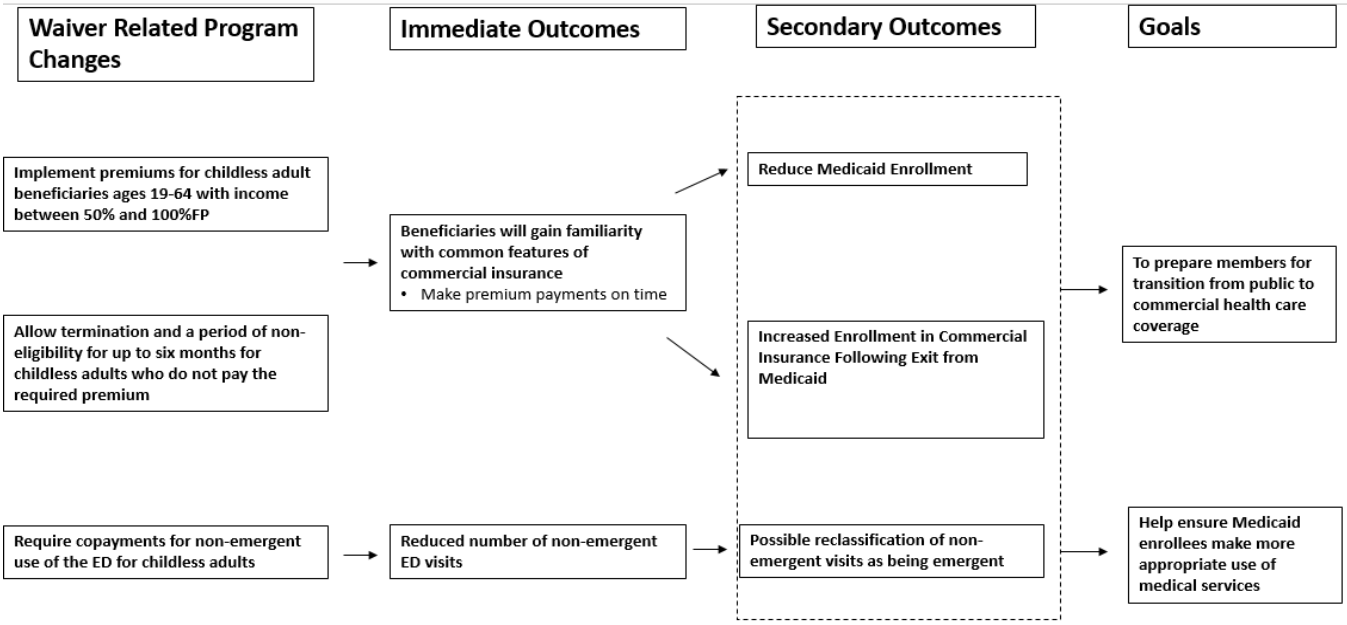
Those CLAs who are subject to the premium requirement but do not make such payments will, at the time of annual renewal, be terminated from Medicaid enrollment and placed in a period of non-eligibility for up to six months. However, the beneficiary may reenroll at any time prior to the end of the six-month period if he or she pays all owed premiums, or if his or her situation changes such that he or she would no longer be subject to a premium requirement. After the six-month period, the beneficiary may be re-enrolled in BadgerCare upon request, if he or she meets all program rules, even if he or she continues to have unpaid premiums from the prior period of enrollment.

Medicaid program goal: To provide beneficiaries with coverage that more closely aligns with commercial coverage, promote participant engagement and readiness to transition to commercial coverage.

C2. Evaluation Questions and Hypotheses

C2.1. Driver Diagram

Figure 4. Driver Diagram: Premium and Emergency Department Co-Payment Requirements



C2.2. Hypotheses & Research Questions

Hypothesis 3.1. Beneficiaries who are required to make premium payments will gain familiarity with a common feature of commercial health insurance.

Primary Research Question 3.1: Did beneficiaries required to make premium payments understand their requirements and make premium payments?

Q 3.1a. How many beneficiaries are required to make premium payments? How does this number change over time?

Q 3.1b. How many beneficiaries make premium payments? On what timeline do beneficiaries typically make payments (monthly, quarterly, annually, or other? How do these numbers change over time?

Q 3.1c. How do the characteristics of those who make their required premium payments differ from those of beneficiaries who fail to make these payments? How do these characteristics change over time?

Q 3.1d. How many beneficiaries have premium payments made on their behalf by third-party entities? How do these numbers change over time?

Q 3.1e. How many beneficiaries are terminated for non-payment and being locked out? Of those terminated, how many re-enroll at the end of their period of non-eligibility? How do these numbers change over time?

Q 3.1f. Do beneficiaries with premium requirements understand their payment obligations and the consequences of non-payment?

Hypothesis 3.2. The imposition of premium requirements for CLAs will reduce enrollment in Medicaid.

Primary Research Question 3.2. Did the imposition of premium requirements reduce enrollment in Medicaid?

Q 3.2a. What effects does the premium requirement have on total and new enrollment in Medicaid?

Q 3.2b. Do beneficiaries with premium obligations who initiate payments continue to make regular payments throughout their 12-month enrollment periods?

Q 3.2c. What effects do premiums have on continuity of coverage, as reflected by mid-year disenrollments and renewal decisions?

Hypothesis 3.3. The imposition of premium requirements for CLAs will increase enrollment in commercial insurance following exits from Medicaid.

Primary Research Question 3.3: Did the imposition of premium requirements increase enrollment in commercial insurance following exits from Medicaid?

Q 3.3a. Did the imposition of premium requirements increase enrollment in employer-sponsored / large group insurance following exits from Medicaid?

Q 3.3b. Did the imposition of premium requirements increase enrollment in individual market / ACA Marketplace insurance following exits from Medicaid?

Q3.3c. To what extent do disenrolled beneficiaries re-enroll in Medicaid following their period of non-eligibility?

Hypothesis 3.4. The imposition of premium requirements for CLAs will lead to pent-up demand for medical care among beneficiaries disenrolled due to failure to pay premiums.

Primary Research Question 3.4. Did the imposition of premium requirements lead to pent-up demand for medical care among beneficiaries disenrolled due to failure to pay premiums?

Hypothesis 3.5. The imposition of a co-payment for non-emergent use of the emergency department will lead to more appropriate uses of medical care among CLAs enrolled in Medicaid.

Primary Research Question 3.5: Did the imposition of a co-payment for non-emergent use of the emergency department reduce the number of non-emergency visits to the emergency department among CLAs enrolled in Medicaid?

Q 3.5a. What was the number of non-emergent visits to the emergency department among CLAs prior to the imposition of copayments?

Q 3.5b. What was the total number of emergency department visits among CLAs prior to the imposition of copayments?

Q 3.5c. How did the numbers of emergency department visits and non-emergent visits change among CLAs after the imposition of copayments?

Q 3.5d. How did the use of primary care change among CLAs after the imposition of copayments for non-emergent visits to the emergency department?

Q 3.5e. Do beneficiaries with co-payment requirements understand their payment obligations?

Hypothesis 3.6. Hospitals vary in how they implement the required co-payment for non-emergency use of the ED.

Primary Research Question 3.6: Are hospitals consistent in how they define non-emergent use of the emergency department, as necessary to apply the associated Medicaid co-payment policy?

Q 3.6a. Do hospitals understand the policy requiring a co-payment for non-emergent use of the emergency department?

Hypothesis 3.7. Hospitals are implementing the policy requiring a co-payment for non-emergent use of the emergency department in a consistent manner.

Primary Research Question 3.7: Are hospitals consistent in how they are implementing the policy requiring a co-payment for non-emergent use of the emergency department?

Q 3.7a. Is the definition of non-emergent ED visits consistently applied across hospitals?

C3. Methodology

C3.1. Evaluation Design Summary

We will use three analytic approaches to address the primary research questions for evaluation of waiver Provision 3, the premium and co-payment requirement for CLAs: ITS, DiD, and RD.

COVID-related note: Provision 3, pertaining to premiums and copayments, is the provision most affected by the change in implementation schedule and by the pandemic circumstances. The implementation of premiums was halted and will not commence until the end of the federally-declared public health emergency. The co-payments for emergency department visits took effect on July 1, 2020, after an initial delay, but this provision is underway during the pandemic and a time of substantial distortions in health care use patterns.

We will no longer use ITS or individual-level fixed effects models to address the research questions under this provision but will instead rely on DiD and RD designs. We will include models that exclude the pandemic period for DiD analyses, to avoid COVID-related disruptions in the baseline. The approach to answer several research questions involved a descriptive analysis of trends and, in these cases, we do not have alternatives available and must carefully interpret results as they are likely affected by the pandemic.

The Design Table (**Table 11**) summarizes the key features of the evaluation design.

