



# BadgerCare Reform Demonstration Draft Evaluation Design

October 31, 2014

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## 1. Executive Summary

In response to Section XI (Sections 47 – 48) of the Special Terms and Conditions (STCs) for the Wisconsin BadgerCare Reform Demonstration Project approved for the Wisconsin Department of Health Services, this document describes the proposed design for evaluating the effectiveness of the Demonstration in terms of the following domains of focus: Better Care, Better Health, and Reducing Costs.

Specifically, the evaluation design which is a mix of both quantitative and qualitative research techniques focuses on the application of rigorous scientific methods to arrive at an understanding of how the changes implemented under the Demonstration impact two Medicaid populations—(1) those individuals who are eligible for Medicaid through Transitional Medical Assistance (TMA Adults) and (2) those childless adults with an effective income level at, or below, 100% of the federal poverty level (FPL). As shown in the following figure, the Demonstration will result in a premium payment requirement for Parents & Caretaker Relatives over 133% FPL from the first day that transitional medical assistance (TMA) is effective (A2/A2). These premiums will be based on a sliding scale (Appendix 1) relative to household income with a cap of 9.5% of household income. Members between 100% and 133% FPL (A1/A1) will be eligible for TMA coverage for the first six (6) months of enrollment without paying a premium, but then will be required to pay premiums thereafter on the same scale. For both groups, once the period during which they are required to pay a premium begins, premium payment will be a condition of continued enrollment. Adults who do not make a premium payment will be dis-enrolled from BadgerCare Plus after a 30-day grace period and prohibited from reenrolling in BadgerCare Plus for 3 months—at which time they are eligible to re-enroll with the applicable premium payment structure.

**Figure 1A: Plan Assignment and Premium Requirement Thresholds for TMA Adults**

FPL	Before	After	STC- Cross Reference
<= 100%	C	C	N/A
>100 & <=133%	A1	<u>A1</u>	Population 1
> 133%	A2	<u>A2</u>	Population 1

 Standard Plan

With respect to the TMA Adults, the evaluation will assess the impact of the premium requirement on measures such as the incidence of unnecessary services (e.g., Emergency Department visits or Inpatient Stays for Ambulatory Care Sensitive Conditions, 30 Day-All Cause Readmissions), changes in the cost of care (e.g., total allowed amounts for care in the demonstration period for the population as a whole and within sub-groups stratified on premium rate, education level, gender, etc.), measures of health process outcomes (e.g., preventive screening adherence rates ), and measures of health outcomes as a function of cost (i.e., cost-effectiveness). Many of these measures will utilize claims, enrollment, and eligibility data from administrative sources, but factors affecting disenrollment will be identified using survey instruments and case studies (requirements are described in sections 3.3 and 3.4, respectively).

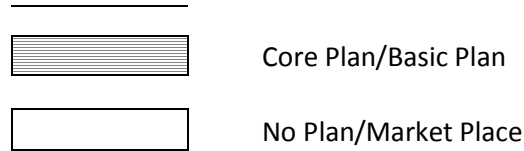
The second population included in this Demonstration is the non-pregnant, non-disabled childless individuals between 19 and 64 years of age whose income level does not exceed 100% of FPL. As depicted below, populations D/D\* will move from the Core Plan or Basic Plan (limited benefit plans available to childless adults prior to April 1, 2014) to the Standard Plan—although, Basic Plan members were required to reapply before being enrolled to the Standard Plan. Please see appendix 3 for a full description of the BadgerCare Plus benefit plans and covered services. Childless adults with incomes that do not exceed 100% FPL who were previously enrolled in the BadgerCare Plus Core Plan have been transitioned to the BadgerCare Standard Plan, and those above 100% FPL may have moved to the federal Marketplace. Effective April 1, 2014, all new childless adults with incomes that do not exceed 100% FPL will be enrolled in the Standard Plan.

**Figure 1B: Plan Assignment Changes for Childless Adults (CLA)**

FPL	Before	After	STC Cross-Reference
100%	<b>D</b>	<b><u>D*</u></b>	Population 2
200%	<b>B</b>	<b><u>B</u></b>	N/A



Standard Plan



\*Population also includes individuals formerly on Core Plan wait-list

As with the evaluation of the Demonstration's impact on the TMA population, the evaluation of the Demonstration's impact on the CLA population will focus on measures of better health, better care, and reducing costs, and this evaluation will also study the effect an expanded set of available services has on these outcomes.

As outlined in the following table, the evaluation design will utilize multiple research methodologies and data sources to provide answers to the following questions—derived from Section 48, paragraph b of the STCs—for the TMA and CLA populations.

**Table 1: Evaluation Questions and Associated Data Analysis Methods**

Evaluation Question	Evaluation Method			
	Case Study	Administrative Data Analysis	Case-Control Matching Study	Enrollment/Disenrollment Survey
<b>For the TMA: Demonstration participants: Payment of Premiums</b>				
1. Will the premium requirement reduce the incidence of unnecessary services?	Y	Y	Y	--
2. Will the premium requirement lead to improved health outcomes?	Y	Y	Y	--
3. Will the premium requirement slow the growth in healthcare spending?	Y	Y	Y	--
4. Will the premium requirement increase the cost effectiveness (Outcomes/Cost) of Medicaid services?	Y	Y	Y	--
5. Will the premium requirement increase the cost effectiveness (Utilization/Cost) of Medicaid services?	Y	Y	Y	--
<b>Association of Enrollment Status to Utilization and/or Costs</b>				
6. Is there any impact on utilization, costs, and/or health care outcomes associated with individuals who were disenrolled, but re-enrolled after the 3-month restrictive re-enrollment period?	Y	Y	Y	Y
7. Are costs and/or utilization of services different for those that are continuously enrolled compared to costs/utilization for individuals that have disenrolled and then re-enrolled?	Y	Y	Y	Y
<b>Enrollment Analysis by Payment of Premiums</b>				

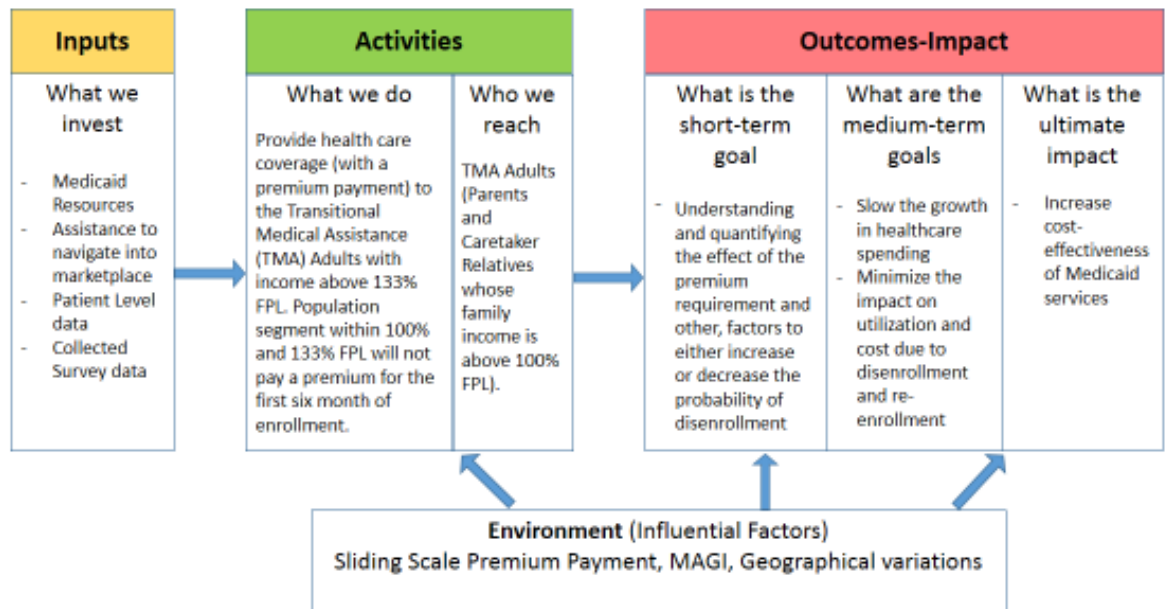
Evaluation Question	Evaluation Method			
	Case Study	Administrative Data Analysis	Case-Control Matching Study	Enrollment/Disenrollment Survey
8. What is the impact of premiums on enrollment broken down by income level and the corresponding monthly premium amount?	Y	Y	Y	--
9. How access to care affected by the application of new, or increased, premium amounts?	Y	Y	Y	Y
<b>Payment of Premiums and 3-Month Restrictive Re-enrollment</b>				
10. What impact does the 3-month restrictive re-enrollment period for failure to make a premium payment have on the payment of premiums and on enrollment?	Y	Y	Y	Y
11. Does this impact vary by income level?	Y	Y	Y	--
12. If there is an impact, explore the break-out by income level.	Y	Y	Y	--
<b>For CLA Adults: Effects of the Benefit Plan for demonstration expansion group</b>				
13. Will the provision of a benefit plan that is the same as the one provided to all other BadgerCare adult beneficiaries result in improved health outcomes?	Y	Y	Y	--
14. Will the provision of a benefit plan that is the same as the one provided to all other BadgerCare adult beneficiaries achieve a reduction in the incidence of unnecessary services?	Y	Y	Y	--
15. Will the provision of a benefit plan that is the same as the one provided to all other BadgerCare adult beneficiaries increase in the cost effectiveness (Outcomes/Cost) of Medicaid services?	Y	Y	Y	--
16. Will the provision of a benefit plan that is the same as the one provided to all other BadgerCare adult beneficiaries increase in the cost effectiveness (Utilization/Cost) of Medicaid services?	Y	Y	Y	--
17. Will the provision of a benefit plan that is the same as the one provided to all other BadgerCare adult beneficiaries demonstrate an increase in the continuity of health coverage?	Y	Y	Y	Y

## 2. Evaluation Design Overview

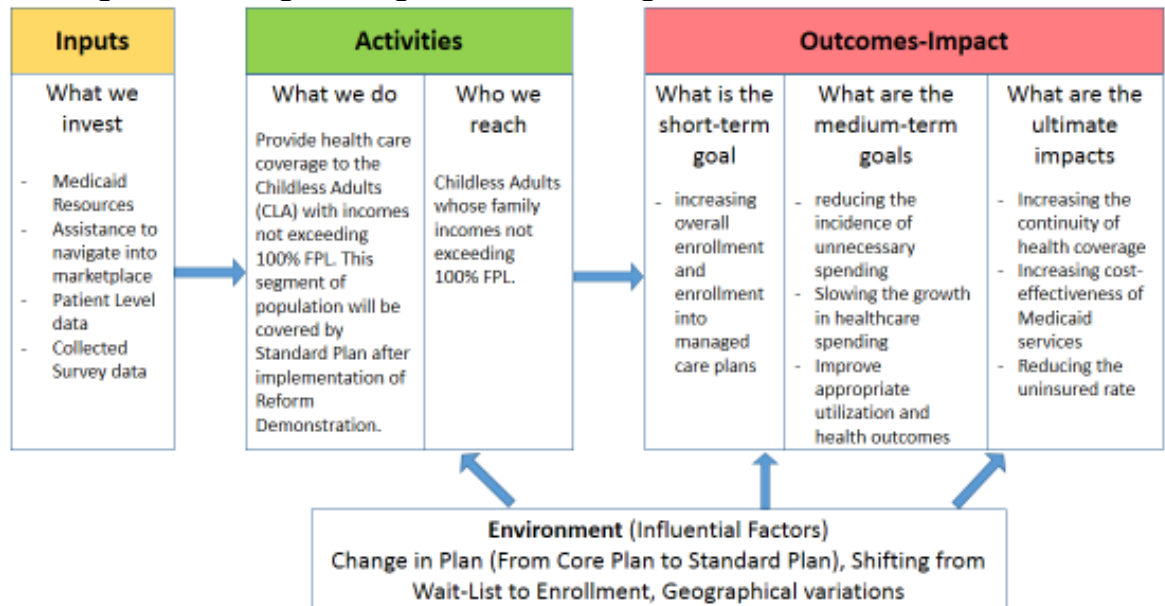
### 2.1 Development Approach

In order to develop an evaluation design that is capable of answering the questions set forth in the preceding table, the following logic models were employed to focus development of the design on the activities and external influences that affect the outcomes being studied.

**Figure 2a: Program Logic Model for BadgerCare Reform – TMA Adults**



**Figure 2b: Program Logic Model for BadgerCare Reform – Childless Adults**



These models will also provide the logical framework to be used in evaluating the effectiveness of the Demonstration. Logic models (Taylor-Powelare et. al., 2003) are graphical representations of the logical relationships between the resources, activities, outputs and outcomes of a program. Whereas there are many ways in which logic models can be presented, the underlying purpose of the logic model is to identify the possible "if-then" (causal) relationships between the elements of the program. For example, the current logic model identifies the resources available for the Demonstration program, the types of activities that can be effectively implemented using those resources, and the specific outputs and outcomes that can be expected as a result of those activities.

## **2.2 Target Populations**

As described previously, two target populations will be studied under this evaluation—TMA Adults and Childless Adults.

### **2.2.1 TMA Population.**

In the TMA population, the Demonstration will enable the State to test the impact of requiring a premium payment that aligns with the insurance affordability program in the federal Marketplace based on their household income when compared to federal poverty level (FPL). This population is divided into two segments—those individuals with incomes above 133 percent of the FPL (who will be required to pay a premium starting from the first day of enrollment) and those with incomes between 100-133 percent of the FPL (who will be required to pay a premium after the first 6 calendar months of TMA coverage).

### **2.2.2 CLA Population.**

The Childless Adults (CLA) population consists of Non-pregnant, Non-Disabled Childless Adults between 19 and 64 years of age who have family incomes that do not exceed 100 percent FPL. As a result of the



Demonstration, this population will be moved from the Core or Basic Plan to the Standard Plan<sup>1</sup>—which offers more comprehensive services compared to the Core or Basic Plan. This population will likely include a large portion of the individuals who were on the Core Plan wait-list.

