Wisconsin BadgerCare Reform 1115 Waiver Demonstration
Section 1115 Quarterly Report

Section 1115 Quarterly Report Summary

Demonstration Year:
3 (1/1/2016 – 12/31/2016)
Federal Fiscal Quarter:
3 (7/1/2016 – 9/30/2016)

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Introduction

The Wisconsin BadgerCare Reform demonstration provides state plan benefits to childless adults who have family incomes up to 95 percent of the Federal Poverty Level (FPL) (effectively 100 percent of the FPL considering a disregard of 5 percent of income), and permits the state to charge premiums to adults who are only eligible for Medicaid through the Transitional Medical Assistance eligibility group (hereinafter referred to as "TMA Adults") with incomes above 133 percent of the FPL starting from the first day of enrollment and to TMA Adults from 100-133 percent of the FPL after the first 6 calendar months of TMA coverage.

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

The state's goals for the program are to demonstrate whether the program will:

- Ensure every Wisconsin resident has access to affordable health insurance and reduce 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 most.

The DHS has contracted, through an interagency agreement, with the UW Population Health Institute (including the Scope of Work, Workplan, and Budget) for conducting the BadgerCare Reform Demonstration Evaluation. The DHS and UW began work starting on September 1, 2015. A copy of the demonstration evaluation scope of work and workplan are included as Attachment E.

Enrollment and Benefits Information

Childless Adults (Population Group 2) - In the third quarter of demonstration year 3 the number of unique program participants decreased along with the total number of childless adults enrolled in the program for the quarter. From the prior quarter the total number of unique program participants decreased from 166,971 to 164,761. The year to date total of unique program participants enrolled increased to 210,999. Total monthly enrollment decreased from the prior quarter with 147,989 childless adults in June 2016 and 147,281 childless adults in September 2016.

Transitional Medical Assistance (TMA) Adults - In the third quarter of demonstration year 3 the number of unique program participants increased as did the total number of TMA adults enrolled in the program. From the prior quarter the total number of unique program participants increased from 29,615 to 30,002,

with a year to date total of 54,693. Total monthly enrollment also increased from the prior quarter with 20,533 TMA adults in June 2016 and 20,510 TMA adults in September 2016.

The rate of disenrollment for non-payment of premiums for the TMA Adult population 100% to 133% FPL was 6%, compared to 21% for the TMA Adult population over 133% FPL, a slight decrease for the TMA Adult population 100% to 133% and a slight increase for the TMA Adult population over 133%.. We will attempt to learn more about the reasons behind the variances between the two populations through the formal evaluation that will be conducted during demonstration year 3.

The DHS has not identified any issues related to access to care or delivery of benefits given the current enrollment trends and will continue to monitor.

Demonstration Populations	Total Number of Demonstration Participants Quarter Ending – 09/30/2016*	Current Enrollees (year to date)**	Disenrolled in Current Quarter	TMA Adults Disenrolled Due to Non-Payment of Premiums (current quarter)***
BC Reform Adults	164,761	210,999	24,166	N/A
TMA Adults – 100% to 133% FPL	19,517	34,268	3,443	1,108
TMA Adults – Over 133% FPL	10,485	20,425	4,039	2,238
*Reflects total unduplicated count of members enrolled during the demonstration quarter				
** Reflects total unduplicated count of members enrolled during the demonstration year.				
***Disenrollment does not reflect those who maintained eligibility after the closure month for any benefit plan				

Member Month Reporting

Eligibility Group	Month 1 (July 2016)	Month 2 (June 2016)	Month 3 (September 2016)	Total for Quarter Ending 09/2016
BC Reform Adults	148,128	148,116	147,281	443,525
TMA Adults – 100% to 133% FPL	13,829	13,740	13,820	41,389
TMA Adults – Over 133% FPL	8,585	6,625	6,690	21,900

Childless Adult and TMA Re-Enrollment Statistics

In September 2015 CMS requested that Wisconsin analyze the demonstration groups to identify how many members had been disenrolled and subsequently regained program eligibility.

In providing these statistics we included those members that regained full-benefit eligibility within 12 months of the current reporting quarter. The statistics provided below include those childless adult and TMA members who were disenrolled since April 2014 (the start of the demonstration) and were enrolled in the third quarter of demonstration year 3.

While program enrollment has stabilized within both demonstration population groups, the childless adult population (group 2) experienced an increase and the TMA adult population (group 1) experienced a decrease in re-enrollments from the prior quarter.

		Number re-enrolled within one year by benefit plan										
Quarter of Disenrollment	Waiver Group	BCSP	FSTMA	MAP	MAPW	MCD	MCDW	SSIMA	WWMA	All Benefit Plans	Total Disenrolled	% Re-enrolled within one year
04/14 - 06/14	CLA	4,962	1	260	16	399	97	155	8	5,898	16,291	36.20%
04/14 - 06/14	TMA	6,289	0	7	1	25	4	15	2	6,343	10,551	60.12%
07/14 - 09/14	CLA	5,686	1	229	14	386	95	142	3	6,556	14,478	45.28%
07/14 - 09/14	TMA	5,691	0	6	0	15	4	13	3	5,732	9,531	60.14%
10/14 - 12/14	CLA	6,890	1	277	13	412	101	121	2	7,817	17,310	45.16%
10/14 - 12/14	TMA	5,733	0	3	0	14	3	9	1	5,763	9,334	61.74%
01/15 - 03/15	CLA	8,346	0	261	10	470	94	146	5	9,332	20,828	44.81%
01/15 - 03/15	TMA	5,237	0	5	0	10	3	6	0	5,261	7,719	68.16%
04/15 - 06/15	CLA	13,240	2	323	16	478	108	185	1	14,353	37,233	38.55%
04/15 - 06/15	TMA	6,136	1	3	0	4	4	9	2	6,159	9,314	66.13%
07/15 - 09/15	CLA	10,843	0	270	16	425	113	149	5	11,821	27,122	43.58%
07/15 - 09/15	TMA	6,778	0	3	0	13	3	9	1	6,807	10,482	64.94%

CLA = Childless Adults

TMA = Transitional Medical Assistance

Outreach/Innovative Activities to Assure Access

All HMOs serving BadgerCare Plus members, which includes members of this demonstration waiver population, but are not limited to the demonstration population, are required to submit their member communication and outreach plans to the DHS for review. All materials are reviewed and approved by the DHS prior to distribution to members. Such materials include HMO-developed member handbooks, HMO-developed new member enrollment materials, and HMO-developed brochures.

The DHS also contracts with the City of Milwaukee Health Department to focus on outreach to current and prospective BadgerCare Plus members in Milwaukee County. As part of this agreement, staff is available at multiple locations throughout the county, including Milwaukee Health Department sites, in order to provide assistance with ACCESS applications and renewals, as well as with other enrollment and eligibility troubleshooting.

Collection and Verification of Encounter Data and Enrollment Data

Following is a summary of the quarterly managed care enrollment. Enrollment for the quarter shows approximately 85% of all childless adults enrolled in managed care which is comparable with managed care enrollment for other BadgerCare Plus populations. Managed care enrollment for the current quarter has increased slightly from the prior quarter.

BadgerCare Plus Childless Adult HMO Enrollment	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16
Anthum Blue Cross Blue Shield	13,684	14,053	14,669	14409	14602	14415	14,414	14,481	14,590
Childrens Community Health Plan	10,537	10,740	10,997	10750	10740	10624	10,745	10,691	10,826
Compcare	3863	3932	4040	4035	4024	3996	3954	3936	3949
Dean Health Plan	4772	4805	4879	4699	4633	4558	4559	4518	4598
Group Health Eau Claire	6376	6500	6791	6776	6692	6665	6701	6664	6728
Group Health South Central	2120	2138	2297	2246	2214	2149	2154	2054	2067
Gundersen	2419	2528	2546	2524	2528	2623	2570	2551	2562
Health Tradition	1199	1220	1281	1249	1247	1236	1253	1226	1248
iCare	6670	6752	6854	6611	6493	6387	6359	6298	6360
Managed Health Services	8628	8637	8753	8578	8406	8242	8263	8058	8142
Mercy	2268	2316	2449	2423	2398	2400	2388	2318	2396
Molina	9320	9499	9779	9511	9363	9256	9244	9196	9190
Network	8564	8548	8551	8564	8343	8204	8166	8088	8145
Physicians Plus	2796	2817	3003	2995	2928	2959	2939	2882	2855
Security	8578	8838	9119	9129	9031	8859	8948	8934	9006
Trilogy	3497	3604	3669	3630	3611	3567	3542	3508	3607
UnitedHealthcare	28,237	28,906	29,884	29726	29631	29701	29,699	29,628	29,990
Unity	1321	1351	1347	1288	1258	1280	1270	1287	1296
Total	**124,849**	**127,184**	**130,908**	**129,143**	**128,142**	**127,121**	**127,168**	**126,318**	**127,555**

Operational/Policy/Systems/Fiscal Developments/Issues

The state has not identified program developments/issues/problems that have occurred in the current quarter or are anticipated to occur in the near future that affect health care delivery, quality of care, approval and contracting with new plans, health plan contract compliance and financial performance relevant to the demonstration, fiscal issues, systems issues, and pertinent legislative or litigation activity.

Financial/Budget Neutrality Development/Issues

The state has not identified any significant developments/issues/problems with financial accounting, budget neutrality, and CMS 64 and budget neutrality reporting for the current quarter.

Please see Attachment A for a copy of the budget neutrality workbook.

The chart provides monthly and quarterly enrollment and expenditure data for the BadgerCare Plus Reform Adult Waiver since its inception in April 2014 through September 2016. This data is compared to the childless adult CORE baseline from April 2013 through March 2014 for budget neutrality purposes.

The data shows waiver enrollment increasing each month from April 2014 to March 2015. From April 2015 to September 2016 waiver enrollment decreases slightly as enrollment stabilizes. Fee-for-service (FFS) enrollment peaks in June 2014 and steadily declines each subsequent month through September 2016.

The monthly managed care enrollment growth rate peaked in March 2015, reflecting the systematic transition of enrollees from FFS to managed care. Managed care enrollees also declined starting in April 2015, tracking with the overall decline in childless adult enrollment.

Since the waiver's April 2014 inception, per-member-per-month (PMPM) costs have increased, but are well below the budget neutrality limits established with the waiver and we do not have any concerns or issues to report at this time.

Consumer Issues

Consumers have not reported any significant issues related to coverage and/or access to the program and benefits in the current quarter.

Quality Assurance/Monitoring Activity

The DHS consistently monitors activities using a systematic approach that ensures services for all BadgerCare Plus populations are reviewed for quality assurance.

In this quarter, DHS conducted the following activities:

a) Health Needs Assessment (HNA) for Childless Adults – DHS worked with the EQRO, MetaStar, and HMOs to develop a guide with the definitions on each measure HMOs will be evaluated for 2016 performance. Had conference calls with HMOs to gather feedback about the proposed measures and finalized the 2016 HNA evaluation methodology and timeframe. Also continued to receive quarterly HNA report from HMOs.

b) Pay-for-Performance (P4P) – Since 2009, DHS has successfully implemented a pay-for-performance program in which HMOs are held accountable to key metrics. For 2016, the P4P program is funded through a withhold of 2.5% of each HMO monthly capitation payments which is earned back by HMOs that meet targets on 14 different measures. The measures include a combination of preventive screenings (e.g. HEDIS Breast Cancer Screening, Childhood Immunizations), management of certain chronic conditions(e.g. Comprehensive Diabetes Care, Controlling High Blood Pressure), as well as behavioral health (e.g. Follow-Up After Mental Health Hospitalization, Antidepressant Medication Management) and dental measures (e.g. Annual Dental Visit).

   In July 2016, DHS received audited HEDIS data from HMOs for calendar year 2015. From July to September 2016, DHS also worked with our fiscal agent to calculate non-HEDIS measures directly from our encounter data system and with the EQRO to validate them. In mid-September

2016, DHS shared preliminary 2015 P4P results with HMOs for their review which were finalized with additional feedback in November 2016.

c) HMO Report Cards – After gathering feedback from the public and HMOs, DHS finalized HMO Report Cards comparing HMO performance across the measures in the P4P program. The HMO Report Cards are included in new members' enrollment packets to help them make an informed decision when selecting an HMO.

d) Performance Improvement Projects – DHS received the final Performance Improvement reports from HMOs for calendar year 2015 which were reviewed by MetaStar.

External Quality Review Activities

Following are the current activities for the third quarter of the demonstration completed by the External Quality Review Organization (EQRO) – MetaStar for the HMOs operating the BadgerCare+ program.

- Finalized the results and delivered the final reports for three HMOs information systems capability assessments.
- Finalized the results and delivered the final report for one HMO's compliance with standards review.
- In collaboration with DHS, finalized the Childless Adults Health Needs Assessment HMO Guide and MetaStar Reviewer Guidelines, and presented the new review activity timeline and standards to HMOs on a conference call. In addition, proposed and solidified the timeframe for review.
- Validated 2015 Performance Improvement Projects (PIPs) for all HMOs but one (who received an extension).
- Updated the DHS-HMO contract references in the accreditation deeming plan/crosswalk document
- Compiled the MetaStar Certification/Accreditation Deeming Plan review results, for both phase I and phase II
- Identified and confirmed agreement to the fiscal year 2016-2017 SSI CMR timeframe for review and standards, including the review timelines and criteria for three HMOs currently on an SSI CMR corrective action plan.
- Performed data abstraction and drafted preliminary calendar year 2015 annual report for HBO initiative (medical home enrollees).
- Amended the Annual Technical Report to include results from the fiscal year 2015-2016 compliance with standards and information systems capabilities assessment reviews.

Managed Care Reporting Requirements

Starting April 1, 2014 childless adults were enrolled in BadgerCare Plus fee-for-service benefits. Starting in July 2014 the state began enrolling childless adults into managed care with an average of 20,000 members in each month until all new members have been enrolled in managed care as applicable. HMOs are required to report to the DHS on the status of quality infinitives, PIPs, and other programmatic requirements.

Demonstration Evaluation

On November 12, 2014, the Centers for Medicare and Medicaid Services (CMS) approved the Department of Health Services (DHS) evaluation plan. The DHS has incorporated the approved evaluation plan as Attachment C.

The DHS has signed an interagency agreement and contracted with the UW Population Health Institute to conduct the evaluation. DHS and the UW began work on the evaluation September 1, 2015. The UW's Scope of Work and Workplan are included as Attachment E.

During the third quarter DHS and the UW Population Health Institute also discussed suggested modifications to the CMS approved evaluation design. Included in Attachment C are the following documents:

- Suggested Modifications to Approved Evaluation Design
- Evaluation Design Change Summary Crosswalk
- CMS Comments and Questions on Suggested Modifications
- Wisconsin Response to CMS Comments and Questions

DHS and the UW Population Health Institute will incorporate these modifications into the second survey and final evaluation report.

During the third quarter the UW Population Health Institute also completed the initial waiver demonstration survey. From the 2,562 members included in the mail survey sample following are the results:

Category	N	% of Total
Uncoded	1392	54.33%
Complete	937	36.57%
Known respondent-level refusal	4	0.16%
Blank questionnaire mailed back, implicit refusal	4	0.16%
Deceased	0	0.00%
Invitation forwarded by USPS with address update	105	4.10%
Invitation returned undelivered	113	4.41%
Invitation returned with forwarding information	7	0.27%
Total	2562	100%

In addition to the 927 surveys completed by mail, the UW Survey Center completed 332 phone surveys, bringing the total complete for the initial survey period to 1,305 or 50.9% of the 2,562 members surveyed.

During the fourth quarter the UW Population Health Institute will develop and deliver the interim evaluation progress report.

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Attachment A – Budget Neutrality Monitoring Workbook

Childless Adults Draft Financial Statistics - Waiver Reporting for Quarter Ending September 2016

Childess Adult Quarterly Comparison	Claim Expenditures ($ in AF)	Prior Year QE Expenditures ($ in AF)	Ave Monthly Enrollment	Prior Year QE Ave Monthly Enrollment	Ave Monthly PMPM	Prior Year QE Ave Monthly PMPM
QE June 2014	101,210,605	22,157,735	111,187	18,660	302.75	395.80
QE Sept. 2014	137,243,424	21,246,908	130,036	17,487	351.42	404.97
QE Dec. 2014	167,024,246	20,296,922	143,883	16,288	386.86	415.43
QE Mar. 2015	190,022,630	18,692,247	160,613	14,762	394.29	422.27

Adult Waiver Quarterly Trends	Claim Expenditures ($ in AF)	Quarter-over-Quarter Percent Change	Ave Monthly Enrollment	Quarter-over-Quarter Percent Change	Ave Monthly PMPM	Quarter-over-Quarter Percent Change
QE June 2015	194,501,401	-	155,823	-	416.22	-
QE Sept. 2015	195,525,111	0.53%	150,708	-3.28%	432.46	3.90%
QE Dec. 2015	195,787,397	0.13%	151,100	0.26%	431.92	-0.12%
QE Mar. 2016	202,532,256	3.44%	153,951	1.89%	438.53	1.53%
QE June 2016	345,927,911	70.80%	248,622	61.49%	773.07	76.29%

CORE Baseline (Childless Adults)	Claim Expenditures ($ in AF)	Fee for Service Enrollees	CAP Expenditures	CAP Members	Total Expenditures	Total Enrollees	Overall PMPM
Apr-13	2,624,273	2,383	4,956,173	16,741	7,580,446	19,124	396.38
May-13	2,582,125	2,333	4,832,357	16,330	7,414,482	18,663	397.28
Jun-13	2,409,378	2,203	4,753,430	15,989	7,162,808	18,192	393.73
Jul-13	2,553,051	1,926	4,721,124	15,922	7,274,175	17,848	407.56
Aug-13	2,395,752	1,832	4,671,819	15,674	7,067,571	17,506	403.72
Sep-13	2,359,752	1,836	4,545,410	15,272	6,905,162	17,108	403.62
Oct-13	2,568,860	1,898	4,411,923	14,809	6,980,783	16,707	417.84
Nov-13	2,222,150	1,657	4,372,572	14,633	6,594,722	16,290	404.83
Dec-13	2,444,132	1,579	4,277,285	14,288	6,721,417	15,867	423.61
Jan-14	2,372,043	1,519	4,069,353	13,844	6,441,396	15,363	419.28
Feb-14	2,153,802	1,403	3,929,873	13,330	6,083,675	14,733	412.93
Mar-14	2,373,347	1,360	3,793,829	12,830	6,167,176	14,190	434.61

BC Reform Adult Waiver (Childless Adults)	Claim Expenditures ($ in AF)	Fee for Service Enrollees	CAP Expenditures	CAP Members	Total Expenditures	Total Enrollees	Overall PMPM
Apr-14	26,293,463	96,182	3,144,558	9,532	29,438,021	105,714	278.47
May-14	31,276,064	100,972	2,951,909	8,878	34,227,973	109,850	311.59
Jun-14	33,724,699	105,854	3,819,912	12,144	37,544,611	117,998	318.18
Jul-14	34,866,576	100,968	7,541,232	23,898	42,407,808	124,866	339.63
Aug-14	31,278,043	86,034	13,633,326	44,239	44,911,369	130,273	344.75
Sep-14	31,688,502	73,344	18,235,745	61,625	49,924,247	134,969	369.89
Oct-14	30,266,965	56,976	23,979,739	82,485	54,246,704	139,461	388.97
Nov-14	25,478,921	44,182	28,569,601	99,066	54,048,522	143,248	377.31
Dec-14	26,403,009	35,918	32,326,011	113,022	58,729,020	148,940	394.31
Jan-15	26,394,875	33,569	34,803,062	121,838	61,197,937	155,407	393.79
Feb-15	25,007,418	33,697	36,623,234	128,387	61,630,652	162,084	380.24
Mar-15	29,129,303	30,584	38,064,738	133,765	67,194,041	164,349	408.85
Apr-15	29,456,121	29,722	37,519,234	132,317	66,975,355	162,039	413.33
May-15	27,360,880	28,230	36,302,788	127,131	63,663,669	155,361	409.78
Jun-15	28,891,476	28,546	34,970,901	121,523	63,862,377	150,069	425.55
Jul-15	29,659,951	26,494	35,844,716	124,332	65,504,667	150,826	434.31
Aug-15	28,853,707	25,755	36,152,405	125,021	65,006,112	150,776	431.14
Sep-15	28,864,462	25,540	36,149,870	124,981	65,014,332	150,521	431.93
Oct-15	29,296,944	25,971	36,168,361	124,108	65,465,305	150,079	436.21
Nov-15	28,427,953	27,012	36,052,707	123,951	64,480,661	150,963	427.13
Dec-15	29,971,594	29,061	35,869,837	123,196	65,841,431	152,257	432.44
Jan-16	30,065,391	31,689	35,724,664	122,387	65,790,055	154,076	427.00
Feb-16	30,824,207	29,776	36,215,887	124,301	67,040,094	154,077	435.11
Mar-16	32,445,700	25,521	37,256,408	128,179	69,702,108	153,700	453.49
Apr-16	31,988,700	25,109	36,606,162	126,178	68,594,862	151,287	453.41
May-16	32,564,891	24,708	36,412,900	125,171	68,977,791	149,879	460.22
Jun-16	33,137,412	24,426	36,234,086	124,295	69,371,498	148,721	466.45
Jul-16	31,697,473	23,505	36,285,179	124,384	67,982,652	147,889	459.69
Aug-16	34,594,685	23,829	36,406,424	124,261	71,001,109	148,090	479.45
Sep-16	30,932,861	22,734	36,580,364	124,682	67,513,225	147,416	457.98

*MC Enrollees have some of their expenditures in FFS Claims as well: Wrap around, Pharmacy, etc.
**FFS Claims are pulled on a date of service basis. PMPM comparisons may be skewed due to claims lag for months of July 2016 through September 2016
*** Expenditures and enrollment may not tie to future quarterly reports as numbers will be adjusted to account for claims lag
**** All data for Jul 2015 - Sep 2016 pulled on Dec 8th, 2016 from DSS, not from MBES quarterly report
***** Note that expenditures are not net of drug rebates. Net expenditures will be reported in MBES for the CMS 64 quarterly report.

Attachment B – Summary of Cost-Sharing for TMA Adults Only

Individuals affected by, or eligible under, the demonstration with the co-payments below

TMA Adults (Demonstration Population 1)

Monthly Premium Amount Based on FPL Percentage	Monthly Premium Amount as Percentage of Income
100.01 – 132.99%	2.0%
133 – 139.99%	3.0%
140 – 149.99%	3.5%
150 – 159.99%	4.0%
160 – 169.99%	4.5%
170 – 179.99%	4.9%
180 – 189.99%	5.4%
190 – 199.99%	5.8%
200 – 209.99%	6.3%
210 – 219.99%	6.7%
220 – 229.99%	7.0%
230 – 339.99%	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%

Attachment C – Demonstration Evaluation Plan & Approved Modifications


WI BadgerCare Reform Final Approve


BadgerCare Reform Demonstration Evalua


Suggested Modifications to Appr


Evaluation Design Change Summary Cr


CMS Comments and Questions on Suggest


Wisconsin Response to CMS Comments an

Attachment D – BadgerCare Plus Reform Waiver Project Work Plan

BadgerCare Plus
Reform Waiver Projec

Attachment E – University of Wisconsin Scope of Work & Project Work Plan

BadgerCare Reform
Waiver Evaluation - S

BadgerCare Plus Reform Waiver Project Workplan

ID	Schedule	STC	Task Name	Duration	Start	Finish	Responsible	Dependency
1			**BadgerCare Plus Reform Waiver Project**	**1446 days**	**Mon 12/30/13**	**Mon 7/15/19**		
2			CMS Waiver Approval	1 day	Mon 12/30/13	Mon 12/30/13		
3			Confirm DHS and CMS Waiver Staff Assignments	11 days	Tue 3/4/14	Tue 3/18/14		
4		**47, 48, 49**	**Evaluation Design**	**197 days**	**Tue 2/11/14**	**Wed 11/12/14**		
5			DRAFT of Core Elements	31 days	Tue 2/11/14	Tue 3/25/14	DHS Eval Design Workgroup	
6			DRAFT Evaluation Design	1 day	Tue 4/1/14	Tue 4/1/14	DHS Eval Design Workgroup	
7			DRAFT Evaluation Design Initial Review	9 days	Wed 4/2/14	Mon 4/14/14	DHS Eval Design Workgroup	
8			DRAFT Evaluation Design Revisions	5 days	Tue 4/15/14	Mon 4/21/14	DHS Eval Design Workgroup	
9			DRAFT Evaluation Design Final Review	6 days	Tue 4/22/14	Tue 4/29/14	DHS Waiver Management	
10			Submit DRAFT Evaluation Design to CMS	1 day	Wed 4/30/14	Wed 4/30/14	DHS Waiver Management	
11			CMS Review of DRAFT Evaluation Design	43 days	Thu 5/1/14	Mon 6/30/14	CMS Waiver Workgroup	
12			Submit DRAFT Evaluation Design Comments to DHS	1 day	Tue 7/1/14	Tue 7/1/14	CMS Waiver Management	
13			FINAL Evaluation Design	13 days	Wed 7/2/14	Fri 7/18/14	DHS Eval Design Workgroup	
14			FINAL Evaluation Design Initial Review	10 days	Mon 7/21/14	Fri 8/1/14	DHS Waiver Management	
15			FINAL Evaluation Design Revisions	10 days	Mon 8/4/14	Fri 8/15/14	DHS Waiver Workgroup	
16			FINAL Evaluation Design Final Review	10 days	Mon 8/18/14	Fri 8/29/14	DHS Waiver Management	
17			Submit FINAL Evaluation Design to CMS	1 day	Mon 9/1/14	Mon 9/1/14	DHS Waiver Management	
18			CMS Review/Approval of Evaluation Design	52 days	Tue 9/2/14	Wed 11/12/14	CMS Waiver Management	
19		**26**	**Post Award Forum**	**130 days**	**Mon 3/3/14**	**Fri 8/29/14**		
20			Confirm/Document Public Forum Requirements	21 days	Mon 3/3/14	Mon 3/31/14	DHS Public Forum Workgroup	
21			Reserve Public Forum Site(s)	22 days	Tue 4/1/14	Wed 4/30/14	DHS Public Forum Workgroup	
22			Develop Public Forum Notice and Solicitation Questions	50 days	Tue 4/1/14	Mon 6/9/14	DHS Public Forum Workgroup	
23			Issue Public Notice Announcing Public Forum	1 day	Tue 6/10/14	Tue 6/10/14	DHS Public Forum Workgroup	
24			Post Award Public Forum	1 day	Thu 7/10/14	Thu 7/10/14	DHS Public Forum Workgroup	
25			Consolidate/Format Public Forum Comments	22 days	Mon 7/14/14	Tue 8/12/14	DHS Public Forum Workgroup	

Project: BadgerCare Plus Reform W
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Task	External Tasks	Manual Task	Finish-only		
Split	External Milestone	Duration-only	Deadline		
Milestone	Inactive Task	Manual Summary Rollup	Progress		
Summary	Inactive Milestone	Manual Summary			
Project Summary	Inactive Summary	Start-only			