Table 101. Provision 3: Summary of Hypotheses, Questions, Data Sources, and Analytic Approaches for Evaluation of Premiums for CLAs

Comparison strategy	Outcome measures	Data sources	Analytic approach	
			Original	Revised
Hypothesis 3.1: *Beneficiaries who are required to make premium payments will gain familiarity with a common feature of commercial health insurance.*				
Primary research question 3.1: Did beneficiaries required to make premium payments understand their requirements and make premium payments?				
Question 3.1a: How many beneficiaries are required to make premium payments? How does this number change over time?				
Answering this research questions requires only data on CLAs in Wisconsin who are subject to premiums; no comparison strategy is required	Counts of CLAs required to make premium payments	CARES	Descriptive	Unchanged
Question 3.1b: How many beneficiaries make premium payments? On what timeline do beneficiaries typically make payments (monthly, quarterly, annually, or other? How do these numbers change over time?				
Answering this research questions requires only data on CLAs in Wisconsin who are subject to premiums; no comparison strategy is required	Counts of CLAs who make premium payments	CARES	Descriptive	Unchanged
Question 3.1c: How do the characteristics of those who make their required premium payments differ from those of beneficiaries who fail to make these payments? How do these characteristics change over time?				
Answering this research questions requires only data on CLAs in Wisconsin who are subject to premiums; no comparison strategy is required	Demographic and health-related characteristics and of CLAs required to make premium payments	CARES and WI Medicaid Claims and Encounter Data	Descriptive	Unchanged

Comparison strategy	Outcome measures	Data sources	Analytic approach	
			Original	Revised
Question 3.1d: How many beneficiaries have premium payments made on their behalf by third-party entities? How do these numbers change over time?				
Answering this research questions requires only data on CLAs in Wisconsin who are subject to premiums; no comparison strategy is required	Counts of CLAs whose premium payments were made by third parties.	CARES	Descriptive	Unchanged
Question 3.1e: How many beneficiaries are terminated and locked out for non-payment? Of those terminated, how many re-enroll at the end of their period of non-eligibility? How do these numbers change over time?				
Answering this research questions requires only data on CLAs in Wisconsin who are subject to premiums; no comparison strategy is required	Counts of CLAs terminated for failure to make premium payments	CARES	Descriptive	Unchanged
	Counts of previously locked-out CLAs who re-enroll following the lock-out period.			
Question 3.1f: Do beneficiaries with premium requirements understand their payment obligations and the consequences of non-payment?				
Answering this research questions requires only data on CLAs in Wisconsin who are subject to premiums; no comparison strategy is required	Understanding of premium requirements	CLA Survey	Descriptive	Unchanged

Comparison strategy	Outcome measures	Data sources	Analytic approach	
			Original	Revised
Hypothesis 3.2: *The imposition of premium requirements for childless adults will reduce enrollment in Medicaid.*				
Primary research question 3.2: Did the imposition of premium requirements reduce enrollment in Medicaid?				
Question 3.2a: What effects does the premium requirement have on total and new enrollment in Medicaid?				
CLAs in other states	Medicaid enrollment	American Community Survey	DiD	Include models that exclude pandemic period from baseline; Comparator states will be selected so as to be similar as possible in both COVID-19 outcomes as well baseline characteristics.
Parents and CLAs in Wisconsin not subject to premiums	Medicaid reenrollment and disenrollment	CARES	DiD	
CLAs in Wisconsin not subject to premiums	Medicaid reenrollment and disenrollment	CARES	RD	Unchanged
CLAs in Wisconsin prior to waiver	Medicaid reenrollment and disenrollment	CARES	ITS	Because of the disruption in 2020 and the change in disenrollment rules, we no longer consider ITS a valid evaluation strategy and we will rely on DiD and RD approaches to answer this question.

Comparison strategy	Outcome measures	Data sources	Analytic approach	
			Original	Revised
Q 3.2b: Do beneficiaries with premium obligations who initiate payments continue to make regular payments throughout their 12-month enrollment periods?				
Answering this research questions requires only data on CLAs in Wisconsin who are subject to premiums; no comparison strategy is required	Counts of CLAs who continuously make premium payments throughout their 12-month enrollment period	CARES	Descriptive	Unchanged
Q 3.2c: What effects do premiums have on continuity of coverage, as reflected by mid-year disenrollments and renewal decisions?				
CLAs in other states	Mid-year disenrollment and renewals	American Community Survey	DiD	Include models that exclude pandemic period from baseline; Comparator states will be selected so as to be similar as possible in both COVID-19 outcomes as well baseline characteristics.
Parents and CLAs in Wisconsin not subject to premiums	Mid-year disenrollment and renewals	CARES	DiD	
CLAs in Wisconsin not subject to premiums	Mid-year disenrollment and renewals	CARES	RD	Unchanged
CLAs in Wisconsin prior to waiver	Mid-year disenrollment and renewals	CARES	ITS	Because of the disruption in 2020 and the change in disenrollment rules, we no longer consider ITS a valid evaluation strategy and we will rely on DiD and RD approaches to answer this question.

Comparison strategy	Outcome measures	Data sources	Analytic approach	
			Original	Revised
Hypothesis 3.3: *The imposition of premium requirements for childless adults will increase enrollment in commercial insurance following exits from Medicaid.*				
Primary research question 3.3: Did the imposition of premium requirements increase enrollment in commercial insurance following exits from Medicaid?				
Question 3.3a: Did the imposition of premium requirements increase enrollment in employer-sponsored / large group insurance following exits from Medicaid?				
CLAs leavers prior to waiver	Enrollment in commercial insurance	WI TPL data UI Data linked to DOL self-insured data WHIO	ITS	Because of the disruption in 2020 and the change in disenrollment rules, we no longer consider ITS a valid evaluation strategy and we will rely on an RD approach to answer this research question.
CLAs leavers not subject to premiums prior to waiver	Enrollment in commercial insurance	WI TPL data UI Data linked to DOL self-insured data WHIO	RD	Unchanged
Question 3.3b: Did the imposition of premium requirements increase enrollment in individual market / ACA Marketplace insurance following exits from Medicaid?				
CLAs leavers prior to waiver	Enrollment in commercial insurance	WI TPL data UI Data linked to DOL self-insured data WHIO	ITS	Because of the disruption in 2020 and the change in disenrollment rules, we no longer consider ITS a valid evaluation strategy and we will rely on an RD approach to answer this research question.
CLAs leavers not subject to premiums prior to waiver	Enrollment in commercial insurance	WI TPL data UI Data linked to DOL self-insured data WHIO	RD	Unchanged

Comparison strategy	Outcome measures	Data sources	Analytic approach	
			Original	Revised
Question 3.3c: To what extent do disenrolled beneficiaries re-enroll in Medicaid following their period of non-eligibility?				
Answering this research questions requires only data on CLAs in Wisconsin who are subject to premiums; no comparison strategy is required	Counts of CLAs disenrolled from Medicaid due to lack of premium payment who subsequently re-enroll in Medicaid following their period of non-eligibility	CARES	Descriptive	Unchanged
Hypothesis 3.4: *The imposition of premium requirements for CLAs will lead to pent-up demand for medical care among beneficiaries disenrolled due to failure to pay premiums.*				
Primary research question 3.4: Did the imposition of premium requirements lead to pent-up demand for medical care among beneficiaries disenrolled due to failure to pay premiums?				
CLAs prior to disenrollment	Use of medical care	CARES and WI Medicaid Claims and Encounter Data	Individual-level fixed effects analysis	Because of the disruption in 2020 and the change in disenrollment rules, we no longer consider individual fixed effects a valid evaluation strategy and we will rely on a DiD approach to answer this question.
Continuously enrolled CLAs	Use of medical care	CARES and WI Medicaid Claims and Encounter Data	DiD	Include models that exclude pandemic period from baseline.

Comparison strategy	Outcome measures	Data sources	Analytic approach	
			Original	Revised
Hypothesis 3.5: *The imposition of a co-payment for non-emergent use of the emergency department will lead to more appropriate uses of medical care among CLAs enrolled in Medicaid.*				
Primary research question 3.5: Did the imposition of a co-payment for non-emergent use of the emergency department reduce the number of non-emergency visits to the emergency department among CLAs enrolled in Medicaid?				
Question 3.5a: What was the number of non-emergent visits to the emergency department among CLAs prior to the imposition of copayments?				
Answering this research questions requires only data on CLAs who are subject to premiums; no comparison strategy is required	Number of non-emergent ED visits	CARES and WI Medicaid Claims and Encounter Data	Descriptive	Unchanged
Question 3.5b: What was the total number of emergency department visits among CLAs prior to the imposition of copayments?				
Answering this research questions requires only data on CLAs who are subject to premiums; no comparison strategy is required	Total number of ED visits	CARES and WI Medicaid Claims and Encounter Data	Descriptive	Unchanged
Question 3.5c: How did the numbers of emergency department visits and non-emergent visits change among CLAs after the imposition of copayments?				
CLAs enrolled prior to introduction of ED copayments	Total number and number of non-emergent ED visits	CARES and WI Medicaid Claims and Encounter Data	ITS	Because of the disruption in 2020 and the change in disenrollment rules, we no longer consider ITS a valid evaluation strategy and we will rely on a DiD approach to answer this question.
Parents and caregiver adults	Total number and number of non-emergent ED visits	CARES and WI Medicaid Claims and Encounter Data	DiD	Include models that exclude pandemic period from baseline
Commercially insured adults	Total number and number of non-emergent ED visits	WHIO	DiD	Include models that exclude pandemic period from baseline

Comparison strategy	Outcome measures	Data sources	Analytic approach	
			Original	Revised
Question 3.5d: How did the use of primary care change among CLAs after the imposition of copayments for non-emergent visits to the emergency department?				
Parents and caregiver adults	Total number and number of primary care visits	CARES and WI Medicaid Claims and Encounter Data	DiD	Include models that exclude pandemic period from baseline
Commercially insured adults	Total number and number of primary care visits	WHIO	DiD	Include models that exclude pandemic period from baseline
Question 3.5e: Do beneficiaries with co-payment requirements understand their payment obligations?				
Answering this research questions requires only data on CLAs who are subject to premiums; no comparison strategy is required	Knowledge and understanding of payment obligations	Beneficiary survey	Descriptive	Unchanged
Hypothesis 3.6: *Hospitals vary in how they implement the required co-payment for non-emergency use of the ED.*				
Primary research question 3.6: Are hospitals consistent in how they are defining non-emergent use of the emergency department, as necessary to apply the associated Medicaid co-payment policy?				
Q 3.6a. Do hospitals understand the policy requiring a co-payment for non-emergent use of the emergency department?				
Answering this research questions requires only data on Wisconsin hospitals; no comparison strategy is required	Understanding of co-payment requirements	Hospital focus groups	Descriptive	Unchanged

Comparison strategy	Outcome measures	Data sources	Analytic approach	
			Original	Revised
Hypothesis 3.7. *Hospitals implement the policy requiring a co-payment for non-emergent use of the emergency department in a consistent manner.*				
Primary research question 3.7: Are hospitals consistent in how they are implementing the policy requiring a co-payment for non-emergent use of the emergency department?				
Question 3.7a: Is the definition of non-emergent ED visits consistently applied across hospitals?				
CLAs subject to co-payments	Hospital-level measure of the ratio of visits for which co-payments assessed, relative to the number of non-emergent visits measured using the Billings (2000) probabilistic method	CARES and WI Medicaid Claims and Encounter Data	Descriptive	Unchanged
Parents and caregiver adults	Hospital-level measure of the ratio of non-emergent to total ED visits	CARES and WI Medicaid Claims and Encounter Data	DiD	Include models that exclude pandemic period from baseline

C3.2. Target and Comparison Populations.