The State will isolate or exclude from the evaluation any overlapping initiatives (e.g. integrated care models coupled with payment reform) that target the TMA or CLA populations. At this time the State has not identified any current initiatives that would impact this evaluation, and will provide a detailed analysis plan for controlling the effects of such initiatives on the current evaluation's studied outcomes.

### **2.3 Stage of Development**

The Demonstration project began April 1, 2014 and will continue until December 2018. There will be short-term, medium-range and long-term outcomes expected from this project. The target populations will be monitored using claims, eligibility and enrollment data. At the end of the demonstration period, the study populations will be surveyed regarding enrollment and disenrollment events. The populations will also be surveyed for case studies (to be identified by the selected evaluator) to augment the findings generated by the analysis of administrative data.

### **2.4 Inputs**

The State and CMS have dedicated resources to the Medicaid Program. The State has modified the program to reduce the uninsured population in the state as well as increase health outcomes for the Medicaid population. To evaluate these goals, the evaluator will collect enrollment and medical claims data from the interChange System (hosted and operated by HP Enterprise Services), eligibility data from the Client Assistance for Re-employment and Economic Support System (CARES). In addition, the evaluator will develop and collect data using a

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<sup>1</sup> Basic Plan members were required to reapply before being enrolled in the Standard Plan

survey of selected members. The State will also support the activities and human resources necessary to complete the evaluation process through the demonstration period, December 31, 2018

## 2.5 Activities

During the Demonstration, the State will provide healthcare coverage to both the TMA and CLA population in accordance with the terms outlined. As outlined in STC 26, the State will hold a public forum (initial within first 6 months and annually thereafter) to solicit comments on the progress of the demonstration project and will provide a summary of the forum in the subsequent Quarterly Report submitted following the close of the quarter in which the forum is held. In addition to these summaries, the Quarterly Report will include initial findings included as part of the evaluation design—e.g., enrollment/disenrollment rates, measures of unnecessary services, counts of services accessed, etc—.

## 2.6 Outcomes

The evaluation will assess whether the Demonstration achieves the following goals:

- Ensure every Wisconsin resident has access to affordable health insurance and reducing the State's uninsured rate.
- Provide a standard set of comprehensive benefits for low income individuals that will lead to improved healthcare outcomes.
- Create a program that is sustainable so Wisconsin's healthcare safety net is available to those who need it.

Successful accomplishment of these goals will be demonstrated or inferred by achievement of short-, medium-, and long-range goals within the two study populations.

### 2.6.1 TMA Population

The short term goal is:

- a) understanding and quantifying the effect of the premium requirement and other, factors to either increase or decrease the probability of disenrollment

The medium range goals are:

- b) slowing the growth in healthcare spending

- c) minimizing the impact on utilization and cost due to disenrollment and re-enrollment
- d) improve appropriate utilization, quality and health outcomes

The long term goal is:

- e) increasing cost-effectiveness of Medicaid services

### **2.6.2 CLA Population**

The short term goal is:

- a) increasing overall enrollment and enrollment into managed care plans

The medium range goals are:

- b) reducing the incidence of unnecessary spending
- c) slowing the growth in healthcare spending
- d) improve appropriate utilization and health outcomes

The long term goals are:

- e) increasing the continuity of health coverage
- f) increasing cost effectiveness of Medicaid services
- g) reducing the uninsured rate

In the following sections, the evaluation design describes the Core Elements of the evaluation—including the specific research questions posed, the methods used to arrive at the answers to those research questions, the outcome measures used to evaluate the impact of the demonstration, and the sources of those measures. The evaluation design also provides details on the sources of data that will be used to perform the analyses (i.e., the independent, dependent, and co-varying factors that will be studied) as well as an explanation of the establishment of the baseline measures and control groups for each of the populations under study.

## **3. Evaluation Design**

Having framed the evaluation design development in terms of the preceding logic models, the following evaluation questions identified in STC 48.b. will be addressed using a variety of research methodologies.

**Table 2: Evaluation Questions and Associated Data Analysis Methods**

Evaluation Question	Evaluation Method			
	Case Study	Administrative Data Analysis	Case-Control Matching Study	Enrollment/Disenrollment Survey
<b>For the TMA: Demonstration participants: Payment of Premiums</b>				
1. Will the premium requirement reduce the incidence of unnecessary services?	Y	Y	Y	--
2. Will the premium requirement lead to improved health outcomes?	Y	Y	Y	--
3. Will the premium requirement slow the growth in healthcare spending?	Y	Y	Y	--
4. Will the premium requirement increase the cost effectiveness (Outcomes/Cost) of Medicaid services?	Y	Y	Y	--
5. Will the premium requirement increase the cost effectiveness (Utilization/Cost) of Medicaid services?	Y	Y	Y	--
<b>Association of Enrollment Status to Utilization and/or Costs</b>				
6. Is there any impact on utilization, costs, and/or health care outcomes associated with individuals who were disenrolled, but re-enrolled after the 3-month restrictive re-enrollment period?	Y	Y	Y	Y
7. Are costs and/or utilization of services different for those that are continuously enrolled compared to costs/utilization for individuals that have disenrolled and then re-enrolled?	Y	Y	Y	Y
<b>Enrollment Analysis by Payment of Premiums</b>				
8. What is the impact of premiums on enrollment broken down by income level and the corresponding monthly premium amount?	Y	Y	Y	--
9. How access to care affected by the application of new, or increased, premium amounts?	Y	Y	Y	Y
<b>Payment of Premiums and 3-Month Restrictive Re-enrollment</b>				
10. What impact does the 3-month restrictive re-enrollment period for failure to make a premium payment have on the payment of premiums and on enrollment?	Y	Y	Y	Y
11. Does this impact vary by income level?	Y	Y	Y	--
12. If there is an impact, explore the break-out by income level.	Y	Y	Y	--
<b>For CLA Adults: Effects of the Benefit Plan for demonstration expansion group</b>				
13. Will the provision of a benefit plan that is the same as the one provided to all other BadgerCare adult beneficiaries result in improved health outcomes?	Y	Y	Y	--
14. Will the provision of a benefit plan that is the same as the one provided to all other BadgerCare adult beneficiaries achieve a reduction in the incidence of unnecessary services?	Y	Y	Y	--

Evaluation Question	Evaluation Method			
	Case Study	Administrative Data Analysis	Case-Control Matching Study	Enrollment/Disenrollment Survey
15. Will the provision of a benefit plan that is the same as the one provided to all other BadgerCare adult beneficiaries increase in the cost effectiveness (Outcomes/Cost) of Medicaid services?	Y	Y	Y	--
16. Will the provision of a benefit plan that is the same as the one provided to all other BadgerCare adult beneficiaries increase in the cost effectiveness (Utilization/Cost) of Medicaid services?	Y	Y	Y	--
17. Will the provision of a benefit plan that is the same as the one provided to all other BadgerCare adult beneficiaries demonstrate an increase in the continuity of health coverage?	Y	Y	Y	Y

The proposed research methods used to answer these questions—and the application of the methods to specific research questions—are described in the following sections. The DHS will procure for an independent evaluator before the end of the second demonstration year, March 31, 2016. The DHS will consult with CMS if the selected evaluator proposes additional research methods.

### **3.1 Administrative Data Analysis**

Analysis of administrative data will be conducted using Medicaid enrollment and claims data from the interChange System and from the Medicaid eligibility determination and maintenance system, Client Assistance for Re-employment and Economic Support System (CARES), hosted by Deloitte.

### **3.2 Case-Control Matching Study**

Within the TMA population for which FPL is 133% or more, there will be a portion of the population that will lose the coverage due to non-payment of premiums. The best estimate about the percent of drop-outs is that approximately 40% will fall into this category within first twelve months of the demonstration. To answer the research questions related to this section of the TMA population, matching sample will be constructed from the remainder 60% of the cohort who maintained their coverage during the first year. The matching will be executed following standard statistical procedures such as, propensity score matching or exact covariate matching. Since the case group and the matched control group are drawn from a somewhat homogenous population, i.e. TMA with 133% or more FPL, any matching method for a specific outcome may inherit biases due to unobserved covariates. To overcome any shortcomings from this situation Heller, Rosenbaum & Small (2009) recommended to perform sensitivity analysis using split-sample technique. In our case we will execute matching to determine comparable control group and apply 10%-90% split-sample technique to test the sensitivity of biases due to unobserved covariates.

Here we discuss the split-sample approach in the context of a research question: Are costs and/or utilization of services different for those that are continuously enrolled compared to costs/utilization for individuals that have disenrolled and then re-enrolled? This is a direct comparison of costs and utilization between the groups of members who were continuously enrolled versus the members who were disenrolled and reenrolled again. Let's call the disenrollment/re-enrollment group as treatment and continuously enrolled group as control. The treatment group may have different health outcomes and/or costs than the control group due to some cofactors which are not adjusted. As Zhang et.al., (2011) mentioned 'after adjustment for observed covariates, the key source of uncertainty in an observational study is the possibility that differences in outcomes between treated and control subjects are not effects of the treatment but rather biases from some unmeasured way in which treated and control subjects were not comparable'. Heller, Rosenbaum, and Small (2009) suggested to split the sample at random into a small planning sample of 10% and large analysis sample of 90% to perform a sensitivity analysis that asks how failure to control some unmeasured covariates might alter the conclusion of the research question. The planning sample will be used to design the study and guide the analysis plan – whereupon the planning sample will be discarded. All analyses and interpretations will be based on untouched, unexamined, untainted analysis sample.

As an example, we demonstrate how the research question 5 will be analyzed using the proposed method. The research question states: 'Are costs and/or utilization of services different for those that are continuously enrolled compared to costs/utilization for individuals that have dis-enrolled and then re-enrolled?' For the overall analysis the whole cohort will be considered at the beneficiary level analysis for several outcome variables. One of those is unnecessary ED visits. The predictor variables are FPL level and the indicator variable whether the beneficiary lost coverage due to dis-enrollment after controlling for some demographic factors. This analysis will produce measures of impact of dis-enrollment over the costs and/or unnecessary utilization. To highlight this effect in

some form of causation, we will have to apply method of observational studies where the beneficiaries who were dis-enrolled during the first year after demonstration will be considered as 'Cases'. Applying matching technique we will find comparable controls from the pool of beneficiaries who had continuous coverage during the first year. Furthermore, to avoid the risk of bias in finding right controls, we will employ split-sample technique to determine the sensitivity of that bias. We propose to have a 10%-90% split for planning and analysis pair samples as were done in Heller, Rosenbaum & Small (2009) and Zhang, Small, Lorch, Srinivas and Rosenbaum (2011).

### **3.3 Enrollment/Disenrollment Survey**

DHS intends to contract with an independent evaluator during the second year of the demonstration and will conduct two surveys during the course of the demonstration. DHS will target completing a survey at the end of the second demonstration year and one at the end of the fourth year of the demonstration. The surveys will be designed so that the sample size represents all major demographic sections of the study population and all levels of FPL eligibility.

We are proposing two separate surveys be employed for the two study populations. The focus for TMA Adults population will be to capture the effects of premium payments on enrollment status. For the Childless Adults, the surveys will try to discern the effects of enhanced benefits, based on survey respondents answers regarding their service needs, on health outcomes.

The survey data will be matched with claims and eligibility data used in administrative analysis to find the impact of premium payments on disenrollment, re-enrollment, churning and subsequently its impact on healthcare cost and utilization. DHS will update Table 3 to include additional measures identified from the surveys.



### 3.4 Case Study

The case study will be designed to provide information to address several of the questions included in the BadgerCare Demonstration Reform program. The first set of questions (1-10) relate to the TMA Adults (Population 1) and the second set (11-14) for Childless Adults (Population 2). To address these questions, in addition to administrative data analysis, case-control study and application of survey methodology, we propose phone interviews to investigate how premium payment and restrictive enrolment impacted health outcomes, costs and general impact of the program.

## 4. Data Analysis and Interpretation

The data analysis plan includes the four methods of evaluation previously discussed—Administrative Data Analysis, Case-Control Matching Study, Case Study and Enrollment/ Disenrollment Survey Study. As depicted in the Question/Method Matrix (Table 2, below), each research question will be evaluated by different combinations of these methods. The proposed methods can be modified and adapted according to the evaluator's determination satisfying the standards agreed upon by the State and CMS. The outcome measures for each of these questions and related factors that will be needed to complete the analyses are described later in this section. The data analyses will be organized by the two study populations—TMA Adults and Childless Adults, respectively.

Further, in order to most effectively utilize these methods to research the questions specified in STC 48.b. The questions will be further broken out into a larger number of more specific research questions. The following question/method matrix identifies the research methods that will be employed to address each of the resulting research questions, and a description of the application of each method to the study of the associated question is detailed in this section.