BadgerCare Plus Reform Waiver Project Workplan

ID	Schedule	STC	Task Name	Duration	Start	Finish	Responsible	Dependency
26	✓		Review Public Forum Comments	12 days	Wed 8/13/14	Thu 8/28/14	DHS Waiver Management	
27	✓		Submit Public Forum Comments to CMS	1 day	Fri 8/29/14	Fri 8/29/14	DHS Waiver Management	
28		**27**	**Quaterly Progress Reports**	**1219 days**	**Tue 4/1/14**	**Fri 11/30/18**		
29			**Quaterly Progress Report (Initial) - Content/Format Confirmation**	**44 days**	**Tue 4/1/14**	**Fri 5/30/14**		
30	✓		Budget Neutrality Monitoring Spreadsheet	34 days	Tue 4/1/14	Fri 5/16/14	DHS BFM	
31	✓		Current Events Affecting Health Care Delivery	34 days	Tue 4/1/14	Fri 5/16/14	DHS BBM	
32	✓		Semi-Annual Tribal Consultation Meeting Summary	34 days	Tue 4/1/14	Fri 5/16/14	DHS BFM	
33	✓		Action Plans (Policy/Admin/Budget)	34 days	Tue 4/1/14	Fri 5/16/14	DHS BBM	
34	✓	34	Monthly Enrollment Report	34 days	Tue 4/1/14	Fri 5/16/14	DHS BOC	
35	✓		Complaints/Grievances/Appeals Filed	34 days	Tue 4/1/14	Fri 5/16/14	DHS BEPS	
36	✓		Evaluation Activities and Interim Findings	34 days	Tue 4/1/14	Fri 5/16/14	DHS BBM	
37	✓		Quality Assurance Monitoring	34 days	Tue 4/1/14	Fri 5/16/14	DHS BBM	
38	✓		Draft Quarterly Progress Report	34 days	Tue 4/1/14	Fri 5/16/14	DHS BOC	
39	✓		Draft Quarterly Progress Report Review	5 days	Mon 5/19/14	Fri 5/23/14	DHS Waiver Management	
40	✓		Draft Quarterly Progress Report Revisions	2 days	Mon 5/26/14	Tue 5/27/14	DHS BOC	
41	✓		Final Draft Quarterly Progress Report Review	2 days	Wed 5/28/14	Thu 5/29/14	DHS Waiver Management	
42	✓		Submit Quarterly Progress Report to CMS	1 day	Fri 5/30/14	Fri 5/30/14	DHS BOC	
43	✓		**Quarterly Progress Report - August 2014**	**1 day**	**Fri 8/29/14**	**Fri 8/29/14**	**DHS BOC**	
44	✓		Budget Neutrality Monitoring Spreadsheet	10 days	Fri 8/1/14	Thu 8/14/14	DHS BFM	
45	✓		Current Events Affecting Health Care Delivery	10 days	Fri 8/1/14	Thu 8/14/14	DHS BBM	
46	✓		Semi-Annual Tribal Consultation Meeting Summary	10 days	Fri 8/1/14	Thu 8/14/14	DHS BFM	
47	✓		Action Plans (Policy/Admin/Budget)	10 days	Fri 8/1/14	Thu 8/14/14	DHS BBM	

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Task	External Tasks	Manual Task	Finish-only
Split	External Milestone	Duration-only	Deadline
Milestone	Inactive Task	Manual Summary Rollup	Progress
Summary	Inactive Milestone	Manual Summary	
Project Summary	Inactive Summary	Start-only	

BadgerCare Plus Reform Waiver Project Workplan

ID	Schedule	STC	Task Name	Duration	Start	Finish	Responsible	Dependency
48	✓	34	Monthly Enrollment Report	10 days	Fri 8/1/14	Thu 8/14/14	DHS BOC	
49	✓		Complaints/Grievances/Appeals Filed	10 days	Fri 8/1/14	Thu 8/14/14	DHS BEPS	
50	✓		Evaluation Activities and Interim Findings	10 days	Fri 8/1/14	Thu 8/14/14	DHS BBM	
51	✓		Quality Assurance Monitoring	10 days	Fri 8/1/14	Thu 8/14/14	DHS BBM	
52	✓		Draft Quarterly Progress Report	10 days	Fri 8/1/14	Thu 8/14/14	DHS BOC	
53	✓		Draft Quarterly Progress Report Review	5 days	Fri 8/15/14	Thu 8/21/14	DHS Waiver Management	
54	✓		Draft Quarterly Progress Report Revisions	3 days	Fri 8/22/14	Tue 8/26/14	DHS BOC	
55	✓		Final Draft Quarterly Progress Report Review	2 days	Wed 8/27/14	Thu 8/28/14	DHS Waiver Management	
56	✓		Submit Quarterly Progress Report to CMS	1 day	Fri 8/29/14	Fri 8/29/14	DHS BOC	
57	✓		Quarterly Progress Report - November 2014	1 day	Fri 11/28/14	Fri 11/28/14	DHS BOC	
58	✓		Quarterly Progress Report - February 2015	1 day	Fri 2/27/15	Fri 2/27/15	DHS BOC	
59	✓		Quarterly Progress Report - May 2015	1 day	Fri 5/29/15	Fri 5/29/15	DHS BOC	
60	✓		Quarterly Progress Report - August 2015	1 day	Mon 8/31/15	Mon 8/31/15	DHS BOC	
61	✓		Quarterly Progress Report - November 2015	1 day	Mon 11/30/15	Mon 11/30/15	DHS BOC	
62	✓		Quarterly Progress Report - February 2016	1 day	Mon 2/29/16	Mon 2/29/16	DHS BOC	
63	✓		Quarterly Progress Report - May 2016	1 day	Tue 5/31/16	Tue 5/31/16	DHS BOC	
64	✓		Quarterly Progress Report - August 2016	1 day	Wed 8/31/16	Wed 8/31/16	DHS BOC	
65	✓		Quarterly Progress Report - November 2016	1 day	Wed 11/30/16	Wed 11/30/16	DHS BOC	
66	☺		Quarterly Progress Report - February 2017	1 day	Tue 2/28/17	Tue 2/28/17	DHS BOC	
67			Quarterly Progress Report - May 2017	1 day	Wed 5/31/17	Wed 5/31/17	DHS BOC	
68			Quarterly Progress Report - August 2017	1 day	Thu 8/31/17	Thu 8/31/17	DHS BOC	
69			Quarterly Progress Report - November 2017	1 day	Thu 11/30/17	Thu 11/30/17	DHS BOC	
70			Quarterly Progress Report - February 2018	1 day	Wed 2/28/18	Wed 2/28/18	DHS BOC	
71			Quarterly Progress Report - May 2018	1 day	Thu 5/31/18	Thu 5/31/18	DHS BOC	
72			Quarterly Progress Report - August 2018	1 day	Fri 8/31/18	Fri 8/31/18	DHS BOC	
73			Quarterly Progress Report - November 2018	1 day	Fri 11/30/18	Fri 11/30/18	DHS BOC	

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Task	External Tasks	Manual Task	Finish-only
Split	External Milestone	Duration-only	Deadline
Milestone	Inactive Task	Manual Summary Rollup	Progress
Summary	Inactive Milestone	Manual Summary	
Project Summary	Inactive Summary	Start-only	

BadgerCare Plus Reform Waiver Project Workplan

ID	Schedule	STC	Task Name	Duration	Start	Finish	Responsible	Dependency
74		**30, 31, 32**	**Quaterly Financial Reports**	**1240 days**	**Mon 3/3/14**	**Fri 11/30/18**		
75			**Quaterly Financial Report (Initial) - Content/Format Confirmation**	**1240 days**	**Mon 3/3/14**	**Fri 11/30/18**		
76	✓		**Form CMS-64**	**86 days**	**Mon 3/3/14**	**Mon 6/30/14**		
77	✓		BC Reform Adults	54 days	Tue 7/1/14	Fri 9/12/14	DHS BFM	
78	✓		TMA Adults	54 days	Tue 7/1/14	Fri 9/12/14	DHS BFM	
79	✓		Submit CMS-64	1 day	Tue 9/30/14	Tue 9/30/14		
80	✓		**Reporting Expenditures**	**86 days**	**Mon 3/3/14**	**Mon 6/30/14**		
81	✓		Adminstrative Costs	54 days	Tue 7/1/14	Fri 9/12/14	DHS BFM	
82	✓		Tracking Expenditures (using MBES/CBES)	54 days	Tue 7/1/14	Fri 9/12/14	DHS BFM	
83	✓		Cost Settlements	54 days	Tue 7/1/14	Fri 9/12/14	DHS BFM	
84	✓		Cost Sharing Contributions	54 days	Tue 7/1/14	Fri 9/12/14	DHS BFM	
85	✓		Pharmacy Rebates	54 days	Tue 7/1/14	Fri 9/12/14	DHS BFM	
86	✓		FQHC Settlement Expenses	54 days	Tue 7/1/14	Fri 9/12/14	DHS BFM	
87	✓		Mandated Increase in Physician Payment Rates in 2013 and 2014 (exclusion)	54 days	Tue 7/1/14	Fri 9/12/14	DHS BFM	
88	✓		Draft Quarterly Financial Report	54 days	Tue 7/1/14	Fri 9/12/14	DHS BFM	
89	✓		Draft Quarterly Financial Report Review	5 days	Mon 9/15/14	Fri 9/19/14	DHS Waiver Management	
90	✓		Draft Quarterly Financial Report Revisions	3 days	Mon 9/22/14	Wed 9/24/14	DHS BFM	
91	✓		Final Draft Quarterly Financial Report Review	3 days	Thu 9/25/14	Mon 9/29/14	DHS Waiver Management	
92	✓		Submit Quarterly Financial Report to CMS	1 day	Tue 9/30/14	Tue 9/30/14	DHS BFM	
93	✓		Quarterly Financial Report - November 2014	1 day	Fri 11/28/14	Fri 11/28/14	DHS BFM	
94	✓		Quarterly Financial Report - February 2015	1 day	Fri 2/27/15	Fri 2/27/15	DHS BFM	
95	✓		Quarterly Financial Report - May 2015	1 day	Fri 5/29/15	Fri 5/29/15	DHS BFM	
96	✓		Quarterly Financial Report - August 2015	1 day	Mon 8/31/15	Mon 8/31/15	DHS BFM	
97	✓		Quarterly Financial Report - November 2015	1 day	Mon 11/30/15	Mon 11/30/15	DHS BFM	

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Task	External Tasks	Manual Task	Finish-only
Split	External Milestone	Duration-only	Deadline
Milestone	Inactive Task	Manual Summary Rollup	Progress
Summary	Inactive Milestone	Manual Summary	
Project Summary	Inactive Summary	Start-only	

BadgerCare Plus Reform Waiver Project Workplan

ID	Schedule	STC	Task Name	Duration	Start	Finish	Responsible	Dependency
98	✓		Quarterly Financial Report - February 2016	1 day	Mon 2/29/16	Mon 2/29/16	DHS BFM	
99	✓		Quarterly Financial Report - May 2016	1 day	Tue 5/31/16	Tue 5/31/16	DHS BFM	
100	✓		Quarterly Financial Report - August 2016	1 day	Wed 8/31/16	Wed 8/31/16	DHS BFM	
101	✓		Quarterly Financial Report - November 2016	1 day	Wed 11/30/16	Wed 11/30/16	DHS BFM	
102	☺		Quarterly Financial Report - February 2017	1 day	Tue 2/28/17	Tue 2/28/17	DHS BFM	
103			Quarterly Financial Report - May 2017	1 day	Wed 5/31/17	Wed 5/31/17	DHS BFM	
104			Quarterly Financial Report - August 2017	1 day	Thu 8/31/17	Thu 8/31/17	DHS BFM	
105			Quarterly Financial Report - November 2017	1 day	Thu 11/30/17	Thu 11/30/17	DHS BFM	
106			Quarterly Financial Report - February 2018	1 day	Wed 2/28/18	Wed 2/28/18	DHS BFM	
107			Quarterly Financial Report - May 2018	1 day	Thu 5/31/18	Thu 5/31/18	DHS BFM	
108			Quarterly Financial Report - August 2018	1 day	Fri 8/31/18	Fri 8/31/18	DHS BFM	
109			Quarterly Financial Report - November 2018	1 day	Fri 11/30/18	Fri 11/30/18	DHS BFM	
110		**28**	**Demonstration Annual Reports**	**1162 days**	**Thu 1/1/15**	**Fri 6/14/19**		
111			**Demonstration Annual Report (Initial) - Content/Format Confirmation**	**1162 days**	**Thu 1/1/15**	**Fri 6/14/19**		
112	✓		Quarterly Report Requirement Summary	42 days	Thu 1/1/15	Fri 2/27/15	DHS BOC	
113	✓		Budget Neutrality Workbook	42 days	Thu 1/1/15	Fri 2/27/15	DHS BFM	
114	✓		Yearly Enrollment Reports	42 days	Thu 1/1/15	Fri 2/27/15	DHS BEPS	
115	✓		TMA Adults Monthly Disenrollment Report	42 days	Thu 1/1/15	Fri 2/27/15	DHS BEPS	
116	✓		Draft Demonstration Annual Report	42 days	Thu 1/1/15	Fri 2/27/15	DHS BOC	
117	✓		Draft Demonstration Annual Report Review	10 days	Mon 3/2/15	Fri 3/13/15	DHS Waiver Management	
118	✓		Draft Demonstration Annual Report Revisions	5 days	Mon 3/16/15	Fri 3/20/15	DHS BOC	
119	✓		Final Draft Demonstration Annual Report Review	5 days	Mon 3/23/15	Fri 3/27/15	DHS Waiver Management	
120	✓		Submit Draft Demonstration Annual Report to CMS	1 day	Mon 3/30/15	Mon 3/30/15	DHS BOC	
121	✓		CMS Review of Draft Demonstration Annual Report	34 days	Tue 3/31/15	Fri 5/15/15	CMS Waiver Management	
122	✓		Submit Final Demonstration Annual Report to CMS	22 days	Mon 5/18/15	Tue 6/16/15	DHS BOC	

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Task	External Tasks	Manual Task	Finish-only
Split	External Milestone	Duration-only	Deadline
Milestone	Inactive Task	Manual Summary Rollup	Progress
Summary	Inactive Milestone	Manual Summary	
Project Summary	Inactive Summary	Start-only	

ID	Schedule	STC	Task Name	Duration	Start	Finish	Responsible	Dependency
123			**Demonstration Annual Report - 2015**	**119 days**	**Fri 1/1/16**	**Wed 6/15/16**		
124	✓		Draft Demonstration Annual Report	42 days	Fri 1/1/16	Mon 2/29/16	DHS BOC	
125	✓		Draft Demonstration Annual Report Review	10 days	Tue 3/1/16	Mon 3/14/16	DHS Waiver Management	
126	✓		Draft Demonstration Annual Report Revisions	5 days	Tue 3/15/16	Mon 3/21/16	DHS BOC	
127	✓		Final Draft Demonstration Annual Report Review	5 days	Tue 3/22/16	Mon 3/28/16	DHS Waiver Management	
128	✓		Submit Draft Demonstration Annual Report to CMS	1 day	Tue 3/29/16	Tue 3/29/16	DHS BOC	
129	✓		CMS Review of Draft Demonstration Annual Report	34 days	Wed 3/30/16	Mon 5/16/16	CMS Waiver Management	
130	✓		Submit Final Demonstration Annual Report to CMS	22 days	Tue 5/17/16	Wed 6/15/16	DHS BOC	
131			**Demonstration Annual Report - 2016**	**119 days**	**Sun 1/1/17**	**Thu 6/15/17**		
132	☺		Draft Demonstration Annual Report	42 days	Sun 1/1/17	Mon 2/27/17	DHS BOC	
133	☺		Draft Demonstration Annual Report Review	10 days	Wed 3/1/17	Tue 3/14/17	DHS Waiver Management	
134	☺		Draft Demonstration Annual Report Revisions	5 days	Wed 3/15/17	Tue 3/21/17	DHS BOC	
135	☺		Final Draft Demonstration Annual Report Review	5 days	Wed 3/22/17	Tue 3/28/17	DHS Waiver Management	
136	☺		Submit Draft Demonstration Annual Report to CMS	1 day	Wed 3/29/17	Wed 3/29/17	DHS BOC	
137	☺		CMS Review of Draft Demonstration Annual Report	34 days	Thu 3/30/17	Tue 5/16/17	CMS Waiver Management	
138	☺		Submit Final Demonstration Annual Report to CMS	22 days	Wed 5/17/17	Thu 6/15/17	DHS BOC	
139			**Demonstration Annual Report - 2017**	**119 days**	**Tue 1/2/18**	**Fri 6/15/18**		
140			Draft Demonstration Annual Report	42 days	Tue 1/2/18	Wed 2/28/18	DHS BOC	
141			Draft Demonstration Annual Report Review	10 days	Thu 3/1/18	Wed 3/14/18	DHS Waiver Management	
142			Draft Demonstration Annual Report Revisions	5 days	Thu 3/15/18	Wed 3/21/18	DHS BOC	
143			Final Draft Demonstration Annual Report Review	5 days	Thu 3/22/18	Wed 3/28/18	DHS Waiver Management	
144			Submit Draft Demonstration Annual Report to CMS	1 day	Thu 3/29/18	Thu 3/29/18	DHS BOC	
145			CMS Review of Draft Demonstration Annual Report	34 days	Fri 3/30/18	Wed 5/16/18	CMS Waiver Management	
146			Submit Final Demonstration Annual Report to CMS	22 days	Thu 5/17/18	Fri 6/15/18	DHS BOC	
147			**Demonstration Annual Report - 2018**	**119 days**	**Tue 1/1/19**	**Fri 6/14/19**		
148			Draft Demonstration Annual Report	42 days	Tue 1/1/19	Wed 2/27/19	DHS BOC	

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Task	External Tasks	Manual Task	Finish-only
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Summary	Inactive Milestone	Manual Summary	
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BadgerCare Plus Reform Waiver Project Workplan

ID	Schedule	STC	Task Name	Duration	Start	Finish	Responsible	Dependency
149			Draft Demonstration Annual Report Review	10 days	Thu 2/28/19	Wed 3/13/19	DHS Waiver Management	
150			Draft Demonstration Annual Report Revisions	5 days	Thu 3/14/19	Wed 3/20/19	DHS BOC	
151			Final Draft Demonstration Annual Report Review	5 days	Thu 3/21/19	Wed 3/27/19	DHS Waiver Management	
152			Submit Draft Demonstration Annual Report to CMS	1 day	Thu 3/28/19	Thu 3/28/19	DHS BOC	
153			CMS Review of Draft Demonstration Annual Report	34 days	Fri 3/29/19	Wed 5/15/19	CMS Waiver Management	
154			Submit Final Demonstration Annual Report to CMS	22 days	Thu 5/16/19	Fri 6/14/19	DHS BOC	
155		**29, 49**	**Demonstration Final/Evaluation Report**	**140 days**	**Tue 1/1/19**	**Mon 7/15/19**		
156			Draft Demonstration Final/Evaluation Report	64 days	Tue 1/1/19	Fri 3/29/19	DHS BOC	
157			Draft Demonstration Final/Evaluation Report Review	10 days	Mon 4/1/19	Fri 4/12/19	DHS Waiver Management	
158			Draft Demonstration Final/Evaluation Report Revisions	5 days	Mon 4/15/19	Fri 4/19/19	DHS BOC	
159			Final Draft Demonstration Final/Evaluation Report Review	5 days	Mon 4/22/19	Fri 4/26/19	DHS Waiver Management	
160			Submit Draft Demonstration Final/Evaluation Report to CMS	1 day	Mon 4/29/19	Mon 4/29/19	DHS BOC	
161			CMS Review of Draft Demonstration Final/Evaluation Report	34 days	Tue 4/30/19	Fri 6/14/19	CMS Waiver Management	
162			Submit Final Demonstration Final/Evaluation Report to CMS	21 days	Mon 6/17/19	Mon 7/15/19	DHS BOC	
163		**51**	**Completion of Expiring Demonstrations' Evaluations**	**219 days**	**Tue 4/1/14**	**Fri 1/30/15**		
164	✓		Draft Demonstration Final/Evaluation Report	154 days	Tue 4/1/14	Fri 10/31/14	DHS BEPS	
165	✓		Draft Demonstration Final/Evaluation Report Review	10 days	Mon 11/3/14	Fri 11/14/14	DHS Waiver Management	
166	✓		Draft Demonstration Final/Evaluation Report Revisions	10 days	Mon 11/17/14	Fri 11/28/14	DHS BEPS	
167	✓		Final Draft Demonstration Final/Evaluation Report Review	11 days	Mon 12/1/14	Mon 12/15/14	DHS Waiver Management	

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Task	External Tasks	Manual Task	Finish-only
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Milestone	Inactive Task	Manual Summary Rollup	Progress
Summary	Inactive Milestone	Manual Summary	
Project Summary	Inactive Summary	Start-only	

ID	Schedule	STC	Task Name	Duration	Start	Finish	Responsible	Dependency
168	✓		Submit Draft Demonstration Final/Evaluation Report to CMS	60 days	Mon 9/29/14	Fri 12/19/14	DHS BEPS	
169	✓		CMS Review of Draft Demonstration Final/Evaluation Report	44 days	Tue 9/30/14	Fri 11/28/14	CMS Waiver Management	
170	✓		Submit Final Demonstration Final/Evaluation Report to CMS	45 days	Mon 12/1/14	Fri 1/30/15	DHS BEPS	
171			**Submit Waiver Renewal Request (Placeholder)**	**1 day**	**Sun 12/31/17**	**Sun 12/31/17**		
172			Identify Potential Changes or Continue Existing Authorities					
173			Similar tasks from original waiver request; public notice					
174			Look at informational bulletin room Aug 2015 for process					

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Task	External Tasks	Manual Task	Finish-only
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BadgerCare Plus Reform Waiver Project Workplan

Notes	1984 '84	'09	2034 '34
Include proposed approach for evaluator			
Approved evaluation design will be added to STCs as Attachment C			
Labor Day			

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Task		External Tasks		Manual Task		Finish-only	
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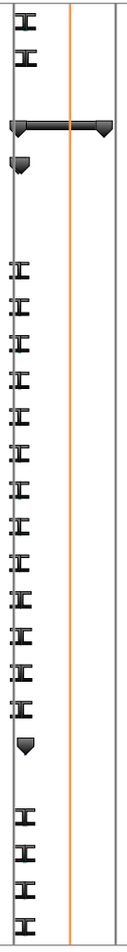
Project Summary		Inactive Summary		Start-only			

Notes
Due date represents first quarterly progress report following public forum
CMS confirmed we can combine and submit with expiring waiver quarterly reports.
Not applicable for initial report
Not applicable for initial report
Not applicable for initial report
Included initial enrollment
Not applicable for initial report
Includes Quarterly Financial Reports (see below)



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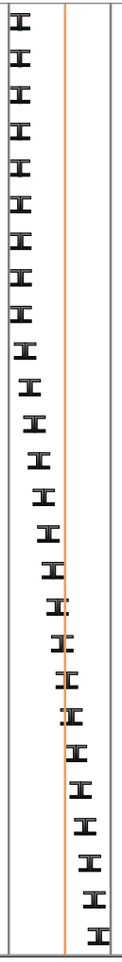
Task		External Tasks		Manual Task		Finish-only	
Split		External Milestone		Duration-only		Deadline	
Milestone		Inactive Task		Manual Summary Rollup		Progress	
Summary		Inactive Milestone		Manual Summary			
Project Summary		Inactive Summary		Start-only			

BadgerCare Plus Reform Waiver Project Workplan

Notes

1984 | 2034

'84 | '09 | '34



Task		External Tasks		Manual Task		Finish-only	
Split		External Milestone		Duration-only		Deadline	
Milestone		Inactive Task		Manual Summary Rollup		Progress	
Summary		Inactive Milestone		Manual Summary			
Project Summary		Inactive Summary		Start-only			

Project: BadgerCare Plus Reform W
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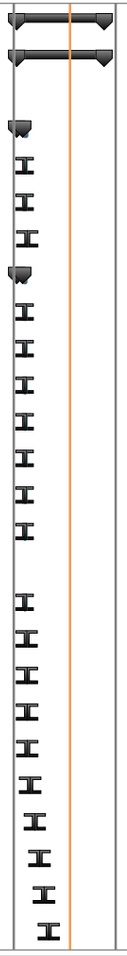
BadgerCare Plus Reform Waiver Project Workplan

Notes	1984		2034
	'84	'09	'34
Submit with Quarterly Progress Reports			



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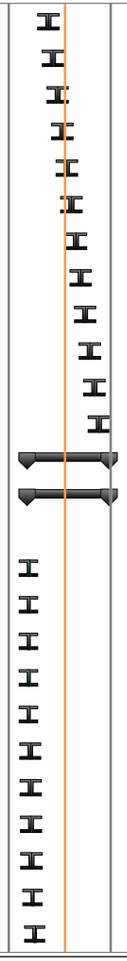
Task		External Tasks		Manual Task		Finish-only	
Split		External Milestone		Duration-only		Deadline	
Milestone		Inactive Task		Manual Summary Rollup		Progress	
Summary		Inactive Milestone		Manual Summary			
Project Summary		Inactive Summary		Start-only			

BadgerCare Plus Reform Waiver Project Workplan

Notes

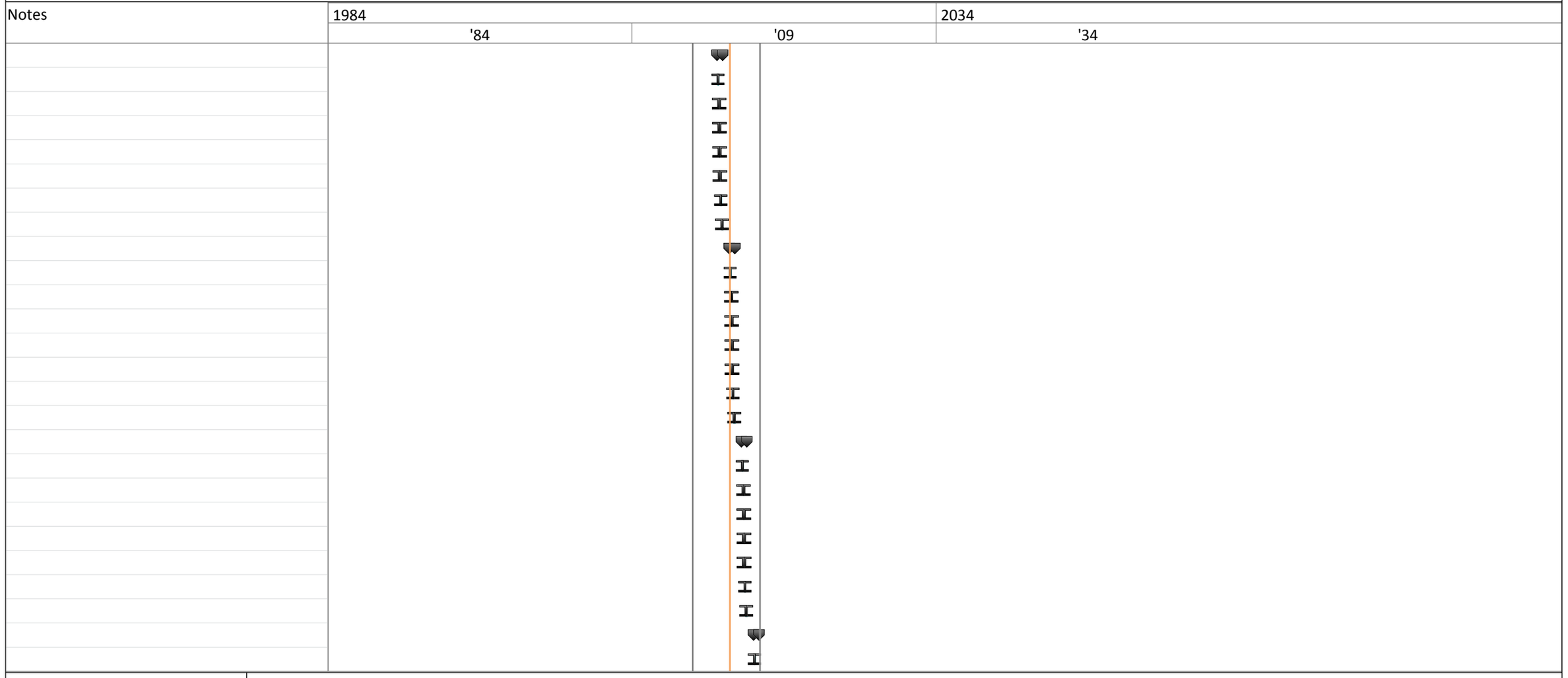
1984 '84 | '09 | 2034 '34



Project: BadgerCare Plus Reform W
Date: Wed 1/18/17

Task		External Tasks		Manual Task		Finish-only	
Split		External Milestone		Duration-only		Deadline	
Milestone		Inactive Task		Manual Summary Rollup		Progress	
Summary		Inactive Milestone		Manual Summary			
Project Summary		Inactive Summary		Start-only			