The target populations for the evaluation of waiver provision 3 -- premium requirement for CLAs and co-payments for non-emergent use of the emergency department -- include CLAs in the Wisconsin Medicaid program and CLAs who exit Medicaid in Wisconsin. We will address the primary research questions as follows:

Q3.1. "Did beneficiaries required to make premium payments understand their requirements and make premium payments?": Conduct a descriptive analysis using data from Wisconsin administrative enrollment systems, which does not require the use of a comparison group.

Q3.2. "Did the imposition of premium requirements reduce enrollment in Medicaid?": Use three different comparison groups. We will first use a comparison group of lower-income CLAs in Wisconsin enrolled in Medicaid that are not subject to premiums. The second comparison group is parents/caregivers in Wisconsin enrolled in Medicaid that also are not subject to premiums. Finally, we will use CLAs enrolled in Medicaid prior to the waiver implementation (and who look like they would have been subject to premiums).

Q3.3. "Did the imposition of premium requirements increase enrollment in commercial insurance among CLAs who exit Medicaid?": Use two comparison groups. First, CLAs who exited Medicaid prior to the imposition of the premium requirement and, second, lower income CLAs who are not subject to premiums and who exit Medicaid.

Q3.4. "Did the imposition of premium requirements lead to pent-up demand for medical care among beneficiaries disenrolled due to failure to pay premiums?": Use two different comparison groups. We will first use a comparison group of CLAs enrolled in Medicaid prior to the waiver implementation (and who look like they would have been subject to premiums). Second, we will use a comparison group of continuously enrolled CLAs (who were also subject to premiums).

Q3.5. "Did the imposition of a copayment for non-emergent use of the emergency department reduce the number of these visits among CLAs enrolled in Medicaid?": Use three comparison groups. First, CLAs enrolled in Medicaid prior to the imposition of co-payments for non-emergent use of the emergency department. Second, parents and caregivers in Wisconsin who were enrolled in Medicaid. Third, adults enrolled in commercial insurance in Wisconsin.

Q3.6. "Are hospitals consistent in how they are defining non-emergent use of the emergency department, as necessary to apply the associated Medicaid co-payment policy?": Conduct interviews with hospitals, which does not require the use of a comparison group.

Q3.7. "Are hospitals consistent in how they are implementing the policy requiring a co-payment for non-emergent use of the emergency department?": Use two comparison groups. First, CLAs enrolled in Medicaid prior to the imposition of co-payments for non-emergent use of the emergency department. Second, parents and caregivers in Wisconsin who were enrolled in Medicaid.

C3.3. Evaluation Period

The evaluation period will include the years 2016 through 2023, which includes a pre-period before premiums and copayments begin, through the end of the evaluation period.

C3.4. Data Sources and Outcome Measures

The outcome measures for this evaluation are defined in **Table 11**, above. This evaluation will involve multiple data sources. They are noted in **Table 12**, along with the hypotheses for which these data will be used. Section IID, above, provides a full description of these data sources.

Table 112. Provision 3 Data Sources

	Hypotheses
Medicaid enrollment (CARES), claims, and encounter data. To estimate the number of CLAs that are required to make premium payment and do make premium payments. We also will use any available data on whether a third-party makes premium payments on behalf of a beneficiary. Finally, we will use these data to calculate Medicaid enrollment rates for the target and comparison groups noted in Table 11.	H1 H2 H4 H5 H7
Medicaid Beneficiary Survey. Data from the questions intended to elicit understanding of premiums, knowledge of program requirements related to premiums, and self-reported reasons why individuals may experience difficulty paying required premiums.	H1
Wisconsin's All-Payer Claims Database (known as WHIO). To measure Medicaid enrollment and transitions to commercial insurance.	H2 H3 H5
Wisconsin Third Party Liability Database (TPL). To identify individuals enrolled in Medicaid who are covered by a private health insurance plan.	H3
Unemployment Insurance data (UI) and Department of Labor data (DOL). To match individuals enrolled in Medicaid to their current and future employers, which when linked to DOL data, can be used to identify individuals transitioning into employment at self-insured firms.	H3

C3.5. Analytic Methods

We will address the primary research questions as follows:

Q3.1. "Did beneficiaries required to make premium payments understand their requirements and make payments on time?" We will conduct a descriptive analysis using data from Wisconsin administrative enrollment systems.

Q3.2. "**Did the imposition of premium requirements reduce enrollment in Medicaid?"** We will employ DiD and RD (each described in Section IIB, above). Using the comparison group of adults in Wisconsin enrolled in Medicaid that are not subject to premiums, we will estimate DiD models on Medicaid enrollment and disenrollment. In addition, using the comparison group of lower-income CLAs in Wisconsin enrolled in Medicaid who are not subject to premiums, we will employ RD models on Medicaid enrollment and disenrollment.

Q3.3. "Did the imposition of premium requirements increase enrollment in commercial insurance among CLAs who exit Medicaid?" We will employ an RD design (described in Section IIB, above. Using the comparison group of low-income adults exiting Medicaid who were not subject to premiums, we will employ RD models on enrollment in commercial insurance. Due to pandemic-related disruptions in waiver implementation and data trends, we have abandoned plans also to use an ITS method.

Q3.4. "Did the imposition of premium requirements lead to pent-up demand for medical care among beneficiaries disenrolled due to failure to pay premiums?" We will employ two different analytic approaches, individual-level fixed effects and DiD. Use of medical case will be measured by total number of visits, number of inpatient hospital stays, and number of visits to the ED.

Q3.5. "Did the imposition of a co-payment for non-emergent visits to the emergency department reduce the number these visits among CLAs enrolled in Medicaid?" We will employ a DiD design (described in Section IIB, above). Non-emergent visits will be measured using a using a probabilistic method developed for claims data.[17] By using this method, we will ensure that we will identify non-emergent visits before and after implementation in a consistent manner. Due to pandemic-related disruptions in waiver implementation and data trends, we have abandoned plans also to use an ITS method.

To conduct the analysis, we will first conduct interrupted time-series analyses to determine whether the CLAs enrolled in Medicaid reduced their non-emergent use of the emergency department following the imposition of co-payments. We also will examine the total number of ED visits to help determine whether any observed reduction in non-emergent visits was the result of reclassification. Second, using the comparison group of parents and caregivers enrolled in Wisconsin Medicaid, we will estimate DiD models on non-emergent and total ED visits. We also will estimate DiD models on non-emergent and total emergency department visits using the comparison group of commercially insured adults in Wisconsin.

Q3.6. "Are hospitals consistent in how they are defining non-emergent use of the emergency department, as necessary to apply the associated Medicaid co-payment policy?":

We will perform a thematic analysis of focus group results.

[17] Codes available here: https://wagner.nyu.edu/faculty/billings/acs-algorithm
See, for reference: Billings J, Parikh N, Mijanovich T. Emergency Department Use: The New York Story. New York (NY): Commonwealth Fund; 2000 Nov. (Issue Brief). Available at: https://www.commonwealthfund.org/sites/default/files/documents/___media_files_publications_issue_brief_2000_nov_emergency_room_use__the_new_york_story_billings_nystory_pdf.pdf

Q3.7. "Are hospitals consistent in how they are implementing the policy requiring a co-payment for non-emergent use of the emergency department?": We will employ DiD method (described in Section IIB, above). Collections of co-payments will be determined from administrative data. Non-emergent visits will be measured using a using the probabilistic method developed for claims data described above. Due to pandemic-related disruptions in waiver implementation and data trends, we have abandoned plans also to use an ITS method.

To conduct the analysis, we will first conduct a descriptive analysis of the extent of variation across hospitals in whether they collect co-payments, relative to a consistent measure of non-emergent visits. Second, using the comparison group of parents and caregivers enrolled in Wisconsin Medicaid, we determine whether hospitals changed their coding of ED visits following the imposition of the co-payment requirement.

C4. Methodological Limitations

Because the CLA coverage expansion was implemented at a single time statewide and without randomized controls, the methods we propose are all quasi-experimental. It is possible that there are other factors that are not fully accounted for in the design that may have a more direct effect on outcomes, particularly enrollment in commercial insurance, such as the availability of commercial coverage options, co-insurance costs, and income levels. The original design had assumed that co-payments for non-emergent use of the emergency department were to be implemented, as planned, concurrent with the premium. However, this limitation may be partially mitigated because the implementation sequence has changed under the pandemic public health emergency. While the premiums remain suspended, the ED co-payment took effect on July 1, 2020. The main remaining limitation is the occurrence of the implementation during the pandemic.

IIID. Provision 4: Substance Use Disorder – Expansion of Covered Services

D1. General Background Information

Provision: Modify the benefit package for substance use disorder (SUD) treatment for all Medicaid enrollees. Specifically, the demonstration waiver authorizes federal funding for treatment provided to all WI Medicaid enrollees in Institutions for Mental Disease (IMD) allowing WI Medicaid to make two significant programmatic changes: 1) to establish a residential treatment benefit for SUD; and 2) to cover existing services when they are provided in an IMD specifically including medically supervised withdrawal management, inpatient services, and medication-assisted treatment (MAT). Wisconsin Medicaid delayed implementation of both programmatic changes due to various challenges in CY2020, but the provisions took effect on February 1, 2021.