**Table 3: Evaluation Questions and Associated Data Analysis Methods**

Evaluation Question	Evaluation Method
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	Case Study	Administrative Data Analysis	Case-Control Matching Study	Enrollment/Disenrollment Survey
<b>For the TMA: Demonstration participants: Payment of Premiums</b>				
18. Will the premium requirement reduce the incidence of unnecessary services?	Y	Y	Y	--
19. Will the premium requirement lead to improved health outcomes?	Y	Y	Y	--
20. Will the premium requirement slow the growth in healthcare spending?	Y	Y	Y	--
21. Will the premium requirement increase the cost effectiveness (Outcomes/Cost) of Medicaid services?	Y	Y	Y	--
22. Will the premium requirement increase the cost effectiveness (Utilization/Cost) of Medicaid services?	Y	Y	Y	--
<b>Association of Enrollment Status to Utilization and/or Costs</b>				
23. Is there any impact on utilization, costs, and/or health care outcomes associated with individuals who were disenrolled, but re-enrolled after the 3-month restrictive re-enrollment period?	Y	Y	Y	Y
24. Are costs and/or utilization of services different for those that are continuously enrolled compared to costs/utilization for individuals that have disenrolled and then re-enrolled?	Y	Y	Y	Y
<b>Enrollment Analysis by Payment of Premiums</b>				
25. What is the impact of premiums on enrollment broken down by income level and the corresponding monthly premium amount?	Y	Y	Y	--
26. How access to care affected by the application of new, or increased, premium amounts?	Y	Y	Y	Y
<b>Payment of Premiums and 3-Month Restrictive Re-enrollment</b>				
27. What impact does the 3-month restrictive re-enrollment period for failure to make a premium payment have on the payment of premiums and on enrollment?	Y	Y	Y	Y
28. Does this impact vary by income level?	Y	Y	Y	--
29. If there is an impact, explore the break-out by income level.	Y	Y	Y	--
<b>For CLA Adults: Effects of the Benefit Plan for demonstration expansion group</b>				
30. Will the provision of a benefit plan that is the same as the one provided to all other BadgerCare adult beneficiaries result in improved health outcomes?	Y	Y	Y	--
31. Will the provision of a benefit plan that is the same as the one provided to all other BadgerCare adult beneficiaries achieve a reduction in the incidence of unnecessary services?	Y	Y	Y	--
32. Will the provision of a benefit plan that is the same as the one provided to all other BadgerCare adult beneficiaries increase in the cost effectiveness (Outcomes/Cost) of Medicaid services?	Y	Y	Y	--


Evaluation Question	Evaluation Method			
	Case Study	Administrative Data Analysis	Case-Control Matching Study	Enrollment/Disenrollment Survey
33. Will the provision of a benefit plan that is the same as the one provided to all other BadgerCare adult beneficiaries increase in the cost effectiveness (Utilization/Cost) of Medicaid services?	Y	Y	Y	--
34. Will the provision of a benefit plan that is the same as the one provided to all other BadgerCare adult beneficiaries demonstrate an increase in the continuity of health coverage?	Y	Y	Y	Y

#### 4.1 Population Segment Definition

In order to facilitate the discussion of the analyses applied to the two study populations, each population "segment" will be described in further detail below:

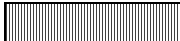

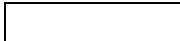
**Figure 3A: Plan Assignment and Premium Requirement Thresholds for TMA Adults**

FPL	Before	After	STC- Cross Reference
<= 100%	C	C	N/A
>100 & <=133%	A1	<u>A1</u>	Population 1
> 133%	A2	<u>A2</u>	Population 1

 Standard Plan

**Figure 3B: Plan Assignment Changes for Childless Adults (CLA)**

FPL	Before	After	STC Cross-Reference
100%	D	<u>D*</u>	Population 2
200%	B	<u>B</u>	N/A

 Standard Plan  
 Core Plan/Basic Plan  
 No Plan/Market Place

\*Population also includes individuals formerly on Core Plan wait-list

**Segment A1:** Parents and Caretaker Relatives who are non-pregnant, non-disabled whose effective family income is between 100% and 133% of FPL.

**Segment A2:** Parents and Caretaker Relatives who are non-pregnant, non-disabled whose effective family income is over 133% of FPL.

**Segment A1:** Same baseline population as Segment A1, but these members will have a twelve-month extension to have the same benefit as A1. Hence this segment of the population will not be considered for the initial analysis plan. When

more detailed information will be available in 2015 for this segment, the analysis plan can be amended based on policy decisions reached.

**Segment A2:** Same baseline population as Segment A2, who will be subjected to pay premiums during Demonstration based on sliding scale cost-sharing structure

**Segment B:** Non-pregnant, non-disabled childless individuals who are from 19 through 64 years old with an effective income between 100% and 200% FPL.

**Segment B:** Same baseline as population Segment B, who will be transitioned from Core Plan/Basin Plan to marketplace in the Demonstration project and is not a part of the evaluation design.

**Segment C:** Parents and Caretaker Relatives who are non-pregnant, non-disabled whose effective family income does not exceed 100% of FPL. The benefits for this segment will remain unchanged after the implementation of the Demonstration Reform and is not a part of the evaluation design.

**Segment D:** Non-pregnant, non-disabled childless individuals who are from 19 through 64 years old with an effective that does not exceed 100%, before Demonstration.

**Segment D\*:** This segment of the study population will include all the baseline population which are entering Demonstration from segment D and all the uninsured or people on the Core Plan waitlist who qualified to be part of Segment D.

## 4.2 Data Analysis Method

The three major analytical strategies will be adopted for the data analysis to test the evaluation hypotheses. The methods are described in further detail below.

1. Means Test
2. Multivariate Regression modeling
3. Cost-Effectiveness Analysis

### Means Test

For all the measures that are population based, the predictors cannot be associated to the changes that are observed in time. The overall measures are compared before and after implementation time periods. The changes will be viewed as the effects of the reform demonstration. Multiple comparisons will be carried out to determine measurement changes from baseline and over time.

### Multivariate Regression Modeling

The measures from Medicaid Adult Core Set and NCQA HEDIS will be modeled using difference-in-difference (DID). These measures are population based, with overall rates and percentages are calculated related to sections of populations. Individually each member will have dichotomous response for each of the measures indicating whether or not the member received services (e.g. screening) received during a specific time period. Those dichotomous variables are then modeled by predictors and control variables.

For the hypothesis where the outcome is measured as the indicator of disenrollment, similar dichotomous variables will be used. The annual total cost variables are on continuous type but most likely will be positively skewed. For this reason all cost data will be log-transferred before modeling by predictors and control variables.

### Cost-Effectiveness Analysis

Cost-effectiveness analysis typically relates cost of care to the quality outcomes as a population-based measure. The primary factor in this analysis is how the effect of time is addressed. For example, adherence to control medication may have a significant impact on Asthma outcomes. If the intervention is geared toward raising medication adherence, then the cost of care will increase during the first few months of the intervention due to higher rates of medication refill. However, the long term effect of the higher adherence in terms of reduced ER visit or hospitalizations might not be observed immediately. So the cost-effectiveness will be very low (potentially negative) for initial months. For each of the outcomes the potential lag-time will be considered for cost-effectiveness analysis.

For each research question described in the preceding Question/Method Matrix (Table 3, above), the outcome variable(s) and the predictors are stated below. We found that most of the questions needed to be analyzed by controlling several variables. Instead of repeating those under each question, the list is mentioned here. Unless otherwise mentioned for any given question it will be assumed that the research question will be analyzed using this set of control variables.

Demographics (Age[Group], Gender, Race & Ethnicity), Education, County, Region, Risk Score[ACG or CDPS], belongs to MCO or FFS, Tribal population\*. Some risk scores use Age and Gender as predictors. In that case, age and gender can be dropped for modelling purposes.

Questions 1 thru 12 relate to the population segments A2 and A2. Population segment A2 data is used to create baseline measures for comparison of measures calculated at a future date during the Demonstration. Otherwise, data from population segments A2 and A2 will be merged to develop statistical models and case-control studies. All 12 research questions will be analyzed at the beneficiary level. The claims and eligibility data will be used to create beneficiary level variables. The questions for which the cofactors or outcomes are time-varying variables longitudinal analysis methods are proposed.

The reports that will be generated to monitor health outcomes shown in Table 3, will be calculated at aggregate level.

***Question 1: Will the premium requirement reduce the incidence of unnecessary services?***

Hypothesis 1.1: The incidence of unnecessary services (such as Emergency Department visits and Inpatient Stays for Ambulatory Care Sensitive Conditions (ASCs), 30-Day All Cause Readmissions and overall inpatient stays) will be lower for TMA members in the demonstration than the incidence of unnecessary services for the same population prior to the demonstration.

Members in transitional medical assistance who are paying premiums will be more engaged in the health care decision making process and will make more efficient use of preventive and primary care, reducing the incidence of unnecessary services such as Emergency Department visits and Inpatient Stays for Ambulatory Care Sensitive Conditions (ASCs), 30-Day All Cause Readmissions and overall inpatient stays.

Outcome Variables: Emergency Department visits and Inpatient Stays for Ambulatory Care Sensitive Conditions (ASCs), 30-Day All Cause Readmissions and overall inpatient stays.

Predictor / Explanatory Variable(s): FPL (hence sliding scale premium).

Data Analysis Method: Changes in the number of unnecessary services over time (during the prior year and the five-year duration of the study) will be examined as a function of the individual premium payment levels determined by the premium schedule. This explanatory variable as well as some of the control variables (e.g., age, risk score) are time-varying covariates. Therefore, we are proposing to develop longitudinal regression models for outcome variable(s) and perform sub-group analyses (i.e., separate models for different sub-sections of the population). For case-control analyses a split-sample method will be used to assign individuals to the case and control groups. The samples will be determined during the first year of the Demonstration and this



division of the sample will be maintained during the rest of the study period for comparison purposes.

**Question 2: Will the premium requirement lead to improved health outcomes?**

Hypothesis 2.1: Health care outcomes (as defined in table 3 below) for the TMA population who are paying premiums will be better than the health care outcomes for these members prior to the demonstration.

Hypothesis 2.2: Health care outcomes (as defined in table 3) for TMA members who are paying premiums will be better than health care outcomes for members not paying premiums.

TMA members who are paying premiums will be more engaged in the health care decision making process and will make more efficient use of preventive and primary care, leading to improved health outcomes.

**Table 4: Outcome Measures Frequently used by DHS to Determine Healthcare Quality**

Focus Area	NQF Measure #	CMS Adult Core Set #	Measure
<b>Preventive / Screening</b>	0031	Measure 3	Breast Cancer Screening (BCS) (HEDIS-NCQA)
<b>Chronic</b>	0057	Measure 19	Comprehensive Diabetes Care- HbA1c Testing (HEDIS-NCQA)
	0063	Measure 18	Comprehensive Diabetes Care- LDL-C Screening (HEDIS-NCQA)
<b>Mental Health</b>	0105	Measure 20	Antidepressant Medication Management (AMM- Effective Continuation Phase) (HEDIS)
	0004	Measure 25	Initiation and Engagement of Alcohol and Other Drug Dependence Treatment (IET-Engagement of AOD Treatment) (HEDIS-NCQA)
			Tobacco Cessation (Counseling only) – Wisconsin specific measure – the percentage of adult smokers that received tobacco cessation counseling during the calendar year
	0576	Measure 13	Follow-up After Hospitalization for Mental Illness – 30 Days After Discharge (FUH-30) (HEDIS-NCQA)
<b>Emergency Dept.</b>			Ambulatory Care – Emergency Department Visits (AMB) sans revenue code 0456 (HEDIS-NCQA)

DHS will explore including additional health care outcomes measures from medical record data as agreed upon with HMOs and other Medicaid providers in the state.

Outcome Variables: The outcome variables will be recorded as member-specific data. The screening, preventive and primary care indicators are binary variables based on whether a member reported to have obtained the age, gender, and chronic condition specific services specified by NCQA for relevant HEDIS measures.

Predictor/Explanatory Variable(s): FPL (hence sliding scale premium).

Data Analysis Method: The changes in the likelihood that a member will receive screening, preventive and primary care services over time (during the prior year and the five-year duration of the study) will be examined as a function of the individual premium payment levels determined by the premium schedule. This explanatory variable as well as some of the control variables (e.g., age, risk score) are time-varying covariates. Therefore, we are proposing to develop generalized estimation equation (GEE) models for the binary outcome variable(s). Sub-group analyses (i.e., separate models for different sub-sections of the population) will be performed.

For case-control analyses a split-sample method will be used to assess the assignments of individuals to the case and control groups. The samples will be determined during the first year of the Demonstration and this division of the sample will be maintained during the rest of the study period for comparison purposes.

***Question 3: Will the premium requirement slow the growth in healthcare spending?***

Hypothesis 3.1: Healthcare spending for TMA members paying premiums during the demonstration will be lower compared to the healthcare spending for the same members prior to the demonstration.

Hypothesis 3.2: Healthcare spending for TMA members paying premiums during the demonstration will be lower compared to the healthcare spending for members (of similar makeup) outside of the demonstration.

Outcome Variable: The evaluation will consider using Allowed Amounts, Paid Amounts, and/or per member costs as the outcome variable for cost calculations (e.g. the allowed amount is calculated as the amount paid by Wisconsin Medicaid for services based on the maximum allowable fee schedule or the capitation payments made to Medicaid HMOs).

Predictor / Explanatory Variable(s): FPL levels defined in terms of levels on the sliding premium scale.

Data Analysis Method: Healthcare spending over time (during the prior year and the five-year duration of the study) will be evaluated as a function of individual premium payment level. This explanatory variable as well as some of the control variables (e.g., age, risk score) are time-varying covariates. Therefore, we are proposing to develop longitudinal regression models for outcome variable(s). Sub-group analyses (i.e., separate models for different sub-sections of the population) are proposed.

Since the cost data are generally positively skewed (with long right side tail), assumptions related to linear regressions do not hold true for modeling purposes. Some kind of transformation of cost data is needed to apply linear regression methods. Most common of those are log transformations of the cost data. This process might result in hidden biases during transforming back to the predicted values of the cost data (Manning & Mullahy, 2001) and corrective measures can be adopted as described in that research publication.

For case-control analyses a split-sample method will be used to assign individuals to the case and control groups. The samples will be determined during the first year of the Demonstration and this division of the sample will be maintained during the rest of the study period for comparison purposes. See section 5 for data collection methods and baseline development.

***Question 4: Will the premium requirement increase the cost effectiveness (Outcomes/Cost) of Medicaid services?***

Hypothesis 4.1: The cost-effectiveness for TMA members paying premiums during the demonstration will be higher (over time) as compared to the cost effectiveness for the same members prior to the demonstration.