BadgerCare Plus Reform Waiver Project Workplan



Project: BadgerCare Plus Reform W
Date: Wed 1/18/17

Task		External Tasks		Manual Task		Finish-only	
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Milestone		Inactive Task		Manual Summary Rollup		Progress	
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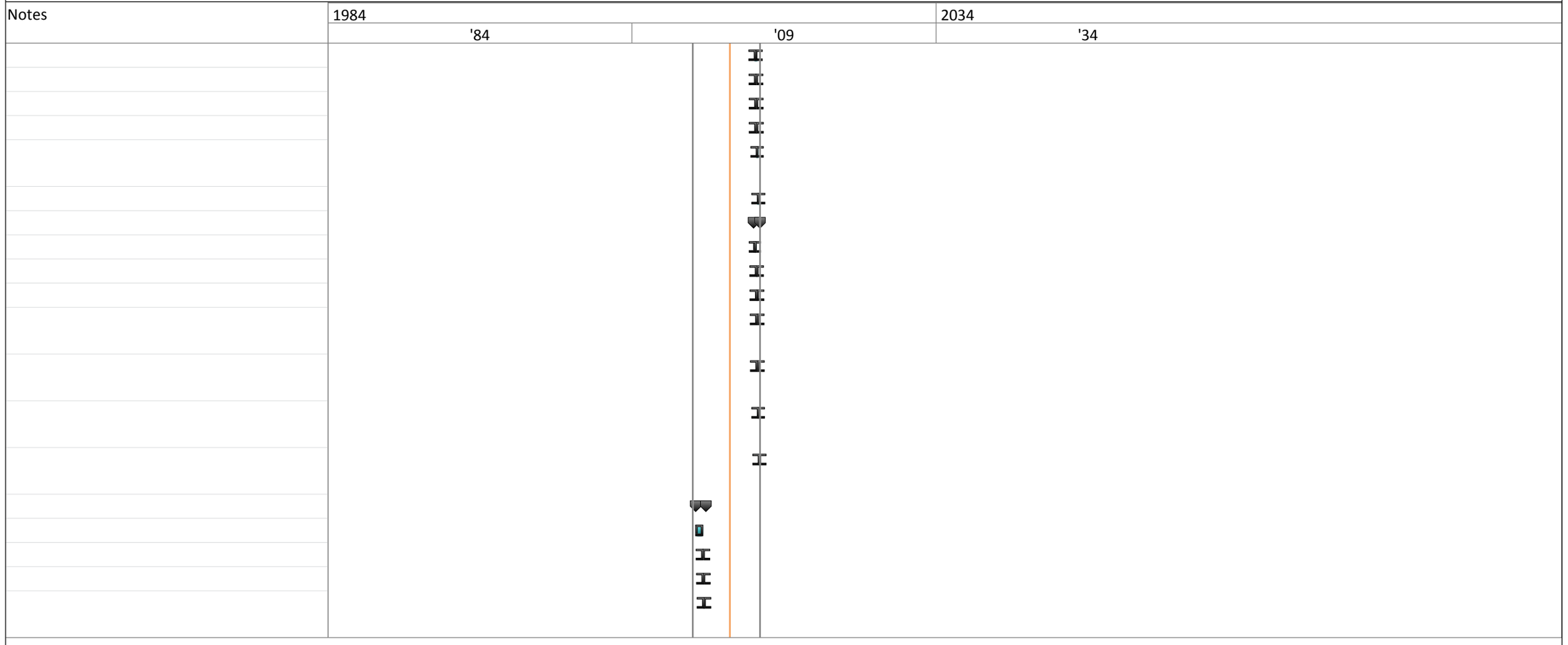
BadgerCare Plus Reform Waiver Project Workplan



Project: BadgerCare Plus Reform W
Date: Wed 1/18/17

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Milestone		Inactive Task		Manual Summary Rollup		Progress	
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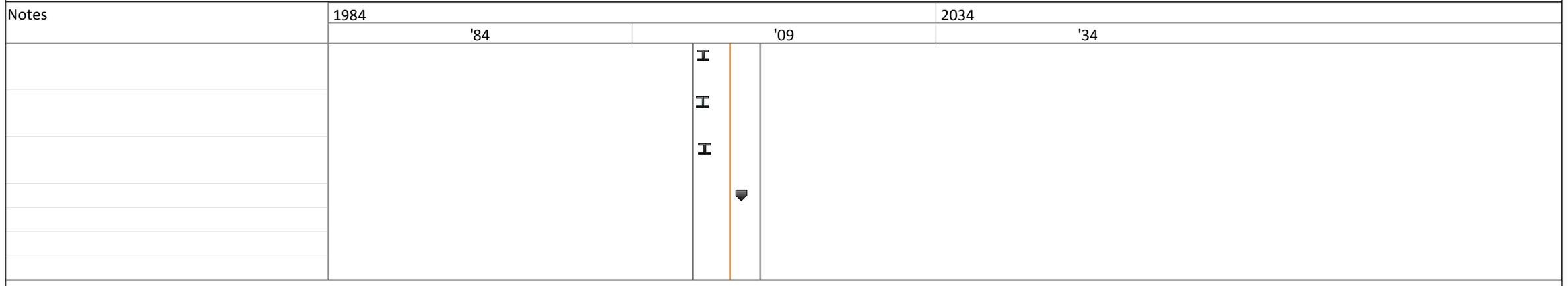
BadgerCare Plus Reform Waiver Project Workplan



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Split		External Milestone		Duration-only		Deadline	
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Project Summary		Inactive Summary		Start-only			

BadgerCare Reform Demonstration Draft Evaluation Design

October 31, 2014

Table of Contents

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**	**A1**	Population 1
> 133%	**A2**	A2	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%	D	D*	Population 2
200%	B	B	N/A

Standard Plan

Core Plan/Basic Plan

No Plan/Market Place

*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
For the TMA: Demonstration participants: Payment of Premiums				
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	--
Association of Enrollment Status to Utilization and/or Costs				
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
Enrollment Analysis by Payment of Premiums				

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
Payment of Premiums and 3-Month Restrictive Re-enrollment				
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	--
For CLA Adults: Effects of the Benefit Plan for demonstration expansion group				
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

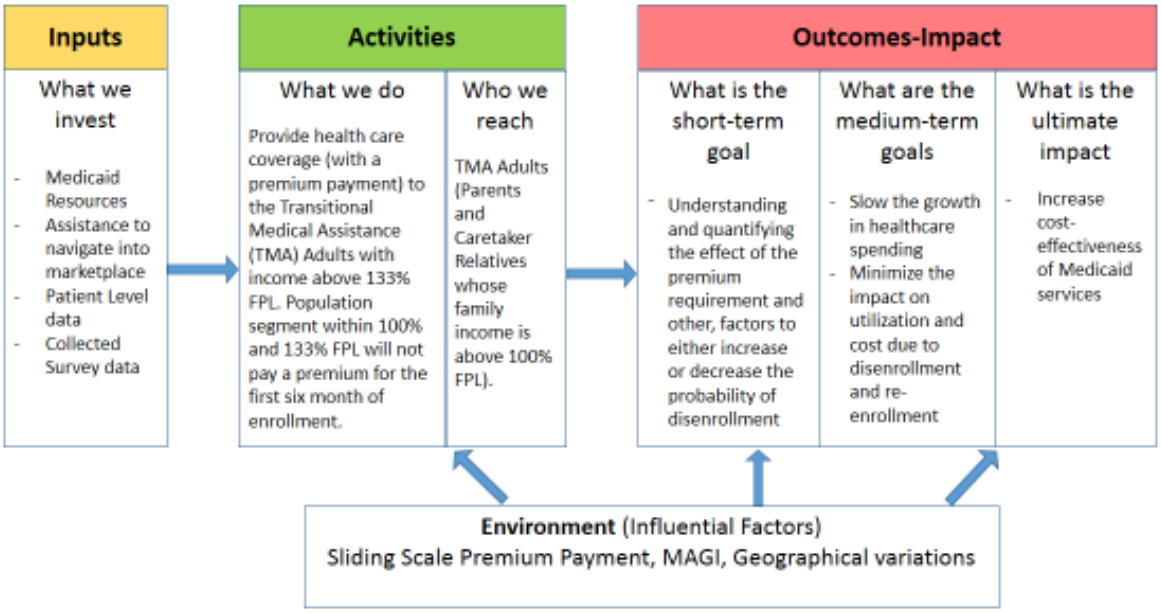
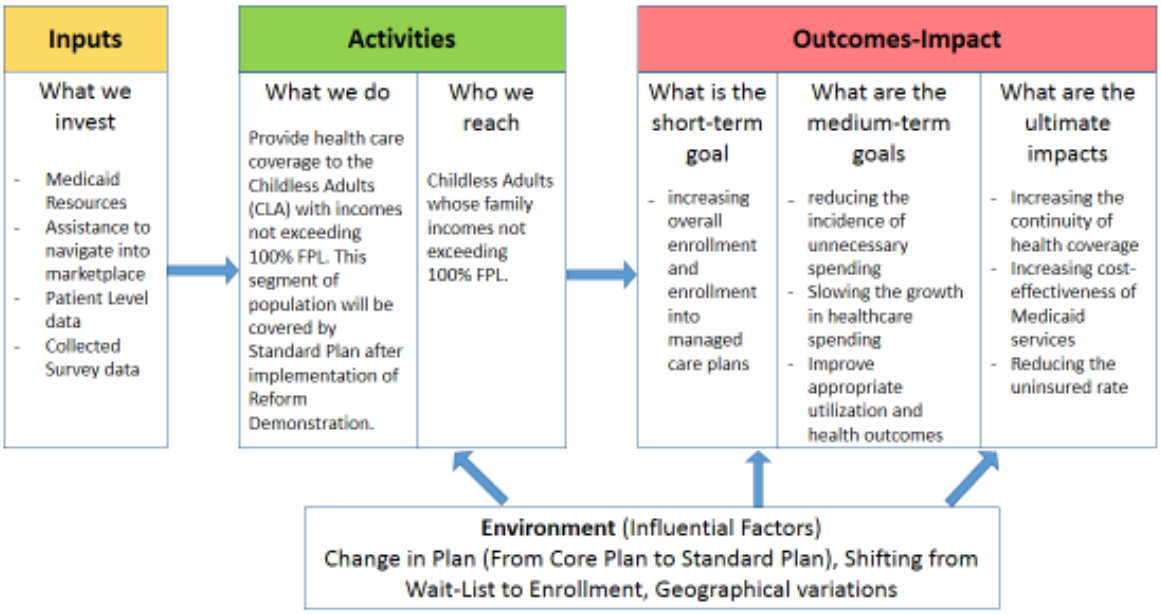


Figure 2b: Program Logic Model for BadgerCare Reform – Childless Adults



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[1]—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

[1] 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
For the TMA: Demonstration participants: Payment of Premiums				
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	--
Association of Enrollment Status to Utilization and/or Costs				
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
Enrollment Analysis by Payment of Premiums				
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
Payment of Premiums and 3-Month Restrictive Re-enrollment				
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	--
For CLA Adults: Effects of the Benefit Plan for demonstration expansion group				
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

	Case Study	Administrative Data Analysis	Case-Control Matching Study	Enrollment/ Disenrollment Survey
For the TMA: Demonstration participants: Payment of Premiums				
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	--
Association of Enrollment Status to Utilization and/or Costs				
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
Enrollment Analysis by Payment of Premiums				
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
Payment of Premiums and 3-Month Restrictive Re-enrollment				
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	--
For CLA Adults: Effects of the Benefit Plan for demonstration expansion group				
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	A1	Population 1
> 133%	A2	A2	Population 1

Standard Plan

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

FPL	Before	After	STC Cross-Reference
100%	D	D*	Population 2
200%	B	B	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 dis-enrollment, 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
Preventive / Screening	0031	Measure 3	Breast Cancer Screening (BCS) (HEDIS-NCQA)
Chronic	0057	Measure 19	Comprehensive Diabetes Care- HbA1c Testing (HEDIS-NCQA)
	0063	Measure 18	Comprehensive Diabetes Care- LDL-C Screening (HEDIS-NCQA)
Mental Health	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)
Emergency Dept.			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
Preventive / Screening	0031	Measure 3	Breast Cancer Screening (BCS) (HEDIS-NCQA)
Chronic	0057	Measure 19	Comprehensive Diabetes Care- HbA1c Testing (HEDIS-NCQA)
	0063	Measure 18	Comprehensive Diabetes Care- LDL-C Screening (HEDIS-NCQA)
Mental Health	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)
Emergency Dept.			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		
For the TMA: Demonstration participants: Payment of Premiums					
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.

4. Will the premium requirement increase the cost effectiveness (Outcomes/Cost) of Medicaid services?	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.	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 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.
5. Will the premium requirement increase the cost effectiveness (Utilization/Cost) of Medicaid services?	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).	FPL levels defined in terms of levels on the sliding premium scale.		Beneficiary level analysis. The control sample will be selected by split-sample method from within the TMA Adults population	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.
Association of Enrollment Status to Utilization and/or Costs					
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?	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.	FPL (hence sliding scale premium). Disenrollment/Re-enrollment history (Identify few frequent patterns of disenrollment / re-enrollment and create dummy variables on those patterns).	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	Beneficiary level analysis. The control sample will be selected by split-sample method from within the TMA Adults population	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.

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?	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.	FPL (hence sliding scale premium). Disenrollment/Re-enrollment history (Identify few frequent patterns of disenrollment / re-enrollment and create dummy variables on those patterns).	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	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.
Enrollment Analysis by Payment of Premiums					
8. What is the impact of premiums on enrollment broken down by income level and the corresponding monthly premium amount?	Disenrollment/Re-enrollment history (Identify few frequent patterns of disenrollment / re-enrollment and create dummy variables on those patterns).	FPL (hence sliding scale premium) with possible categorization into wider intervals (smaller number of buckets). Appendix 1.	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	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.
9. How is enrollment or access to care affected by the application of new, or increased, premium amounts?	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.	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.		Beneficiary level Analysis. The control sample will be selected by split-sample method from within the TMA Adults population	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.
Payment of Premiums and 3-Month Restrictive Re-enrollment					
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?	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.	This is a Binary variable and determined whether any member had experienced this condition or not.	Demographics (Age[Group], Gender, Race & Ethnicity), Education, County, Region, Risk Score[ACG or CDPS], belongs to MCO	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.

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.
For Childless Adults: Effects of the Benefit Plan for demonstration expansion group					
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.

14. Will this achieve a reduction in 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 Devices.	Before and after implementation comparison.		Beneficiary level analysis. The control sample will be selected by split-sample method from within the CLA 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 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.
15. Will the provision increase the cost effectiveness (Outcomes/Cost) of Medicaid services?	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.	Before and after implementation comparison.		Beneficiary level analysis. The control sample will be selected by split-sample method from within the CLA 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 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.

16. Will the provision increase the cost effectiveness (Utilization/Cost) of Medicaid services?	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).	Most notable predictor as described in the question is the effect of time.		Beneficiary level analysis. The control sample will be selected by split-sample method from within the CLA Adults population	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.
17. Will it demonstrate an increase in the continuity of health coverage?	Measure of Continuity of Coverage.	Before and after implementation comparison.		Beneficiary level analysis. The control sample will be selected by split-sample method from within the CLA Adults population	The effect may vary by income level or any other demographic variables. So some adjustment by control variables are also proposed for this question.

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.

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

This Table is found in Attachment B of STC Document.

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

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: • Chiropractors. • Nurse practitioners. • Optometrists. • Physicians (including psychiatrists and ophthalmologists) • Physician assistants. • Podiatrists. $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	Full coverage. $0.50 to $3.00 copayment per service.	Limited coverage of preventive, diagnostic, simple restorative, periodontics, and surgical procedures for pregnant women and children. Coverage limited to $750.00 per enrollment year. A $200.00 deductible applies to all services except preventive and diagnostic. Cost-sharing equal to 50 percent of allowable fee on all services. Pregnant women are	Coverage limited to certain emergency services. No copayment.	Coverage limited to certain emergency services. $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
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	Comprehensive drug benefit with coverage of generic and brand name prescription drugs and some over-the-counter (OTC) drugs. Members are limited to 5 prescriptions per month for opioid drugs. Copayments are as follows: • $0.50 for OTC drugs. • $1.00 for generic drugs. • $3.00 for brand name drugs.	Generic-only formulary drug benefit and some OTC drugs. Member are limited to 5 prescriptions per month for opioid drugs Members will be automatically enrolled in BadgerRx Gold. This is a separate program administered by Navitus Health Solutions. $5.00 copayment with no upper limits.	Generic-only formulary drug and some OTC drugs. Some brand name drugs are covered. Members are limited to 5 prescriptions per month for opioid drugs. Members will be automatically enrolled in BadgerRx Gold. This is a separate program administered by Navitus Health Solutions.	Generic-only formulary drug benefit and some OTC drugs. Humalog, Humalog Mix, Lantus, Tamiflu, and Relenza are the only brand name drugs covered. 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.

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.		The following items do not count towards the $2,500.00 enrollment year limit: • Hearing aids, hearing aid batteries, and accessories. • Bone-anchored hearing aids. • Cochlear implants. Hearing aid repairs are subject to the $2,500.00 enrollment year limit.	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	Full coverage. $3.00 copayment per day with a $75.00 cap per stay.	Full coverage. Copayments are as follows: • $100.00 stay for medical stays. • $50.00 copayment per stay for mental health and/or substance abuse treatment.	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). $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.	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. Subsequent inpatient stays are

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)			$100.00 copayment per stay for members with income from 100 percent to 200 percent of the FPL. There is a $300.00 total copayment cap per enrollment year for inpatient and outpatient hospital services for all income levels.	subject to the $7,500.00 deductible per enrollment year for inpatient and outpatient hospital services (excluding emergency room). Reimbursement for per diem facility stays will be capped at the length of 14 days. Outlier costs and hospital access payments are not included in the reimbursement rate. There is a $100.00 copayment per covered stay for nondeductible inpatient hospital stays.

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	Full coverage (not including room and board). $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. Copayment not required when services are provided in a hospital setting.	Coverage of this service is based on the Wisconsin State Employee Health Plan. 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.	Coverage limited to services provided by a psychiatrist under the physician services benefit. $0.50 to $3.00 copayment per service, limited $30.00 per provider, per enrollment year.	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:

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)		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. 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."		• Chiropractors. • Nurse practitioners. • Optometrists. • Physicians (including psychiatrists and ophthalmologists) • Physician assistants. • Podiatrists.

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)		• $15.00 per visit for narcotic treatment services (no copayment for lab tests). • $15.00 per visit for outpatient mental health diagnostic interview exam, psychotherapy — individual or group (no copayment for electroconvulsive therapy and pharmacological management). • $15.00 per visit for outpatient substance abuse services.		
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.			$15.00 copayment per visit for members with income from 100 percent to 200 percent of the FPL. $300.00 total copayment cap per enrollment year for inpatient and outpatient hospital services for all income levels.	(excluding emergency room). After the deductible is reached, full coverage of outpatient hospital services. Payment will not include outliers. There is a $60.00 copayment per visit for nondeductible visits.

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)	Full coverage. $0.50 to $3.00 copayment per service. 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).	Full coverage, limited to 20 visits per therapy discipline, per enrollment year. 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.)	Full coverage, limited to 20 visits per therapy discipline, per enrollment year. (Cardiac rehabilitation visits count towards the 20-visit limit for PT.) $0.50 to $3.00 copayment per service. Copayment obligation limited to the first 30 hours or	Full coverage, limited to 10 visits per therapy discipline, per enrollment year. (Cardiac rehabilitation visits count towards the 10-visit limit for PT.) $10.00 copayment per visit.

Physical Therapy (PT), Occupational Therapy, and Speech and Language Pathology (SLP) cont..		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. There are no monthly or annual copayment limits. $15.00 copayment per visit, per provider.	$1,500.00, whichever occurs first, during one enrollment year (copayment limits calculated separately for each discipline).	
Physician	Full coverage, including laboratory and radiology. $0.50 to $3.00 copayment per	Full coverage, including laboratory and radiology. $15.00 copayment per visit.	Full coverage, including laboratory and radiology. $0.50 to $3.00 copayment per	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:

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)	service, limited to $30.00 per provider per calendar year. No copayment for emergency services, anesthesia, or clozapine management.	No copayment for emergency services, anesthesia, or clozapine management.	service, limited to $30.00 per provider per enrollment year. No copayment for emergency services, anesthesia, or clozapine management.	• Chiropractors. • Nurse practitioners. • Optometrists. • Physicians (including psychiatrists and ophthalmologists) . • Physician assistants. • Podiatrists. Transplants and transplant- related services are not covered. Provider- administered drugs are not covered. There is a $10.00 copayment per visit. Most radiology services have a $5.00 or $20.00 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
Podiatry	Full coverage. $0.50 to $3.00 copayment per service, limited to $30.00 per provider per calendar year.	Full coverage. $15.00 copayment per visit.	Full coverage. $0.50 to $3.00 copayment per service, limited to $30.00 per provider per enrollment year.	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: • Chiropractors. • Nurse practitioners. • Optometrists. • Physicians (including psychiatrists and ophthalmologists) • Physician assistants. • Podiatrists. There is a $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
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	Full coverage including coverage of eyeglasses. $0.50 to $3.00 copayment per service.	One eye exam per enrollment year, with refraction. $15.00 copayment per visit.	General ophthalmological services are covered if billed with CPT codes 92002-92014 and certain qualifying diagnosis codes.	General ophthalmological services are covered if billed with CPT codes 92002-92014 and certain qualifying diagnosis codes. Certain visits are subject to a combined 10-visit limit. The combined 10-visit limit applies to certain visits provided by the following providers:

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.				• Chiropractors. • Nurse practitioners. • Optometrists. • Physicians (including psychiatrists and ophthalmologists) • Physician assistants. • Podiatrists

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: • $2.00 copayment for non- emergency ambulance trips. • $1.00 copayment per trip for transportation by SMV. • No copayment for transportation by common carrier or emergency ambulance.	Full coverage of emergency and non-emergency transportation to and from a certified provider for a covered service. Copayments are as follows: • $50.00 copayment per trip for emergency transportation by ambulance. • $1.00 copayment per trip for transportation by SMV. • No copayment for transportation by common carrier.	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.

EVALUATION OF WISCONSIN'S BADGERCARE PLUS HEALTH COVERAGE

FOR

PARENTS & CARETAKER ADULTS AND FOR CHILDLESS ADULTS

2014 WAIVER PROVISIONS

SCOPE OF WORK STATEMENT

SUBMITTED TO THE
WISCONSIN DEPARTMENT OF HEALTH SERVICES

MARCH 27, 2015

by the

Health Policy Research Team
UW Population Health Institute
http://bit.ly/1vNN9kV

INTRODUCTION/BACKGROUND

The UW Population Health Institute (The Institute) will conduct an evaluation of the Wisconsin BadgerCare Reform Demonstration Project, as outlined by the Wisconsin Department of Health Services (DHS) and approved by the federal CMS. The evaluation will include a mix of both quantitative and qualitative research techniques, using 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).

The evaluation will address the 17 evaluation questions stated as hypotheses, with embedded sub-questions, as laid out in the documents provided by the Wisconsin DHS. These hypotheses pertain to both of the study populations, with Questions 1-12 specific to the TMA Adults, and Questions 13-17 specific to the Childless Adults.

The project will include use of administrative data for quantitative analysis, along with a survey of current and former program members, and case studies.

The DHS had defined various methodological and statistical approaches. The Institute's scientific team will provide its recommendations to DHS about methodological and statistical approaches, as the first deliverable for this project, explaining any deviations from what DHS had outlined in its CMS-reviewed document.

Consistent with this, the Institute team will provide a re-stated version of the 17 hypotheses in a format to coincide with its recommended methodologic and statistical approach to the evaluation, along with explanation about how the Institute's restated version aligns with and meets the DHS and CMS evaluation objectives.

SCOPE OF WORK & OBJECTIVES

The scope of work for the Waiver Evaluation includes all planning, execution, implementation, analysis, and reporting vis-à-vis the 17 hypothesis and two study populations identified by DHS. Specific deliverables and milestones will be listed in the Work Requirements and Schedules and Milestones sections of this SOW.

Major deliverables include the following:

1. Design Report
2. Year 01 Member Survey
3. Interim analyses of administrative data in Years 02 and 03
4. Year 04 Member Survey
5. Case study narrative report.
6. Final report for submittal to CMS

The Institute's team will work in collaboration with the designated project sponsor and manager at the Wisconsin Department of Health Services. We will have regularly scheduled monthly meetings with DHS partners, and the Institute's project manager will be available to communicate regularly on an ad-hoc basis with the DHS manager.

All reports will be provided for 30-day advance review to DHS in draft form prior to being submitted to DHS as interim final or final product.

PERIOD OF PERFORMANCE/TIMEFRAME

The period of performance will be for 46 months, beginning on September 1, 2015 through June 30, 2019. All work will be scheduled to complete within this timeframe. The time frame is contingent on timely receipt of administrative data from DHS, and of review by DHS of draft documents. Any modifications or extensions to the timeline will be discussed with the DHS project manager.