Additionally, the demonstration waiver includes several new or revised policies to support the implementation and quality of these newly covered services. These policies, took effect on February 1, 2021, are as follows: updated licensure/certification requirements for providers (ongoing); ensuring

ASAM-consistent placement criteria (ongoing); utilization management for the residential treatment benefit; residential treatment provider qualifications that align with national standards (ongoing); requirement that residential treatment facilities offer MAT.
The new residential treatment benefit builds on the existing robust set of services currently covered by the Wisconsin Medicaid program to treat substance use disorders (SUDs) for all enrollees, including outpatient counseling, day treatment, psychosocial rehabilitation, MAT, telehealth services (expanded with the onset of the COVID-19 PHE) and inpatient treatment.

The period of evaluation for the SUD demonstration waiver encompasses a six-year period, February 2017 – January 2023, allowing up to 3 years of observation before (2017-2019) and after (2021-2023) implementation of the first provision of the demonstration waiver, coverage for residential treatment services.

Medicaid program goal: To reduce the incidence of drug overdose deaths, including opioid-related deaths, by improving access to the full continuum of treatment.

D2. Evaluation Questions and Hypotheses

The following section of the evaluation design report follows the format and guidance that CMS issued specifically for evaluation of SUD demonstration waivers.[18] For this reason, the format of this section of the design report and its related tables/figures differs in some respects from the sections of the evaluation design that are focused on other provisions in the demonstration waiver (e.g., premium reductions).

D2.1. Driver Diagram

Figure 5 displays the driver diagram. In the logic of a driver diagram, secondary drivers are mechanisms or conditions that are necessary to achieve the primary drivers which in turn contribute directly to realizing the overall purpose of the demonstration waiver. **Figure** 5 also includes the specific programmatic changes that the Wisconsin Medicaid program will implement under the SUD demonstration waiver. We do so to show how these changes hypothetically relate to the demonstration waiver's overall goal of reducing drug overdose deaths in the Medicaid population.

The programmatic changes fall within three functional categories: supply of Medicaid SUD providers at all levels of care; coverage for SUD services; and quality of SUD services. These changes have the potential to impact the rate of drug overdose deaths through a sequence of mechanisms. Most directly, the programmatic changes have the potential to increase the supply of SUD providers that accept and treat Medicaid enrollees, and to increase Medicaid enrollees' use of SUD services. These mechanisms are represented in **Figure** 5 as secondary drivers.

[18] Centers for Medicare and Medicaid Services. Substance Use Disorder Section 1115 Demonstration Evaluation Design- Technical Assistance. March 6, 2019. Available at: https://www.medicaid.gov/medicaid/section-1115-demo/evaluation-reports/evaluation-designs-and-reports/index.html

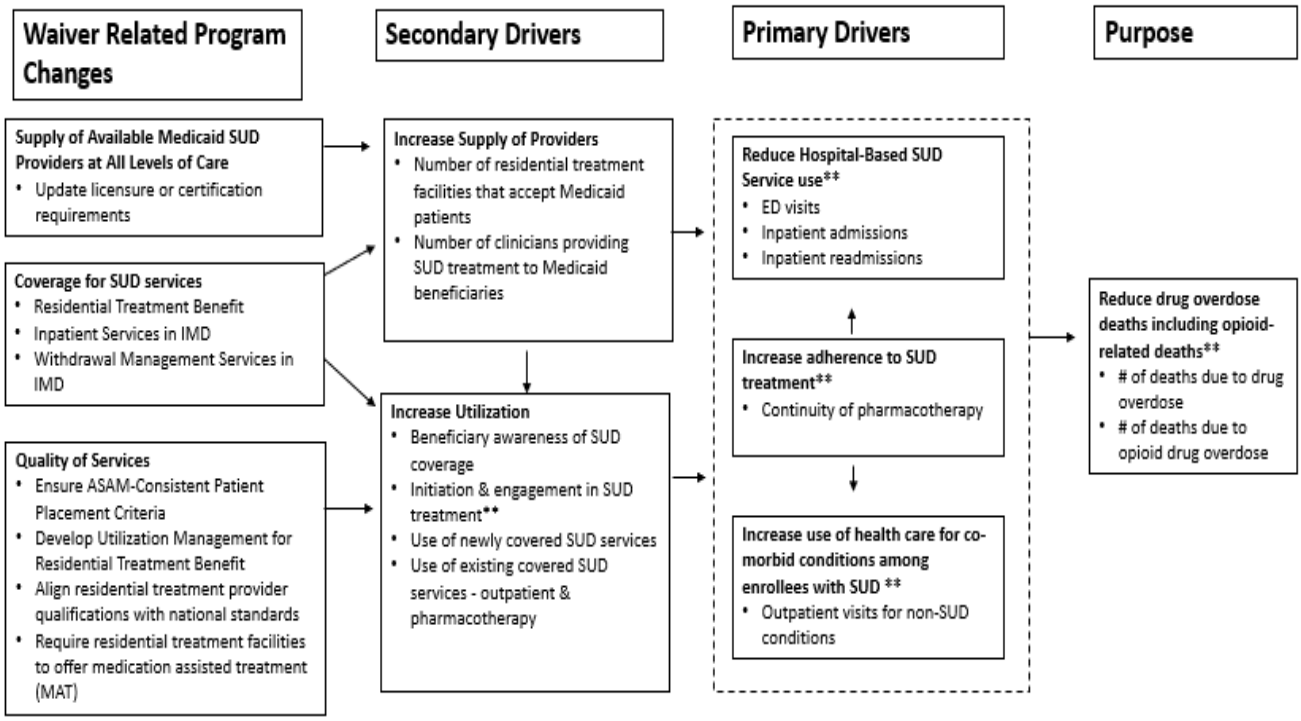
These secondary drivers may, in turn, influence the primary drivers: 1) enrollees' health care needs and preferences, and 2) their capacity to seek care that is suited to their needs. For example, increased access to SUD providers and increased use of SUD services may reduce symptoms of SUD, increase the likelihood of recovery, increase engagement in health care, and foster knowledge and awareness of treatment needs. These changes may thus enable enrollees to remain in SUD treatment, reduce hospital-based SUD service use, and/or address previously ignored physical and mental health co-morbidities. Improvements in outcomes considered primary drivers then have the potential to influence the waiver's overall goal of reducing drug overdose deaths among Medicaid enrollees.

We derive the evaluation design for the SUD demonstration waiver from the logic of the driver diagram and will proceed in stages. In the first stage of the evaluation, we will assess the causal effects of the demonstration waiver on the outcomes listed as secondary drivers because the planned programmatic changes are most directly related to these outcomes. We anticipate that the programmatic changes will increase the supply of providers, particularly residential treatment providers, and enrollees' use of newly covered SUD services.

In the second stage of the evaluation, we will evaluate the causal effects of the SUD demonstration waiver on the outcomes noted as primary drivers in **Figure** 5 -- conditional on finding that the waiver influences the supply of SUD providers and/or use of SUD services. If the SUD demonstration waiver has no significant impact on the secondary drivers, we will not attempt to estimate the causal effects of the SUD demonstration waiver on primary drivers, because there would be no empirical basis on which to expect an effect. Rather, we will conduct descriptive analyses to quantify the association between the primary drivers and factors that may provide insight to the Wisconsin Medicaid program regarding potential change over time in these outcomes. These factors include beneficiary characteristics, county-level SUD prevention and treatment resources, and significant state or federal policies related to SUD prevention and treatment implemented during the observation period.

If we find that the SUD demonstration waiver significantly impacts the primary drivers as hypothesized in **Figure** 5, we will assess the demonstration waiver's causal impact on the rate of drug overdose deaths among Medicaid beneficiaries. If the SUD waiver has no effect on the primary drivers, or if we do not conduct that causal analysis because of null effects in the first stage of the evaluation, we will conduct descriptive analyses to quantify the association between the rate of deaths due to drug overdose and factors that may provide insight to the Wisconsin Medicaid program regarding potential change over time in this outcome. These factors include beneficiary or population characteristics, county-level SUD prevention and treatment resources, and significant state or federal policies related to SUD prevention and treatment implemented during the observation period.

Figure 5. Driver Diagram: Substance use Disorder Waiver Provision



**Goal for SUD treatment reform per Wisconsin Medicaid's SUD Implementation Protocol, June 2019

D2.2. Hypotheses and Research Questions

SUD Demonstration Waiver: Expands coverage for SUD treatment in IMD settings including a new residential treatment benefit and coverage for inpatient and medically supervised withdrawal management services, and adopts new or revised policies to support implementation of this coverage expansion.

Question 4.1. Does the SUD demonstration waiver increase the supply of SUD providers for Medicaid enrollees?

H4.1a. The SUD demonstration waiver will increase the supply of SUD providers that accept and/or treat Medicaid enrollees.

Question 4.2. Does the SUD demonstration waiver increase access to, and use of, newly covered SUD services for Medicaid enrollees?

H4.2a. After implementation of the SUD demonstration waiver, enrollees' awareness of available SUD treatment services will increase over time.

H4.2b. The SUD demonstration waiver will increase use of SUD treatment in IMD settings including residential treatment, impatient treatment, medically supervised withdrawal services and MAT for opioid use disorder.

H4.2c. The SUD demonstration waiver will increase initiation and engagement in SUD treatment.

Question 4.3. Does the SUD demonstration waiver change Medicaid enrollees' use of existing covered SUD services?

H4.3a. The SUD demonstration waiver will increase or have no effect on SUD outpatient services, including in-person and telehealth, and pharmacotherapy treatment provided outside IMD settings.