Outcome Variable: Cost-Effectiveness is usually calculated as cost divided by a measure of health outcomes. In this case the cost variable(s) utilized in Question 2 can be used along with the measure of unnecessary services utilized in Question 1 in combination with the health care outcomes measures listed below:

Predictor / Explanatory Variable(s): FPL levels defined in terms of levels on the sliding premium scale.

Data Analysis Method: The need is to analyze the changes in cost-effectiveness (specifically aimed at unnecessary services over time and the health outcomes defined in table 3 above), during the baseline year and the five-year duration of the study, as explained by the individual premium payment requirements by FPL. This outcome variable as well as some of the control variables (e.g., age, risk score) are time-varying covariates. Therefore, we are proposing to develop longitudinal regression models for outcome variable(s). Sub-group analyses (i.e., separate models for different sub-sections of the population) are proposed.

For case-control matching study using split-sample technique, samples can be determined during the first year of the Demonstration. This division of the sample will be maintained during the rest of the study period for comparison purposes.

***Question 5: Will the premium requirement increase the cost effectiveness (Utilization/Cost) of Medicaid services?***

Hypothesis 5.1: The cost-effectiveness for TMA members paying premiums during the demonstration will be higher (over time) as compared to the cost effectiveness for the same members prior to the demonstration.

Outcome Variable: Cost-Effectiveness will be determined as to whether changes in cost resulted in fewer unnecessary utilization healthcare services. In this case the cost variable(s) used in Question 2 can be used along with the measure of unnecessary

services (such as Emergency Department visits and Inpatient Stays for Ambulatory Care Sensitive Conditions (ASCs), 30-Day All Cause Readmissions, and overall inpatient stays).

Predictor / Explanatory Variable(s): FPL levels defined in terms of levels on the sliding premium scale.

Data Analysis Method: The need is to analyze the changes in cost-effectiveness (specifically aimed at reduction of unnecessary services), during the prior year and the five-year duration of the study, as explained by the individual premium payment requirements by FPL. This outcome variable as well as some of the control variables (e.g., age, risk score) are time-varying covariates. Therefore, we are proposing to develop longitudinal regression models for outcome variable(s). Sub-group analyses (i.e., separate models for different sub-sections of the population) are proposed.

For the case-control matching study, the control group will be identified by propensity score matching and the split-sample technique used to determine the sensitivity of bias present in the matching method. The case and control samples will be determined during the first year of the Demonstration. This division of the sample will be maintained during the rest of the study period for comparison purposes.

***Question 6: Is there any impact on utilization, costs, and/or health care outcomes associated with individuals who were disenrolled, but re-enrolled after the 3-month restrictive re-enrollment period?***

Hypothesis 6.1: Utilization, costs, and health care outcomes will not be impacted for those individuals who were disenrolled, but re-re-enrolled after the 3-month restrictive re-enrollment period due to the limited amount of time that individuals would not have access to benefits.

Outcome Variable: Unnecessary services (i.e. ED Visits and Inpatient Stays for Ambulatory care Sensitive Conditions) and avoidable events (i.e. 30-Day All-Cause

Readmissions and Unnecessary Medical Services and Devices) as well as the health care outcomes defined in table 3.

The evaluation will consider using Allowed Amounts, Paid Amounts, and/or per member costs as the outcome variable for cost calculations (e.g. the allowed amount is calculated as the amount paid by Wisconsin Medicaid for services based on the maximum allowable fee schedule or the capitation payments made to Medicaid HMOs).

Predictor / Explanatory Variable(s): FPL levels defined in terms of levels on the sliding premium scale. Disenrollment/Re-enrollment history will be used to identify common patterns of disenrollment and re-enrollment and the effect of these patterns on the outcome variable will be assessed.

Data Analysis Method: We are proposing longitudinal regression methods for this analysis. The enrollment / disenrollment / re-enrollment information can be used multiple ways. Indicator variables can be developed to identify whether a member had any of these statuses within a certain unit of time and these variables will be added to the regression model. Alternatively, the enrollment status can be counted and categorized to discover differential effects of disenrollment/re-enrollment vs. continuous enrollment.

***Question 7. Are costs, utilization of services, and/or health outcomes different for those that are continuously enrolled compared to costs/utilization for individuals that have disenrolled and then re-enrolled?***

Hypothesis 7.1: Utilization, costs, and health care outcomes will not be different for those individuals who are continuously enrolled compared to those for individuals that have disenrolled and then re-enrolled due to the limited amount of time that individuals would not have access to benefits.

Outcome Variable: Unnecessary services (i.e. ED Visits and Inpatient Stays for Ambulatory Care Sensitive Conditions) and avoidable events (i.e. 30-Day All Cause Readmissions and utilization of unnecessary medical services and devices).

The evaluation will consider using Allowed Amounts, Paid Amounts, and/or per member costs as the outcome variable for cost calculations (e.g. the allowed amount is calculated as the amount paid by Wisconsin Medicaid for services based on the maximum allowable fee schedule or the capitation payments made to Medicaid HMOs).

Predictor / Explanatory Variable(s): FPL (hence sliding scale premium).

Disenrollment/Re-enrollment history (Identify few frequent patterns of disenrollment / re-enrollment and create dummy variables on those patterns).

Data Analysis Method: We are proposing longitudinal regression methods for this analysis. The enrollment / disenrollment / reenrollment information can be used multiple different ways. Indicator variable can be developed whether a member had any of these statuses within a certain unit of time and use the variable in models. Otherwise, the enrollment status can be counted and categorized to discover differential effects.

A Case-Control matching method using split-sample approach will be employed to determine if there are significant different outcomes between the groups of different insurance status.

***Question 8. What is the impact of premiums on enrollment broken down by income level and the corresponding monthly premium amount?***

Hypothesis 8.1: TMA members with higher incomes will transition faster out of BadgerCare Plus than TMA members with lower income. The impact of the premium will vary by income level as TMA members with higher income will have more health care coverage options than members with lower income levels and may transition out of BadgerCare Plus faster.

Outcome Variable: Disenrollment/Re-enrollment history (Identify frequent patterns of disenrollment / re-enrollment and create dummy variables on those patterns).

Predictor / Explanatory Variable(s): FPL (hence sliding scale premium) with possible categorization into wider intervals (smaller number of buckets). STC Attachment B.

Data Analysis Method: Depending on the type of outcome variable that is used the analysis method will be selected. For example, if enrollment / disenrollment indicator is a categorical variable then either logistic regression analysis or generalized linear models can be employed to answer the research question.

***Question 9. How is access to care affected by the application of new, or increased, premium amounts?***

Hypothesis 9.1: The premium requirement will have no effect on access to care.

Outcome Variable: Access to care can be defined as availability of Preventive Care, Behavioral Health Care, Specialist Care, Post-Acute Care, will be measured through survey questions for TMA population related to accessing needed care such as whether members have a primary care physician and if they have had difficulties scheduling appointments with providers for needed care.

Predictor / Explanatory Variable(s): FPL (hence sliding scale premium) with possible categorization into wider intervals (smaller number of buckets). Appendix 1. Also, dummy variables can be created to depict if the premium payment is new or an increased amount from past payments.

Data Analysis Method: Generally 'Access To Care' can be determined as continuous or discrete variable, depending on the emphasis of the domain of care. Based on that determination an appropriate regression model can be developed for longitudinal data.

***Question 10. What impact does the 3-month restrictive re-enrollment period for failure to make a premium payment have on the payment of premiums and on enrollment?***

The 3-month restrictive re-enrollment period for failure to make a premium payment will have variable impact on membership continuation and enrollment. We envision that after the restrictive re-enrollment period is over and members reenroll again their



likelihood of paying regular premiums will increase. The comprehensive benefit package that Wisconsin Medicaid members receive will incentivize them to continue paying their premiums and remain enrolled in Medicaid after their return beyond the restrictive reenrollment period. We also presume that this effect will vary by income level, since members with higher incomes will have more opportunities to purchase health insurance outside of BadgerCare Plus. The next three hypotheses are based on this context.

Hypothesis 10.1: The 3-month restrictive re-enrollment period for failure to make a premium payment will increase retention for both payment of premiums (after members return to Wisconsin Medicaid) and TMA member's enrollment after adjusting for the member's acuity.

Outcome Variable(s): This is a Dyad Outcome. A suitable combination category class can be created based on the premium amount and pattern of enrollment / disenrollment. The categories will be created so that variability can be observed based on 3-month restrictive enrollment.

Predictor / Explanatory Variable: This is a Binary variable and based on whether any member had experienced this condition.

Data Analysis Method: The categorization of dual outcome variables will create a nominal variable since there may not be a logical ordering between the categories. The logistic regression method for nominal variables may be applied to answer this research question.

***Question 11. Does this impact (as described in Question 10) vary by income level?***

Hypothesis 11.1: The impact (as described in Question 10) will vary by income level and other variables.

Outcome Variable: This is a Dyad Outcome. A suitable combination category class can be created based on the premium amount and pattern of enrollment / disenrollment.

The categories will be created so that variability is observed based on 3-month restrictive enrollment.

Predictor / Explanatory Variable(s): Categorical variables created by smaller number of income classes.

Data Analysis Method: The categorization of dual outcome variables will create a nominal variable since there may not be a logical ordering between the categories. The logistic regression method for nominal variables may be applied to answer this research question.

***Question 12. If there is an impact (as described in Question 10), explore the break-out by income level.***

Hypothesis 12.1: (as described in Question 10) We will explore the break-out by income level.

Outcome Variable: This is a Dyad Outcome. A suitable combination category class can be created based on the premium amount and pattern of enrollment / disenrollment. The categories will be created so that variability is observed based on 3-month restrictive enrollment.

Predictor / Explanatory Variable(s): Categorical variables created by smaller number of income classes.

Data Analysis Method: The categorization of dual outcome variables will create a nominal variable since there may not be a logical ordering between the categories. The logistic regression method for nominal variables may be applied to answer this research question.

To find the break-out point(s) in the income level where significant differences are observed, exploratory analyses can be employed using different cut-off points of the income scale.

Questions 13 thru 16 relate to the population segment D and D\*. Population segment D data are used to create baseline measures where only comparison of measures will be made to a future date during the Demonstration. Otherwise, data from population segments D and D\* will be merged to develop statistical models and for case-control studies. Note: population segment D\* will have new members who were on the uninsured or on the Core Plan waitlist before implementation of the Demonstration and were enrolled to BadgerCare Plus after the Demonstration.

***Question 13. Will the provision of a benefit plan that is the same as the one provided to all other BadgerCare adult beneficiaries result in improved health outcomes?***

Hypothesis 13.1: Childless adults who were previously (prior to April 1, 2014) enrolled in the BadgerCare Plus Core Plan will have better health outcomes in the demonstration than prior to the demonstration due to the enhanced benefit package in the Standard Plan such as mental health and dental.

Hypothesis 13.2: Newly eligible childless adults enrolled in the Standard Plan starting on April 1, 2014 will have better health outcomes as compared to the childless adults enrolled in the Core Plan for a similar period of enrollment during the demonstration.

Outcome Variable: Health Outcome Measures as shown in the following Table 3.

**Table 5: Outcome Measures Frequently used by DHS to Determine Healthcare Quality**

Focus Area	NQF Measure #	CMS Adult Core Set #	Measure
<b>Preventive / Screening</b>	0031	Measure 3	Breast Cancer Screening (BCS) (HEDIS-NCQA)
<b>Chronic</b>	0057	Measure 19	Comprehensive Diabetes Care- HbA1c Testing (HEDIS-NCQA)
	0063	Measure 18	Comprehensive Diabetes Care- LDL-C Screening (HEDIS-NCQA)
<b>Mental Health</b>	0105	Measure 20	Antidepressant Medication Management (AMM- Effective Continuation Phase) (HEDIS)

	0004	Measure 25	Initiation and Engagement of Alcohol and Other Drug Dependence Treatment (IET-Engagement of AOD Treatment) (HEDIS-NCQA)
			Tobacco Cessation (Counseling only) – Wisconsin specific measure – the percentage of adult smokers that received tobacco cessation counseling during the calendar year
	0576	Measure 13	Follow-up After Hospitalization for Mental Illness – 30 Days After Discharge (FUH-30) (HEDIS-NCQA)
<b>Emergency Dept.</b>			Ambulatory Care – Emergency Department Visits (AMB) sans revenue code 0456 (HEDIS-NCQA)

Wisconsin Medicaid will explore including additional health care outcomes measures from medical record data as agreed upon with HMOs and other Medicaid providers in the state. Some additional health care outcomes could also be derived from the survey questions.

Wisconsin Medicaid will include EPSDT measures as part of health care outcomes pending further analysis of the 19 to 20 age cohort covered under the Core Plan and the new childless adult population to assess cell size.

Predictor / Explanatory Variable(s): The health outcomes measures for the childless adult population who were covered by the Core Plan before implementation of the demonstration and during the demonstration. Hence the combination of time period and benefit plan is the predictor for this analysis.

Data Analysis Method: First, the basic analysis for this research question will be calculation and comparison of different measures over time. DHS has baseline data and values for the measures in Table 3 for the BadgerCare Plus Standard Plan population; for the Core Plan population, DHS has baseline data but not specific baseline values which can be calculated through administrative data using the algorithms developed by our fiscal vendor for the Standard Plan population. The baseline measures will be used for most of the comparison purposes. We propose to adjust some of the measures by suitable control variables, though HEDIS measures as described in the table above, are not adjusted by any covariates.

A second analysis will be to examine the changes in the likelihood that a member will receive screening, preventive and primary care services over time (during the years prior to the demonstration and the five-year duration of the study) will be examined as a function of the enhanced benefit package of the Standard Plan. This explanatory variable as well as some of the control variables (e.g., age, risk score) are time-varying covariates. Therefore, we are proposing to develop generalized estimation equation (GEE) models and use a logistic regression model for the binary outcome variable(s). Sub-group analyses (i.e., separate models for different sub-sections of the population) will be performed.