PROJECT STAGES & TASKS

The Institute will be responsible for performing various tasks throughout project, which will unfold in stages:

Start-Up Phase: September 2015
Survey: Years 01 and 03
File Construction and Data Programming: Throughout
Project Handoff/Closure: April – June 2019

ACCEPTANCE /COMPLETION CRITERIA

Once all project tasks have been completed, the project will enter the handoff/closure stage. During this stage of the project, the Institute will provide its project closure report and project task checklist to the DHS Project Manager. The acceptance of this documentation by the DHS Project Manager acknowledges acceptance of all project deliverables and that the Institute has met all assigned tasks.

OTHER REQUIREMENTS AND ASSUMPTIONS

This project depends on the timely completion of a needed Business Associate Agreement and Data Use Agreements between DHS and the Institute, and the ongoing timely provision of data from DHS throughout the project period. It also requires timely review and feedback on questions or drafts that are submitted to DHS.

KEY PERSONNEL

<u>Scientific Investigators</u>

Marguerite Burns, PhD – UW Madison: 20% FTE. Dr. Burns will lead the development of methodological and statistical approach, and oversee the data construction,

programming, and analysis for the hypotheses pertaining to Unnecessary Services and Improved Health Outcomes.

Laura Dague, PhD – Texas A&M University: 20% FTE: Dr. Dague will lead the development of methodological and statistical approach, and oversee the data construction, programming, and analysis for the hypotheses pertaining to Slowing Growth in Healthcare Spending and Cost Impact Analysis.

Lindsey Leininger, PhD - Mathematica: 20% FTE. Dr. Leininger will lead the development of methodological and statistical approach, and oversee the data construction, programming, and analysis for the hypotheses pertaining to Effects of the RRP and Continuity of Coverage.

Thomas DeLeire, PhD – Georgetown University: Engaged as a consultant to provide input on methodological approaches and statistical interpretation on a limited basis.

Project Management and Research Staff

Donna Friedsam, MPH: 25% FTE will serve as Project Manager, liaison to DHS, and also researcher, supporting all components of the study and responsible for all reports and completion of deliverables to DHS.

Kristen Voskuil, MA: 50% FTE will serve as data Programmer and Analyst across all components of the study.

Graduate Student: 50% FTE. An economics doctoral student will provide data programming and statistical services and methodological support.

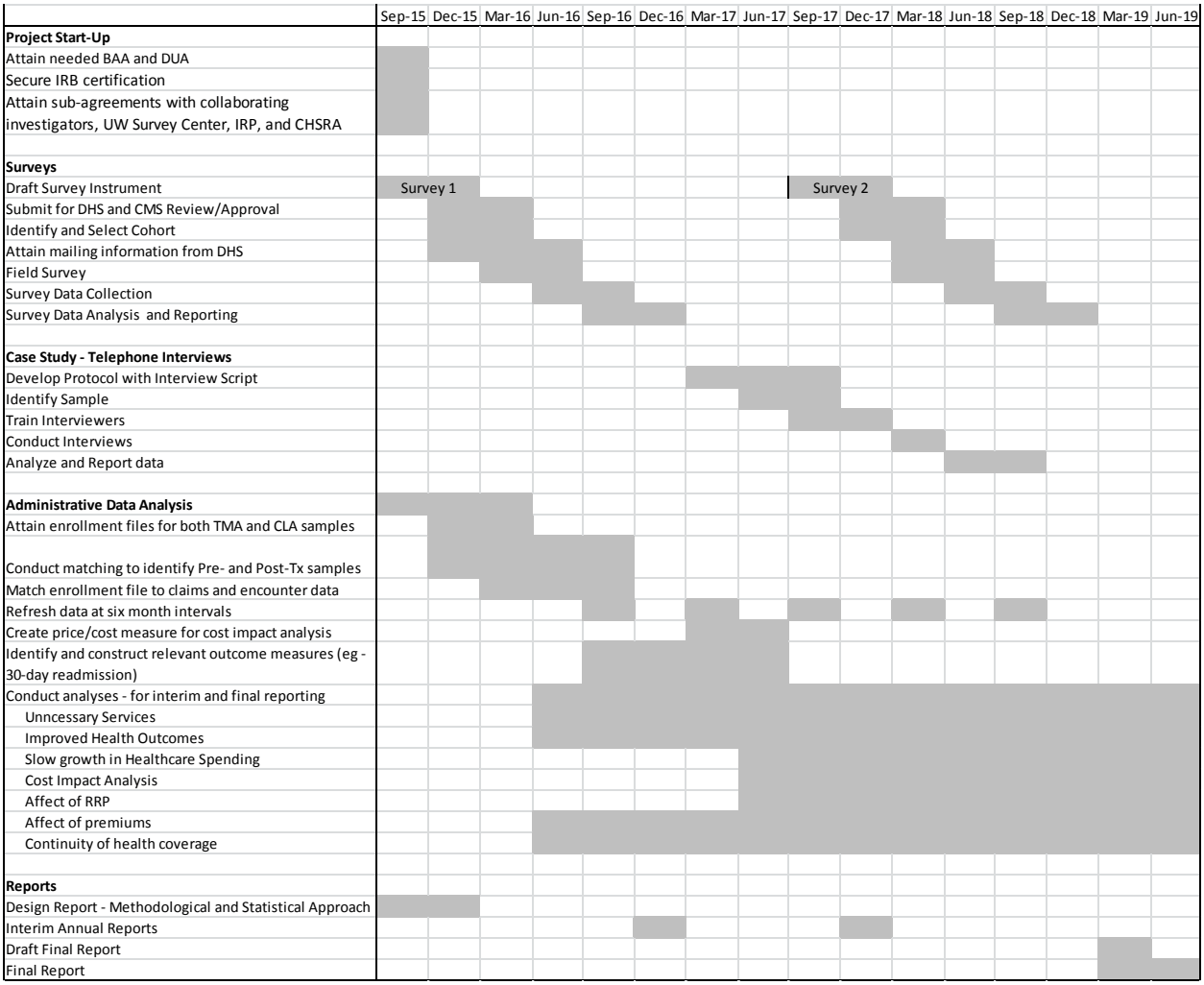
Survey Research and Case Studies

Contracted to the UW Survey Research Center (John Stevenson & Bob Craddock).

Data Management

Contracted to the UW Institute for Research on Poverty (IRP – Steve Cook & Maggie Smith) for cleaning, identity-masking, and secure storage of CARES data, and to the UW Centers for Health Systems Research and Analysis (CHSRA – Jim Robinson, Richard Ross, various staff) for cleaning, identity masking, and secure storage of MMIS claims and encounter data. Both IRP and CHSRA staff also assist the Institute with matching IRP to MMIS data.

SCHEDULE/MILESTONES:



Hypotheses	Evaluation Team Planned Approach	DHS Proposal
Payment of Premiums and The Effect of Premiums: Q 1-5; 8,9		
1: Will the premium requirement reduce the incidence of unnecessary services? 2: Will the premium requirement lead to improved health outcomes? 3: Will the premium requirement slow the growth in healthcare spending? 4: Will the premium requirement increase the cost effectiveness (Outcomes/Cost) of Medicaid services? 5: Will the premium requirement increase the cost effectiveness (Utilization/Cost) of Medicaid services?	1. Descriptive analysis of administrative data. Report the effect of the premium on 5 outcome measures: 1) rates of unnecessary service use, 2) rate on various health outcomes, 3) health spending, 4) cost-effectiveness over time (as defined by the ratio of health outcomes to spending), and 5) cost-effectiveness (as defined by the ratio of healthcare utilization to spending), over time by TMA status, income, premium payment status, and other demographic characteristics available through CARES. We will include tabulations as well as a graphical and regression analysis. 2. Causal analysis of administrative data using a difference-in-differences study design. Compare the 5 outcome measures for those affected by the policy (Treatment Group 1) to those not affected by the policy (Comparison Group 1 and Comparison Group 2 in separate analyses), over time. A purely descriptive analysis would not account for secular changes that might affect the 5 outcome measures nor the potential for selection into TMA status. This design allows identification of the causal effect of premiums by assuming that the 5 outcome measures for the treatment group would have evolved similarly over time as that of the comparison group(s) in the absence of the implementation of the premium requirement. For estimation, we will use an appropriate econometric model that incorporates the nature and distribution of the outcome variable. 3. We will also perform a within-person analysis that considers whether outcomes change over time for those affected by the policy conditional on remaining enrolled.	"Case Study", "Administrative Data Analysis", and "Case-Control Matching" by statistically matching those who drop out of TMA within 12 months of premium implementation to those who do not drop out.
8: What is the impact of premiums on enrollment broken down by income level and the corresponding monthly premium amount?	1. Descriptive analysis of administrative data. We will provide a description of TMA enrollment over time, including the probability of transitioning to TMA, by TMA status, income, premium payment status, and other demographic characteristics available through CARES. 2. Causal analysis of administrative data using an interrupted time series study design. Compare the rate of transitions from MA adult to TMA status in order to understand whether premium requirements affect the incentive to take up TMA and/or	

	experience the types of transitions that would lead to a qualifying event. We will also use this design to study the probability of exit from TMA. This design allows us to identify the causal effect of premiums by assuming that enrollment behavior in the TMA population would have evolved similarly over time if not for the premium requirements. We will use econometric modeling techniques that appropriately account for serial correlation. 3. Regression discontinuity design within the TMA population to study the effect of premium amounts. This design involves comparing the enrollment behavior of those who transition and have incomes just low enough to qualify them for a particular premium amount relative to those who transition and have incomes just higher, qualifying them for a higher premium amount. The strength of this design is that it ensures populations are highly similar (as both transitioned from MA) rather than relying on a comparison of adults who did not transition, who may be different from those who did in unobservable ways that are predictive of the enrollment outcome. We will perform this analysis for each level of the required premium.	
9: How is access to care affected by the application of new, or increased, premium amounts?	1. Descriptive analysis of survey data: The survey that will be fielded in Spring 2016 will include measures of access to care (e.g., usual source of care and experience of any unmet need for medical care), which is not well measured from administrative claims data. The survey will include both current TMA enrollees as well as those who have been placed in an RRP, so that both those who are and are not currently paying premiums are represented. We will summarize survey measures of beneficiary access to care stratified by TMA and premium-requirement status, providing tabular, graphical, and regression-adjusted analyses. 2. Matched analysis of administrative data. If feasible, we will enhance the survey by matching the survey data to the administrative data. This will allow us to observe more precise measures of income and enrollment, which will facilitate a causal analysis. In particular, we will use a regression discontinuity design within the TMA population in order to study the effect of premium amounts. This design involves comparing the surveyed access to care responses of those who transition and have incomes just	"Case Study", "Administrative Data Analysis", "Case-Control Matching", and "Enrollment/Disenrollment Survey"

	low enough to qualify them for a particular premium amount relative to those who transition and have incomes just higher, qualifying them for a higher premium amount. The strength of this design is that it ensures populations are highly similar rather than relying on a comparison of adults who did not transition, who may be different from those who did in unobservable ways that are predictive of the enrollment outcome. We will perform this analysis for each level of the required premium using appropriate econometric techniques.	
Restrictive Reenrollment Period for Failure to Pay Premium: Q6-7; 10-12		
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?	Regression model that compares pre- and post-RRP trends taking advantage of repeated measures of utilization within the same beneficiary, and also taking advantage of data from other beneficiaries who experience RRPs at different times. In this estimation strategy, beneficiaries in pre-RRP periods can serve as controls for themselves in the post-RRP period as well as for other beneficiaries who experience RRPs at different times.	"Case Study", "Administrative Data Analysis", "Case-Control Matching", and "Enrollment/Disenrollment Survey"
7: Are costs and/or utilization of services different for those that are continuously enrolled compared to costs/utilization for beneficiaries that have disenrolled and then re-enrolled?	Difference-in-differences design to compare the longer-term trends in outcomes between the population of TMA beneficiaries that experience RRPs to several alternative groups that do not experience RRPs. 1. The first comparison is a within-group comparison for TMA with incomes 100-133% FPL in their first six months (when they are not subject to RRP) versus their second six months when they are subject to RRPs. The advantage of this comparison is that we observe the group during a time period when they are not at risk of losing coverage due to an RRP compared to a time period when the policy changes and they are exposed to an RRP. 2. Second, we can look at TMA populations who remain continuously enrolled (i.e. never experience an RRP), but are otherwise similar to those who do experience an RRP (using a propensity score matching process with baseline demographic characteristics). Third, we can compare TMA beneficiaries with an RRP to similar beneficiaries in the CLA population, which is not subject to RRPs, and is therefore	"Case Study", "Administrative Data Analysis", "Case-Control Matching", and "Enrollment/Disenrollment Survey"

	less likely to experience enrollment gaps.	
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?	1. Hazard modeling to compare the relative risk of disenrollment in the first six months among TMA individuals with incomes 100%-133% FPL to disenrollment rates in other groups over similar amounts of time. The hazard model assumes that every individual has some underlying probability of leaving the program, whether or not they are subject to premiums and/or an RRP, and that this risk can be modeled as a function of time spent in the program, demographics, and policy variables. 2. Comparison of differences in both disenrollment rate and total premiums paid between individuals subject to the 3 month RRP 2016 versus the effect of 12 month RRP among similar individuals from prior time period, using propensity score matching.	"Case Study", "Administrative Data Analysis", "Case-Control Matching", and "Enrollment/Disenrollment Survey"
11: Does the RRP impact vary by income level? 12: If there is an impact from the RRP, explore the break-out by income level.	1. Comparison of subgroup effects within the 3 month RRP to the 12 month RRP (i.e., examining whether the average rate of premium payment is higher or lower among beneficiaries with higher income after the switch). This can be operationalized by interacting a variable for income category with the variable for policy group in a model that reports average differences in mean number of months of enrollment and carrying out a similar analysis for estimates of amount paid per month during enrollment. 2. Formal testing of statistical significance for interaction to indicate whether any variation identified is likely to reflect variation that cannot be explained simply by chance differences in the income groups.	"Case Study", "Administrative Data Analysis", and "Case-Control Matching"
Childless Adult Beneficiary Enrollment in the Medicaid Standard Plan: Q13-17		
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?	1. Descriptive analysis of administrative data. We will descriptively analyze 3 outcome measures: 1) health-related outcomes over time, 2) rates of unnecessary service use, and 3) the cost-effectiveness over time (as defined by the ratio of health-related outcomes to spending) for CLA beneficiaries by sample membership (i.e., new enrollees and transitioners), and for CLA transitioners relative to the matched parent/caretaker comparison group. We will include tabulations as well as a graphical and regression analysis.	"Case Study;" "Administrative Data Analysis;" and "Case-Control Matching."

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?	2. <u>Causal analysis of administrative data</u>. We will use a difference-in-differences study design to compare 3 outcome measures -- 1) health-related outcomes, 2) rates of unnecessary service use, 3) health-related-outcomes/spending ratio -- for those affected by the change to Standard Plan coverage (CLA transitioners) to those not affected by the coverage change (matched parents and caretakers), over time. This design allows us to identify the causal effect of Standard Plan coverage relative to Core Plan coverage by assuming that each of the 3 measures for the treatment group would have evolved similarly over time as that of the comparison group in the absence of the change in coverage. For estimation, we will use an appropriate econometric model that incorporates the nature and distribution of the outcome variable. 3. Expenditures estimation. Health care expenditures will be computed using an algorithm that maps encounter data to a fee-for-service schedule of allowable charges for the Wisconsin Medicaid population.	
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?		
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?	1. Descriptive analysis of administrative data. We will describe 2 outcome measures -- 1) the cost-effectiveness over time (as defined by the ratio of health care use to spending) and 2) the continuity of health insurance coverage and the continuity of health care over time -- for CLA beneficiaries by sample membership (i.e., new enrollees and transitioners), and for CLA transitioners relative to the matched parent/caretaker comparison group. We will include tabulations as well as a graphical and regression analysis. 2. Causal analysis of administrative data. We will use a difference-in-differences study design to compare the health care use/spending ratio and the continuity of coverage and care for those affected by the change to Standard Plan coverage (CLA transitioners) to those not affected by the coverage change (matched parents and caretakers), over time. This design allows us to identify the causal effect of Standard	"Case Study;" "Administrative Data Analysis;" "Case-Control Matching," and "enrollment/disenrollment survey."
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?	Plan coverage relative to Core Plan coverage by assuming that the each of the outcomes for the treatment group would have evolved similarly over time as that of the comparison group in the absence of the change in coverage. For estimation, we will use an appropriate econometric model that incorporates the nature and distribution of the outcome variable. 3. Expenditures estimation. Health care expenditures will be computed using an algorithm that maps encounter data to a fee-for-service schedule of allowable charges for the Wisconsin Medicaid population. 4. Descriptive and potential causal analysis of survey data. In addition to the 2014 survey of BadgerCare beneficiaries, the 2016 and 2018 surveys will provide repeated cross-sectional measures of health care continuity for CLA beneficiaries with income at or below 100%FPL. Using these data we will describe the continuity of health care over time for CLA beneficiaries. The planned surveys will also include a panel component, a subset of respondents that is surveyed up to three times (i.e., 2014, 2016, and 2018). This panel of respondents enables person-level, fixed effects analyses to estimate the effect of the transition to the Standard Plan from Core Plan coverage on health care continuity. In this fixed effects framework, each person serves as his/her own control. Implementation of this causal analysis is contingent upon retention of a sufficient sample of CLA panel respondents.	

EVALUATION OF WISCONSIN'S BADGERCARE PLUS HEALTH COVERAGE

for

PARENTS & CARETAKER ADULTS AND FOR CHILDLESS ADULTS

2014 CMS Section 1115 Waiver Provisions

Design Report: Analytic Methods

Update with revisions to December 2015 version

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by the
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I. INTRODUCTION/BACKGROUND

The UW Population Health Institute (The Institute) is conducting an evaluation of the Wisconsin BadgerCare Reform Demonstration Project, as outlined by the Wisconsin Department of Health Services (DHS) and approved by the federal Centers for Medicare and Medicaid Services (CMS). The evaluation uses rigorous methods to arrive at an understanding of how the changes implemented under Wisconsin's 2014 Medicaid 1115 Waiver Demonstration affect two Medicaid populations — (1) those individuals who are eligible for Medicaid through Transitional Medical Assistance (TMA Adults) and (2) those childless adults (CLAs) with an effective income level at, or below, 100% of the federal poverty level (FPL).

The evaluation will address the 17 evaluation questions defined by DHS in the "BadgerCare Reform Demonstration Draft Evaluation Design" of 10/31/2014. The UW team has reviewed DHS' prior approved plans and determined that our alternative methods outlined in the report submitted here will be more appropriate and offer the robust results expected by CMS. The Institute's team will utilize state-of-the art social scientific methods to rigorously answer each question. This design report outlines the selected methodological and statistical approaches, fulfilling the first deliverable for the project.

The design report proceeds as follows. We first summarize the proposed methods according to each evaluation question in Table 1 and then describe the data sources required for this evaluation. Our detailed explanation of the methodological approaches specific to each evaluation question is organized according to the programmatic changes authorized by the 1115 Waiver: Premium changes; 3-month RRP; and Standard Plan coverage for CLAs. Finally, an attachment at the end of this document provides a cross-walk between the evaluation team's plans and the DHS' Draft design, to clarify how this design report aligns with and meets the DHS and CMS evaluation objectives.

Table 1 Evaluation Questions and Associated Data Analysis Methods

Evaluation Question	Evaluation Method			
	Administrative Data		Survey Data	
	Descriptive Analysis	Causal Analysis	Descriptive Analysis	Causal Analysis
For TMA demonstration participants: Payment of Premiums				
1: Will the premium requirement reduce the incidence of unnecessary services?	X	DD & WP		
2: Will the premium requirement lead to improved health outcomes?	X	DD & WP		
3: Will the premium requirement slow the growth in healthcare spending?	X	DD & WP		
4: Will the premium requirement increase the cost effectiveness (Outcomes/Cost) of Medicaid services?	X	DD & WP		
5: Will the premium requirement increase the cost effectiveness (Utilization/Cost) of Medicaid services?	X	DD & WP		
Association of enrollment status to utilization and costs				
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?	X	WP	X	
7: Are costs and/or utilization of services different for those that are continuously enrolled compared to costs/utilization for beneficiaries that have disenrolled and then re-enrolled?	X	DD	X	
Enrollment analysis by payment of premiums				
8: What is the impact of premiums on enrollment broken down by income level and the corresponding monthly premium amount?	X	ITS & RD		
9: How is access to care affected by the application of new, or increased, premium amounts?		RD[a]	X	RD[a]
Payment of Premiums and Three Month Restrictive Re-enrollment				
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?	X	HZ	X	
11: Does the RRP impact vary by income level?	X			
12: If there is an impact from the RRP, explore the break-out by income level.	X			
For CLA Adults: Effects of the Benefit Plan for Demonstration Expansion Group				
13. Will the provision of a benefit plan that is the same as the one provided to all other BadgerCare adult beneficiaries result in	X	DD	X	

improved health outcomes?				
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?	X	DD	X	
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?	X	DD		
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?	X	DD		
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?	X	DD	X	WP[b]

Legend:
DD = Differences-in-Differences
ITS = Interrupted Time Series
RD= Regression Discontinuity
WP = Longitudinal within-person analysis
HZ = Hazard modeling

[a] Contingent on approval and feasibility of matching survey data to CARES data.
[b] Continent upon sufficient sample size for panel compo

II. DATA SOURCES

The evaluation will require administrative data from the Wisconsin DHS on (a) claims and encounters, (b) diagnostic codes, (c) enrollment, and disenrollment reason codes, and (d) premium payment information. We will also conduct a survey, in 2016 and 2018, of current and disenrolled members, assessing measures of utilization, health, and response to premiums.

A. Administrative Data from Wisconsin DHS

1. Enrollment Data

We will use longitudinal administrative data from the CARES system to measure enrollment. CARES also contains demographic information, including age, sex, educational attainment, county of residence, income, and income sources. The CARES data may contain data about an applicant's health insurance status at the time of application, although we have found previously that these fields are only regularly filled for the subset of enrollees for which this question is applicable (i.e., those for whom crowd-out provisions pertain.)

From these data, we will ascertain, where relevant, the month a person disenrolled from BadgerCare Plus (BC+). We will utilize reason codes associated with disenrollment. Further, these data contain "premium payment files" that contain monthly information on the dollar amount of premium owed, whether it was paid, and the date of payment.

2. Unemployment Insurance Earnings Data

We will use longitudinal administrative data from the Unemployment Insurance earnings reporting system to augment the enrollment data with individual measures of reported quarterly employment, wages, and firm industry code. In addition to these measures of individual-specific employment and wages (which are only available at case-level in CARES) and industry of employment, the unemployment insurance earnings data will allow us to assess the employment dynamics of individuals who transition from standard BadgerCare Plus into TMA.

3. Claims/Encounter Data

We will obtain claims and encounter data from the State's MMIS claims database. These data files include detailed ICD-9 diagnostic codes. We will draw claims data for the period from February 2008 (the beginning of the BC+ program) throughout the end of the current 1115 demonstration period. The claims and encounter data contain detailed information on diagnoses, procedure, and billing codes from which we will construct outcomes measures of health care use including health-related measures, general care use, and unnecessary care use as summarized in Table 2. Our health care use measures will include all-cause emergency department (ED) visits, inpatient hospitalizations, and outpatient visits. We will further categorize ED and inpatient measures of utilization into visits/admissions for ambulatory care sensitive conditions (ACSC) and preventable hospitalizations. Likewise, we will examine types of outpatient visits (e.g., primary, specialty and dental care).

ED visits will be measured as a day with an ED claim, identified using procedure billing codes. ACSC ED visits will be defined following Billings et al., (2000) and using the corresponding algorithm. Using this method, an ED visit is classified on a probabilistic basis into one of five categories, with the first three considered ACSC: (1) non-emergent, (2) emergent/primary care treatable, (3) emergent but preventable, and (4) emergent not preventable, (5) injuries, mental health, drug or alcohol, other.

Hospitalizations will be measured as the number of hospital stays, using bed day revenue codes to identify them in the claims. This analysis will distinguish between new admissions and transfers between hospitals, as transfers should not be considered new hospitalizations. Since transfers cannot be observed directly, any gap of less than two days between an admission and a discharge or last bed day will be considered a transfer.

Table 2 Health and health care outcome measures derived from MMIS data

Focus	Data Source	Description	Evaluation Question
Health-related			
Preventive health			
Breast cancer screening (BCS)	MMIS	NQF measure 0031; CMS adult core set #3;	1-7, 9, 13,15
Influenza immunization	MMIS	NQF measure 0041	1-7, 9, 13,15
Chronic health			
Diabetes care HBA1c testing	MMIS	NQF measure 0057; CMS adult core set #19	1-7, 9, 13,15
Diabetes care-LDL-C screening	MMIS	NQF measure 0063; CMS adult core set #18	1-7, 9, 13,15
Mental health & substance use disorder			1-7, 9, 13,15
Antidepressant medication management	MMIS	NQF measure 0105; CMS adult core set #20	1-7, 9, 13,15
Follow-up within 30 days after hospitalization for mental illness	MMIS	NQF measure 0576; CMS adult core set #13	1-7, 9, 13,15
Tobacco cessation counseling	MMIS		1-7, 9, 13,15
Initiation and engagement of alcohol and other drug dependence treatment	MMIS	NQF measure 0004; CMS adult core set #25	1-7, 9, 13,15
Health care use, general			
Office-based visits	MMIS	Non-emergency department outpatient and office-based visits, total and defined by type (e.g., dental, primary, specialty)	1-7, 9, 13,15
Emergency department visits	MMIS	ED visits, all cause	1-7, 9, 13,15
Inpatient admissions	MMIS	Inpatient admissions, all cause	1-7, 9, 13,15
Potentially avoidable/unnecessary health care use			
30-day all cause hospital readmission	MMIS		1-5, 9, 14,16
Emergency department visit for ambulatory care sensitive condition (ACSC)	MMIS		1-5, 9, 14,16
Inpatient stay for ACSC	MMIS		1-5, 9, 14,16
Preventable hospitalization	MMIS		1-5, 9, 14,16

Preventable hospitalizations will be measured using AHRQ (2010) Preventive Quality Indices (PQIs). PQIs indicate conditions for which good outpatient care can potentially prevent the need for hospitalization, or for which early intervention can prevent complications or more severe disease. The PQIs considered here will be hospital admissions due to the following: (1) short-term complications from diabetes, (2) perforated appendix, (3) long-term complications from diabetes, (4) chronic obstructive pulmonary disease (COPD), (5) hypertension, (6) congestive heart failure, (7) dehydration, (8) bacterial pneumonia, (9) urinary tract infection, (10) angina without procedure, (11) asthma.

Outpatient visits will be measured as the number of provider-day visits. Total outpatient visits will be defined using a procedure code that is used only for outpatient visits (which includes skilled nursing visits). We will follow HEDIS, CMS, and NQF technical specifications as appropriate to construct the measures of health-related care use identified in Table 2.

Health care costs will be estimated by using FFS allowable charges for FFS visits and by imputing costs for Medicaid managed care encounters using the same FFS schedule of allowable charges. Monthly costs per member will be calculated by summing the total amount spent on visits in all service categories by each member, and then dividing by the number of months enrolled.