H4.3b. The SUD demonstration waiver will reduce use of hospital-based SUD services, conditional on increased supply of SUD providers, and/or increased use of new and existing covered SUD services.

H4.3c. The SUD demonstration waiver will increase access to health care for co-morbid physical and mental health conditions among enrollees with a SUD, conditional on increased supply of SUD providers, and/or increased use of new and existing covered SUD services.

H4.3d. The SUD demonstration waiver will increase adherence to SUD treatment, conditional on increased supply of SUD providers, and/or increased use of new and existing covered SUD services.

Question 4.4. Does the SUD demonstration waiver reduce the rate of drug overdose deaths among Medicaid enrollees including opioid-related deaths?

H4.4a. The SUD demonstration waiver will reduce the rate of drug overdose deaths among Medicaid beneficiaries, including opioid-related overdose deaths, conditional on increased supply of SUD providers, and/or increased use of new and existing covered SUD services.

The final research question, Q4.5, follows from the recommendations in the CMS technical assistance guidance on SUD demonstration waiver evaluations. Consistent with this guidance, there are no accompanying hypotheses.

Question 4.5. What are the patterns and trends in Medicaid costs associated with the SUD demonstration waiver?

D3. Methodology

D3.1. Evaluation Design Summary

We will use descriptive analyses to characterize changes over time in evaluation outcomes and to identify key correlates associated with the outcomes including beneficiary characteristics, county-level SUD prevention and treatment resources, and potential changes in state and federal policy or events within and beyond the Medicaid program that are related to SUD prevention and treatment. (e.g., expanded coverage of telehealth services for SUD treatment.) For causal analysis, we will use DiD. Section IIC, above, provides an overview of this analytic approach, and a discussion of its application to this component of the evaluation follows in section E3.5.

COVID-related note: Provision 4, the SUD residential treatment benefit, was substantially delayed, with implementation taking effect on February 1, 2021; The evaluation plan is affected by this change in schedule and by the pandemic circumstances. The original plan called for a combination of ITS and DiD approaches. We will no longer implement the ITS analysis, as it will be strongly confounded by COVID disruptions. We are still able to address all of the research questions. We will implement the DiD models excluding 2020 from the baseline period to avoid COVID19 related effects on outcomes during the baseline. The comparison populations and data sources for the DiD models are largely unchanged from the original analysis plan. Interpretation of DiD findings will include discussion of the potential residual confounding effects of the pandemic.

The Design Table (**Table 13**) summarizes the key features of the evaluation design, including evaluation questions, hypotheses, data sources and analytic approaches. As noted above, the format of this table conforms to CMS guidance for evaluation of the SUD provision and differs somewhat from the form of the table presented in prior sections.

Table 123. Provision 4: Summary of Questions, Hypotheses, Data Sources, and Analytic Approaches for Evaluation of the SUD Demonstration Waiver

NOTE: Implementation of this provision was delayed, with the new implementation set to February 1, 2021.							
DRIVER	**MEASURE DESCRIPTION [steward]**	**NUMERATOR**	**DENOMINATOR**	**DATA SOURCE**	**COMPARISON GROUP(S)**	**ANALYTICAL APPROACH**	
						Original	**Revised**
Q4.1 Does the SUD demonstration waiver increase the supply of SUD providers for Medicaid enrollees?							
H4.1a. The SUD demonstration waiver will increase the supply of SUD providers that accept and/or treat Medicaid enrollees.							
Secondary Driver (Increase Supply of Providers)	Number of residential treatment facilities that accept Medicaid patients [n/a]	Facility reports willingness to accept Medicaid patients	Federal, state, and local government and private residential treatment facilities that provide substance abuse treatment services	National Survey of Substance Abuse Treatment Facilities	All treatment facilities in Wisconsin and in selected comparison states for the measurement period	DiD	Exclude 2020 from the baseline period for DiD models to avoid COVID19 related effects on outcomes during the baseline. Modify selection criteria of comparison states to include state-level COVID-19 outcomes. Interpretation of DiD findings will include discussion of the potential residual confounding effects of the pandemic.

DRIVER	MEASURE DESCRIPTION [steward]	NUMERATOR	DENOMINATOR	DATA SOURCE	COMPARISON GROUP(S)	ANALYTICAL APPROACH	
						Original	Revised
Secondary Driver (Increase Supply of Providers)	Proportion of Medicaid clinicians that provide treatment for SUD [n/a]	Number of clinicians that provide one or more services with an SUD diagnosis in any category of service (i.e., outpatient, inpatient, emergency department) in the measurement period	Number of active clinicians that provide any outpatient, inpatient, IMD, or emergency department service to one or more adult Medicaid enrollees in the measurement period.	WI Medicaid claims and encounter	Clinicians who provided any service to one or more adult Medicaid enrollee during the three years before SUD waiver implementation, and clinicians who provided any service to one or more adult Medicaid enrollee during the three years after SUD waiver implementation.	ITS	No longer do the ITS analysis, as it will be strongly confounded by COVID disruptions. Implement a DiD in which we compare the change in # of clinicians that provide one or more services with an SUD diagnosis, to the change in # of clinicians who provide one or more services with a diabetes diagnosis. Exclude 2020 from the baseline period for DiD models to avoid COVID19 related effects on outcomes during the baseline. Interpretation of DiD findings will include discussion of the potential confounding effects of the pandemic.

DRIVER	MEASURE DESCRIPTION [steward]	NUMERATOR	DENOMINATOR	DATA SOURCE	COMPARISON GROUP(S)	ANALYTICAL APPROACH	
						Original	Revised
Q4.2 Does the SUD demonstration waiver increase access to, and use of, newly covered SUD services for Medicaid enrollees?							
H4.2a. After implementation of the SUD demonstration waiver, enrollees' awareness of available SUD treatment services will increase over time							
Secondary Driver (Increase Utilization)	Awareness of Medicaid coverage for SUD services [n/a]	Beneficiary Survey	Beneficiary Survey	Beneficiary Survey	Cross-sectional sample of enrollees at two post-implementation time points	Descriptive Analysis	The delayed implementation of the SUD waiver results in one survey assessment pre-implementation (Fall 2020). Descriptive analysis will compare pre- and post-implementation outcomes recognizing the potential confounding effect of the pandemic.
H4.2b. The SUD demonstration waiver will increase use of SUD treatment in IMD settings including residential treatment, inpatient treatment, medically supervised withdrawal services and MAT for opioid use disorder.							
Secondary Driver (Increase Utilization)	Any use of SUD treatment in IMD setting and volume of use, overall and by service type [n/a]	Any SUD treatment use overall and by service type; Quantity of SUD treatment services received by service type.	All admissions during the measurement period from treatment facilities that receive state funds or federal block grant funds to provide alcohol and/or drug treatment services	Treatment Episode Dataset - Admissions	Admissions to drug treatment facilities in WI and a set of comparison states for three years before and two years after implementation of the SUD demonstration waiver in WI.	DID	Exclude 2020 from the baseline period for DiD models to avoid COVID19 related effects on outcomes during the baseline. Modify selection criteria of comparison states to include state-level COVID-19 outcomes. Interpretation of DiD findings will include discussion of the potential confounding effects of the pandemic.

DRIVER	MEASURE DESCRIPTION [steward]	NUMERATOR	DENOMINATOR	DATA SOURCE	COMPARISON GROUP(S)	ANALYTICAL APPROACH	
						Original	Revised
H4.2c. The SUD demonstration waiver will increase initiation and engagement in SUD treatment.							
Secondary Driver (Increase Utilization)	Initiation and engagement of alcohol and other drug dependence treatment [NCQA-IET]	Initiation- # of enrollees who initiated treatment w/in 14 days of the index episode. Engagement- # of enrollees who initiated treatment & had >=2 additional services with a diagnosis of AOD w/in 30 days of initiation visit	Enrollees with a new diagnosis of AOD received between 1/1-11/15 of the measurement year, and continuous enrollment 60 days before new diagnosis and 44 days post.	WI all payer claims database (DD analysis); Medicaid claims and encounter (validation analysis)	For DD: Non-elderly adults enrolled in Medicaid and non-elderly adults enrolled in private insurance during the three years before and/or after implementation of the waiver.	ITS and DiD	No longer do the ITS analysis, as it will be strongly confounded by COVID disruptions. Implement descriptive trend analysis with Medicaid data to validate all-payer data. Exclude 2020 from the baseline period for DiD models to avoid COVID19 related effects on outcomes during the baseline. Interpretation of DiD findings will include discussion of the potential confounding effects of the pandemic.

DRIVER	MEASURE DESCRIPTION [steward]	NUMERATOR	DENOMINATOR	DATA SOURCE	COMPARISON GROUP(S)	ANALYTICAL APPROACH	
						Original	Revised
Q4.3 Does the SUD demonstration waiver change Medicaid enrollees' use of existing covered SUD services?							
H4.3a. The SUD demonstration waiver will increase or have no effect on SUD outpatient services, including in-person and telehealth, and pharmacotherapy treatment provided outside of IMD settings.							
Secondary Driver (Increase Utilization)	Any outpatient visit for SUD treatment, and volume of outpatient visits for SUD treatment. [MODRN]	any, and # of non-emergency department, outpatient claims with a SUD diagnosis and of an OUD diagnosis. Outpatient visits include in-person and telehealth visits.	all member-months observed for target population and comparison group during the measurement period	same as H4.2c	same as H4.2c	same as H4.2c	No longer do the ITS analysis, as it will be strongly confounded by COVID disruptions. Exclude 2020 from the baseline period for DiD models to avoid COVID19 related effects on outcomes during the baseline. Interpretation of DiD findings will include discussion of the potential confounding effects of the pandemic.
Secondary Driver (Increase Utilization)	Any medication assisted treatment for opioid use disorder [MODRN]	any claim for buprenorphine, naltrexone (oral), injectable naltrexone, buprenorphine/Naloxone or a HCPCs code for buprenorphine or buprenorphine/ naloxone, methadone administration, or naltrexone	all member-months observed for enrollees with at least one encounter with a diagnosis of OUD in inpatient, outpatient and professional claims during the measurement period	same as H4.2c	same as H4.2c	same as H4.2c	No longer do the ITS analysis, as it will be strongly confounded by COVID disruptions. Exclude 2020 from the baseline period for DiD models to avoid COVID19 related effects on outcomes during the baseline. Interpretation of DiD findings will include discussion of the potential confounding effects of the pandemic.