For case-control analyses a split-sample method will be used to assess the assignments of individuals to the case and control groups. The samples will be determined during the first year of the Demonstration and this division of the sample will be maintained during the rest of the study period for comparison purposes.

***Question 14. Will this (as described in Question 13) achieve a reduction in the incidence of unnecessary services?***

Hypothesis 14.1: For childless adults who were previously (prior to April 1, 2014) enrolled in the BadgerCare Plus Core Plan there will be a reduction in the incidence of unnecessary services (such as Emergency Department visits and Inpatient Stays for Ambulatory Care Sensitive Conditions, 30-Day All Cause Readmissions) during the demonstration compared to prior to the demonstration due to the enhanced benefits provided in the Standard Plan, specifically mental health and dental.

Hypothesis 14.2: Newly eligible childless adults enrolled in the Standard Plan starting on April 1, 2014 will show more efficient utilization of services compared to the childless adults enrolled in the Core Plan for a similar period of enrollment during the demonstration.

Outcome Variable: Unnecessary services and avoidable events (such as Emergency Department visits and Inpatient Stays for Ambulatory Care Sensitive Conditions, 30-Day All Cause Readmissions and unnecessary medical services and devices).

Predictor / Explanatory Variable(s): Most notable predictor as described in the question is the effect of time and the enhanced benefit package.

Data Analysis Method: Changes in the number of unnecessary services over time (during the prior year and the five-year duration of the study) will be examined as a function of the enhanced benefit package provided in the Standard Plan. This explanatory variable as well as some of the control variables (e.g., age, risk score, income level) are time-varying covariates. Therefore, we are proposing to develop longitudinal regression models for outcome variable(s) and perform sub-group analyses (i.e., separate models for different sub-sections of the population). For case-control analyses a split-sample method will be used to assign individuals to the case and control groups. The samples will be determined during the first year of the Demonstration and this division of the sample will be maintained during the rest of the study period for comparison purposes.

***Question 15. Will the provision increase the cost effectiveness (Outcomes/Cost) of Medicaid services?***

Hypothesis 15.1: For childless adults who were previously (prior to April 1, 2014) enrolled in the BadgerCare Plus Core Plan there will be increased cost effectiveness during the demonstration than prior to the demonstration due to the enhanced benefits provided in the Standard Plan, specifically mental health and dental.

Hypothesis 15.2: Newly eligible childless adults enrolled in the Standard Plan starting on April 1, 2014 will show higher cost effectiveness compared to the childless adults enrolled in the Core Plan for a similar period of enrollment during the demonstration.

Outcome Variables: Cost-Effectiveness will be determined as to whether changes in cost resulted in better health outcomes. In this case the cost variable(s) will be determined as total cost of care per member and the health outcomes will be that are listed in Table 3, screening / preventive measures, chronic condition management, mental health related measures and frequency of ED visits.

Predictor / Explanatory Variable(s): Most notable predictor as described in the question is the effect of time and the enhanced benefit package.

Data Analysis Method: Changes in the number of unnecessary services over time (during the prior year and the five-year duration of the study) will be examined as a function of the enhanced benefit package provided in the Standard Plan. This explanatory variable as well as some of the control variables (e.g., age, risk score, income level) are time-varying covariates. Therefore, we are proposing to develop longitudinal regression models for outcome variable(s) and perform sub-group analyses (i.e., separate models for different sub-sections of the population). For case-control analyses a split-sample method will be used to assign individuals to the case and control groups. The samples will be determined during the first year of the Demonstration and this division of the sample will be maintained during the rest of the study period for comparison purposes.

***Question 16. Will the provision increase the cost effectiveness (Utilization/Cost) of Medicaid services?***

Hypothesis 16.1: For childless adults who were previously (prior to April 1, 2014) enrolled in the BadgerCare Plus Core Plan there will be increased cost effectiveness during the demonstration than prior to the demonstration due to the enhanced benefits provided in the Standard Plan, specifically mental health and dental.

Hypothesis 16.2: Newly eligible childless adults enrolled in the Standard Plan starting on April 1, 2014 will show higher cost effectiveness compared to the childless adults enrolled in the Core Plan for a similar period of enrollment during the demonstration.

Outcome Variable: Cost-Effectiveness will be determined as to whether changes in cost resulted in fewer unnecessary utilization healthcare services. In this case the cost variable(s) will be determined as total cost of care per member that can be used along with the measure of unnecessary services (such as Emergency Department visits and Inpatient Stays for Ambulatory Care Sensitive Conditions (ASCs), 30-day all cause readmissions, and overall inpatient stays).

Predictor / Explanatory Variable(s): Most notable predictor as described in the question is the effect of time and the enhanced benefit package.

Data Analysis Method: The effect may vary by income level or any other demographic variables. So some adjustment by control variables are also proposed for this question. The means test will determine any significant difference in cost-effectiveness measures from before to after demonstration.

There will also be an analysis of the changes in cost-effectiveness (specifically aimed at reduction of unnecessary services), during the prior year and the five-year duration of the study, as explained by the enhanced benefit package provided in the Standard Plan. This outcome variable as well as some of the control variables (e.g., age, risk score) are time-varying covariates. Therefore, we are proposing to develop longitudinal regression models for outcome variable(s). Sub-group analyses (i.e., separate models for different sub-sections of the population) are proposed.

For the case-control matching study, the control group will be identified by propensity score matching and the split-sample technique used to determine the sensitivity of bias present in the matching method. The case and control samples will be determined during the first year of the Demonstration. This division of the sample will be maintained during the rest of the study period for comparison purposes.

***Question 17. Will it demonstrate an increase in the continuity of health coverage?***

Hypothesis 17.1: For childless adults who were previously (prior to April 1, 2014) enrolled in the BadgerCare Plus Core Plan there will be an increase in the continuity of coverage in the demonstration compared to prior to the demonstration due to the enhanced benefits provided in the Standard Plan, specifically mental health and dental.

Hypothesis 17.2: Newly eligible childless adults enrolled in the Standard Plan starting on April 1, 2014 will show an increased continuity of coverage compared to the childless adults enrolled in the Core Plan for a similar period of enrollment during the demonstration.



Outcome Variable: Any preferred measure of Continuity of Coverage. The measure will be calculated by combining data from claims and eligibility. Moreover, the continuity of care will be determined as part of the survey to CLAs related to usual sources of care and their experience in getting needed care before and after the demonstration.

Predictor / Explanatory Variable(s): Enrollment binary variable.

Data Analysis Method: Comparison between before and after implementation of Demonstration will be made and the measure will be analyzed over time.

A summary of the analysis plan for each of the questions is provided, below, as Table 4.

**Table 6: BadgerCare Reform Demonstration Evaluation Data Analysis Plan**

Research Question	Proposed Variables in analysis and/or model development			Anticipated Analysis level & Comments	Proposed Data Analysis Method
	Outcome Variable	Predictors / Independent Variable(s)	Control Variables		
<b>For the TMA: Demonstration participants: Payment of Premiums</b>					
1. Will the premium requirement reduce the incidence of unnecessary services?	Unnecessary ED Visits as defined in Billings et al., (2000) paper. Ambulatory Care Sensitive Visits (Non-Emergent, Primary Care Treatable, Avoidable). Also, 30-Day All Cause Readmissions and Unnecessary Medical Services & Devices.	FPL (hence sliding scale premium)	Demographics (Age[Group], Gender, Race & Ethnicity), Education, County, Region, Risk Score[ACG or CDPS], belongs to MCO or FFS, Tribal population*. Some risk scores use Age and Gender as predictors. In that case, age and gender can be dropped for modelling purposes.	Beneficiary level analysis. The control sample will be selected by split-sample method from within the TMA Adults population	Changes in the number of unnecessary services over time (during the prior year and the five-year duration of the study) will be examined as a function of the individual premium payment levels determined by the premium schedule. This explanatory variable as well as some of the control variables (e.g., age, risk score) are time-varying covariates. Therefore, it is proposed to develop longitudinal regression models for outcome variable(s). Sub-group analyses (i.e., separate models for different sub-sections of the population).
2. Will the premium requirement lead to improved health outcomes?	The outcome variables will be recorded as member-specific data. The screening, preventive and primary care indicators are binary variables based on whether a member reported to have obtained the age, gender, and chronic condition specific services specified by NCQA for relevant HEDIS measures.	FPL (hence sliding scale premium)		Beneficiary level analysis. The control sample will be selected by split-sample method from within the TMA Adults population	The changes in the likelihood that a member will receive screening, preventive and primary care services over time (during the prior year and the five-year duration of the study) will be examined as a function of the individual premium payment levels determined by the premium schedule. This explanatory variable as well as some of the control variables (e.g., age, risk score) are time-varying covariates. Therefore, we are proposing to develop generalized estimation equation (GEE) models for the binary outcome variable(s). Sub-group analyses (i.e., separate models for different sub-sections of the population) will be performed.
3. Will the premium requirement slow the growth in healthcare spending?	Allowed Amount will be used as the outcome variable for all cost calculations. This will be calculated as the amount paid by Wisconsin Medicaid for services based on the maximum allowable fee schedule or the capitation payments made to Medicaid HMOs.	FPL (hence sliding scale premium)		Beneficiary level analysis. The control sample will be selected by split-sample method from within the TMA Adults population	Healthcare spending over time (during the prior year and the five-year duration of the study) will be evaluated as a function of individual premium payment level. This explanatory variable as well as some of the control variables (e.g., age, risk score) are time-varying covariates. Therefore, we are proposing to develop longitudinal regression models for outcome variable(s). Sub-group analyses (i.e., separate models for different sub-sections of the population) are proposed.

<p>4. Will the premium requirement increase the cost effectiveness (Outcomes/Cost) of Medicaid services?</p>	<p>Cost-Effectiveness is usually calculated as cost divided by a measure of health outcomes. In this case the cost variable(s) utilized in Question 2 can be used along with the measure of unnecessary services utilized in Question 1.</p>	<p>FPL (hence sliding scale premium).</p>		<p>Beneficiary level analysis. The control sample will be selected by split-sample method from within the TMA Adults population</p>	<p>The need is to analyze the changes in cost-effectiveness (specifically aimed at unnecessary services over time), during the prior year and the five-year duration of the study, as explained by the individual premium payment requirements by FPL. This outcome variable as well as some of the control variables (e.g., age, risk score) are time-varying covariates. Therefore, we are proposing to develop longitudinal regression models for outcome variable(s). Sub-group analyses (i.e., separate models for different sub-sections of the population) are proposed.</p>
<p>5. Will the premium requirement increase the cost effectiveness (Utilization/Cost) of Medicaid services?</p>	<p>Cost-Effectiveness will be determined as to whether changes in cost resulted in fewer unnecessary utilization healthcare services. In this case the cost variable(s) used in Question 2 can be used along with the measure of unnecessary services (such as Emergency Department visits and Inpatient Stays for Ambulatory Care Sensitive Conditions (ASCs), 30-Day All Cause Readmissions, and overall inpatient stays).</p>	<p>FPL levels defined in terms of levels on the sliding premium scale.</p>		<p>Beneficiary level analysis. The control sample will be selected by split-sample method from within the TMA Adults population</p>	<p>The need is to analyze the changes in cost-effectiveness (specifically aimed at reduction of unnecessary services), during the prior year and the five-year duration of the study, as explained by the individual premium payment requirements by FPL. This outcome variable as well as some of the control variables (e.g., age, risk score) are time-varying covariates. Therefore, we are proposing to develop longitudinal regression models for outcome variable(s). Sub-group analyses (i.e., separate models for different sub-sections of the population) are proposed. For case-control matching study, the control group will be identified by propensity score matching method and the split-sample technique used to determine the sensitivity of bias present in matching method. The case and control samples will be determined during the first year of the Demonstration. This division of the sample will be maintained during the rest of the study period for comparison purposes.</p>
<p><b>Association of Enrollment Status to Utilization and/or Costs</b></p>					
<p>6. Is there any impact on utilization and/or costs associated with individuals who were disenrolled, but re-enrolled after the 3-month restrictive re-enrollment period?</p>	<p>Unnecessary ED Visits as defined in Billings et al., (2000) paper. Ambulatory Care Sensitive Visits (Non-Emergent, Primary Care Treatable, Avoidable). Also, 30-Day All Cause Readmissions and Unnecessary Medical Devices. Overall PMPY Cost of Care (Medical and Pharmacy Expenditures). Allowed Amount will be considered for cost calculations.</p>	<p>FPL (hence sliding scale premium). Disenrollment/Re-enrollment history (Identify few frequent patterns of disenrollment / re-enrollment and create dummy variables on those patterns).</p>	<p>Demographics (Age[Group], Gender, Race &amp; Ethnicity), Education, County, Region, Risk Score[ACG or CDPS], belongs to MCO or FFS, Tribal population*. Some risk scores use Age</p>	<p>Beneficiary level analysis. The control sample will be selected by split-sample method from within the TMA Adults population</p>	<p>Longitudinal regression methods are proposed for this analysis. The enrollment / disenrollment / re-enrollment information can be used multiple ways. Indicator variables can be developed to identify whether a member had any of these statuses within a certain unit of time and these variables will be added to the regression model. Alternatively, the enrollment status can be counted and categorized to discover differential effects of disenrollment/re-enrollment vs. continuous enrollment.</p>