B. Survey Data

We will utilize the UW Survey Center to conduct surveys for this project. We will conduct a mixed-mode mail and telephone survey to reach a statistically valid sample of the three study cohorts:

- BadgerCare TMA current
- BadgerCare RRP – both those currently in an RRP and those returned from an RRP
- BadgerCare Childless Adults- both currently enrolled and those who were enrolled prior to March 2014

In order to develop a longitudinal panel that can facilitate over-time comparisons, where possible the survey will resample from the 1,054 respondents from the Spring 2014 survey that was fielded under the prior BadgerCare waiver evaluation. We anticipate that more than half of the new survey sample will be comprised of resampled respondents.

The survey design and process will be based on and informed by that utilized by the Oregon Health Study[1], the Urban Institute's Health Reform Monitoring Survey[2],the RAND Patient Satisfaction Survey[3] , and lessons learned administering the national Medicaid CAHPS[4] and elsewhere[5]. The survey will include questions pertaining to health care coverage and utilization during enrollment and during the time not enrolled in BadgerCare, about health status, and about the effect of premiums on enrollment decisions.

The survey will be fielded in Spring 2016 and Spring 2018. It will include an initial mailing with two follow-up letters, and then a telephone follow-up interview to selected respondents and non-respondents. Tracking methods will be utilized to locate individuals no longer BadgerCare-enrolled who are not reached through state-provided addresses information.

III. METHODOLOGICAL & STATISTICAL APPROACH

Payment of Premiums and The Effect of Premiums: Questions 1-5, 8,9

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

A. DHS proposed: "Case Study," "Administrative Data Analysis," and "Case-Control Matching" by statistically matching those who drop out of TMA within 12 months of premium implementation to those who do not drop out.

B. Evaluation Team Proposes:

1. Method

a. Descriptive analysis of administrative data. We will provide rates of unnecessary service use over time by TMA status, income, premium payment status, and other demographic characteristics available through CARES. We will include tabulations as well as a graphical and regression analysis.

b. *Causal analysis of administrative data*. We will use a difference-in-differences study design to compare rates of unnecessary service use for those affected by the policy (Treatment Group 1) to those not affected by the policy (Comparison Group 1 and Comparison Group 2 in separate analyses), over time. A purely descriptive analysis would not account for secular changes that might affect unnecessary service use nor the potential for selection into TMA status. This design allows us to identify the causal effect of premiums by assuming that the unnecessary service use for the treatment group would have evolved similarly over time as that of the comparison group(s) in the absence of the implementation of the premium requirement. For estimation, we will use an appropriate econometric model that incorporates the nature and distribution of the outcome variable. We will also perform a within-person analysis that considers whether outcomes change over time for those affected by the policy conditional on remaining enrolled.

c. *Empirical Models.* Our analytic models will take the following general forms.

Difference-in-Differences Analyses $Y = \beta_1 TG + \beta_3 TT + \gamma_1 (TG * TT) + \varphi X + \varepsilon$

Y is an outcome of interest, TG is an indicator for membership in the treatment group and TT is an indicator for the post-period. Observations are at the person-month or person-year level as appropriate to the outcome (subscripts are suppressed.) We allow X to stand for control variables and ε to represent a random error term. The treatment effect of interest is the coefficient on the interaction term, γ_1. Standard errors will be adjusted for multiple observations within person over time. We will estimate this model separately for the comparisons between the Treatment Group and Comparison Group 1, and the Treatment Group and Comparison Group 2.

Within-Person Analyses $Y_{it} = \alpha_i + \beta X_{it} + \gamma D_{it} + \varepsilon_{it}$

In this model, *i* designates a person and *t* designates a unit of time (e.g., month or year). The outcome of interest is Y. Treatment status (implementation of the Waiver) is *D*, *X* is a vector of covariates that vary over time within subjects, α is a fixed effect for each individual, and ϵ is the error term. The treatment effect of interest is γ .

2. Study Population

Among adults eligible to qualify for TMA, we will use two comparison groups common to Questions 1-5, 8 and 9 in order to isolate the effect of the premium requirements on the outcomes of interest. Comparison Group 1 is defined as all BadgerCare adults below 100% FPL beginning at least 2 years prior to the July 2012 original premium. Because this group never experienced any change in their premium requirements, they provide a good benchmark for general trends in health care usage, costs, and program enrollment. However, since the treatment group (TMA adults) were all originally members of MA adults, it is possible that the composition of Comparison Group 1 changes over time due to the new TMA premium policies. While we will study this directly under Question 8, we will also use an alternative comparison group, parents and caretakers who entered with incomes higher than 100% FPL and so are not eligible for TMA (Comparison Group 2).

Comparison Group 2 was subject to the same policy as TMA from July 2012 – March 2014 and may provide a better match for the TMA group after the time of their transition, as they have similar income levels. The use of Comparison Group 2 will only be historical since Comparison Group 2 lost eligibility effective April 2014.

For the time dimension of the study, we will consider the outcomes of the treatment and comparison groups across three time periods: first, prior to any premium requirements; second, under the July 2012-April 2014 conditions; and finally, under the April 2014 – present conditions. (Table 3, below)

Table 3: Study Population 1, Premium Requirements for Treatment and Comparison Groups

Timeline	Comparison Group 1	Comparison Group 2	Treatment Group
	MA adults (<100% FPL)	Higher-income parents/caretakers (100-200% FPL)	TMA adults
Prior to premium introduction (Feb 2008- June 2012)	Not required to pay premiums	Parents who enrolled at >150% FPL were required to pay premiums; those 100-150% were not	Not required to pay premiums
First premium policy (July 2012- March 2014)	Not required to pay premiums	Premiums introduced for 133-150%; increased for >150%	Premiums introduced for 133-200%
Current waiver premium policy (April 2014 – present)	Not required to pay premiums	No longer eligible	Premiums introduced for 100-133%

3. Data Requirements

Source:	Time	Purpose:
CARES	(February 2008 – present)	Identification of study population during and prior to TMA period
MMIS Claims	(February 2008 – present)	Identification of outcome measures for study population (Necessary/unnecessary emergency department visits, ambulatory care sensitive inpatient stays, 30 day all cause readmissions)

4. Expected Limitations

a. *Outcome measure.* While we will use empirically validated measures of the outcome, identification of "unnecessary" visits through claims data algorithms is an imperfect process and will inevitably misclassify some visits that were "necessary" as "unnecessary" and vice versa.
b. *Parallel trends assumption.* This assumption is required for the difference-in-differences analysis but is fundamentally untestable. If something other than the premium requirement changes for Treatment Group 1 but not the comparison groups at the same time as the premium requirement was implemented, the design would be invalid. While we are not aware of any obvious violations in this context, it should be noted as a potential limitation.

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

A. **DHS proposed**: "Case Study," "Administrative Data Analysis," and "Case-Control Matching" by statistically matching those who drop out of TMA within 12 months of premium implementation to those who do not drop out.

B. **Evaluation Team Proposes**:

1. Method

a. Descriptive analysis of administrative data. Description of health-related outcomes over time by TMA status, income, premium payment status, and other demographic characteristics available through CARES. We will include tabulations and a graphical and regression analysis.
b. *Causal analysis of administrative data*. We will use a difference-in-differences study design to compare health-related outcomes for those affected by the policy (Treatment Group 1) to those not affected by the policy (Comparison Group 1 and Comparison Group 2 in separate analyses), over time. A purely descriptive analysis would not account for secular changes that might affect health-related outcomes nor the potential for selection into TMA status. This design allows us to identify the causal effect of premiums by assuming that the health-related outcomes for the treatment group would have evolved similarly over time as that of the comparison group(s) in the absence of the implementation of the premium requirement. For estimation, we will use an appropriate econometric model that incorporates the nature and distribution of the outcome variable. We will also perform a within-person analysis that considers whether outcomes change over time for those affected by the policy conditional on remaining enrolled.
c. *Empirical models*. Same as Question 1

2. **Study Population:** Same as Question 1

3. **Data Requirements**

Source	Time Frame	Purpose
CARES	(February 2008 – present)	Identification of study population during and prior to TMA period
MMIS Claims	(February 2008 – present)	Identification of health-related outcomes (Table 2)

4. **Expected Limitations**
   a. *Outcome measure.* While we will use empirically validated measures as described in Table 2, identification of health-related outcomes through claims data algorithms is an imperfect process as it requires the enrollee to utilize the health care system in order to appear unhealthy.
   b. *Parallel trends assumption.* This assumption is required for the difference-in-differences analysis but is fundamentally untestable. If something other than the premium requirement changes for Treatment Group 1 but not the comparison groups at the same time as the premium requirement was implemented, the design would be invalid. While we are not aware of any obvious violations in this context, it should be noted as a potential limitation.

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

A. **DHS proposed**: "Case Study," "Administrative Data Analysis," and "Case-Control Matching" by statistically matching those who drop out of TMA within 12 months of premium implementation to those who do not drop out.

B. **Evaluation Team Proposes**:
   1. Method
   a. Descriptive analysis of administrative data. Description of healthcare spending over time by TMA status, income, premium payment status, and other demographic characteristics available through CARES. We will include tabulations and a graphical and regression analysis.
   b. *Causal analysis of administrative data*. We will use a difference-in-differences study design to compare healthcare spending for those affected by the policy (Treatment Group 1) to those not affected by the policy (Comparison Group 1 and Comparison Group 2 in separate analyses), over time. A purely descriptive analysis would not account for secular changes that might affect healthcare spending nor the potential for selection into TMA status. This design allows us to identify the causal effect of premiums by assuming that the healthcare spending for the treatment group would have evolved similarly over time as that of the comparison group(s) in the absence of the implementation of the premium requirement. For estimation, we will use an appropriate econometric model that incorporates the nature and distribution of the outcome variable. We will also perform a within-person analysis that considers whether outcomes change over time for those affected by the policy conditional on remaining enrolled.
   c. *Empirical models*. Same as Questions 1 and 2.

2. **Study Population:** Same as Questions 1 and 2

3. **Data Requirements**

Source	Time Frame	Purpose
CARES	(February 2008 – present)	Identification of study population during and prior to TMA period
MMIS Claims	(February 2008 – present)	Identification of healthcare spending outcomes

4. **Expected Limitations**

Parallel trends assumption. This assumption is required for the difference-in-differences analysis but is fundamentally untestable. If something other than the premium requirement changes for Treatment Group 1 but not the comparison groups at the same time as the premium requirement was implemented, the design would be invalid. While we are not aware of any obvious violations in this context, it should be noted as a potential limitation.

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

A. **DHS proposed**: "Case Study," "Administrative Data Analysis," and "Case-Control Matching" by statistically matching those who drop out of TMA within 12 months of premium implementation to those who do not drop out.

B. **Evaluation Team Proposes**:

1. **Method**

a. *Descriptive analysis of administrative data.* Description of cost-effectiveness over time (as defined by the ratio of health-related outcomes to spending) by TMA status, income, premium payment status, and other demographic characteristics available through CARES. We will include tabulations and a graphical and regression analysis.

b. *Causal analysis of administrative data*. We will use a difference-in-differences study design to compare the health-related outcomes/spending ratio for those affected by the policy (Treatment Group 1) to those not affected by the policy (Comparison Group 1 and Comparison Group 2 in separate analyses), over time. A purely descriptive analysis would not account for secular changes that might affect the ratio of health-related outcomes to spending nor the potential for selection into TMA status. This design allows us to identify the causal effect of premiums by assuming that the health outcomes/spending ratio for the treatment group would have evolved similarly over time as that of the comparison group(s) in the absence of the implementation of the premium requirement. For estimation, we will use an appropriate econometric model that incorporates the nature and distribution of the outcome variable. We will also perform a within-person analysis that considers whether outcomes change over time for those affected by the policy conditional on remaining enrolled.

c. *Empirical models*. Same as Questions 1-3.

2. **Study Population:** Same as Questions 1-3

3. **Data Requirements**

Source	Time Frame	Purpose
CARES	(February 2008 – present)	Identification of study population during and prior to TMA period
MMIS Claims	(February 2008 – present)	Identification of health-related outcomes (Table 2) and healthcare spending

4. **Expected Limitations**
   a. ***Outcome measure.*** While we will use empirically validated measures as described in Table 2, identification of health-related outcomes through claims data algorithms is an imperfect process as it requires the enrollee to utilize the health care system in order to appear unhealthy. We note that Outcomes/Cost is also not a typical measure of "cost-effectiveness", which is normally expressed as a denominator of a gain in health and a numerator of the cost associated with the health gain. Regardless, we will not be able to directly identify the specific costs of any particular change in health outcomes, only "changes in costs" and "changes in health outcomes" induced by the premium requirement.
   b. ***Parallel trends assumption.*** This assumption is required for the difference-in-differences analysis but is fundamentally untestable. If something other than the premium requirement changes for Treatment Group 1 but not the comparison groups at the same time as the premium requirement was implemented, the design would be invalid. While we are not aware of any obvious violations in this context, it should be noted as a potential limitation.

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

A. **DHS proposed**: "Case Study,","Administrative Data Analysis," and "Case-Control Matching" by statistically matching those who drop out of TMA within 12 months of premium implementation to those who do not drop out.

B. **Evaluation Team Proposes**:

1. **Method**
   a. *Descriptive analysis of administrative data.* Description of cost-effectiveness over time (as defined by the ratio of healthcare utilization to spending) by TMA status, income, premium payment status, and other demographic characteristics available through CARES. We will include tabulations and a graphical and regression analysis.
   b. *Causal analysis of administrative data*. We will use a difference-in-differences study design to compare the ratio of healthcare utilization to spending for those affected by the policy (Treatment Group 1) to those not affected by the policy (Comparison Group 1 and Comparison Group 2 in separate analyses), over time. A purely descriptive analysis would not account for secular changes that might affect the ratio of healthcare utilization to spending nor the potential for selection into TMA status. This design allows us to identify

the causal effect of premiums by assuming that the ratio of healthcare utilization to spending for the treatment group would have evolved similarly over time as that of the comparison group(s) in the absence of the implementation of the premium requirement. For estimation, we will use an appropriate econometric model that incorporates the nature and distribution of the outcome variable. We will also perform a within-person analysis that considers whether outcomes change over time for those affected by the policy conditional on remaining enrolled.

c. *Empirical Models*. Same as Questions 1-4

2. **Study Population:** Same as Questions 1-4

3. **Data Requirements**

Source	Time Frame	Purpose
CARES	(February 2008 – present)	Identification of study population during and prior to TMA period
MMIS Claims	(February 2008 – present)	Identification of healthcare utilization (emergency department use, hospitalizations, and outpatient use) and healthcare spending

4. **Expected Limitations**
   a. ***Outcome measure.*** While we will use empirically validated measures as described in Table 2, identification of health outcomes through claims data algorithms is an imperfect process as it requires the enrollee to utilize the health care system in order to appear unhealthy. We note that Utilization/Cost is also not a typical measure of "cost-effectiveness", which is normally expressed as a denominator of a gain in health and a numerator of the cost associated with the health gain. Regardless, we will not be able to directly identify the specific costs of any particular change in health outcomes, only "changes in costs" and "changes in healthcare utilization" induced by the premium requirement.
   b. ***Parallel trends assumption.*** This assumption is required for the difference-in-differences analysis but is fundamentally untestable. If something other than the premium requirement changes for Treatment Group 1 but not the comparison groups at the same time as the premium requirement was implemented, the design would be invalid. While we are not aware of any obvious violations in this context, it should be noted as a potential limitation.

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

A. **DHS proposed**: "Case Study," "Administrative Data Analysis," and "Case-Control Matching" by statistically matching those who drop out of TMA within 12 months of premium implementation to those who do not drop out.

B. **Evaluation Team Proposes**:

1. **Method**
   a. *Descriptive analysis of administrative data.* We will provide a description of TMA enrollment over time, including the probability of transitioning to TMA, by TMA status, income, premium payment status, and other demographic characteristics available through CARES.
   b. *Causal analysis of administrative data*. We will use an interrupted time series study design to compare the rate of transitions from MA adult to TMA status in order to understand whether premium requirements affect the incentive to take up TMA and/or experience the types of transitions that would lead to a qualifying event. We will also use this design to study the probability of exit from TMA. This design allows us to identify the causal effect of premiums by assuming that enrollment behavior in the TMA population would have evolved similarly over time if not for the premium requirements. We will use econometric modeling techniques that appropriately account for serial correlation. Second, we will use a regression discontinuity design within the TMA population in order to study the effect of premium amounts. This design involves comparing the enrollment behavior of those who transition and have incomes just low enough to qualify them for a particular premium amount relative to those who transition and have incomes just higher, qualifying them for a higher premium amount. The strength of this design is that it ensures populations are highly similar (as both transitioned from MA) rather than relying on a comparison of adults who did not transition, who may be different from those who did in unobservable ways that are predictive of the enrollment outcome. We will perform this analysis for each level of the required premiums.
   c. *Empirical models.*
   Interrupted Time Series

$$Y_t = \beta_1 (month) + \beta_2 (policy) + \beta_3 (trend\ change) + \varepsilon_t$$

   Y_t is the average outcome for all subjects in month *t (e.g., probability of exit)*. The model terms include an integer variable *month* that denotes the month numbered from the start to the end of the observation period, 1,…N; the accompanying coefficient reflects the underlying trend in the outcome. The binary variable *policy* equals zero until the first month of the policy change at which time it takes on the value of one for the duration of the observation period. The coefficient, β_2, represents the level change in the outcome immediately following the policy change. The integer variable *trend change* reflects the number of months since the policy change. The corresponding coefficient, β_3, captures any change in outcome trend following the transition. We will select the appropriate correlation structure for the error term based on model diagnostic tests.

   Regression Discontinuity $Y_i = \alpha + \beta(X_i - x_0) + \tau W_i + \gamma(X_i - x_0)W_i + \epsilon_i$

   with kernel weights defined as $h - |X_i - x_0|$ where h is the bandwidth and all observations outside the bandwidth (more than h away from x_0) are discarded. Here, Y_i is the outcome under consideration (e.g., total months enrolled), X_i is income as % FPL, x_0 is the income threshold, W_i is an indicator for the difference in premium status, and ϵ_i is a random error term. The treatment effect of interest is τ. The coefficients β and γ allow the slope of the regression to differ on either side of the cutoff x_0.

2. **Study Population:** Same as Questions 1-5

3. **Data Requirements**

Source	Time Frame	Purpose
CARES	February 2008 – present	Identification of study population during and prior to TMA period. Identification of premium amounts and payment status.
UI Earnings reports	First quarter 2008 - present	Verification of changes in earnings

4. **Expected Limitations**
   a. ***Interrupted time series assumption*.** This analysis relies on the idea that no other programmatic changes occurred at the same time as the premium changes. To this end, we will not be able to separate the effects of the premium from other simultaneously implemented policies.
   b. ***Regression discontinuity assumption.*** This analysis requires the assumption that TMA adults are not purposefully selecting into their premium-paying group (for example, by influencing their reported income). This assumption is somewhat testable and will be addressed by studying transition probabilities at the premium margins.
   3. *Income as a confounder.* Because premiums are higher as income increases, it is not completely possible to separate the effect of the premium from the effect of income on average. In particular, we will not be able to conclude whether the effects may differ for higher income groups due to the amount of the premium or due to the beneficiaries' higher incomes.

Question 9: How is access to care affected by the application of new, or increased, Premium amounts?

A. **DHS proposed**: "Case Study," "Administrative Data Analysis," "Case-Control Matching," and "Enrollment/Disenrollment Survey"

B. **Evaluation Team Proposes**:

1. Method

a. *Descriptive analysis of survey data.* : The survey that will be fielded in Spring 2016 will include questions that will provide measures of access to care (e.g., usual source of care and experience of any unmet need for medical care), which is not well measured from administrative claims data. The survey will include both current TMA enrollees as well as those who have been placed in an RRP, so that both those who are and are not currently paying premiums are represented. We will summarize survey measures of beneficiary access to care stratified by TMA and premium-requirement status, providing tabular, graphical, and regression-adjusted analyses.

b. *Matched analysis of administrative data*. If feasible, we will enhance the survey by matching the survey data to the administrative data. This will allow us to observe more precise measures of income and enrollment, which will facilitate a causal analysis. In particular, we will use a regression discontinuity design within the TMA population in order to study the effect of premium amounts. This design involves comparing the surveyed access to care

responses of those who transition and have incomes just low enough to qualify them for a particular premium amount relative to those who transition and have incomes just higher, qualifying them for a higher premium amount. The strength of this design is that it ensures populations are highly similar rather than relying on a comparison of adults who did not transition, who may be different from those who did in unobservable ways that are predictive of the enrollment outcome. We will perform this analysis for each level of the required premium using appropriate econometric techniques.

c. *Empirical models*. Same as regression discontinuity model in Question 8.

2. **Study Population:** Same as Questions 1-5,8

3. **Data Requirements**

Source	Time Frame	Purpose
CARES	February 2008 – present	Identification of study population during and prior to TMA period. Identification of premium amounts and payment status.
Survey	Point-in-time measures valid at time of survey implementation	Measuring access to care

4. **Expected Limitations**
   a. ***Survey data sample.*** While the survey team will follow best practices in design, feasible limitations in limitations will not allow the identification of very small differences in access to care.
   b. ***Regression discontinuity assumption.*** This analysis requires the assumption that TMA adults are not purposefully selecting into their premium-paying group (for example, by influencing their reported income). This assumption is somewhat testable and will be addressed by studying transition probabilities at the premium margins.
   c. ***Income as a confounder.*** Because premiums are higher as income increases, it is not completely possible to separate the effect of the premium from the effect of income on average. In particular, we will not be able to conclude whether the effects may differ for higher income groups due to the amount of the premium or due to the beneficiaries' higher incomes.

Restrictive Reenrollment Period for Failure to Pay Premium: Questions 6-7, 10-12

The 2014 waiver introduced a 3-month restrictive reenrollment period (RRP) for TMA beneficiaries who failed to pay the required premium after a 30-day grace period. Unlike the 12-month RRP that had previously been in place for BadgerCare+ members, the RRP included in the 2014 waiver allows beneficiaries to re-enter the program before the end of the RRP period if they repay previously owed premiums. TMA members with incomes between 100%-133% FPL are exempted from premiums in their first six months of enrollment and are therefore not subject to the RRP during this time.

For those beneficiaries who experience an RRP, the period of disenrollment may affect both outcomes related to service use (utilization, cost, and access) as well as outcomes related to enrollment. Relative to patterns of utilization before entering an RRP, beneficiaries may decrease their use of health services while in an RRP since they are temporarily uninsured, but then increase their service use in the immediate period after returning to the program due to "pent-up" demand for care (Question 6). Over longer-periods of time, these may lead to differences in spending and service utilization between those who experience RRPs versus those who remain continuously enrolled (Question 7). The presence of an RRP may also be hypothesized to reduce the likelihood that beneficiaries fail to make premium payments, at least insofar as beneficiaries are concerned about losing benefits for an extended period of time (Question 10). The impact of the RRP penalty may also differ depending on the member's income level (Questions 11-12), but the direction of the association has not yet been hypothesized.

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?

A. DHS proposed: "Case Study," "Administrative Data Analysis," "Case-Control Matching," and "Enrollment/Disenrollment Survey"

B. Evaluation Team Proposes:

1. Method

Question 6 will be addressed through (1) an analysis of administrative data (claims and enrollment from CARES and MMIS) and (2) through an analysis of survey data. The survey will contribute to assessment of both questions 6 and 7, which has several new questions designed to focus on the experiences of being in an RRP.

a. Administrative data analysis: A key analytical challenge in measuring the impact of the RRP is to identify the impact of being placed in an RRP on post-RRP outcomes independent of other individual-level factors that may drive utilization changes. For example, a beneficiary may experience a health event that causes both a temporary inability to work (increasing financial strain) and which leads to greater than average utilization in the pre-RRP period. Risk of entering an RRP may also be influenced by changes in the environment, such as the secular trends in the state economy. To account for these factors, we will estimate a regression model that compares pre- and post-RRP trends taking advantage of repeated measures of utilization within the same beneficiary, and also taking advantage of data from other beneficiaries who experience RRPs at different times. In this estimation strategy, beneficiaries in pre-RRP periods can serve as controls for themselves in the post-RRP period as well as for other beneficiaries who experience RRPs at different times.

The regression equation measuring the impact of the RRP can be expressed as:

$$Y_{it} = \beta_0 + \beta_1 Post\text{-}RRP_{it} + \beta_2 Pre\text{-}RRP_{it} + \beta_3 Demographics_i + \beta_4 Month_t + \beta_5 Person_i + \varepsilon_{it}$$

Where *Y* represents any outcome measure, for person *i* observed at time *t*. *Post-RRP* is an indicator for being observed in a post-RRP period and *Pre-RRP* is an indicator for being observed in a pre-RRP period. The omitted time period in these models are periods of "regular enrollment." *Demographics* represents time-invariant individual-level

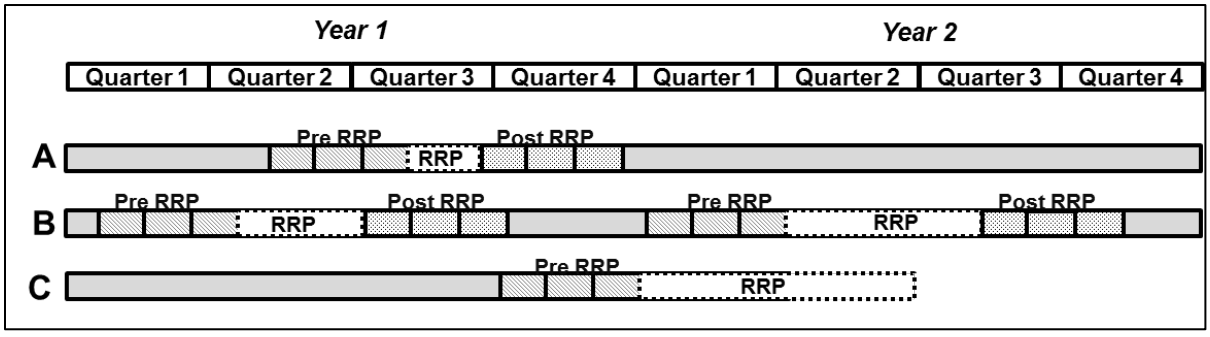
demographics. *Month* is a monthly indicator for time point where the individual is observed (in order to adjust for secular time trends). *Person* is an individual-level random effect, which allows the model to apply a different intercept term to each beneficiary. Standard errors will be adjusted to account for the auto-correlation of individual-level data across months and the clustering of multiple RRPs within the same beneficiary. This regression approach can be adapted for a variety of outcomes using generalized linear models. These models will allow us to specify the appropriate functional form for the outcome (e.g., probit models for binary outcomes and negative binomial or Poisson models for number of visits).

b. Survey Data Analysis**:** The survey that will be fielded in Spring 2016 and Spring 2018 will provide a special module of questions specifically designed to capture the experiences of beneficiaries who have experienced a recent RRP. To ensure that an adequate sample of these beneficiaries are captured in the data collection process, we will allocate approximately 20% of the sample (~200 interviews) to beneficiaries whom the state indicates have been recently placed in an RRP. Comparison of responses will be conducted within the RRP sample between those that return to BadgerCare and those that do not return, and between the RRP and non-RRP samples (especially other TMA beneficiaries). The analysis will adjust for other differences in income and demographics. This comparison will reveal whether beneficiaries in an RRP experience a greater prevalence of access problems than do other demographically similar BadgerCare enrollees.