DRIVER	MEASURE DESCRIPTION [steward]	NUMERATOR	DENOMINATOR	DATA SOURCE	COMPARISON GROUP(S)	ANALYTICAL APPROACH	
						Original	Revised
Secondary Driver (Increase Utilization)	Any outpatient visit for SUD treatment; any prescription medication treatment for SUD [n/a]	Beneficiary Survey	Beneficiary Survey	Beneficiary Survey	Cross-sectional sample of enrollees at two post-implementation time points	Descriptive Analysis	The delayed implementation of the SUD waiver results in one survey assessment pre-implementation (Fall 2020). Descriptive analysis will compare pre- and post-implementation outcomes recognizing the potential confounding effect of the pandemic.

DRIVER	MEASURE DESCRIPTION [steward]	NUMERATOR	DENOMINATOR	DATA SOURCE	COMPARISON GROUP(S)	ANALYTICAL APPROACH	
						Original	Revised
H4.3b. The SUD demonstration waiver will reduce use of hospital-based services, conditional on increased supply of SUD providers, and/or increased use of new and existing covered SUD services.							
Primary Driver (Reduce Hospital-Based SUD Service Use)	Any emergency department visit with a SUD-diagnosis, and volume of emergency department visits with an SUD diagnosis [MODRN]	any, and # of ED visits with a SUD diagnosis of any kind; any and # of ED visits with an OUD diagnosis	all member-months observed for target population and comparison group during the measurement period	same as H4.2c	same as H4.2c	Descriptive Analysis, and same as H4.2c	Descriptive analyses are unchanged. No longer do the ITS analysis, as it will be strongly confounded by COVID disruptions. Exclude 2020 from the baseline period for DiD models to avoid COVID19 related effects on outcomes during the baseline. Interpretation of DiD findings will include discussion of the potential confounding effects of the pandemic.
	Any hospitalization with a SUD diagnosis, and number of hospitalizations with a SUD diagnosis [MODRN]	any, and # of hospitalizations with a SUD diagnosis of any kind; any, and # of hospitalizations with an OUD diagnosis	all member-months observed for target population and comparison group during the measurement period	same as H4.2c	same as H4.2c	Descriptive Analysis, and same as H4.2c	Descriptive analyses are unchanged. No longer do the ITS analysis, as it will be strongly confounded by COVID disruptions. Exclude 2020 from the baseline period for DiD models to avoid COVID19 related effects on outcomes during the baseline. Interpretation of DiD findings will include discussion of the potential confounding effects of the pandemic.

DRIVER	MEASURE DESCRIPTION [steward]	NUMERATOR	DENOMINATOR	DATA SOURCE	COMPARISON GROUP(S)	ANALYTICAL APPROACH	
						Original	Revised
Primary Driver (Reduce Hospital-Based SUD Service Use)	Any, and volume of readmissions within 30-days following hospitalization for a SUD diagnosis [n/a]	any, and # of readmissions to the hospital within 30-days for an SUD diagnosis of any kind; any and # of readmissions to the hospital within 30-days for an OUD diagnosis	Hospital discharges with a diagnosis of SUD in the measurement period among enrollees with continuous enrollment for a least 31 days post-hospitalization.	same as H4.2c	same as H4.2c	Descriptive Analysis, and same as H4.2c	Descriptive analyses are unchanged. No longer do the ITS analysis, as it will be strongly confounded by COVID disruptions. Exclude 2020 from the baseline period for DiD models to avoid COVID19 related effects on outcomes during the baseline. Interpretation of DiD findings will include discussion of the potential confounding effects of the pandemic.
	Any emergency department visit for a SUD; any hospitalization for a SUD [n/a]	Beneficiary Survey	Beneficiary Survey	Beneficiary Survey	Cross-sectional sample of enrollees at two post-implementation time points	Descriptive Analysis	The delayed implementation of the SUD waiver results in one survey assessment pre-implementation (Fall 2020). Descriptive analysis will compare pre- and post-implementation outcomes recognizing the potential confounding effect of the pandemic.

DRIVER	MEASURE DESCRIPTION [steward]	NUMERATOR	DENOMINATOR	DATA SOURCE	COMPARISON GROUP(S)	ANALYTICAL APPROACH	
						Original	Revised
H4.3c The SUD demonstration waiver will increase use of health care for co-morbid physical and mental health conditions among enrollees with a SUD, conditional on increased supply of SUD providers, and/or increased use of new and existing covered SUD services.							
Primary Driver (Increase Use of Health Care for Co-Morbid Conditions)	Any outpatient visit for a non-SUD diagnosis; Quantity of outpatient visits for a non-SUD diagnosis [n/a]. Outpatient visit includes in-person and telehealth visits.	any, and # of non-emergency department, outpatient claim with a non-SUD diagnosis; any, and # of non-emergency department outpatient claims with a non-SUD diagnosis	all member-months observed for target population and comparison group members with at least one inpatient, outpatient, emergency department or IMD claim with an SUD diagnosis	same as H4.2c	same as H4.2c	Descriptive Analysis, and same as H4.2c	Descriptive analyses are unchanged. No longer do the ITS analysis, as it will be strongly confounded by COVID disruptions. Exclude 2020 from the baseline period for DiD models to avoid COVID19 related effects on outcomes during the baseline. Interpretation of DiD findings will include discussion of the potential confounding effects of the pandemic.
Primary Driver (Increase Use of Health Care for Co-Morbid Conditions)	Health status and chronic conditions; Access and use of general medical care; Substance use and SUD; Access and use of drug tx; knowledge/ understanding of waiver provisions	Beneficiary Survey	Beneficiary Survey	Survey	Cross-sectional sample of enrollees at two post-implementation time points	Descriptive Analysis	The delayed implementation of the SUD waiver results in one survey assessment pre-implementation (Fall 2020). Descriptive analysis will compare pre- and post-implementation outcomes recognizing the potential confounding effect of the pandemic.

DRIVER	MEASURE DESCRIPTION [steward]	NUMERATOR	DENOMINATOR	DATA SOURCE	COMPARISON GROUP(S)	ANALYTICAL APPROACH	
						Original	Revised
H5.3d. The SUD demonstration waiver will increase adherence to SUD treatment, conditional on increased supply of SUD providers, and/or increased use of new and existing covered SUD services.							
Primary Driver (Increase adherence to SUD treatment)	Continuity of pharmacotherapy for OUD [NQF 3175, MODRN]	Enrollees who have at least a) 90 days, and b) 180 days of continuous pharmacotherapy with a medication prescribed for OUD without a gap of more than 7 days.	Enrollees that meet Inclusion criteria: individuals with a diagnosis of OUD in inpatient, outpatient or professional claims at any time during the measurement period; and at least one claim for an oral OUD medication during the measurement period received with at least 180 days before the end of the final calendar year of the measurement period; and continuously enrolled for at least 6 months after the month with the first OUD medication claim in the measurement period with no gap in that enrollment.	same as H4.2c	same as H4.2c	Descriptive Analysis, and same as H4.2c	Descriptive analyses are unchanged. No longer do the ITS analysis, as it will be strongly confounded by COVID disruptions. Exclude 2020 from the baseline period for DiD models to avoid COVID19 related effects on outcomes during the baseline. Interpretation of DiD findings will include discussion of the potential residual confounding effects of the pandemic.

DRIVER	MEASURE DESCRIPTION [steward]	NUMERATOR	DENOMINATOR	DATA SOURCE	COMPARISON GROUP(S)	ANALYTICAL APPROACH	
						Original	Revised
Q4.4 Does the SUD demonstration waiver reduce the rate of drug overdose deaths among Medicaid enrollees including opioid-related deaths?							
H4.4a. The SUD demonstration waiver will reduce the rate of drug overdose deaths among Medicaid beneficiaries, conditional on increased supply of SUD providers, and/or increased use of new and existing covered SUD services.							
Purpose (Reduce drug overdose deaths including opioid-related deaths)	Rate of drug overdose death, and opioid-related drug overdose death [WIDHS - Technical Notes Annual Death Report, 2017, P-01170-19]	# of deaths due to any type of drug overdose; # of deaths due to opioid drug overdose	Medicaid non-elderly adult population for the measurement period; Estimated Wisconsin non-elderly adult population not enrolled in Medicaid for the measurement period; Estimated Wisconsin non-elderly population in the measurement period.	WI Death Records; Census Estimates; Medicaid Enrollment	For DD: Wisconsin non-elderly adult population not enrolled in Medicaid during the measurement period	Descriptive Analysis, ITS, DiD	Descriptive analyses are unchanged. No longer do the ITS analysis, as it will be strongly confounded by COVID disruptions. Exclude 2020 from the baseline period for DiD models to avoid COVID19 related effects on outcomes during the baseline. Interpretation of DiD findings will include discussion of the potential confounding effects of the pandemic.