<p>7. Are costs and/or utilization of services different for those that are continuously enrolled compared to costs/utilization for individuals that have disenrolled and then re-enrolled?</p>	<p>Unnecessary ED Visits as defined in Billings et al., (2000) paper. Ambulatory Care Sensitive Visits (Non-Emergent, Primary Care Treatable, Avoidable). Also, 30-Day All Cause Readmissions and Unnecessary Medical Devices. Overall PMPY Cost of Care (Medical and Pharmacy Expenditures). Allowed Amount will be considered for cost calculations.</p>	<p>FPL (hence sliding scale premium). Disenrollment/Re-enrollment history (Identify few frequent patterns of disenrollment / re-enrollment and create dummy variables on those patterns).</p>	<p>and Gender as predictors. In that case, age and gender can be dropped for modelling purposes.</p>	<p>Beneficiary level analysis. The control sample will be selected by split-sample method from within the TMA Adults population</p>	<p>Longitudinal regression methods are proposed for this analysis. The enrollment / disenrollment / reenrollment information can be used multiple different ways. Indicator variable can be developed whether a member had any of these statuses within a certain unit of time and use the variable in models. Otherwise, the enrollment status can be counted and categorized to discover differential effects.</p>
<p><b>Enrollment Analysis by Payment of Premiums</b></p>					
<p>8. What is the impact of premiums on enrollment broken down by income level and the corresponding monthly premium amount?</p>	<p>Disenrollment/Re-enrollment history (Identify few frequent patterns of disenrollment / re-enrollment and create dummy variables on those patterns).</p>	<p>FPL (hence sliding scale premium) with possible categorization into wider intervals (smaller number of buckets). Appendix 1.</p>	<p>Demographics (Age[Group], Gender, Race &amp; Ethnicity), Education, County, Region, Risk Score[ACG or CDPS], belongs to MCO or FFS, Tribal population*.</p>	<p>Beneficiary level Analysis. The control sample will be selected by split-sample method from within the TMA Adults population</p>	<p>Depending on the type of outcome variable that is used the analysis method will be selected. For example, if enrollment / disenrollment indicator is a categorical variable then either logistic regression analysis or generalized linear models can be employed to answer the research question.</p>
<p>9. How is enrollment or access to care affected by the application of new, or increased, premium amounts?</p>	<p>Access to care can be defined through survey questions related to whether members have a primary care physician and if they have had difficulties scheduling appointments with providers for needed care.</p>	<p>FPL (hence sliding scale premium) with possible categorization into wider intervals (smaller number of buckets). Appendix 1. Also, dummy variables can be created to depict if the premium payment is new or an increased amount from past payments.</p>	<p>Some risk scores use Age and Gender as predictors. In that case, age and gender can be dropped for modelling purposes.</p>	<p>Beneficiary level Analysis. The control sample will be selected by split-sample method from within the TMA Adults population</p>	<p>Generally 'Access To Care' can be determined as continuous or discrete variable, depending on the emphasis of the domain of care. Based on that determination appropriate regression model can be developed for longitudinal data. The source of these data will be enrollment surveys.</p>
<p><b>Payment of Premiums and 3-Month Restrictive Re-enrollment</b></p>					
<p>10. What impact does the 3-month restrictive re-enrollment period for failure to make a premium payment have on the payment of premiums and on enrollment?</p>	<p>This is a Dyad Outcome. A suitable combination category class can be created based on amount of premium and pattern of enrollment / disenrollment. The categories will be created so that variability are observed based on 3-month restrictive enrollment.</p>	<p>This is a Binary variable and determined whether any member had experienced this condition or not.</p>	<p>Demographics (Age[Group], Gender, Race &amp; Ethnicity), Education, County, Region, Risk Score[ACG or CDPS], belongs to MCO</p>	<p>Beneficiary level analysis. The control sample will be selected by split-sample method from within the TMA Adults population</p>	<p>The categorization of dual outcome variables will create a nominal variable since there may not be a logical ordering between the categories. The logistic regression method for nominal variables may be applied to answer this research question.</p>

11. Does this impact vary by income level?	This is a Dyad Outcome. A suitable combination category class can be created based on amount of premium and pattern of enrollment / disenrollment. The categories will be created so the variability are observed based on 3-month restrictive enrollment.	As income level is associated with premium payment, which is the outcome variable, the predictor must be carefully defined so that it is separated form outcome.	or FFS, Tribal population*. Some risk scores use Age and Gender as predictors. In that case, age and gender can be dropped for modelling purposes.	Beneficiary level analysis. The control sample will be selected by split-sample method from within the TMA Adults population	The categorization of dual outcome variables will create a nominal variable since there may not be a logical ordering between the categories. The logistic regression method for nominal variables may be applied to answer this research question.
12. If there is an impact, explore the break-out by income level.	This is a Dyad Outcome. A suitable combination category class can be created based on amount of premium and pattern of enrollment / disenrollment. The categories will be created so that variability is observed based on 3-month restrictive enrollment.	As income level is associated with premium payment, which is the outcome variable, the predictor must be carefully defined so that it is separated form outcome.		Beneficiary level analysis. The control sample will be selected by split-sample method from within the TMA Adults population	To find the break-out point(s) in the income level that makes significant difference in outcome variable, exploratory analyses can be employed using different cut-off points of the income scale.
<b>For Childless Adults: Effects of the Benefit Plan for demonstration expansion group</b>					
13. Will the provision of a benefit plan that is the same as the one provided to all other BadgerCare adult beneficiaries result in improved health outcomes?	Health Outcome Measures as shown in Table 2.	Groups that will be predictors are: CLA population and Core Plan Group.	Demographics (Age[Group], Gender, Race & Ethnicity), Education, County, Region, Risk Score[ACG or CDPS], belongs to MCO or FFS, Tribal population*. Some risk scores use Age and Gender as predictors. In that case, age and gender can be dropped for modelling purposes.	Aggregate level analysis: Baseline measures are calculated for the start of the study period and compared with similar measures from before and after the implementation. Beneficiary level analysis. The control sample will be selected by split-sample method from within the CLA Adults population.	The basic analysis for this research question will be calculation and comparison of different measures over time. The baseline measures will be used for most of the comparison purposes. We propose to adjust some of the measures by suitable control variables, though HEDIS measures as described in the table above, are not adjusted by any covariates. A second analysis will be to examine the changes in the likelihood that a member will receive screening, preventive and primary care services over time (during the years prior to the demonstration and the five-year duration of the study) will be examined as a function of the enhanced benefit package of the Standard Plan. This explanatory variable as well as some of the control variables (e.g., age, risk score) are time-varying covariates. Therefore, we are proposing to develop generalized estimation equation (GEE) models and use a logistic regression model for the binary outcome variable(s). Sub-group analyses (i.e., separate models for different sub-sections of the population) will be performed. For case-control analyses a split-sample method will be used to assess the assignments of individuals to the case and control groups. The samples will be determined during the first year of the Demonstration and this division of the sample will be maintained during the rest of the study period for comparison purposes.

<p>14. Will this achieve a reduction in the incidence of unnecessary services?</p>	<p>Unnecessary ED Visits as defined in Billings et al., (2000) paper. Ambulatory Care Sensitive Visits (Non-Emergent, Primary Care Treatable, Avoidable). Also, 30-Day All Cause Readmissions and Unnecessary Medical Devices.</p>	<p>Before and after implementation comparison.</p>		<p>Beneficiary level analysis. The control sample will be selected by split-sample method from within the CLA Adults population</p>	<p>: Changes in the number of unnecessary services over time (during the prior year and the five-year duration of the study) will be examined as a function of the enhanced benefit package provided in the Standard Plan. This explanatory variable as well as some of the control variables (e.g., age, risk score) are time-varying covariates. Therefore, we are proposing to develop longitudinal regression models for outcome variable(s) and perform sub-group analyses (i.e., separate models for different sub-sections of the population). For case-control analyses a split-sample method will be used to assign individuals to the case and control groups. The samples will be determined during the first year of the Demonstration and this division of the sample will be maintained during the rest of the study period for comparison purposes.</p>
<p>15. Will the provision increase the cost effectiveness (Outcomes/Cost) of Medicaid services?</p>	<p>Cost-Effectiveness will be determined as to whether changes in cost, even though increment, resulted in better health outcomes. In this case the cost variable(s) will be determined as total cost of care per member and the health outcomes will be that are listed in Table 4.2, screening / preventive measures, chronic condition management, mental health related measures and frequency of ED visits.</p>	<p>Before and after implementation comparison.</p>		<p>Beneficiary level analysis. The control sample will be selected by split-sample method from within the CLA Adults population</p>	<p>Changes in the number of unnecessary services over time (during the prior year and the five-year duration of the study) will be examined as a function of the enhanced benefit package provided in the Standard Plan. This explanatory variable as well as some of the control variables (e.g., age, risk score, income level) are time-varying covariates. Therefore, we are proposing to develop longitudinal regression models for outcome variable(s) and perform sub-group analyses (i.e., separate models for different sub-sections of the population). For case-control analyses a split-sample method will be used to assign individuals to the case and control groups. The samples will be determined during the first year of the Demonstration and this division of the sample will be maintained during the rest of the study period for comparison purposes.</p>

<p>16. Will the provision increase the cost effectiveness (Utilization/Cost) of Medicaid services?</p>	<p>Cost-Effectiveness will be determined as to whether changes in cost, even though increment, resulted in fewer unnecessary utilization healthcare services. In this case the cost variable(s) will be determined as total cost of care per member that can be used along with the measure of unnecessary services (such as Emergency Department visits for Ambulatory Care Sensitive Conditions (ASCs), 30-day all cause readmissions, and overall inpatient stays).</p>	<p>Most notable predictor as described in the question is the effect of time.</p>	<p>Beneficiary level analysis. The control sample will be selected by split-sample method from within the CLA Adults population</p>	<p>The effect may vary by income level or any other demographic variables. So some adjustment by control variables are also proposed for this question. The means test will determine any significant difference in cost-effectiveness measures from before to after demonstration.</p> <p>There will also be an analysis of the changes in cost-effectiveness (specifically aimed at reduction of unnecessary services), during the prior year and the five-year duration of the study, as explained by the enhanced benefit package provided in the Standard Plan. This outcome variable as well as some of the control variables (e.g., age, risk score) are time-varying covariates. Therefore, we are proposing to develop longitudinal regression models for outcome variable(s). Sub-group analyses (i.e., separate models for different sub-sections of the population) are proposed.</p> <p>For the case-control matching study, the control group will be identified by propensity score matching and the split-sample technique used to determine the sensitivity of bias present in the matching method. The case and control samples will be determined during the first year of the Demonstration. This division of the sample will be maintained during the rest of the study period for comparison purposes.</p>
<p>17. Will it demonstrate an increase in the continuity of health coverage?</p>	<p>Measure of Continuity of Coverage.</p>	<p>Before and after implementation comparison.</p>	<p>Beneficiary level analysis. The control sample will be selected by split-sample method from within the CLA Adults population</p>	<p>The effect may vary by income level or any other demographic variables. So some adjustment by control variables are also proposed for this question.</p>

## 5. Data Collection Methods

Data will be collected from 3 main sources over the course of the evaluation. The two basic sources are the interChange System enrollment and claims data (captured and maintained by HP Enterprise Services, hereinafter identified as 'Enrollment and Claims/Encounter Data') and the Eligibility CARES data (captured and maintained by Deloitte, hereinafter mentioned as 'Eligibility Data'). A periodic data collection schedule will be developed by the evaluator according to analytical and reporting needs. The data fields needed to answer research questions and to create the measure to report to CMS periodically will be determined by the evaluator.

These two data sources are updated on a regular basis and hence the periodic data extraction will capture all the latest updates. To develop the baseline data, the evaluator will use Medicaid eligibility and claims data extracted at the beginning of the demonstration. All claims and eligibility data for those members will be collected twenty-four months prior to the implementation start date (April 2, 2014). These data will be archived for the exclusive use of the evaluation project, and the data format and storage location will be determined by the evaluator.

For all case-control matching analyses, since the income level (FPL) is a major matching variable, we propose to adopt a split-sample approach to define the control group. The cohort of new members joining the segments will be included into the segments for analysis purposes. The new members may be treated separately for the case-control study since those members will not have sufficient data from before implementation date.

In the middle of the demonstration and at the end of the study period, the enrollment / disenrollment / reenrollment survey will be administered by the evaluator. The survey information will be augmented with enrollment and claims data and eligibility data to provide a deeper understanding of the member perspective about premium payments, 3-month restrictive reenrollment and its' effect on health outcomes, continuity of coverage and cost of providing health care.



## **6. Quarterly Progress Report Contribution**

Where appropriate and practical, summary statistics will be broken out by the levels of covariates such as FPL, gender, etc. to provide consistent indicators of program performance throughout the Demonstration period, however, no inferential statistics will be calculated until the second yearly report—at which time interim findings pertaining to sub-group differences in process outcomes, health outcomes, and cost-savings may be included in the quarterly progress reports.

## **7. Estimated Evaluation Budget**

As noted previously DHS intends to contract with an independent evaluator during the second year of the demonstration and will conduct two surveys during the course of the demonstration. DHS will produce an evaluation budget as part of the contracting process,. DHS contracted with the University of Wisconsin (UW) Population Health Institute to complete the evaluation for the Wisconsin Medicaid Section 1115 Health Care Reform Demonstration (BadgerCare) (11-W-00125/5) and Childless Adults Section 1115 Demonstration (11-W-00242/5).

The UW Population Health Institute conducted one survey (at the end of the demonstrations) along with the data evaluation. The total cost for the survey and evaluation for the two expiring waivers is \$400,000. DHS anticipates that the costs to conduct the evaluation for the current demonstration will be higher than the expiring demonstrations due to the additional survey and evaluation in demonstration year 3. DHS estimates the cost to be between \$500,000 and \$800,000.

## References

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Appendix 1 - Summary of Cost-sharing for TMA Adults Only

This Table is found in Attachment B of STC Document.