2. **Study Population**

For the administrative data analyses we will identify all beneficiaries who were placed in an RRP at any point from January 1, 2014-December 31, 2015. The maximum length of an RRP is 3 months, but we expect that many members will have RRPs less than 3 months (as they can rejoin the program after paying owed premiums). We also assume that some beneficiaries will remain disenrolled beyond the length of the RRP. We will test the sensitivity of several sample restrictions, such as limiting the sample to beneficiaries who have disenrollment periods of 1-6 months.

Figure 1. Measuring RRPs for Hypothetical TMA Beneficiaries



For each beneficiary who is placed in an RRP, we will define two adjacent time periods: the pre-RRP period and post-RRP period. We can define these periods in terms of monthly segments (e.g., 3 months pre and 3 months post RRP). All time periods that are outside of the window of time adjacent to the RRP will be considered "regular enrollment" periods.

Figure 1 illustrates this approach for 3 hypothetical beneficiaries (A, B, and C). Person A experiences a brief RRP in year 1; person B experiences two separate RRPs in years 1 and 2; person C enters an RRP in year 2, but does not re-join the program for a period of at least 6 months. Other time periods, shown in light gray comprise regular enrollment periods.

3. Data Requirements

Source	Time Frame	Purpose
CARES	January 1, 2014-December 31, 2015	Identification of study population: beneficiaries during and prior to three-month RRP
MMIS Claims	January 1, 2014-December 31, 2015	Measures of cost, utilization, and access to care created using claims data
Survey	Point-in-time measures valid at time of survey implementation	Identification of study population: beneficiaries that experience RRP and return; beneficiaries that experience RRP and do not return; beneficiaries that do not experience an RRP; Measures of utilization

4. Expected Limitations

a. ***Selection Bias from Life Events:*** entry into an RRP is not a random process – it is more likely to occur to individuals that experience "life events" that precede non-payment of premiums. Failure to control for these life events can bias the interpretation of the "RRP effect" since these events can influence utilization independent of the RRP. However, it is difficult to know what the direction of bias will be since life events can be either negative (e.g., loss of employment, marital dissolution) or positive (e.g., new coverage options through a job gain or spousal employment). We will address this issue in regression models by controlling for individual-level variables that may be associated with greater risk of life events (such as demographics). We will also, where possible, attempt to identify whether the RRP coincides with life events that are observed through other state databases (such as gains or losses in employment).

b. ***Survey Response Bias:*** respondents to the RRP survey may be different than the population experiencing the RRP (for example, individuals who agree to complete a survey may have a greater likelihood of rejoining the program). To address this survey response bias, we will use survey weights to adjust the sample closer to the overall population of RRP individuals (e.g., adjusting by demographic factors that may influence both survey response and RRP experiences).

Question 7: Are costs and/or utilization of services different for those that are continuously enrolled compared to costs/utilization for beneficiaries that have disenrolled and then re-enrolled?

A. DHS Proposed: "Case Study", "Administrative Data Analysis,", "Case-Control Matching," and "Enrollment/Disenrollment Survey"

C. Evaluation Team Proposes:

1. Methods

To examine the effects of experiencing a disruption in coverage due to an RRP relative to being continuously enrolled on utilization, cost, and health care outcomes, we will use a difference-in-differences design to compare the longer-term trends in outcomes between the population of TMA beneficiaries that experience RRPs to several alternative groups that do not experience RRPs.

The first comparison is a within-group comparison for TMA with incomes 100-133% FPL in their first six months (when they are not subject to RRP) versus their second six months when they are subject to RRPs. The advantage of this comparison is that we observe the group during a time period when they are not at risk of losing coverage due to an RRP compared to a time period when the policy changes and they are exposed to an RRP. Second, we can look at TMA populations who remain continuously enrolled (i.e. never experience an RRP), but are otherwise similar to those who do experience an RRP (using a propensity score matching process with baseline demographic characteristics). Third, we can compare TMA beneficiaries with an RRP to similar beneficiaries in the CLA population, which is not subject to RRPs, and is therefore less likely to experience enrollment gaps.

Matching: A challenge with such a comparison is that differences between RRP and non-RRP beneficiaries may also reflect unmeasured differences in underlying preferences for insurance, need for care, and access to alternative health care resources. If these differences are not accounted for, comparisons will provide biased estimates of the effect of being in the RRP group. One strategy to address the comparability problem is to apply propensity score matching to the sample. A propensity score reflects the degree to which beneficiaries in the non-RRP group are like beneficiaries in the RRP group based on a set of observable characteristics taken from some baseline period (such as the first two months of coverage). The propensity score can be derived using demographic information (race, age, sex), income category, and health service utilization measures. This method can be implemented using a regression model that assigns each individual in the non-RRP group a probability of being similar to an RRP individual. Examining whether the matched samples are similar on observable covariates can test balance between the RRP and non-RRP groups.

Estimation Approach: After matching, we can estimate a regression model of the following form:

$$Y_{it} = \beta_0 + \beta_1 RRP\text{-}Group_{it} + \beta_2 Year_t + \beta_3 Person_i + \varepsilon_{it}$$

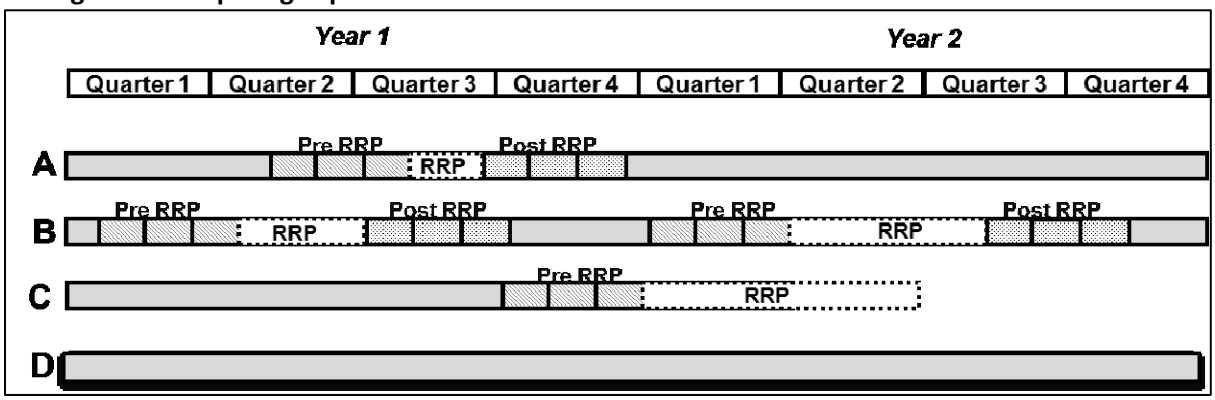
Where *Y* represents any study outcome related to either spending or utilization (for example, in 6 month increments) for person *i* observed at year *t*. *RRP-Group* is an indicator for whether an individual is in the TMA population that experienced an RRP versus the matched group that did

not experience an RRP. *Year* is an indicator for the calendar year of data (to account for secular trends). *Person* represents an individual-level random effect. Since beneficiaries can contribute data from multiple years, data will be clustered at the level of the beneficiary.

2. Study Population

Whereas Question 6 is focused on changes in utilization and spending that occur after an RRP within the population that experiences an RRP, Question 7 is focused on overall trends in costs and utilization in the RRP population versus the non-RRP population. This is represented in Figure 2 where the comparison is now between beneficiaries A, B, and C to beneficiary D (and others like him/her). The simplest way to conduct this comparison is to sum all utilization and spending over defined time periods (e.g., six month increments) and compare averages in the TMA subgroup that experienced RRPs versus the TMA group that did not experience RRPs.

Figure 2. Comparing experience of RRP and non-RRP TMA beneficiaries



3. Data Requirements:

Source	Time Frame	Purpose
CARES	January 1, 2014-December 31, 2015	Identification of study population: beneficiaries in TMA who experience an RRP versus CLA or TMA individuals who don't experience an RRP
MMIS Claims	January 1, 2014-December 31, 2015	Measures of cost, utilization, and access to care created using claims data

4. Expected Limitations:

Matching Bias: With the exception of the first comparison that focuses on the same population at two different time periods, this research question will be addressed by matching groups with RRP experience to groups that do not experience an RRP. Matching is most effective if the observable variables used to create the comparison group are closely related to selection into the treatment group. While this assumption cannot be directly tested, we can examine the robustness of the matching method by comparing different matching and weighting strategies.

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?

A. DHS Proposed: "Case Study," "Administrative Data Analysis," "Case-Control Matching," and "Enrollment/Disenrollment Survey"

B. Evaluation Team Proposes:

1. Methods

For both analyses described below, we will measure the payment of premiums as a function of two processes: the average length of total enrollment and, conditional on being enrolled in the program, the amount of premiums owed that are paid to the program during the time enrolled in the program.

Analysis 1: The Effect of Premiums and RRP on Enrollment:

This first analysis will address the question of how much enrollment duration changes after the imposition of premiums with RRP (without further disentangling the effect of premiums from the RRP). We will compare enrollment patterns among TMA individuals with incomes 100%-133% FPL in their first six months in the program (when they are not subject to premiums or RRP) to TMA beneficiaries in this same income group (100%-133% FPL) in their second six months in the program (when they are submit to premiums) and to TMA beneficiaries in income groups above 133% FPL in their first six months of enrollment. Using both comparison groups is necessary because the group of TMA beneficiaries that persist in the program after six months may be more highly selected toward individuals with a long-term demand for public insurance. The empirical model for this analysis will take the following general form

$$Y_i = \beta_0 + \beta_i TMA2 + \beta_2 TMA133 + \varphi X + \varepsilon_i$$

in which *Y* represents the outcome for person *i,* the reference group includes TMA individuals with incomes from 100-133%FPL in their first six months in the program, the first comparison group, *TMA2*, includes beneficiaries from this same income group in their second six months in the program, and *TMA133* represents the second comparison group described above. The coefficients of interest are β_1 and β_2. We include *X*, a vector of person-level demographic characteristics, and a random error term.

Estimating Enrollment Trends: We will apply hazard modeling to compare the relative risk of disenrollment in the first six months for TMA individuals with income 100%-133% FPL to disenrollment rates in the comparison groups over the six month segments noted above. The hazard model assumes that every individual has some underlying probability of leaving the program, whether or not they are subject to premiums and/or an RRP, and that this risk can be modeled as a function of time spent in the program, demographics, and policy variables. The population 100%-133% FPL in their first six months provides a baseline rate with which to compare disenrollment rates in segments of the program with higher incomes or with longer periods of enrollment. The hazard model will allow us to calculate the rate of leaving the program comparing a baseline (no premiums or RRP) to the rate with premiums and RRP, conditional on a set of time invariant person-level covariates.

Analysis 2: Historical Comparison with the 12 Month RRP

This analysis will consider the differences in both disenrollment rate and total premiums paid between individuals subject to the 3 month RRP 2016 versus the effect of 12 month RRP among demographically similar individuals in the past. The time periods will be July 2012-December 2013 (12 month RRP) versus July 2014-December 2015 (3 month RRP).

The two populations will first be matched on demographic and income covariates. Once comparable cohorts have been created, the analysis will calculate the mean length of an enrollment spell and the amount paid per month of enrollment, conditional on being in the program. These two parameters can be combined to estimate the unconditional predicted amount of money paid to the program during a time of enrollment.

Average total amount paid = (Mean number of months of enrollment)(Amount paid per month during enrollment)*

2. Study Population

This question considers how the RRP for the TMA population would affect the rate of premium payments relative to a situation in which beneficiaries are subject to premiums but are not locked-out through the RRP. Because there is no segment of the Wisconsin program that currently is required to pay premiums and is not subject to an RRP, there is no readily available comparison group. It is also important to note that the 3 month RRP is different than the previously existing 12 month RRP not only because it is shorter but also because it is less binding (i.e., beneficiaries are allowed to re-enter the program before the end of 3 months as long as they pay owed premiums).

3. **Data Requirements:**

Source	Time Frame	Purpose
CARES	January 1, 2014-December 31, 2015	Comparing TMA enrollees 100-133% FPL before and after premium requirement begins (after first six months of enrollment)
CARES	July 2012-December 2013; July 2014-December 2015	Comparing TMA enrollees subject to the 3 month RRP versus TMA enrollees subject to the 12 month RRP

4. **Expected Limitations**
   - **a.** ***Generalizability (Approach 1):*** The first approach focuses on the disenrollment effect of being subject to a premium plus RRP on a specific income group (100-133% FPL). This effect may not apply to higher income levels. Addressing heterogeneity by income is a key objective of Questions 11 and 12, below.
   - **b.** ***Identifying Premium Effect (Approach 1):*** As noted above, the first approach does not allow us to disentangle the effect of being subject to premiums versus being subject to RRP. Therefore, these estimates are understood to represent the combined effect of these two policies on the relevant income group where we have the ability to clearly identify over-time variation in the implementation of the policy.

c. ***Secular Trends (Approach 2):*** The second approach, comparing the historical 12 month RRP to the current 3 month RRP is challenging because these two policies unfolded against different time varying trends that could independently influence enrollment dynamics (e.g., the implementation of the Affordable Care Act and changes in the state economy). As a possible way to address this, we will explore using enrollment dynamics in a third group (such as parents and caretakers) that is less affected by these premium policy changes but is likely to be influenced by the same secular trends.

Question 11: Does the RRP impact vary by income level?
&
Question 12: If there is an RRP impact, explore the break-out by income level.

A. DHS Proposed: "Case Study", "Administrative Data Analysis", and "Case-Control Matching"

B. Evaluation Team Proposes:

1. Methods

Testing for heterogeneity in the effect of the RRP by income level can be accomplished by comparing subgroup effects within the 3 month RRP to the 12 month RRP (i.e., examining whether the average rate of premium payment is higher or lower among beneficiaries with higher income after the switch). This can be operationalized by interacting a variable for income category with the variable for policy group in a model that reports average differences in mean number of months of enrollment (e.g., by looking at whether the enrollment effect is greater for individuals above 200% FPL) and carrying out a similar analysis for estimates of amount paid per month during enrollment. Formal testing of statistical significance for interaction can indicate whether any variation identified is likely to reflect variation that cannot be explained simply by chance differences in the income groups. We will implement the same type of empirical models used in Question 10 with the addition of interaction terms representing income subgroups.

2. **Study Population:** same as for Question 10

3. **Data Requirements:** Same as 10

4. **Expected Limitations**

As indicated in Question 8, there is no way to fully disentangle the effect of premiums from higher income since the two increase together. We will descriptively compare differences in enrollment trends by income level and will attribute those differences to some combined effect of income and premium levels.

Childless Adult Beneficiary Enrollment in the Medicaid Standard Plan: Questions 13-17

The objective of evaluation questions 13-17 is to understand whether and to what extent the provision of standard Medicaid benefits to childless adult (CLAs) beneficiaries improved health, health care, and resource use-related outcomes for CLAs. The WI Department of Health Services is specifically interested in measuring CLA Standard Plan enrollees' outcomes relative to the two comparators, A and B, described below. We will implement both comparisons for each of the

research questions related to childless adult enrollment in the Standard Plan. In the following paragraphs, we describe the general samples and research designs that we will deploy across questions 13-17. We then provide additional analytical detail that is specific to each research question.

A. A comparison of CLA beneficiaries' outcomes while enrolled in the Standard Plan relative to their outcomes while enrolled in the Core Plan; and

B. A comparison of outcomes for newly eligible CLA beneficiaries enrolled in the Standard Plan relative to outcomes for CLA beneficiaries enrolled in the Core Plan for a similar period of enrollment during the demonstration.

A. Research Design and Sample

Design. We will implement a difference-in-differences (DD) design to estimate the change in outcomes for CLA beneficiaries before enrollment in the Standard Plan and after Standard Plan enrollment relative to the change in outcomes over the same time periods in a propensity-score matched comparison group of parent/caretaker beneficiaries. As illustrated in Table 4, a comparison group of parents/caretakers who were continuously enrolled in the Standard Plan controls for any trends that may have affected the health care use of publicly-insured low-income adults during this period that were not otherwise related to the introduction of Standard Plan coverage for CLA beneficiaries. The DD design with a well-matched comparison group increases our capacity to make causal inferences from the evaluation findings by isolating the impact of the coverage change on the affected population.

Table 4. Difference-in-Differences Research Design for Evaluation of Childless Adult Enrollment in Standard Plan

	Pre-Period *April 2012 - March 2014		**Post-Period *April 2014-March 2016**
Treatment Group	Core Plan (A) Cohort of childless adults < =100%FPL	**=>**	Standard Plan (B) Same cohort of childless adults <=100%FPL
Comparison Group	Standard Plan (C) Propensity-score matched cohort of parents/caretakers <=100%FPL	**=>**	Standard Plan (D) Same cohort of parents/caretakers <=100%FPL
Difference-in-Differences:			**[(B-A) - (D-C)]**

**Time segments for the 'pre' and 'post' periods may be adjusted based on enrollment continuity of sample and data availability.*

Sample. We will use the CARES data to identify the sample of CLA beneficiaries that transitioned from the Core Plan to the Standard Plan. Each individual that meets the following criteria will be included in the "transitioner," sample: income that is at or below 100% FPL; enrollment in the Core Plan in March 2014; and enrollment for at least 1 month after the April 1, 2014 transition to the Standard Plan.

Because childless adult and parent/caretaker beneficiaries may differ on observable characteristics, we will employ propensity score methods to construct a statistically matched comparison group of parents/caretakers using CARES and MMIS claims data. The comparison sample of parents/caretakers will include subjects who can be statistically matched to the childless adult beneficiary sample in terms of their administrative characteristics (e.g., month and duration of enrollment, income level, age, gender, county of residence), past utilization (measures of visits in the pre-period), and health history (measured by diagnostic codes in the MMIS data in the pre-period). A large literature has demonstrated that matching on past outcome measures, as we propose here, is an exceptionally strong propensity score matching design.[6]

The empirical model that we will use to implement **Research Design A** (described in the preceding paragraphs) for evaluation questions 13-17 is described below.

$$Y = \beta_1 TG + \beta_3 TT + \gamma_1 (TG * TT) + \varphi X + \varepsilon$$

Y is an outcome of interest, TG is an indicator for membership in the treated group (childless adults), and TT is an indicator for the post-period. Observations are at the person-month or person-year level as appropriate to the outcome (subscripts are suppressed.) We allow X to stand for control variables and ε to represent a random error term. The treatment effect of interest is the coefficient on the interaction term, γ_1. Standard errors will be adjusted for multiple observations within person over time.

B. Research Design and Sample

Design. We will describe the differences in study outcomes between two groups of CLA Standard Plan enrollees: individuals who enrolled on or after April 1, 2014; and individuals who transitioned from the Core Plan to the Standard Plan in April 2014. The observational study design is illustrated in Figure 3.

Figure 3. Comparing the experience in the Standard Plan of new CLA enrollees to CLA enrollees that transitioned from the Core Plan

CLA Beneficiaries	April 2014-March 2015				April 2015 – March 2016			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
New Enrollees	=> ----------|							
Transitioners	=> ----------|							

This design will yield important insight into the effects on study outcomes of Standard Plan coverage for CLAs who experienced a richer set of benefits from the start of their Medicaid enrollment (i.e., new enrollees) relative to CLAs who initially experienced a more limited set of Medicaid benefits (i.e., transitioners.) We note that the design does not allow us to distinguish between several plausible explanations for potential outcome differences between new enrollees and transitioners. These explanations include prior health insurance coverage and differences across groups in unobserved characteristics related to study outcomes such as care-seeking preferences, health history, etc.

Sample. We will use CARES data to identify two groups of CLA beneficiaries between the ages of 19-64: new enrollees; and transitioners. New enrollees will include CLA beneficiaries with at least 1 month of Standard Plan enrollment beginning on or after 4/1/2014 and no Core Plan enrollment in the prior 12 months. The new enrollee population will thus include both individuals on the Core Plan wait list and individuals that were not on the Core Plan wait list. Each individual that meets the

following criteria will be included in the "transitioner," sample: income that is at or below 100% FPL; enrollment in the Core plan in March 2014; and enrollment for at least 1 month after the April 2014 transition to the Standard Plan.

The empirical model that we will use to implement **Research Design B** (described in the preceding paragraphs) for evaluation questions 13-17 is noted below.

$$Y = \beta_1 NE + \varphi X + \pi_t + \varepsilon$$

Y is an outcome of interest, NE is an indicator that takes on a value of 0 for Childless Adults that transitioned from the Core plan and a value of 1 for new enrollees. Observations are at the person-month or person-year level as appropriate to the outcome (subscripts are suppressed.) We allow X to stand for control variables, π_t is a time fixed effect, and ε represent a random error term. The coefficient of interest, β_1, represents the relative difference in the outcome for new enrollees compared to transitioners. Standard errors will be adjusted for multiple observations within person over time.

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?

A. DHS Proposed: "Case Study," "Administrative Data Analysis," and "Case-Control Matching."

B. Evaluation Team Proposes:

1. Method

a. *Descriptive analysis of administrative data*. We will describe health-related outcomes over time for CLA beneficiaries by sample membership (i.e., new enrollees and transitioners), and for CLA transitioners relative to the matched parent/caretaker comparison group. We will include tabulations as well as a graphical and regression analysis. Study outcomes for Q.13 are summarized in Table 2.

b. *Causal analysis of administrative data*. We will use a difference-in-differences study design to compare health-related outcomes for those affected by the change to Standard Plan coverage (CLA transitioners) to those not affected by the coverage change (matched parents and caretakers), over time. A purely descriptive analysis would not account for secular changes that might affect health-related outcomes. This design allows us to identify the causal effect of Standard Plan coverage relative to Core Plan coverage by assuming that the health-related outcomes for the treatment group would have evolved similarly over time as that of the comparison group in the absence of the change in coverage. For estimation, we will use an appropriate econometric model that incorporates the nature and distribution of the outcome variable.

1. **Study Population:** CLA transitioners, CLA new enrollees, and matched parent/caretaker sample as described above.

2. Time period

a. We will compare health-related outcomes for new enrollees relative to transitioners from April 1, 2014 through March 30, 2016.

b. The pre and post-periods for our DD analyses will include up to 24 months each, April 2012-March 2014 and April 2014-March 2016 respectively.

3. Data Requirements

Source	Time Frame	Purpose
CARES	April 2012 – March 2016	Identification of study samples and the specific months observed for each subject. Provides the demographic data for use in construction of propensity-score matched parent/caretaker group.
MMIS Claims	April 2012 – March 2016	Identification of health-related outcomes. Provides the diagnostic and health care data for use in construction of propensity-score matched parent/caretaker group.

5. Expected Limitations

a. *Outcome measures.* We will use empirically validated measures whenever possible as described in Table 2. However, identification of health-related outcomes through claims data algorithms is an imperfect process as it requires the enrollee to utilize the health care system in order to appear unhealthy.

b. *Outcome measures*. The technical specifications for some of the outcomes noted in Table 2 require 18-24 months of continuous enrollment for inclusion in the denominator. This restriction will limit the available sample for measure construction and may affect the generalizability of the finding to the relevant WI Medicaid population. When feasible, we will modify the definition and technical specifications of some measures to balance sample size limitations and evaluation objectives. .

c. *Parallel trends assumption.* This assumption is required for the difference-in-differences analysis but is fundamentally untestable. If something other than coverage changes for CLA transitioners (that is also related to the outcome) but not the comparison group in April 2014, the design would be invalid. While we are not aware of any obvious violations in this context, it should be noted as a potential limitation.

Question 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?

A. DHS Proposed: "Case Study," "Administrative Data Analysis," and "Case-Control Matching."

B. Evaluation Team Proposes:

1. Method

a. Descriptive analysis of administrative data. We will describe rates of unnecessary service use over time for CLA beneficiaries by sample membership (i.e., new enrollees and transitioners), and for CLA transitioners relative to the matched parent/caretaker comparison group. We will include tabulations as well as a graphical and regression analysis. Outcome measures for Q.14 are summarized in Table 2.

b. Causal analysis of administrative data. We will use a difference-in-differences study design to compare rates of unnecessary service use for those affected by the change to Standard Plan coverage (CLA transitioners) to those not affected by the coverage change (matched parents and caretakers), over time. A purely descriptive analysis would not account for secular changes that might affect health outcomes. This design allows us to identify the causal effect of Standard Plan coverage relative to Core Plan coverage by assuming that the use of

unnecessary services for the treatment group would have evolved similarly over time as that of the comparison group in the absence of the change in coverage. For estimation, we will use an appropriate econometric model that incorporates the nature and distribution of the outcome variable.

2. **Study Population:** CLA transitioners, CLA new enrollees, and matched parent/caretaker sample as described above.
3. **Time period**
   a. We will compare unnecessary service use for new enrollees relative to transitioners from April 1, 2014 through March 30, 2016.
   b. The pre and post-periods for our DD analyses will include up to 24 months each, April 2012-March 2014 and April 2014-March 2016 respectively.

4. **Data Requirements**

Source	Time Frame	Purpose
CARES	April 2012 – March 2016	Identification of study samples and the specific months observed for each subject. Provides the demographic data for use in construction of propensity-score matched parent/caretaker group.
MMIS Claims	April 2012 – March 2016	Identification of outcome measures. Provides the diagnostic and health care data for use in construction of propensity-score matched parent/caretaker group.

5. **Expected Limitations**
   a. *Outcome measure.* Identification of "unnecessary" visits through claims data algorithms is an imperfect process and will inevitably misclassify some visits that were "necessary" as "unnecessary" and vice versa.
   b. *Parallel trends assumption.* This assumption is required for the difference-in-differences analysis but is fundamentally untestable. If something other than coverage changes for CLA transitioners (that is also related to the outcome) but not the comparison group in April 2014, the design would be invalid. While we are not aware of any obvious violations in this context, it should be noted as a potential limitation.

Question 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?

A. DHS Proposed: "Case Study," "Administrative Data Analysis," and "Case-Control Matching."

B. Evaluation Team Proposes:

1. Method

a. *Descriptive analysis of administrative data*. We will describe the cost-effectiveness over time (as defined by the ratio of health-related outcomes to spending) for CLA beneficiaries by sample membership (i.e., new enrollees and transitioners), and for CLA transitioners relative to the matched parent/caretaker comparison group. We will include tabulations as well as a graphical and regression analysis. Outcome measures for Q.15 are summarized in Table 2.
b. *Causal analysis of administrative data*. We will use a difference-in-differences study design to compare the health-related outcomes/spending ratio for those affected by the change to

Standard Plan coverage (CLA transitioners) to those not affected by the coverage change (matched parents and caretakers), over time. A purely descriptive analysis would not account for secular changes that might affect the ratio of health outcomes to spending. This design allows us to identify the causal effect of Standard Plan coverage relative to Core Plan coverage by assuming that the outcome/spending ratio for the treatment group would have evolved similarly over time as that of the comparison group in the absence of the change in coverage. For estimation, we will use an appropriate econometric model that incorporates the nature and distribution of the outcome variable.

c. Expenditures estimation. Health care expenditures will be computed using an algorithm that maps encounter data to a fee-for-service schedule of allowable charges for the Wisconsin Medicaid population.[7]

2. Study Population: CLA transitioners, CLA new enrollees. and matched parent/caretaker sample as described above.

3. Time period

a. We will compare the ratio of health-related outcomes to spending for new enrollees relative to transitioners from April 1, 2014 through March 30, 2016.
b. The pre and post-periods for our DD analyses will include up to 24 months each, April 2012-March 2014 and April 2014-March 2016 respectively.