DRIVER	MEASURE DESCRIPTION [steward]	NUMERATOR	DENOMINATOR	DATA SOURCE	COMPARISON GROUP(S)	ANALYTICAL APPROACH	
						Original	Revised
Q4.5 What are the patterns and trends in Medicaid costs associated with the SUD demonstration waiver?							
	Total health care costs; SUD and Non-SUD costs; Category-specific costs (e.g., Inpatient, Pharmacy, Outpatient non-ED, outpatient ED, long-term care). [CMS SUD Evaluation Design TA Attachment A]	Medicaid amount paid for each outcome noted.	All member-months observed during the measurement period for the target population.	Medicaid claims and encounter data.	Non-elderly adult Medicaid beneficiaries enrolled during the 3 years before and/or after waiver implementation.	Descriptive analysis and ITS	Descriptive analyses are unchanged. No longer do the ITS analysis, as it will be strongly confounded by COVID disruptions.
TABLE NOTES							
MODRN refers to the Medicaid Outcomes Distributed Research Network's Opioid Use Disorder workgroup. https://www.academyhealth.org/MODRN							

D3.2. Target and Comparison Populations

The provisions in the SUD demonstration waiver affect the full Wisconsin Medicaid population. The evaluation focuses specifically on non-elderly adult Medicaid beneficiaries, ages 21-64, the Medicaid population in Wisconsin with the highest rates of SUD. We exclude adults who are dually enrolled in Medicaid and Medicare because we cannot observe all of their health care use in Medicaid claims and encounters. We will employ several comparison groups; these vary according to the research question as described below.

To address question 4.1, "*Does the SUD demonstration waiver increase the supply of SUD providers for Medicaid enrollees*?" we will construct two comparison groups. First, to estimate the causal effect of the demonstration waiver on the supply of clinicians who provide SUD services to enrollees, we will use Wisconsin Medicaid claims and encounter data to identify the clinicians who provided any service to an adult Medicaid beneficiary during the three years before implementation of the residential treatment benefit, and similarly, the clinicians who provided any service to an adult Medicaid beneficiary during the three years after its implementation. Using these two groups, and an ITS analyses, we will determine if the demonstration waiver increased the fraction of Medicaid providers that delivered at least one SUD service to an adult Medicaid beneficiary. As a placebo test, we will replicate this analysis for an outcome that we would not expect to change as a consequence of the SUD demonstration waiver (e.g., the fraction of Medicaid providers that delivered at least one diabetes-related service to an adult beneficiary.)

Second, to estimate the causal effect of the demonstration waiver on the supply of residential treatment facilities that accept Medicaid beneficiaries, we will use the National Survey of Substance Abuse Treatment Facilities to identify the facilities that provided residential treatment for adults during the three years before and after implementation of the residential treatment facility. We will construct this sample of facilities in Wisconsin, and a sample of facilities from a set of comparison states that did not implement a SUD waiver during the study period. We will use a DiD design to determine if any potential change in the likelihood that a residential treatment facility accepts Medicaid patients after implementation of the wavier relative to the pre-period was greater than the any potential change experienced in the comparison states. We will select the comparison states based on their similarity to Wisconsin in demographics, Medicaid program characteristics, and federal resources available for SUD prevention and treatment (e.g., Substance Abuse and Mental Health Services Administration funding).

To address question 4.2, "*Does the SUD demonstration waiver increase access to, and use of, newly covered SUD services for Medicaid enrollees?"* we will construct several comparison groups. First, to determine the magnitude of increase in beneficiary awareness of SUD treatment services in the years following its implementation (H5.2a), we will compare respondents to the second survey of Medicaid beneficiaries that the team will field in CY2023 relative to respondents of the first survey of Medicaid beneficiaries that we will field in CY2020. Second, to test the effect of the demonstration waiver on the use of IMD-based SUD services (H4.2b), we will use the Treatment Episode Dataset (TEDS) to construct a sample of admissions to drug treatment facilities in Wisconsin and in a set of comparison

states for three years before and two years after implementation of the residential treatment benefit in Wisconsin. We will use a DiD design to determine if the change in use of IMD-based services after implementation of the wavier relative to the pre-period was greater than the any potential change experienced in the comparison states. We will select the comparison states for this analysis using the same criteria noted above in addition to consideration of the comparability of data submitted by each state to the TEDS.

To address the last hypothesis within question 4.2 pertaining to an expected increase in initiation and engagement in SUD treatment (H4.2c), we will use the state's all payer claims database to construct a comparison group of privately insured adults, and to construct a cohort of all non-elderly adult Medicaid beneficiaries enrolled at any point between February 2017 and January 2023. We will use a DiD design to compare the change in the likelihood of initiation and engagement in SUD treatment among Medicaid enrollees relative to privately insured adults in the three years after implementation of the residential treatment benefit relative to the pre-period, 2017-2019.

We will use the comparison strategies identified above for H4.2c to answer question 4.3, "*Does the SUD demonstration waiver change Medicaid enrollees' use of existing covered SUD services*?" To address question 4.4, "*Does the SUD demonstration waiver reduce the rate of drug overdose deaths among Medicaid enrollees including opioid-related deaths?*" we will use two comparison groups in addition to a statewide, population-level analysis. The first includes adult Medicaid enrollees in the three years before implementation of the residential treatment benefit which we will identify from Medicaid enrollment data.

We will implement a DiD design to compare the change in the drug overdose death rate three years after implementation of the waiver relative to the pre-period (2017-2019) for adult Medicaid enrollees relative to adult non-Medicaid enrollees in Wisconsin. We will estimate the size of the non-Medicaid group from census data and the Medicaid population from Medicaid enrollment data. Finally, to address question 4.5, "What are the patterns and trends in Medicaid costs associated with the SUD demonstration waiver?" We use the Medicaid enrollment data to construct a sample that includes all non-elderly adult Medicaid beneficiaries enrolled at any point between February 2017 and January 2023. We will use descriptive analysis to summarize and plot the trend in health care costs during the evaluation period beginning in 2017 through 2023. Originally planned as an ITS analysis, it is no longer viable given the pandemic-induced disruptions in health care use during the pre-waiver implementation period.

D3.3. Evaluation Period

The implementation of the residential treatment benefit and the implementation date for coverage of existing services within an IMD setting (i.e., inpatient services and medically supervised withdrawal services) took effect on February 1, 2021. The evaluation period for the SUD waiver is February 1, 2017 – January 31, 2023. This delay in implementation slightly alters the post-implementation time frame for observation, in that the waiver's planned time frame had allowed for up to 36 months of observation before and after implementation of specific SUD demonstration waiver provisions while

allowing for adequate time to complete the analyses and interpretation of analyses in the fourth and final year of the evaluation waiver. The specific duration of the evaluation period may vary according to the question and hypothesis.

D3.4. Data Sources

The outcome measures for this evaluation are defined in **Table 1**3. This evaluation will involve multiple data sources. They are noted in **Table 1**4, along with the hypotheses for which these data will be used. Section IID, above, provides a full description of these data sources.

Table 134. Provision 4 Data Sources

	Hypotheses
All Payer Claims Database, WHIO. Use the member file to identify both the Medicaid and privately insured samples to implement difference-in-difference analyses, and the claims files as the source of health care-use related outcomes. We will purchase the data for the evaluation years from the WHIO. We note that in 2019, the WHIO hired a new contractor to collect and construct the all-payer-claims database. We do not expect that the change in contractor will impede the use of these data longitudinally; however, we will confirm that there have been no changes in the methodology for data construction that would introduce bias into the study designs when technical information is available from the new contractor. In the evaluation of the SUD provision of the waiver, the WHIO provides a source for a within state comparison group of commercially insured individuals to complement the primary designs that estimate the effect of the SUD provision for the affected populations using ITS which does not rely upon a within-state comparator. Thus, in the unlikely event that the new WHIO data are not usable, our capacity to answer the research question will not be affected.	H4.2c H4.3a-d
American Community Survey. To estimate the annual size of the adult population in Wisconsin by age, an input into calculating age-adjusted rate of death due to drug overdose overall and opioid-related specifically. The ACS is a publicly available survey. As we have done for previous studies, we will obtain these data from IPUMS, https://usa.ipums.org/usa/.	H4.4a
Medicaid beneficiary survey. To assess enrollees' awareness of coverage for SUD treatment services under Medicaid, use of those services and self-reported treatment outcomes particularly among individuals who self-report harmful substance use. The Medicaid Beneficiary Survey will be designed and implemented by this evaluation team. We will obtain the data from within the project.	H4.2a H4.3a H4.3b

Data Sources	Hypotheses
Medicaid enrollment, claims, and encounter data. Construct all of the health-care-use-related outcome measures and cost outcomes shown in Table 13 for the target population. We obtain enrollment, claims and encounter data through regular extracts from the Department of Health Services. We use the fee-for-service allowable charges schedule to impute costs for encounter data. HMOs have a strong incentive to accurately and completely report encounter data to the WI DHS because these data are considered within the rate-setting process. The WI DHS contractually requires HMOs to provide at least 90% of adjudicated claims as encounters within 90 days and 99% within 150 days. Internal analyses conducted by the WI DHS from 2016-2018 show that missing data across HMOS is consistently modest ranging from 1.4% to 5.3%.	H4.1a H4.2c H4.3 H4.4a Q4.5
National Survey of Substance Abuse Treatment Services (N-SSATS). This N-SSATS is the key source of treatment facilities and facility characteristics in each state for our analysis of facility acceptance of Medicaid patients. We will compare the facilities identified in the N-SSATS for Wisconsin to the Wisconsin Division of Quality Assurance list to ensure that we have the most relevant sample in Wisconsin. The N-SSATS is a publicly available dataset. We will download these data from the following site, https://www.datafiles.samhsa.gov/study-series/national-survey-substance-abuse-treatment-services-n-ssats-nid13519	H4.1a
Treatment Episode Data Set – Admissions (TEDS-A). The TEDS-A is the source of outcome data to assess Medicaid enrollee use of SUD services within an IMD setting. This dataset is published approximately two-years after the close of the calendar year (e.g., May 2019 for the 2017 dataset), so we expect to use five datasets covering the years 2017 – 2021. The TEDS-A is a publicly available dataset. We will download these data from the following site, https://www.datafiles.samhsa.gov/study-series/treatment-episode-data-set-admissions-teds-nid13518	H4.2b
Wisconsin Death Records. To obtain deaths due to drug overdose overall and opioid-related specifically. We will obtain these data from the Wisconsin Department of Health Services Vital Records Services under the terms of the data use agreement for this evaluation.	H4.4a
Wisconsin Mental Health and Substance Use Needs Assessment. To use as a source of control variables. We will obtain this publicly available report from the Wisconsin Division of Care and Treatment Services. It is published biannually and provides county-specific indicators of SUD treatment needs and available resources.	H4.1a, H4.2c H4.3a-d

D3.5. Analytic Methods

In this section we describe the analytic methods we will implement to complete our descriptive and causal analyses. The hypotheses for which each method will be used are noted in brackets following a description of the approach.