<b>Monthly Premium Amount based on FPL Percentage</b>	<b>Monthly Premium Amount as a Percentage of Income</b>
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%

Appendix 2 – Expiring Evaluation Design Questions  
Wisconsin Medicaid Section 1115 Health Care Reform Demonstration (BadgerCare) 11-  
W-00125/5 & Wisconsin BadgerCare Plus Health Insurance for Childless Adults Section  
1115 Demonstration 11-W-00242/5

The evaluation will test the following specific hypotheses related to the affordability test, premiums, and 12 month restrictive re-enrollment period imposed on the BadgerCare Plus parents and caretaker population:

1. Is there any impact on utilization and/or costs associated with individuals who were disenrolled, but re-enrolled after the 12 month restrictive reenrollment period (RRP)?
2. Are costs and/or utilizations of services different for those that are continuously enrolled compared to those for individuals who have disenrolled and then re-enrolled?
3. What impact does the 12 month waiting period for failure to make a premium payment have on the payment of premiums and on enrollment? Does this impact vary by income (if so, include a break out by income level)?
4. What is the impact of premiums on enrollment broken down by income level and corresponding monthly premium amount?
5. How are enrollment, retention and access to care affected by the application of new, or increased, premium amounts?
6. Are there discernible characteristics with respect to individuals and/or policies that are available to them, who have been determined to have affordable coverage, e.g., part-time/full-time, large/small employer, etc?
7. How many individuals have met the affordability test? What is the margin by which they have met the test?
8. Has the application of new premiums to this population served as a cost-savings measure to the State?

Wisconsin BadgerCare Plus Health Insurance for Childless Adults Section 1115  
Demonstration

For the BadgerCare Plus for Childless Adults waiver, the evaluation will assess the following specific hypotheses related to the crowd-out policies and premiums imposed on childless adults with household income above 133% of the FPL:

1. Is there any impact on utilization and/or costs associated with individuals who were disenrolled, but re-enrolled after the 12 month RRP?
2. Are costs and/or utilizations of services different for those that are continuously enrolled compared to those for individuals who have disenrolled and then re-enrolled?
3. What impact does the 12 month waiting period for failure to make a premium payment have on the payment of premiums and on enrollment? Does this impact vary by income (if so, include a break out by income level)?
4. What is the impact of premiums on enrollment broken down by income level and corresponding monthly premium amount?
5. How are enrollment, retention, and access to care affected by the application of new, or increased, premium amounts?
6. Has the application of new premiums to this population served as a cost-savings measure to the State?

## BadgerCare Plus and Wisconsin Medicaid Covered Services Comparison Chart

The covered services information in the following chart is provided as general information. Providers should refer to their service-specific publications and the ForwardHealth Online Handbook for detailed information on covered and noncovered services and prior authorization (PA) information.

Service	Coverage Under the BadgerCare Plus Standard Plan and Wisconsin Medicaid	Coverage Under the BadgerCare Plus Benchmark Plan	Coverage Under the BadgerCare Plus Core Plan	Coverage Under the BadgerCare Plus Basic Plan
Ambulatory Surgery Centers	Coverage of certain surgical procedures and related lab services.  \$3.00 copayment per service.	Coverage of certain surgical procedures and related lab services.  \$15.00 copayment per visit.	Coverage of certain surgical procedures and related lab services.  \$3.00 copayment per service.	Coverage of certain surgical and related procedures.  Limited to five visits per enrollment year.  \$60.00 copayment per visit.

Service	Coverage Under the BadgerCare Plus Standard Plan and Wisconsin Medicaid	Coverage Under the BadgerCare Plus Benchmark Plan	Coverage Under the BadgerCare Plus Core Plan	Coverage Under the BadgerCare Plus Basic Plan
Chiropractic	Full coverage.  \$0.50 to \$3.00 copayment per service.	Full coverage.  \$15.00 copayment per visit.	Full coverage.  \$0.50 to \$3.00 copayment per service.	Full coverage. Initial visits and chiropractic manipulative treatments are subject to a combined 10-visit limit. The combined 10-visit limit applies to certain visits provided by the following providers: <ul style="list-style-type: none"> <li>• Chiropractors.</li> <li>• Nurse practitioners.</li> <li>• Optometrists.</li> <li>• Physicians (including psychiatrists and ophthalmologists)</li> <li>• Physician assistants.</li> <li>• Podiatrists.</li> </ul> \$10.00 copayment per visit..

Service	Coverage Under the BadgerCare Plus Standard Plan and Wisconsin Medicaid	Coverage Under the BadgerCare Plus Benchmark Plan	Coverage Under the BadgerCare Plus Core Plan	Coverage Under the BadgerCare Plus Basic Plan
Dental	<p>Full coverage.</p> <p>\$0.50 to \$3.00 copayment per service.</p>	<p>Limited coverage of preventive, diagnostic, simple restorative, periodontics, and surgical procedures for pregnant women and children.</p> <p>Coverage limited to \$750.00 per enrollment year.</p> <p>A \$200.00 deductible applies to all services except preventive and diagnostic.</p> <p>Cost-sharing equal to 50 percent of allowable fee on all services.</p> <p>Pregnant women are</p>	<p>Coverage limited to certain emergency services.</p> <p>No copayment.</p>	<p>Coverage limited to certain emergency services.</p> <p>\$10.00 copayment per visit.</p>



Service	Coverage Under the BadgerCare Plus Standard Plan and Wisconsin Medicaid	Coverage Under the BadgerCare Plus Benchmark Plan	Coverage Under the BadgerCare Plus Core Plan	Coverage Under the BadgerCare Plus Basic Plan
Disposable Medical Supplies (DMS)	Full coverage.  \$0.50 to \$3.00 copayment per service and \$0.50 per prescription for diabetic supplies.	Coverage of diabetic supplies, ostomy supplies, and other DMS that are required with the use of durable medical equipment (DME).  \$0.50 copayment per prescription for diabetic supplies. No copayment for other DMS.	Coverage of diabetic supplies, ostomy supplies, and other DMS that are required with the use of DME.  \$0.50 to \$3.00 copayment per service.  \$0.50 per prescription for diabetic supplies.	Coverage of diabetic supplies, ostomy supplies, and other DMS that are required with the use of DME.  Up to \$5.00 copayment per priced unit for most DMS.  \$0.50 per prescription for diabetic supplies.  Prescriptions for diabetic supplies do not count towards the member's limit of 10 prescriptions per Calendar month.

Service	Coverage Under the BadgerCare Plus Standard Plan and Wisconsin Medicaid	Coverage Under the BadgerCare Plus Benchmark Plan	Coverage Under the BadgerCare Plus Core Plan	Coverage Under the BadgerCare Plus Basic Plan
Drugs	<p>Comprehensive drug benefit with coverage of generic and brand name prescription drugs and some over-the-counter (OTC) drugs.</p> <p>Members are limited to 5 prescriptions per month for opioid drugs.</p> <p>Copayments are as follows:</p> <ul style="list-style-type: none"> <li>• \$0.50 for OTC drugs.</li> <li>• \$1.00 for generic drugs.</li> <li>• \$3.00 for brand name drugs.</li> </ul>	<p>Generic-only formulary drug benefit and some OTC drugs.</p> <p>Member are limited to 5 prescriptions per month for opioid drugs</p> <p>Members will be automatically enrolled in BadgerRx Gold. This is a separate program administered by Navitus Health Solutions.</p> <p>\$5.00 copayment with no upper limits.</p>	<p>Generic-only formulary drug and some OTC drugs.</p> <p>Some brand name drugs are covered.</p> <p>Members are limited to 5 prescriptions per month for opioid drugs.</p> <p>Members will be automatically enrolled in BadgerRx Gold. This is a separate program administered by Navitus Health Solutions.</p>	<p>Generic-only formulary drug benefit and some OTC drugs.</p> <p>Humalog, Humalog Mix, Lantus, Tamiflu, and Relenza are the only brand name drugs covered.</p> <p>Prescriptions are limited to a total of 10 per calendar month. Of the 10 total prescriptions allowed per month, up to 5 prescriptions per month are covered for opioid drugs.</p>

Service	Coverage Under the BadgerCare Plus Standard Plan and Wisconsin Medicaid	Coverage Under the BadgerCare Plus Benchmark Plan	Coverage Under the BadgerCare Plus Core Plan	Coverage Under the BadgerCare Plus Basic Plan
Drugs (Continued)				There is up to a \$5.00 copayment per generic drug prescription with no upper limit. There is a \$10.00 copayment for brand name drugs. There is a \$10.00 copayment for the flu shot.
Durable Medical Equipment (DME)	Full coverage.  \$0.50 to \$3.00 copayment per item.  Rental items are not subject to copayment.	Full coverage up to \$2,500.00 per enrollment year. \$5.00 copayment per item. Rental items are not subject to copayment but count toward the \$2,500.00 enrollment year limit.	Full coverage up to \$2,500.00 per enrollment year.  \$0.50 to \$3.00 copayment per item.	Full coverage up to \$500.00 per enrollment year.  Up to \$10.00 copayment per item. Copayment for blood glucose meters is \$0.50 per prescription.

Service	Coverage Under the BadgerCare Plus Standard Plan and Wisconsin Medicaid	Coverage Under the BadgerCare Plus Benchmark Plan	Coverage Under the BadgerCare Plus Core Plan	Coverage Under the BadgerCare Plus Basic Plan
Durable Medical Equipment (DME) Cont.		<p>The following items do not count towards the \$2,500.00 enrollment year limit:</p> <ul style="list-style-type: none"> <li>• Hearing aids, hearing aid batteries, and accessories.</li> <li>• Bone-anchored hearing aids.</li> <li>• Cochlear implants.</li> </ul> <p>Hearing aid repairs are subject to the \$2,500.00 enrollment year limit.</p>	Rental items are not subject to copayment but count toward the \$2,500.00 annual limit.	Rental items are not subject to copayment but count toward the \$500.00 annual limit.
End-Stage Renal Disease (ESRD)	Full coverage.  No copayment.	Full coverage.  No copayment.	Full coverage.  No copayment.	Full coverage.  End-stage renal disease providers who bill ESRD services as an ESRD facility are not subject to the outpatient hospital limits.

Service	Coverage Under the BadgerCare Plus Standard Plan and Wisconsin Medicaid	Coverage Under the BadgerCare Plus Benchmark Plan	Coverage Under the BadgerCare Plus Core Plan	Coverage Under the BadgerCare Plus Basic Plan
Health Screenings for Children	Full coverage of HealthCheck screenings and other services for individuals under the age of 21.	Full coverage of HealthCheck screenings and other services for individuals under the age of 21.	Not applicable.	Not applicable.
Hearing Services	Full coverage.  \$0.50 to \$3.00 copayment per procedure.  No copayment for	Full coverage for members 17 years of age and younger.  \$15.00 per visit, regardless of the number or type of	No coverage.	No coverage.

Service	Coverage Under the BadgerCare Plus Standard Plan and Wisconsin Medicaid	Coverage Under the BadgerCare Plus Benchmark Plan	Coverage Under the BadgerCare Plus Core Plan	Coverage Under the BadgerCare Plus Basic Plan
Home Care Services (Home Health, Private Duty Nursing [PDN], and Personal Care)	Full coverage of PDN, home health, and personal care services.  No copayment.	Full coverage of home health services.  Coverage limited to 60 visits per enrollment year.  Private duty nursing and personal care services are not covered.  \$15.00 copayment per visit.	Coverage of home health services for 30 days following an inpatient stay if discharge from the hospital is contingent on the provision of follow-up home health services.  Coverage is limited to 100 visits within the 30-day post-hospitalization period.  No copayment.	No coverage.
Hospice	Full coverage.  No copayment.	Full coverage, up to 360 days per lifetime.  No copayment.	Full coverage.  No copayment.	Full coverage.  No copayment.

Service	Coverage Under the BadgerCare Plus Standard Plan and Wisconsin Medicaid	Coverage Under the BadgerCare Plus Benchmark Plan	Coverage Under the BadgerCare Plus Core Plan	Coverage Under the BadgerCare Plus Basic Plan
Inpatient Hospital	<p>Full coverage.</p> <p>\$3.00 copayment per day with a \$75.00 cap per stay.</p>	<p>Full coverage.</p> <p>Copayments are as follows:</p> <ul style="list-style-type: none"> <li>• \$100.00 stay for medical stays.</li> <li>• \$50.00 copayment per stay for mental health and/or substance abuse treatment.</li> </ul>	<p>Full coverage (not including inpatient psychiatric stays in either an Institute for Mental Disease [IMD] or the psychiatric ward of an acute care hospital and inpatient substance abuse treatment).</p> <p>\$3.00 copayment per day for members with income up to 100 percent of the Federal Poverty Level (FPL) with a \$75.00 cap per stay.</p>	<p>Full coverage for the first inpatient stay with authorization (not including inpatient psychiatric stays in either an IMD or the psychiatric ward of an acute care hospital or inpatient stays for transplant services). If the first stay is a transfer, both providers are required to have authorization.</p> <p>Subsequent inpatient stays are</p>

Service	Coverage Under the BadgerCare Plus Standard Plan and Wisconsin Medicaid	Coverage Under the BadgerCare Plus Benchmark Plan	Coverage Under the BadgerCare Plus Core Plan	Coverage Under the BadgerCare Plus Basic Plan
Inpatient Hospital (Continued)			<p>\$100.00 copayment per stay for members with income from 100 percent to 200 percent of the FPL.</p> <p>There is a \$300.00 total copayment cap per enrollment year for inpatient and outpatient hospital services for all income levels.</p>	<p>subject to the \$7,500.00 deductible per enrollment year for inpatient and outpatient hospital services (excluding emergency room).</p> <p>Reimbursement for per diem facility stays will be capped at the length of 14 days.</p> <p>Outlier costs and hospital access payments are not included in the reimbursement rate.</p> <p>There is a \$100.00 copayment per covered stay for nondeductible inpatient hospital stays.</p>