4. **Data Requirements**

Source	Time Frame	Purpose
CARES	April 2012 – March 2016	Identification of study samples and the specific months observed for each subject. Provides the demographic data for use in construction of propensity-score matched parent/caretaker group.
MMIS Claims	April 2012 – March 2016	Identification of outcome measures. Provides the diagnostic and health care data for use in construction of propensity-score matched parent/caretaker group.

5. Expected Limitations

a. *Outcome measure.* We will use empirically validated measures whenever possible as described in Table 2. Identification of health-related outcomes through claims data algorithms is an imperfect process as it requires the enrollee to utilize the health care system in order to appear unhealthy. We note that outcomes/spending is also not a typical measure of "cost-effectiveness," which is normally expressed as a denominator of a gain in health and a numerator of the cost associated with the health gain. Regardless, we will not be able to directly identify the specific costs of any particular change in health outcomes, only "changes in costs" and "changes in health-related outcomes" induced by the introduction of Standard Plan coverage.
b. *Parallel trends assumption.* This assumption is required for the difference-in-differences analysis but is fundamentally untestable. If something other than coverage changes for CLA transitioners (that is also related to the outcome) but not the comparison group in April 2014, the design would be invalid. While we are not aware of any obvious violations in this context, it should be noted as a potential limitation.

Question 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 (Utilization/Cost) of Medicaid services?

A. DHS Proposed: "Case Study, "Administrative Data Analysis," and "Case-Control Matching."

B. Evaluation Team Proposes:

1. Method
   a. *Descriptive analysis of administrative data*. We will describe the cost-effectiveness over time (as defined by the ratio of health care use to spending) for CLA beneficiaries by sample membership (i.e., new enrollees and transitioners), and for CLA transitioners relative to the matched parent/caretaker comparison group. We will include tabulations as well as a graphical and regression analysis. Outcome measures for Q.16 are summarized in Table 2.
   b. *Causal analysis of administrative data*. We will use a difference-in-differences study design to compare the health care use/spending ratio for those affected by the change to Standard Plan coverage (CLA transitioners) to those not affected by the coverage change (matched parents and caretakers), over time. A purely descriptive analysis would not account for secular changes that might affect the ratio of health care use to spending. This design allows us to identify the causal effect of Standard Plan coverage relative to Core Plan coverage by assuming that the care use/spending ratio for the treatment group would have evolved similarly over time as that of the comparison group in the absence of the change in coverage. For estimation, we will use an appropriate econometric model that incorporates the nature and distribution of the outcome variable.
   c. Expenditures estimation. Health care expenditures will be computed using an algorithm that maps encounter data to a fee-for-service schedule of allowable charges for the Wisconsin Medicaid population.

2. **Study Population:** CLA transitioners, CLA new enrollees, and matched parent/caretaker sample as described above.

3. **Time period**
   a. We will compare the ratio of health care use to spending for new enrollees relative to transitioners from April 1, 2014 through March 30, 2016.
   b. The pre and post-periods for our DD analyses will include up to 24 months each, April 2012-March 2014 and April 2014-March 2016 respectively.

4. **Data Requirements**

Source	Time Frame	Purpose
CARES	April 2012 – March 2016	Identification of study samples and the specific months observed for each subject. Provides the demographic data for use in construction of propensity-score matched parent/caretaker group.
MMIS Claims	April 2012 – March 2016	Identification of outcome measures. Provides the diagnostic and health care data for use in construction of propensity-score matched parent/caretaker group.

5. Expected Limitations

a. *Outcome measure.* We note that utilization/cost is also not a typical measure of "cost-effectiveness", which is normally expressed as a denominator of a gain in health and a numerator of the cost associated with the health gain. Regardless, we will not be able to directly identify the specific costs of any particular change in health outcomes, only "changes in costs" and "changes in healthcare utilization" induced by the premium requirement.

b. *Parallel trends assumption.* This assumption is required for the difference-in-differences analysis but is fundamentally untestable. If something other than coverage changes for CLA transitioners (that is also related to the outcome) but not the comparison group in April 2014, the design would be invalid. While we are not aware of any obvious violations in this context, it should be noted as a potential limitation.

Question 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?

A. DHS Proposed: "Case Study," "Administrative Data Analysis," "Case-Control Matching," and "enrollment/disenrollment survey."

B. Evaluation Team Proposes:

1. Method

a. *Descriptive analysis of administrative data*. We will describe the continuity of health insurance coverage and the continuity of health care over time for CLA beneficiaries by sample membership (i.e., new enrollees and transitioners), and for CLA transitioners relative to the matched parent/caretaker comparison group. We will include tabulations as well as a graphical and regression analysis.

b. *Causal analysis of administrative data*. We will use a difference-in-differences study design to compare the continuity of coverage and care for those affected by the change to Standard Plan coverage (CLA transitioners) to those not affected by the coverage change (matched parents and caretakers), over time. A purely descriptive analysis would not account for secular changes that might affect continuity of coverage. This design allows us to identify the causal effect of Standard Plan coverage relative to Core Plan coverage by assuming that the continuity of coverage and care for the treatment group would have evolved similarly over time as that of the comparison group in the absence of the change in coverage. For estimation, we will use an appropriate econometric model that incorporates the nature and distribution of the outcome variable.

c. *Descriptive and causal analysis of survey data*. In addition to the 2014 survey of BadgerCare beneficiaries, the 2016 and 2018 surveys will provide repeated cross-sectional measures of health care continuity for CLA beneficiaries with income at or below 100%FPL. Using these data we will describe the continuity of health care over time for CLA beneficiaries. The planned surveys will also include a panel component, a subset of respondents that is surveyed up to three times (i.e., 2014, 2016, and 2018). This panel of respondents enables person-level, fixed effects analyses to estimate the effect of the transition to the Standard Plan from Core Plan coverage on health care continuity. In this fixed effects framework, each person serves as his/her own control. Implementation of this causal analysis is contingent upon retention of a sufficient sample of CLA panel respondents.

2. **Study Population:** CLA transitioners, CLA new enrollees, and matched parent/caretaker sample as described above.

3. **Time period**
   a. We will compare continuity of coverage and care for new enrollees relative to transitioners from April 1, 2014 through March 30, 2016.
   b. The pre and post-periods for our DD analyses will include up to 24 months each, April 2012-March 2014 and April 2014-March 2016 respectively.
   c. For survey-based measures, we will describe continuity of care across and within CLA beneficiaries at three time points (2014, 2016, and 2018).

4. **Data Requirements**

Source	Time Frame	Purpose
CARES	April 2012 – March 2016	Identification of study samples and the specific months observed for each subject. Provides the demographic data for use in construction of propensity-score matched parent/caretaker group. Identification of outcome measures related to coverage continuity (i.e., number and duration of enrollment and disenrollment spells; re-enrollment at renewal; transition to non-CLA Medicaid eligibility category.)
MMIS Claims	April 2012 – March 2016	Provides the diagnostic and health care data for use in construction of propensity-score matched parent/caretaker group.
Survey	Point-in-time measures valid at time of survey implementation	Identification of outcome measures for continuity of care: usual source of care; usual provider of care; receipt of all needed care in the past 12 months.

5. **Expected Limitations**
   a. *Survey data sample.* While the survey team will follow best practices in design and implementation, it is possible that the resulting sample size will not allow identification of small differences in continuity of care or support within-subject analyses.
   b. *Parallel trends assumption.* This assumption is required for the difference-in-differences analysis but is fundamentally untestable. If something other than coverage changes for CLA transitioners (that is also related to the outcome) but not the comparison group in April 2014, the design would be invalid. While we are not aware of any obvious violations in this context, it should be noted as a potential limitation.

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Centers for Medicare & Medicaid Services
7500 Security Boulevard, Mail Stop S2-01-16
Baltimore, Maryland 21244-1850

CMS
CENTERS FOR MEDICARE & MEDICAID SERVICES
CENTER FOR MEDICAID & CHIP SERVICES

Children and Adults Health Programs Group

NOV 1 2 2014

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

Dear Mr. Davis:

The Centers for Medicare & Medicaid Services (CMS) is approving Wisconsin's proposed evaluation design for the section 1115 demonstration titled "BadgerCare Reform" (Project Number 11-W-00293/5). Per our agreement, please update the estimated budget section to reflect accurate information to CMS when it becomes available.

You may now post the approved evaluation design on the states' Medicaid website pursuant to the CMS Special Terms and Conditions (STCs).

Your project officer for this demonstration is Ms. Leila Ashkeboussi. She is available to answer any questions concerning your section 1115 demonstration. Ms. Ashkeboussi's contact information is:

Centers for Medicare & Medicaid Services
Center for Medicaid & CHIP Services
Mail Stop: S2-01-16
7500 Security Boulevard
Baltimore, MD 21244-1850
Telephone: (410) 786-3135
E-mail: Leila.Ashkeboussi@cms.hhs.gov

Official communications regarding program matters should be sent simultaneously to Ms. Verlon Johnson, Associate Regional Administrator for the Division of Medicaid and Children's Health in the Chicago Regional Office. Ms. Verlon's contact information is as follows:

Centers for Medicare & Medicaid Services
Richard Bolling Federal Building
233 North Michigan Avenue, Suite 600
Chicago, Illinois 60601

Telephone: (312) 353-1133

We look forward to continuing to partner with you and your staff on the BadgerCare Reform demonstration.

Sincerely,

Manning Pellanda

Manning Pellanda
Director
Division of State Demonstrations and Waivers

cc:

Verlon Johsnon, ARA, Region V

REVIEW
Wisconsin BadgerCare Reform Evaluation Design changes

The revised plan represents a set of robust evaluation methodologies, including elements like the proposed difference-in-difference study design, in conjunction with a within-person longitudinal analysis, and interrupted time series and regression discontinuity designs. **The main limitations that need to be clarified or addressed are listed below. Items in bold are considered priorities.**

Effect of Premium Requirements and Payment of Premiums Q 1-5; 8-9

- The proposed evaluation outcome measures listed in Table 2 do not adequately assess whether enrollees are forgoing any necessary care. Evaluators may want to consider adapting additional national standards for preventive care outcome measures for the evaluation such as: adult access to ambulatory care (NCQA), tobacco use cessation (NCQA, NQF #0028), body mass index screening and follow-up (NQF #0421), cervical cancer screening (NQF #0032), screening for clinical depression (NQF #0418), and practitioner follow-up after hospitalization (NQF #0567).
- **The first comparison population of MA Adults <100% FPL are not exposed to the premium policy because their income requirements do not qualify them. We can expect systematic differences between the treatment population (TMA Adults) and this proposed comparison group on key variables, such as income level, that influence both selection into the groups and subsequent outcomes. Propensity score methods are used with a difference-in-difference framework to balance the groups on these key observable variables. Do the evaluators propose to use propensity score methods in this case, as proposed for the CLA comparison group in Q 13-17?**
- **The evaluators note that the second comparison group of parents/caretakers was exposed to the premium policy for a limited time period, and can only serve as a historical comparison since they do not have Medicaid coverage in the post-policy period for the treatment group (Table 3). Do the evaluators propose to conduct a difference-in-difference analysis with this comparison population as well? If so, how are the different time periods of exposure to premium payments for the two groups going to be aligned? Alternately, what study design will be used to compare the two groups?**
- It is possible that the treatment and comparison groups may not be mutually exclusive, meaning that someone may have qualified as an MA adult in earlier years, and may now qualify as a TMA adult who has to pay a premium. How will the evaluation handle such beneficiaries?
- In assessing the impact of premiums on enrollment, the evaluators rightly note that income effects cannot be separated from premium effects. Evaluators may however want to consider stratifying the ITT and RDD analyses by specific income levels to assess if the impact of premiums on enrollment varies by income. The proposed design currently does not get at this question.

- Does the survey sample of 1,054 refer to respondents with completed surveys? In fielding the survey, and using it to facilitate over-time comparisons, evaluators may want to consider the low response rate of <25% for the adult Medicaid population[1] on mixed-mode mail and phone surveys, to determine their target sample.
- Can the evaluator provide more clarity on how they plan to link survey data to claims?
- **What survey questions will adequately capture whether premiums affect disenrollment and access to care as consequence of disenrollment? Will the evaluators consider conducting interviews or focus groups with disenrolled beneficiaries to obtain qualitative insights to how premiums affect disenrollment?**

Restrictive Reenrollment Period for Failure to Pay Premiums Q6-7; 10-12

- In assessing Q6, are outcomes to be estimated every beneficiary-month, while additionally including calendar-month in the models to control for time trends?
- As noted previously, evaluators may want to consider oversampling beneficiaries experiencing RRPs to allow for pre-post comparisons in Q6. Longitudinal survey response rates for Medicaid beneficiaries can be greatly improved by providing incentives upon completion of the follow-up survey.
- To evaluate Q7, evaluators propose using a difference-in-difference design, but the model specification on Page 20 seems to compare just differences in cost/utilization (calculated over a 6-month periods) between the groups. Please clarify.
- For Q7, it will be important to match RRP and non-RRP beneficiaries by their health status. Hence, evaluators may want to consider including Chronic Illness Disability Payment System (CDPS) risk score computed using all diagnoses on claims/encounters over the baseline period in the propensity score model.
- **In Analysis 1 for Q10-12, evaluators may want to consider conducting a sensitivity analysis comparing disenrollment rates for TMA beneficiaries with varying income levels in the first two months to their respective disenrollment rates in their last two months of TMA eligibility to assess the impact of premiums alone. Since the RRP locks out a beneficiary for three-months, the marginal rate of disenrollment between these first and last TMA eligibility months will capture the burden of premiums alone on disenrollment. Evaluators may want to consider to something similarly unique to assess the effect of RRP alone on disenrollment.**
  In Analysis 2 for Q 10, evaluators propose using a historical comparison group of beneficiaries who experienced the 12 month RRP in a previous policy version. Would this not bias the findings in favor of the 3 month RRP because of the increased opportunity for beneficiaries to pay premiums? What survey questions will adequately capture the impact of RRP on access to care? Will the evaluators consider conducting interviews or focus groups with beneficiaries with RRPs to obtain qualitative insights on the consequences of RRP?

Childless Adult Beneficiary Enrollment Q 13-17

To capture the impact of transitioning into a more comprehensive plan on beneficiary outcomes, evaluators may want to consider adapting additional nationally recognized preventive care outcome measures such as: adult access to ambulatory care (NCQA), tobacco use cessation (NCQA, NQF #0028), body mass index screening and follow-up (NQF #0421), cervical cancer screening (NQF #0032), screening for clinical depression (NQF #0418), and practitioner follow-up after hospitalization (NQF #0567).

- It will be important to match beneficiaries in the treatment and comparison group by their health status. Hence, evaluators may want to consider including Chronic Illness Disability Payment System (CDPS) risk score computed using all diagnoses on claims/encounters over a baseline period in the propensity score model.
- Systematic differences between childless adults and parents/caretakers are likely. While propensity score methods ensure balance between the two groups on measured confounders, are there contingency plans in place if there is no balance observed between the treatment and comparison group on these observed confounders?

Additional suggestions for evaluators to consider:

- We suggest rewording the "cost-effectiveness" to either "efficiency" or "smarter spending" since the evaluation measures do not get at true cost-effectiveness.
- There are multiple diagnoses associated with an ED visit claim/encounter. In applying the Billings Algorithm to determine whether an ED visit is for an ambulatory care sensitive condition, we suggest that evaluators consider the ED diagnoses on the claim with the highest with the highest likelihood of being truly emergent. This allows for consistency in classifying ED visits as avoidable/unavoidable.
- We suggest adding a discussion on the completeness and accuracy of the Wisconsin encounter data.

Wisconsin BadgerCare Reform Evaluation Design changes
UW Response to CMS Review

CMS comments in Font Times Roman
UW Comments in *Font Calibri italics*

The revised plan represents a set of robust evaluation methodologies, including elements like the proposed difference-in-difference study design, in conjunction with a within-person longitudinal analysis, and interrupted time series and regression discontinuity designs. **The main limitations that need to be clarified or addressed are listed below. Items in bold are considered priorities.**

We appreciate CMS' careful and thoughtful review of our Design Report. We had submitted that report to the Wisconsin Department of Health Services under our contract to evaluate Wisconsin's 2014 BadgerCare waiver. The State had provided to us an evaluation plan, titled "BadgerCare Reform Demonstrate Evaluation Plan" (https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/wi/Badger-Care-Reform/wi-badgercare-demo-eval-plan-20141031.pdf), that had been prepared by a separate consulting firm and pre-approved by CMS, and asked that we use that plan, including its measures and methods, for our evaluation.

Our team, after reviewing that plan, met with Wisconsin DHS, noted concerns about the plan and asked that we propose a revision. DHS understood our perspective, particularly with regard to the scientific methods, and asked that, in preparing a revision, we adhere to the existing 17 study questions as outlined in its existing pre-approved plan and within the existing budget limits for the evaluation.

We welcome an ongoing discussion about how to best answer questions of importance to both Wisconsin DHS and to CMS. Toward that end, we offer the following responses to the CMS comments.

Effect of Premium Requirements and Payment of Premiums Q 1-5; 8-9

- The proposed evaluation outcome measures listed in Table 2 do not adequately assess whether enrollees are forgoing any necessary care. Evaluators may want to consider adapting additional national standards for preventive care outcome measures for the evaluation such as: adult access to ambulatory care (NCQA), tobacco use cessation (NCQA, NQF #0028), body mass index screening and follow-up (NQF #0421), cervical cancer screening (NQF #0032), screening for clinical depression (NQF #0418), and practitioner follow-up after hospitalization (NQF #0567).

The current evaluation reflects the outcome measures that the WI DHS selected in its CMS-approved "BadgerCare Reform Demonstrate Evaluation Plan," (see pages 25 and 35-36 in that original plan) along with additional measures that the UW PHI team suggested to the DHS based on the data available.

We are happy to consider additional variables as outcomes to the extent that we may construct them with the data available. Specifically, using the available claims and enrollment data it is possible to assess access to ambulatory care, cervical cancer screening, and practitioner follow-up after hospitalization. However, the additional measures requested above are beyond the scope of the current project because they require access to clinical information (e.g., electronic medical records) that is not available to the evaluation team.

- **The first comparison population of MA Adults <100% FPL are not exposed to the premium policy because their income requirements do not qualify them. We can expect systematic differences between the treatment population (TMA Adults) and this proposed comparison group on key variables, such as income level, that influence both selection into the groups and subsequent outcomes. Propensity score methods are used with a difference-in-difference framework to balance the groups on these key observable variables. Do the evaluators propose to use propensity score methods in this case, as proposed for the CLA comparison group in Q 13-17?**

  Propensity score matching is unnecessary if the common trends assumption is satisfied. If matching appears to be needed, we will use this method. It is important to note that TMA adults were previously members of the MA adults <100% FPL group. In addition, we have planned analyses as indicated that involve only comparisons within the TMA population.

- **The evaluators note that the second comparison group of parents/caretakers was exposed to the premium policy for a limited time period, and can only serve as a historical comparison since they do not have Medicaid coverage in the post-policy period for the treatment group (Table 3). Do the evaluators propose to conduct a difference-in-difference analysis with this comparison population as well? If so, how are the different time periods of exposure to premium payments for the two groups going to be aligned? Alternately, what study design will be used to compare the two groups?**

  We plan to use this comparison group in a cohort study (so the timelines would be aligned, for example, 1 year prior). The relevant assumption would be that the outcomes would have evolved similarly for this population in the prior time period so that they provide a good counterfactual for the post-policy period for the treatment group.

- It is possible that the treatment and comparison groups may not be mutually exclusive, meaning that someone may have qualified as an MA adult in earlier years, and may now qualify as a TMA adult who has to pay a premium. How will the evaluation handle such beneficiaries?

The analysis is planned to be spell-level. Therefore, if the enrollment represents a distinct spell, the individuals will be treated as distinct. We will explore whether controlling for prior enrollment spells is important for the analysis.

- In assessing the impact of premiums on enrollment, the evaluators rightly note that income effects cannot be separated from premium effects. Evaluators may however want to consider stratifying the ITT and RDD analyses by specific income levels to assess if the impact of premiums on enrollment varies by income. The proposed design currently does not get at this question.

  The analysis plan states: "We will perform this analysis for each level of the required premium." This means that at each income level at which the premium changes, we will provide separate estimates. Since the ITT/RDD analyses can only be done at the margins at which the premiums change, and these are also different income levels, the design of the waiver does not allow us to directly assess the question of whether any differing effects are due to higher premiums or higher incomes.

- Does the survey sample of 1,054 refer to respondents with completed surveys? In fielding the survey, and using it to facilitate over-time comparisons, evaluators may want to consider the low response rate of <25% for the adult Medicaid population on mixed-mode mail and phone surveys, to determine their target sample.

  The 2014 evaluation surveyed 2,000 total members, with 1,084 total respondents with completed surveys, yielding a (very high) 54% response rate. We have previously conducted extensive research on the response rates of various Medicaid surveys and our project partner, the UW Survey Center has extensive and longstanding expertise in the various methods available to increase response rates, as well as with weighting and oversampling techniques.

- Can the evaluator provide more clarity on how they plan to link survey data to claims?

  Each survey instrument has a code on it that allows connection back to unique assigned identifier at the UW Survey Center. That Survey Center identifier is connected in a separate secure data file to each respondent's Medicaid ID number, which is what is used to connect the responses to the Medicaid claims.

- **What survey questions will adequately capture whether premiums affect disenrollment and access to care as consequence of disenrollment? Will the evaluators consider conducting interviews or focus groups with disenrolled beneficiaries to obtain qualitative insights to how premiums affect disenrollment?**

  We have attached a copy of the full survey instrument here. Several questions within the instrument address premiums, their relationship to enrollment, and access to care as a

consequence to disenrollment. On the "Non-RRP" survey version, these concerns are specifically addressed in questions 2,4,8-19, 23, 27, 40-44. The "RRP" survey version specifically addresses these concerns in questions 3-19, 23, 27, 40-44.

We have opted not to conduct focus groups given our very limited evaluation resources. Instead, are conducting enhanced telephone follow-up within the survey protocol, with respondent interviews, to achieve a high survey response rate and to gain robust understanding across all survey elements.

Restrictive Reenrollment Period for Failure to Pay Premiums Q6-7; 10-12

- In assessing Q6, are outcomes to be estimated every beneficiary-month, while additionally including calendar-month in the models to control for time trends?

  Yes, that is the current plan.

- As noted previously, evaluators may want to consider oversampling beneficiaries experiencing RRPs to allow for pre-post comparisons in Q6. Longitudinal survey response rates for Medicaid beneficiaries can be greatly improved by providing incentives upon completion of the follow-up survey.

  We are oversampling beneficiaries experiencing RRPs.

- To evaluate Q7, evaluators propose using a difference-in-difference design, but the model specification on Page 20 seems to compare just differences in cost/utilization (calculated over a 6-month periods) between the groups. Please clarify.

  Here is our anticipated model for the DD design that involves subjects 100-133% FPL versus those higher income 134%+:

  $$Y_{it} = \beta_0 + \beta_1 After\_transition_t + \beta_2 High\_Income_{it} + \beta_3 After\_transition * High\_Income_{it} + \beta_4 Demographics_{it} + \beta_5 CalendarMonth + \varepsilon_{it}$$

  Where Y is some outcome measured for individual i at time t (which is constrained to be in the first six months of TMA). "After transition" is being observed in the time period after April 2014 when the RRP policy changed, "High Income" is being 133%+ FPL and thus subject to the requirements, β_3 is the key DD coefficient which identifies the differences in continuity of coverage and service use outcomes in the post-transition period in the targeted group compared to the untargeted group 100-133% FPL. Demographics are person-level fixed characteristics and CalendarMonth is a seasonality control for the calendar month in which the RRP began.

- For Q7, it will be important to match RRP and non-RRP beneficiaries by their health status. Hence, evaluators may want to consider including Chronic Illness Disability Payment System

(CDPS) risk score computed using all diagnoses on claims/encounters over the baseline period in the propensity score model.

We agree that propensity score matching will be important for matching RRP and non-RRP subjects, and we hope to develop an approach that encompasses a variety of health status/utilization measures. Our team has not previously worked with the CDPS algorithm. It does appear to be available for free to research teams such as ours, and may be feasible with the structure of claims that we have available, but we are not prepared to commit to implementing this algorithm on the claims until we are confident that it can be done with high reliability and within the limited resources our team has available. We can also explore alternative methods for health stratification such as the Charlson Comorbidity Index.

- **In Analysis 1 for Q10-12, evaluators may want to consider conducting a sensitivity analysis comparing disenrollment rates for TMA beneficiaries with varying income levels in the first two months to their respective disenrollment rates in their last two months of TMA eligibility to assess the impact of premiums alone. Since the RRP locks out a beneficiary for three-months, the marginal rate of disenrollment between these first and last TMA eligibility months will capture the burden of premiums alone on disenrollment. Evaluators may want to consider to something similarly unique to assess the effect of RRP alone on disenrollment.**

  Thank you for this good suggestion. This is a creative approach that we will certainly explore, as we agree that the potential loss of months of eligibility are much greater for an RRP in months 1 and 2 than they are in months 11 and 12. Offhand, the only concern we have about this approach is that individuals who persist to months 11 and 12 may be a more selected group that is likely to persist in their coverage and pay premiums regularly than those who attrit from coverage earlier, but we can explore approaches to reduce potential bias.

- **In Analysis 2 for Q 10, evaluators propose using a historical comparison group of beneficiaries who experienced the 12 month RRP in a previous policy version. Would this not bias the findings in favor of the 3 month RRP because of the increased opportunity for beneficiaries to pay premiums? What survey questions will adequately capture the impact of RRP on access to care? Will the evaluators consider conducting interviews or focus groups with beneficiaries with RRPs to obtain qualitative insights on the consequences of RRP?**

  Our study design is conditional, so we don't only look at total months. We look at disenrollment rate/RRP rate from period of TMA entry, and then conditional on exiting TMA, we separately look at length of time out of the program.

  We have survey items that ask people where they go for care during the RRP. For example:

[RRP only]During the period of time you could not be enrolled because of Restrictive Reenrollment, which of the following statements applied to your health care needs? Select *all* that apply.	**Yes**	**No**
a. I did not need any health care	○	○
b. I needed health care, but I decided to delay until I had health care coverage again [# Skip to Q7, place usually go]	○	○
c. I received health care in the hospital emergency room	○	○
d. I received health care at a community health center or clinic	○	○
e. I received health care from a private doctor or clinic	○	○
f. I received health care where I usually do when I have health care coverage	○	○
[RRP only] How did you pay for the health care you got during the period of time you could not be enrolled in BadgerCare Plus? Select all that apply.		
a. I, or a friend or family member, paid directly (out-of-pocket)	○	○
b. I was able to get free/charity care	○	○
c. I used a different health insurance plan	○	○
d. I still owe money/have debt for those bills	○	○

We have opted not to conduct focus groups given our very limited evaluation resources. Instead, we are conducting enhanced telephone follow-up within the survey protocol, with respondent interviews, to boost the response rate to the surveys and gain robust understanding across these elements.