Descriptive Analyses

We will implement descriptive analyses to achieve the following objectives: a) to characterize and compare the equivalence of characteristics and baseline outcomes across study groups; b) to describe, and test for change over time in study outcomes; and c) to quantify the association between study outcomes and factors that may influence those outcomes including beneficiary characteristics, the implementation of the SUD demonstration waiver, and county-level SUD prevention and treatment resources. We will use bivariate statistical tests (e.g., t-test, chi-square test) to determine the equivalence of unadjusted characteristics or outcomes across groups and over time, and regression methods to quantify the association between specific covariates and study outcomes while adjusting for other relevant covariates. The general forms of the regression models that we will use to execute our descriptive analyses are described below.

$$(1) \qquad Y_{it} = \beta_1 svy2_t + \varphi X_i + \varepsilon_{it}$$

Equation (1) describes the regression model that we will implement to test for an increase in beneficiary awareness and self-reported use of SUD services from the first to the second survey in the post-waiver implementation period. Specifically, Y is an outcome of interest for person *i* at time *t*, svy2 is an indicator that takes on a value of 1 for responses from the second beneficiary survey. We allow X to stand for control variables and ε represent a random error term. The coefficient of interest β_1, represents the difference in the outcome in the second beneficiary relative to the first survey. We will use ordinary least squares or logistic regression analysis as appropriate to the outcome. [H4.2a, H4.3a, H4.3b]

$$(2) \qquad Y_{it} = \varphi X_i + \gamma M_t + \tau P_t + \pi_t + \varepsilon_{it}$$

Equation (2) illustrates the general model we will implement to quantify the association between a given outcome, *Y* for unit *i* at time *t*, and select covariates: a vector, *X,* of beneficiary characteristics; a vector, *M,* of county-level SUD prevention and treatment resources; *P,* a vector of state or federal policies related to SUD prevention and treatment; and a time fixed effect, π_t. Observations are at the unit-time period that is appropriate to the outcome, and ε represent a random error term. We will select the specific type of regression analysis for each model according to the functional form relationship between the parameter of interest (e.g., conditional mean) and the key independent variable(s). We will adjust standard errors for multiple observations within person over time as appropriate to the outcome.

To describe potential differences in health care costs after implementation of the waiver relative to the prior period, we will implement a modified version of Equation (2) that includes an indicator variable for the post-waiver period (i.e., on or after Timeframe B). We will use two-part generalized linear models selecting the appropriate link and variance functions using a modified version of the Hosmer-Lemeshow test and the Park test respectively.[19,20] [H4.3a-H4.3d, H4.4a, Q4.5]

Causal Analyses

As noted above, the original evaluation plan included a combination of ITS and DiD approaches. We will no longer implement the ITS analysis, as it will be strongly confounded by COVID disruptions. We are still able to address all of the research questions. We will implement the DiD models excluding 2020 from the baseline period to avoid COVID19 related effects on outcomes during the baseline. Interpretation of DiD findings will include discussion of the potential residual confounding effects of the pandemic.

We will implement a DiD design[21] to test the equivalence of a change in an outcome after implementation of the SUD demonstration waiver relative to the pre-waiver period for the target group relative to a change in the outcome for a concurrent comparison group. A general description of this approach is provided in Section IIB.

The DiD design allows us to identify the causal effect of the SUD demonstration waiver by assuming that the outcomes for the target group would have evolved similarly over time as that of the comparison group(s) in the absence of the implementation of the waiver. While this assumption is not directly testable, we will assess its plausibility by comparing the pre-intervention outcome trends for the target and comparison groups. Our particular application of DiD regression analyses to the evaluation of the SUD demonstration waiver is described immediately below beginning with the general form of the model. [Q4.1a, Q4.2b, Q4.2c, Q4.3a-Q4.3d, Q4.4a]

$$(4) \qquad Y_{it} = \beta_1 TG_i + \beta_2 post_t + \beta_3 (TG_i * post_t) + \varphi X_i \ + \ \gamma M_t \ + \varepsilon_{it}$$

Y is an outcome of interest for unit *i* at time *t*, TG is an indicator for membership in the target group, and $post$ is an indicator for the post-waiver period, the period on or after the first implementation date for the SUD demonstration waiver. Observations are at the unit and time period (e.g., person-month, facility-year, etc.,) that is appropriate to the outcome. We allow X to stand for control variables. For models in which both the target and comparison groups are drawn from the State of Wisconsin, we will include a vector M that includes county-level control variables related to SUD treatment prevention and resources access from the Wisconsin Mental Health and Substance Use

[19] Manning WG, Basu A, Mullahy J. Generalized modeling approaches to risk adjustment of skewed outcomes data. Journal of Health Economics. 2005;24:465-488.

[20] Manning WG, Mullahy J. Estimating log models: to transform or not to transform? Journal of Health Economics. 2001;20:461-494.

[21] Wing C, Simon K, Bello-Gomez RA. 2018. Designing Difference-in-difference Studies: Best Practices for Public Health Policy Research. Annual Review of Public Health. 39:453-69.l

Needs Assessment data. Where feasible and appropriate, the set of control variables may include county by year fixed effects to address the potential for time-varying geographic differences to help isolate the demonstration impact. We will also include specifications that allow for heterogeneity in the effect by year (defining *post* as indicator variables for year) to observe the impact of the demonstration in years during and right after the COVID-19 pandemic and in later years when the pandemic has further subsided, where appropriate. The random error term is represented by ε. The coefficient of interest is the coefficient on the interaction term, β_3. Standard errors will be adjusted for multiple observations within person over time as needed.

We will select the specific type of regression analysis for each DiD model according to the functional form relationship between the parameter of interest (e.g., conditional mean) and the key independent variable(s). In cases where we implement non-linear regression analyses, we will report post-estimation average marginal effects to facilitate interpretation of the DiD results.[22]

D4. Methodological Limitations

Comparison strategies. Implementation of the SUD provision for all adult Medicaid beneficiaries at the same points in time precludes the inclusion of a concurrent, within-state Medicaid comparison group that is exposed to all other potential changes in Medicaid policies during the observation period except the SUD demonstration waiver provisions. However, we will assess the potential confounding influence of other demonstration waiver provisions that are implemented coincident with the SUD provisions (e.g., HRA/HNAs, premiums, etc.,) on the outcomes described in Table 13 by estimating separate models for adults with and without dependent children when feasible. Adults without dependent children are subject to all provisions in the demonstration waiver. By contrast, parents and caregivers are only subject to the SUD demonstration waiver provisions.

For outcomes that require health care claims for their construction, the proposed evaluation design for the SUD demonstration waiver lacks an out-of-state comparison group; thus, we cannot rule out the possibility that national secular events or trends may confound the relationship between implementation of the SUD provision and the study outcomes. As a member of the OUD workgroup in the multi-state Medicaid Outcomes Distributed Research Network (MODRN),[23] we considered the possibility of engaging another MODRN state(s) as a comparison state. However, after consultation with MODRN leadership, we concluded that it was not feasible due to resource constraints. Specifically, each state-university partnership within the MODRN employs a common data model, common measurement periods, common definitions of eligibility groups, and common measures to assess OUD prevalence, treatment and outcomes for purposes of the MODRN's research and learning objectives.

[22] Karaca-Mandic P, Norton EC, Dowd B. 2012. Interaction Terms in Nonlinear Models. Health Services Research.47(1, Part 1):255-274.

[23] A description of the Medicaid Outcomes Distributed Research Network is available at: https://www.academyhealth.org/MODRN

To participate as a comparator state for an 1115 waiver evaluation would require significant adaptation of this work including modification of the measurement periods to construct the measures and define the study population, potential revision to the definition of the eligibility groups, and a willingness to share aggregate data (at a minimum) with another state for a non-MODRN purpose. These revisions and activities would demand significant staff and investigator time from each potential comparison state that goes well beyond what is supported through the MODRN. At present, we are not aware of any CMS resources available to facilitate or incentivize states' participation as comparison states for 1115 waiver evaluations. If such resources are available, we would be happy to pursue further discussions with our MODRN colleagues about the possibility of serving in that role.

Compositional changes in population. Implementation of the SUD demonstration waiver may alter the composition of the adult beneficiary population in ways that are relevant to our outcomes to the extent that individuals newly enroll in Medicaid because of the availability of expanded SUD services. Such individuals, for example, may be more likely to have an SUD and a desire for treatment. It is important to distinguish the potential effects of the demonstration waiver on study outcomes, from changes in study outcomes that are attributable to compositional changes in the beneficiary population.

We will take two steps to assess and mitigate this possibility. First, in our evaluation of the change over time in drug overdose deaths, we include a population-level analysis that does not distinguish between Medicaid and non-Medicaid enrollees in the event that the risk-profile of these two groups changes over time. Second, as our data permit, we will execute sensitivity analyses that hold the analytic sample constant before and after implementation of the waiver as our data allow to rule out the potential confounding effects of changes in the characteristics of the beneficiary population.

ATTACHMENT G: MONITORING PROTOCOL

ATTACHMENT H: TRIBAL CONSULTATION PLAN