<b>Service</b>	<b>Coverage Under the BadgerCare Plus Standard Plan and Wisconsin Medicaid</b>	<b>Coverage Under the BadgerCare Plus Benchmark Plan</b>	<b>Coverage Under the BadgerCare Plus Core Plan</b>	<b>Coverage Under the BadgerCare Plus Basic Plan</b>
Mental Health and Substance Abuse Treatment	<p>Full coverage (not including room and board).</p> <p>\$0.50 to \$3.00 copayment per service, limited to the first 15 hours or \$825.00 of services, whichever comes first, provided per calendar year.</p> <p>Copayment not required when services are provided in a hospital setting.</p>	<p>Coverage of this service is based on the Wisconsin State Employee Health Plan.</p> <p>Covered services include outpatient mental health, outpatient substance abuse (including narcotic treatment), adult mental health day treatment for adults, substance abuse day treatment for adults and children, child/adolescent mental health day treatment, and inpatient hospital stays for mental health and substance abuse.</p>	<p>Coverage limited to services provided by a psychiatrist under the physician services benefit.</p> <p>\$0.50 to \$3.00 copayment per service, limited \$30.00 per provider, per enrollment year.</p>	<p>Coverage limited to services provided by a psychiatrist under the physician services benefit. Certain covered services by psychiatrists are counted toward the combined 10-visit limit. The combined 10-visit limit applies to certain visits provided by the following providers:</p>

Service	Coverage Under the BadgerCare Plus Standard Plan and Wisconsin Medicaid	Coverage Under the BadgerCare Plus Benchmark Plan	Coverage Under the BadgerCare Plus Core Plan	Coverage Under the BadgerCare Plus Basic Plan
Mental Health and Substance Abuse Treatment (Continued)		<p>Services not covered are crisis intervention, community support program, comprehensive community services, outpatient mental health services in the home and community for adults, community recovery services, and substance abuse residential treatment.</p> <p>Note: No copayments may be charged for child/adolescent day treatment services provided to BadgerCare Plus Benchmark Plan members. Child/adolescent day treatment services are HealthCheck "Other Services."</p>		<ul style="list-style-type: none"> <li>• Chiropractors.</li> <li>• Nurse practitioners.</li> <li>• Optometrists.</li> <li>• Physicians (including psychiatrists and ophthalmologists)</li> <li>• Physician assistants.</li> <li>• Podiatrists.</li> </ul>

Service	Coverage Under the BadgerCare Plus Standard Plan and Wisconsin Medicaid	Coverage Under the BadgerCare Plus Benchmark Plan	Coverage Under the BadgerCare Plus Core Plan	Coverage Under the BadgerCare Plus Basic Plan
Mental Health and Substance Abuse Treatment (Continued)		<ul style="list-style-type: none"> <li>• \$15.00 per visit for narcotic treatment services (no copayment for lab tests).</li> <li>• \$15.00 per visit for outpatient mental health diagnostic interview exam, psychotherapy — individual or group (no copayment for electroconvulsive therapy and pharmacological management).</li> <li>• \$15.00 per visit for outpatient substance abuse services.</li> </ul>		
Nursing Home Services	Full coverage.  No copayment.	Full coverage for stays at skilled nursing homes limited to 30 days per enrollment year.	No coverage.	No coverage.

Service	Coverage Under the BadgerCare Plus Standard Plan and Wisconsin Medicaid	Coverage Under the BadgerCare Plus Benchmark Plan	Coverage Under the BadgerCare Plus Core Plan	Coverage Under the BadgerCare Plus Basic Plan
Outpatient Hospital — Emergency Room	Full coverage.  No copayment.	Full coverage.  \$60.00 copayment per visit (waived if the member is admitted to a hospital).	Full coverage.  \$3.00 copayment for members with income up to 100 percent of the FPL.  \$60.00 copayment per visit for members with income from 100 percent to 200 percent of the FPL (waived	Full coverage, limited to two visits per enrollment year.  \$60.00 copayment per visit (waived if the member is admitted to a hospital).
Outpatient Hospital	Full coverage.  \$3.00 copayment per visit.	Full coverage.  \$15.00 copayment per visit.	Full coverage.  Outpatient mental health and substance abuse treatment services are not covered.  \$3.00 copayment per visit for members with income up to 100 percent of the FPL.	Full coverage for the first five outpatient non-emergency room visits with authorization.  Subsequent visits covered after the first five outpatient visits are subject to the \$7,500.00 deductible per enrollment year for inpatient and outpatient hospital services

Service	Coverage Under the BadgerCare Plus Standard Plan and Wisconsin Medicaid	Coverage Under the BadgerCare Plus Benchmark Plan	Coverage Under the BadgerCare Plus Core Plan	Coverage Under the BadgerCare Plus Basic Plan
Outpatient Hospital cont.			<p>\$15.00 copayment per visit for members with income from 100 percent to 200 percent of the FPL.</p> <p>\$300.00 total copayment cap per enrollment year for inpatient and outpatient hospital services for all income levels.</p>	<p>(excluding emergency room).</p> <p>After the deductible is reached, full coverage of outpatient hospital services. Payment will not include outliers.</p> <p>There is a \$60.00 copayment per visit for nondeductible visits.</p>

Service	Coverage Under the BadgerCare Plus Standard Plan and Wisconsin Medicaid	Coverage Under the BadgerCare Plus Benchmark Plan	Coverage Under the BadgerCare Plus Core Plan	Coverage Under the BadgerCare Plus Basic Plan
Physical Therapy (PT), Occupational Therapy, and Speech and Language Pathology (SLP)	<p>Full coverage.</p> <p>\$0.50 to \$3.00 copayment per service.</p> <p>Copayment obligation limited to the first 30 hours or \$1,500.00, whichever occurs first, during one calendar year (copayment limits calculated separately for each discipline).</p>	<p>Full coverage, limited to 20 visits per therapy discipline, per enrollment year.</p> <p>Also covers up to 36 visits per enrollment year for cardiac rehabilitation provided by a physical therapist. (The cardiac rehabilitation visits do not count towards the 20-visit limit for PT.)</p>	<p>Full coverage, limited to 20 visits per therapy discipline, per enrollment year.</p> <p>(Cardiac rehabilitation visits count towards the 20-visit limit for PT.)</p> <p>\$0.50 to \$3.00 copayment per service.</p> <p>Copayment obligation limited to the first 30 hours or</p>	<p>Full coverage, limited to 10 visits per therapy discipline, per enrollment year.</p> <p>(Cardiac rehabilitation visits count towards the 10-visit limit for PT.)</p> <p>\$10.00 copayment per visit.</p>

<p>Physical Therapy (PT), Occupational Therapy, and Speech and Language Pathology (SLP) cont..</p>		<p>Also covers up to a maximum of 60 SLP therapy visits over 20- week period following a bone anchored hearing aid or cochlear implant surgeries for members 17 years of age and younger. These SLP services do not count towards the 20-visit limit for SLP.</p> <p>There are no monthly or annual copayment limits.</p> <p>\$15.00 copayment per visit, per provider.</p>	<p>\$1,500.00, whichever occurs first, during one enrollment year (copayment limits calculated separately for each discipline).</p>	
<p>Physician</p>	<p>Full coverage, including laboratory and radiology.</p> <p>\$0.50 to \$3.00 copayment per</p>	<p>Full coverage, including laboratory and radiology.</p> <p>\$15.00 copayment per visit.</p>	<p>Full coverage, including laboratory and radiology.</p> <p>\$0.50 to \$3.00 copayment per</p>	<p>Full coverage, including laboratory and radiology, although certain visits are subject to a combined 10-visit limit. The combined 10-visit limit applies to certain visits provided by the following providers:</p>

Service	Coverage Under the BadgerCare Plus Standard Plan and Wisconsin Medicaid	Coverage Under the BadgerCare Plus Benchmark Plan	Coverage Under the BadgerCare Plus Core Plan	Coverage Under the BadgerCare Plus Basic Plan
Physician (Continued)	<p>service, limited to \$30.00 per provider per calendar year.</p> <p>No copayment for emergency services, anesthesia, or clozapine management.</p>	No copayment for emergency services, anesthesia, or clozapine management.	<p>service, limited to \$30.00 per provider per enrollment year.</p> <p>No copayment for emergency services, anesthesia, or clozapine management.</p>	<ul style="list-style-type: none"> <li>• Chiropractors.</li> <li>• Nurse practitioners.</li> <li>• Optometrists.</li> <li>• Physicians (including psychiatrists and ophthalmologists)</li> <li>• Physician assistants.</li> <li>• Podiatrists.</li> </ul> <p>Transplants and transplant- related services are not covered. Provider- administered drugs are not covered.</p> <p>There is a \$10.00 copayment per visit. Most radiology services have a \$5.00 or \$20.00 copayment.</p>



Service	Coverage Under the BadgerCare Plus Standard Plan and Wisconsin Medicaid	Coverage Under the BadgerCare Plus Benchmark Plan	Coverage Under the BadgerCare Plus Core Plan	Coverage Under the BadgerCare Plus Basic Plan
Podiatry	<p>Full coverage.</p> <p>\$0.50 to \$3.00 copayment per service, limited to \$30.00 per provider per calendar year.</p>	<p>Full coverage.</p> <p>\$15.00 copayment per visit.</p>	<p>Full coverage.</p> <p>\$0.50 to \$3.00 copayment per service, limited to \$30.00 per provider per enrollment year.</p>	<p>Full coverage, although certain visits are subject to a combined 10-visit limit. The combined 10-visit limit applies to certain visits provided by the following providers:</p> <ul style="list-style-type: none"> <li>• Chiropractors.</li> <li>• Nurse practitioners.</li> <li>• Optometrists.</li> <li>• Physicians (including psychiatrists and ophthalmologists)</li> <li>• Physician assistants.</li> <li>• Podiatrists.</li> </ul> <p>There is a \$10.00 copayment per visit.</p>

Service	Coverage Under the BadgerCare Plus Standard Plan and Wisconsin Medicaid	Coverage Under the BadgerCare Plus Benchmark Plan	Coverage Under the BadgerCare Plus Core Plan	Coverage Under the BadgerCare Plus Basic Plan
Prenatal/Maternity Care	Full coverage, including Prenatal Care Coordination (PNCC), and preventive mental health and substance abuse screening and counseling for women at risk of mental health or substance abuse problems.  No copayment.	Full coverage, including PNCC, and preventive mental health and substance abuse screening and counseling for women at risk of mental health or substance abuse problems.  No copayment.	Not applicable.	Not applicable.
Reproductive Health Service	Full coverage, excluding infertility treatments, surrogate parenting and related services, including but not limited to artificial insemination and subsequent obstetrical care as a non covered service, and the reversal of voluntary sterilization.	Full coverage, excluding infertility treatments, surrogate parenting and related services, including but not limited to artificial insemination and subsequent obstetrical care as a non covered service, and the reversal of voluntary sterilization.	Family planning services provided by family planning clinics will be covered separately under the Family Planning Only Services (FPOS).	Family planning services provided by family planning clinics will be covered separately under the FPOS.

Service	Coverage Under the BadgerCare Plus Standard Plan and Wisconsin Medicaid	Coverage Under the BadgerCare Plus Benchmark Plan	Coverage Under the BadgerCare Plus Core Plan	Coverage Under the BadgerCare Plus Basic Plan
Reproductive Health Service (Continued)	No copayment for family planning services.	No copayment for family planning services.		
Routine Vision	<p>Full coverage including coverage of eyeglasses.</p> <p>\$0.50 to \$3.00 copayment per service.</p>	<p>One eye exam per enrollment year, with refraction.</p> <p>\$15.00 copayment per visit.</p>	<p>General ophthalmological services are covered if billed with CPT codes 92002-92014 and certain qualifying diagnosis codes.</p>	<p>General ophthalmological services are covered if billed with CPT codes 92002-92014 and certain qualifying diagnosis codes.</p> <p>Certain visits are subject to a combined 10-visit limit. The combined 10-visit limit applies to certain visits provided by the following providers:</p>

Service	Coverage Under the BadgerCare Plus Standard Plan and Wisconsin Medicaid	Coverage Under the BadgerCare Plus Benchmark Plan	Coverage Under the BadgerCare Plus Core Plan	Coverage Under the BadgerCare Plus Basic Plan
Routine Vision cont.				<ul style="list-style-type: none"> <li>• Chiropractors.</li> <li>• Nurse practitioners.</li> <li>• Optometrists.</li> <li>• Physicians (including psychiatrists and ophthalmologists)</li> <li>• Physician assistants.</li> <li>• Podiatrists</li> </ul>

Service	Coverage Under the BadgerCare Plus Standard Plan and Wisconsin Medicaid	Coverage Under the BadgerCare Plus Benchmark Plan	Coverage Under the BadgerCare Plus Core Plan	Coverage Under the BadgerCare Plus Basic Plan
Transportation — Ambulance, Specialized Medical Vehicle (SMV), Common Carrier	Full coverage of emergency and non-emergency transportation to and from a certified provider for a covered service.  Copayments are as follows: <ul style="list-style-type: none"> <li>• \$2.00 copayment for non-emergency ambulance trips.</li> <li>• \$1.00 copayment per trip for transportation by SMV.</li> <li>• No copayment for transportation by common carrier or emergency ambulance.</li> </ul>	Full coverage of emergency and non-emergency transportation to and from a certified provider for a covered service.  Copayments are as follows: <ul style="list-style-type: none"> <li>• \$50.00 copayment per trip for emergency transportation by ambulance.</li> <li>• \$1.00 copayment per trip for transportation by SMV.</li> <li>• No copayment for transportation by common carrier.</li> </ul>	Coverage limited to emergency transportation by ambulance.  No copayment.	Coverage limited to emergency transportation by ambulance.  No copayment.

Note: The covered services information in this chart is provided as general information. Providers should refer to their service-specific publications and the Online Handbook for detailed information on covered and noncovered services and PA information.