Childless Adult Beneficiary Enrollment Q 13-17

To capture the impact of transitioning into a more comprehensive plan on beneficiary outcomes, evaluators may want to consider adapting additional nationally recognized preventive care outcome measures such as: adult access to ambulatory care (NCQA), tobacco use cessation (NCQA, NQF #0028), body mass index screening and follow-up (NQF #0421), cervical cancer screening (NQF #0032), screening for clinical depression (NQF #0418), and practitioner follow-up after hospitalization (NQF #0567).

The current evaluation reflects the outcome measures that the WI DHS selected in its CMS-approved "BadgerCare Reform Demonstrate Evaluation Plan," (see pages 25 and 35-36 in that original plan) along with additional measures that the UW PHI team suggested to the DHS based on the data available.

We are happy to consider additional variables as outcomes to the extent that we may construct them with the data available. Specifically, using the available claims and enrollment data it is possible to assess access to ambulatory care, cervical cancer screening, and practitioner follow-up after hospitalization. However, the additional measures

requested above are beyond the scope of the current project because they require access to clinical information (e.g., electronic medical records) that is not available to the evaluation team.

- It will be important to match beneficiaries in the treatment and comparison group by their health status. Hence, evaluators may want to consider including Chronic Illness Disability Payment System (CDPS) risk score computed using all diagnoses on claims/encounters over a baseline period in the propensity score model.

  Propensity score matching of the treatment and comparison group is unnecessary if the common trends assumption is satisfied. We appreciate the CMS' suggestion of the CDPS as a potential matching variable and will consider it if matching appears to be needed.

- Systematic differences between childless adults and parents/caretakers are likely. While propensity score methods ensure balance between the two groups on measured confounders, are there contingency plans in place if there is no balance observed between the treatment and comparison group on these observed confounders?

  In the context of the diff-in-diff design, systematic differences between the groups are only problematic to the extent that they violate the common trends assumption.

  If matching appears to be necessary, we will select our matching method based on the degree of overlap in observables between the two groups. If there is insufficient overlap, we will implement a single series interrupted time series model. This design has the capacity to yield causal findings in the absence of a comparison group assuming no concurrent event related to the outcome in April 2014 and a sufficient number of data points before and after April 2014. We have a sufficient number of data points to implement this design and are not aware of any confounding concurrent events.

Additional suggestions for evaluators to consider:

- We suggest rewording the "cost-effectiveness" to either "efficiency" or "smarter spending" since the evaluation measures do not get at true cost-effectiveness.

  Our UW evaluation team did not select the content or wording of the State of Wisconsin's evaluation measures. This language was laid out in the State of Wisconsin's document that had previously been approved by CMS and provided to our UW team to follow as part of our evaluation contract.

  In our Design Report that we submitted to DHS, we provided clarifying text in the "limitations" section that follows each of the State's cost -effectiveness questions. This text recognizes the CMS' point. The representative text from Q15 is included below:

We note that outcomes/spending is also not a typical measure of "cost-effectiveness," which is normally expressed as a denominator of a gain in health and a numerator of the cost associated with the health gain. Regardless, we will not be able to directly identify the specific costs of any particular change in health outcomes, only "changes in costs" and "changes in health-related outcomes" induced by the introduction of Standard Plan coverage.

- There are multiple diagnoses associated with an ED visit claim/encounter. In applying the Billings Algorithm to determine whether an ED visit is for an ambulatory care sensitive condition, we suggest that evaluators consider the ED diagnoses on the claim with the highest with the highest likelihood of being truly emergent. This allows for consistency in classifying ED visits as avoidable/unavoidable.

  We will apply the Billings algorithm in a consistent and transparent manner as in our prior work. See, for example:

  DeLeire T, Dague L, Leininger L, Voskuil K, Friedsam D. 2013. Wisconsin experience indicates that expanding public insurance to low-income childless adults has health care impacts. Health Affairs. 32(6):1037-1045.

- We suggest adding a discussion on the completeness and accuracy of the Wisconsin encounter data.

  We will include this assessment in our annual and final reports, as we have in our previous evaluation projects with Wisconsin DHS.

University of Wisconsin
Population Health Institute
SCHOOL OF MEDICINE AND PUBLIC HEALTH

Current or Former
BadgerCare Plus Member Survey

Thank you for taking the time to answer the questions on the following pages. This survey is about your health care coverage through Wisconsin Medicaid or BadgerCare Plus. Your answers will help the Wisconsin Department of Health Services understand how changes to these programs affect your health and health care.

Taking part in this survey is voluntary. You can skip questions that you do not want to answer. If you choose not to take this survey, it will not affect any health care benefits you are getting right now or might get in the future. All information is private and confidential. You will not be individually identified with your responses.

For each question, please fill in the circle next to the answer you choose, or write your answer in the box provided. When you are finished, please place the completed survey into the postage-paid envelope provided, and put it in the mail.

If you have questions about the survey, you can contact one of the people listed below:

Bob Cradock at the University of Wisconsin Survey Center
608-265-9885
cradock@ssc.wisc.edu

Donna Friedsam at the UW Population Health Institute
608-263-4881
dafriedsam@wisc.edu

Thank you again for your help!

Your Health Care Coverage

1. In the past 12 months, how many months did you have some kind of health care coverage? Select *one* answer only.

- ○ No health care coverage during the last 12 months
- ○ 1 to 2 months of health care coverage
- ○ 3 to 5 months of health care coverage
- ○ 6 to 8 months of health care coverage
- ○ 9 to 11 months of health care coverage
- ○ Covered for all of the last 12 months → **Go to Question 3**

2. If you did not have health care coverage in some or all of the past 12 months, what are the reasons you did not have coverage? Select *all* that apply.

	Yes	No
a. I did not qualify for Medicaid/BadgerCare Plus anymore	○	○
b. I could not afford payments to remain on Medicaid or BadgerCare Plus	○	○
c. I could not afford payments for private health care coverage, an employer's insurance, or from the federal Marketplace/Healthcare.gov/ACA/Obamacare	○	○
d. I was not offered health care coverage from an employer	○	○
e. I was not able to afford the health care coverage an employer offered	○	○
f. I did not have access to any health care coverage	○	○
g. I did not want health care coverage	○	○
h. I did not know how to find information on available health care coverage options	○	○
i. I did not have the time to get health care coverage	○	○

3. What type of health care coverage do you *currently* have? Select *all* that apply.

	Yes	No
a. Wisconsin Medicaid Program	○	○
b. BadgerCare Plus	○	○
c. Medicare	○	○
d. Employer or family member's employer	○	○
e. A private plan I pay for myself	○	○
f. A health plan from Healthcare.gov, the federal Affordable Care Act (ACA/Obamacare) Marketplace	○	○
g. Other coverage. Please specify:	○	○
h. None - no coverage/insurance	○	○

If you *currently* have coverage from Medicaid or BadgerCare Plus, please skip to Question 7.

4. For those who no longer have Medicaid/BadgerCare coverage: What are the reasons you no longer have that coverage? Select *all* that apply.

	Yes	No
a. I am not eligible anymore because I have access to other health care coverage.	○	○
b. I am not eligible anymore because my income has changed.	○	○
c. I am not eligible anymore for other reasons.	○	○
d. The premiums increased and so I dropped my Medicaid/BadgerCare Plus coverage.	○	○
e. I missed a premium payment, so the Medicaid/BadgerCare Plus program temporarily removed me from coverage.	○	○
f. Other reason. Please specify:	○	○

5. Have you ever looked for information on health care coverage available from the federal Health Insurance Marketplace (healthcare.gov)? Select *one* answer only.

- ○ Yes
- ○ No, but I plan on looking for information → **Go to Question 7**
- ○ No, and I do not plan on looking for information → **Go to Question 7**
- ○ I have not heard about this kind of health care coverage → **Go to Question 7**
- ○ I do not know how to look for health care coverage → **Go to Question 7**

6. How did the health care coverage available from the federal Health Insurance Marketplace (healthcare.gov) seem to you? Select *one* answer only.

- ○ There are some good options for me
- ○ I can't afford the required premium payments
- ○ The plans don’t cover/include the doctors and providers that I need to see
- ○ I’m not sure

Your Health Care

7. Is there a place you *usually* go to get health care? Select *one* answer only.

- ◯ Yes
- ◯ No → **Go to Question 9**

8. Where do you usually go to get health care? Select *one* answer only.

- ◯ A private doctor's office or clinic
- ◯ A public health clinic, community health center, or tribal clinic
- ◯ A walk-in clinic in a store, such as Walmart or a pharmacy
- ◯ A hospital-based clinic
- ◯ A hospital emergency room
- ◯ An urgent care clinic
- ◯ Some other place. Please specify: ☐
- ◯ I don't have a usual place
- ◯ I don't know

9. Do you have at least one person you think of as your personal doctor or health care provider? Select *one* answer only.

- ◯ Yes, more than one person
- ◯ Yes, only one person
- ◯ No, no one
- ◯ I don't know

10. If you needed health care in the past 12 months, did you get all the care you needed?

- ○ Yes → **Go to Question 12**
- ○ No
- ○ I did not need care in the last 12 months → **Go to Question 12**

11. Think about the *most recent time* you went *without* needed health care in the last 12 months. What were the main reasons you went without care at that time? Select *all* that apply.

	Yes	No
a. It cost too much	○	○
b. I didn't have health care coverage	○	○
c. The doctor wouldn't take my insurance	○	○
d. I owed money to the doctor	○	○
e. I couldn't get an appointment quickly enough	○	○
f. The office wasn't open when I could get there	○	○
g. I didn't have a doctor	○	○
h. Other reason. Please specify:	○	○

12. Was there a time in the *last 12 months* when you needed *prescription medication*?

- ○ Yes
- ○ No → **Go to Question 15**

13. If you needed prescription medications in the past 12 months, did you get all the medications you needed? Select *one* answer only.

- ○ Yes → **Go to Question 15**
- ○ No
- ○ I did not need medications in the last 12 months → **Go to Question 15**

14. Think about the *most recent time* you went *without* prescription medications that you needed in the last 12 months. What were the main reasons you went without prescription medications at that time? Select *all* that apply.

	Yes	No
a. They cost too much	○	○
b. I didn't have health care coverage	○	○
c. I didn't have a doctor	○	○
d. I couldn't get a prescription	○	○
e. I couldn't get to the pharmacy	○	○
f. Some other reason. Please specify:	○	○

15. How long has it been since you last visited a dentist or a dental care provider for any reason? *Include visits to dental specialists, such as orthodontists.*

- ◯ Less than 12 months ago
- ◯ Between 1 and 5 years ago
- ◯ More than 5 years ago
- ◯ I have never visited a dentist or dental care provider
- ◯ Not sure

16. In the *last 12 months*, how many times did you visit a doctor's office, an urgent care or walk-in clinic, or other health care provider to get care for yourself? *Do not include hospital and emergency room visits or dental care. Please give your best guess.*

- ◯ 0 times
- ◯ 1 time
- ◯ 2 times
- ◯ 3 or 4 times
- ◯ 5 or more times

17. In the *last 12 months*, how many times did you go to an emergency room to get care for yourself? *Please give your best guess.*

- ◯ 0 times → **Go to Question 19**
- ◯ 1 time
- ◯ 2 times
- ◯ 3 or 4 times
- ◯ 5 or more times

18. Think about the *most recent time* you went to the emergency room in the last 12 months. What were the main reasons you went to the emergency room instead of somewhere else for health care at that time? Select *all* that apply.

	Yes	No
a. I needed emergency care	◯	◯
b. I didn't have health insurance	◯	◯
c. The doctors' office/clinic was closed	◯	◯
d. I couldn't get an appointment to see a regular doctor soon enough	◯	◯
e. I didn't have a personal doctor	◯	◯
f. I couldn't afford the copay to see a doctor	◯	◯
g. I needed a prescription drug	◯	◯
h. I didn't know where else to go	◯	◯
i. Some other reason. Please specify: _____	◯	◯

19. In the *last 12 months*, how many different times were you a patient in a hospital for at least one overnight? *Do not include hospital stays to deliver a baby.*

☐ times

20. Overall, how would you rate the quality of the medical care you have received in the *last 12 months*?

◯ Excellent
◯ Very good
◯ Good
◯ Fair
◯ Poor

◯ I did not receive medical care in the last 12 months

21. How satisfied or dissatisfied are you with the following aspects of your current health care?

	Very Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Very Dissatisfied
a. The range of health care services available	◯	◯	◯	◯
b. The choice of doctors and other providers	◯	◯	◯	◯

Your Health Care Costs

22. In the past 12 months, did you have problems paying any medical bills, including bills for doctors, dentists, hospitals, therapists, medical equipment, nursing home, or home care?

◯ Yes
◯ No

23. In the past 12 months, did you need any of the following at any time but not get it because of how much it cost? Select *all* that apply.

	Yes	No
a. Prescription drugs	◯	◯
b. Medical care	◯	◯
c. To see a general doctor	◯	◯
d. To see a specialist	◯	◯
e. To get medical tests, treatment, or follow-up care	◯	◯
f. Dental care	◯	◯
g. Mental health care or counseling	◯	◯
h. Eyeglasses or vision care	◯	◯

24. Do you *currently* owe money to a health care provider, credit card company, or anyone else for medical expenses?

- ◯ Yes
- ◯ No → **Go to Question 26**

25. About how much do you owe?

$ .00 amount owed

26. In the *last 12 months*, have you had to borrow money, skip paying other bills, or pay other bills late in order to pay health insurance bills?

- ◯ Yes
- ◯ No

27. In the *last 12 months*, has a doctor, clinic, or medical service refused to treat you because you owed money to them for past treatment?

- ◯ Yes
- ◯ No
- ◯ I don't know

Your Health

28. In general, would you say your health is:

- ◯ Excellent
- ◯ Very good
- ◯ Good
- ◯ Fair
- ◯ Poor

29. How has your health changed in the *last 12 months*?

- ◯ My health has gotten better
- ◯ My health is about the same
- ◯ My health has gotten worse

30. Have you ever been told by a doctor or other health care provider that you have any of the health conditions listed below? Select *all* that apply.

	Yes	No
a. Diabetes or sugar diabetes	○	○
b. Asthma	○	○
c. High blood pressure	○	○
d. Emphysema or chronic bronchitis (COPD)	○	○
e. Heart disease, angina, or heart attack	○	○
f. Congestive heart failure	○	○
g. Depression or anxiety	○	○
h. High cholesterol	○	○
i. Kidney problems, kidney disease, or dialysis	○	○
j. A stroke	○	○
k. Alcoholism or drug addition	○	○
l. Cancer, except for skin cancer	○	○

31. In the past 12 months, have you done any of the following things specifically for any of those health conditions you were told that you have? Select *all* that apply.

	Yes	No
a. I have been to a doctor or clinic	○	○
b. I have taken medication regularly	○	○
c. I have been to the hospital emergency room because of the condition(s)	○	○
d. I have been admitted to the hospital because of the condition(s)	○	○
e. I have not been treated for the condition(s)	○	○

32. Have you had your blood cholesterol checked?

○ Yes, within the last 12 months
○ Yes, but it's been more than 12 months
○ Never

33. During the past 12 months, have you had either a flu shot or a flu vaccine that was sprayed in your nose?

○ Yes
○ No

34. Do you currently smoke cigarettes every day, some days, or not at all?

- ◯ Every day
- ◯ Some days
- ◯ Not at all → **Go to Question 36**

35. In the *last 12 months*, have you been advised by a doctor or health professional to quit smoking?

- ◯ Yes
- ◯ No
- ◯ I haven't seen a doctor in the last 12 months

36. Does a physical, mental, or emotional condition now limit your ability to work at a job?

- ◯ Yes
- ◯ No

37. Over the past two weeks, how often have you been bothered by having little interest or pleasure in doing things?

- ◯ Not at all
- ◯ A few times
- ◯ More than half the days
- ◯ Nearly every day
- ◯ Don't know

38. Over the past two weeks, how often have you been bothered by feeling down, depressed, or hopeless?

- ◯ Not at all
- ◯ A few times
- ◯ More than half the days
- ◯ Nearly every day
- ◯ Don't know

Your Health Care Coverage Experiences

39. Some people find health care coverage and insurance difficult to understand. For each of the words below, please indicate how confident you are that you understand what the word means.

	Very Confident	Somewhat Confident	Slightly Confident	Not At All Confident
a. Premiums	○	○	○	○
b. Deductibles	○	○	○	○
c. Copayments	○	○	○	○
d. Coinsurance	○	○	○	○

40. Were you enrolled in the BadgerCare program before April 2014?

○ Yes
○ No → **Go to Question 45**
○ Don't know

41. In April 2014, the BadgerCare Plus program changed its program requirements, including how people can become eligible for the program, what services are covered, and what kinds of payments might be required to participate in the program.

To the best of your knowledge were you affected by any new program requirements?

○ Yes
○ No
○ Don't know

42. Did you ever lose eligibility for BadgerCare Plus and were no longer enrolled because of changes made after April 2014?

○ Yes → **Go to Question 45**
○ No

43. Think about changes since April 2014 in the BadgerCare Plus program. Please indicate how each of the items below affected you.

	Increased	Decreased	No Change	Not Sure
a. Monthly premium/payments for health care coverage	○	○	○	○
b. Penalties for not paying a monthly premium	○	○	○	○
c. Copayments to visit a doctor or clinic	○	○	○	○
d. Mental health or substance abuse treatment benefits	○	○	○	○

44. Overall, how satisfied or dissatisfied are you with the changes that have taken place since April 2014? Select one answer only.

- ◯ Very satisfied
- ◯ Somewhat satisfied
- ◯ Neither satisfied nor dissatisfied
- ◯ Somewhat dissatisfied
- ◯ Very dissatisfied

About You

45. Are you male or female?

- ◯ Male
- ◯ Female

46. What is your current age?

- ◯ Younger than age 19
- ◯ Age 19 to 25
- ◯ Age 26 to 34
- ◯ Age 35 to 44
- ◯ Age 45 to 64
- ◯ Age 65 or older

47. Are you currently employed or self-employed?

- ◯ Yes, employed by someone else
- ◯ Yes, self-employed
- ◯ Not currently employed
- ◯ Retired

48. About how many hours per week, on average, do you work at your current job(s)?

- ◯ I don't currently work
- ◯ I work less than 20 hours per week
- ◯ I work 20 to 29 hours per week
- ◯ I work 30 or more hours per week

49. What was your household's gross income (before taxes and deductions are taken out) for 2015? Include any cash assistance or unemployment benefits you may have received, and include the income of all members of your household. Select *one* answer only. If you do not know, give your best guess.

- ◯ Less than $4,999
- ◯ $5,000 to $9,999
- ◯ $10,000 to $14,999
- ◯ $15,000 to $19,999
- ◯ $20,000 to $29,999
- ◯ $30,000 to $39,999
- ◯ $40,000 to $49,999
- ◯ $50,000 to $59,999
- ◯ $60,000 to $69,999
- ◯ $70,000 to $79,999
- ◯ $80,000 to $89,999
- ◯ $90,000 to $99,999
- ◯ $100,000 or more

50. Would you describe yourself as Spanish, Hispanic, or Latino?

- ◯ Yes
- ◯ No

51. How would you describe your race? Select *all* that apply.

- ☐ White
- ☐ Black or African-American
- ☐ American Indian or Alaska Native
- ☐ Asian
- ☐ Native Hawaiian or Pacific Islander
- ☐ Other, please specify: _____

52. What is the *highest* level of education you have completed? Select *one* answer only.

- ◯ Less than high school
- ◯ High school diploma or General Education Development (GED) certificate
- ◯ Vocational training or 2-year degree
- ◯ Some college but no degree
- ◯ A 4-year college degree or more

53. What is your current living arrangement? *Select all that apply.*

☐ I live alone
☐ I live with my partner or spouse
☐ I live with my parents
☐ I live with other relatives (including children)
☐ I live with friends or roommates
☐ Other, please specify: _____

54. How many family members, <u>including yourself</u>, counting adults and children, are living in your home? (*For example, if you live alone, you should write "1".*)

_____ family member(s) in my home

55. Of the family members living in your home, how many are under age 19?

_____ family member(s) in my home are under age 19

56. Do you have any children under age 19 who you financially support but that do not live in your home?

◯ Yes
◯ No

Thank you for your participation. When you have finished your survey, please place it in the included postage-paid envelope, and drop it in the mail.

University of Wisconsin
Population Health Institute
SCHOOL OF MEDICINE AND PUBLIC HEALTH

Current or Former
BadgerCare Plus Member Survey

Thank you for taking the time to answer the questions on the following pages. This survey is about your health care coverage through Wisconsin Medicaid or BadgerCare Plus. Your answers will help the Wisconsin Department of Health Services understand how changes to these programs affect your health and health care.

Taking part in this survey is voluntary. You can skip questions that you do not want to answer. If you choose not to take this survey, it will not affect any health care benefits you are getting right now or might get in the future. All information is private and confidential. You will not be individually identified with your responses.

For each question, please fill in the circle next to the answer you choose, or write your answer in the box provided. When you are finished, please place the completed survey into the postage-paid envelope provided, and put it in the mail.

If you have questions about the survey, you can contact one of the people listed below:

Bob Cradock at the University of Wisconsin Survey Center
608-265-9885
cradock@ssc.wisc.edu

Donna Friedsam at the UW Population Health Institute
608-263-4881
dafriedsam@wisc.edu

Thank you again for your help!

Your Health Care Coverage

1. In the past 12 months, how many months did you have some kind of health care coverage? Select *one* answer only.

- ○ No health care coverage during the last 12 months → **Go to Question 3**
- ○ 1 to 2 months of health care coverage
- ○ 3 to 5 months of health care coverage
- ○ 6 to 8 months of health care coverage
- ○ 9 to 11 months of health care coverage
- ○ Covered for all of the last 12 months

2. What type of health care coverage do you *currently* have? Select *all* that apply.

	Yes	No
a. Wisconsin Medicaid Program	○	○
b. BadgerCare Plus	○	○
c. Medicare	○	○
d. Employer or family member's employer	○	○
e. A private plan I pay for myself	○	○
f. A health plan from Healthcare.gov, the federal Affordable Care Act (ACA/Obamacare) Marketplace	○	○
g. Other coverage. Please specify:	○	○
h. None - no coverage/insurance	○	○

If you *currently* have coverage from Medicaid or BadgerCare Plus, please skip to Question 4.

3. For those who no longer have Medicaid/BadgerCare coverage: What are the reasons you no longer have that coverage? Select *all* that apply.

	Yes	No
a. I am not eligible anymore because I have access to other health care coverage.	○	○
b. I am not eligible anymore because my income has changed.	○	○
c. I am not eligible anymore for other reasons.	○	○
d. The premiums increased and so I dropped my Medicaid/BadgerCare Plus coverage.	○	○
e. I missed a premium payment, so the Medicaid/BadgerCare Plus program temporarily removed me from coverage.	○	○
f. Other reason. Please specify:	○	○

4. Some individuals in the BadgerCare Plus program who don't pay their monthly premiums are subject to a "restrictive re-enrollment period", meaning that the program does not allow them to re-enroll in the program for a certain number of months.

Have you been placed in a restrictive re-enrollment period at any point in the last 12 months?

- ○ Yes, I am in a restrictive re-enrollment period right now and plan to re-enroll in Medicaid/BadgerCare Plus when I am able
- ○ Yes, previously, but I re-enrolled in Medicaid/BadgerCare Plus and am not in a restrictive reenrollment period right now
- ○ I stopped paying my premiums because I no longer want Medicaid/BadgerCare Plus coverage → **Go to Question 7**
- ○ No, I have not been in a restrictive re-enrollment period → **Go to Question 7**
- ○ Don't know → **Go to Question 7**

5. During the period of time you could not be enrolled because of Restrictive Reenrollment, which of the following statements applied to your health care needs? Select *all* that apply.

	Yes	No
a. I did not need any health care	○	○
b. I needed health care, but I decided to delay until I had health care coverage again	○	○
c. I received health care in the hospital emergency room	○	○
d. I received health care at a community health center or clinic	○	○
e. I received health care from a private doctor or clinic	○	○
f. I received health care where I usually do when I have health care coverage	○	○

6. How did you pay for the health care you got during the period of time you could not be enrolled in BadgerCare Plus? Select *all* that apply.

	Yes	No
a. I, or a friend or family member, paid directly (out-of-pocket)	○	○
b. I was able to get free/charity care	○	○
c. I used a different health insurance plan	○	○
d. I still owe money/have debt for those bills	○	○

Your Health Care

7. Is there a place you *usually* go to get health care? Select *one* answer only.

- ◯ Yes
- ◯ No → **Go to Question 9**

8. Where do you usually go to get health care? Select *one* answer only.

- ◯ A private doctor's office or clinic
- ◯ A public health clinic, community health center, or tribal clinic
- ◯ A walk-in clinic in a store, such as Walmart or a pharmacy
- ◯ A hospital-based clinic
- ◯ A hospital emergency room
- ◯ An urgent care clinic
- ◯ Some other place. Please specify: ☐
- ◯ I don't have a usual place
- ◯ I don't know

9. Do you have at least one person you think of as your personal doctor or health care provider? Select *one* answer only.

- ◯ Yes, more than one person
- ◯ Yes, only one person
- ◯ No, no one
- ◯ I don't know

10. If you needed health care in the past 12 months, did you get all the care you needed?

- ○ Yes → **Go to Question 12**
- ○ No
- ○ I did not need care in the last 12 months → **Go to Question 12**

11. Think about the *most recent time* you went *without* needed health care in the last 12 months. What were the main reasons you went without care at that time? Select *all* that apply.

	Yes	No
a. It cost too much	○	○
b. I didn't have health care coverage	○	○
c. The doctor wouldn't take my insurance	○	○
d. I owed money to the doctor	○	○
e. I couldn't get an appointment quickly enough	○	○
f. The office wasn't open when I could get there	○	○
g. I didn't have a doctor	○	○
h. Other reason. Please specify:	○	○

12. Was there a time in the *last 12 months* when you needed *prescription medication*?

- ○ Yes
- ○ No → **Go to Question 15**

13. If you needed prescription medications in the past 12 months, did you get all the medications you needed? Select *one* answer only.

- ○ Yes → **Go to Question 15**
- ○ No
- ○ I did not need medications in the last 12 months → **Go to Question 15**

14. Think about the *most recent time* you went *without* prescription medications that you needed in the last 12 months. What were the main reasons you went without prescription medications at that time? Select *all* that apply.

	Yes	No
a. They cost too much	○	○
b. I didn't have health care coverage	○	○
c. I didn't have a doctor	○	○
d. I couldn't get a prescription	○	○
e. I couldn't get to the pharmacy	○	○
f. Some other reason. Please specify:	○	○

15. How long has it been since you last visited a dentist or a dental care provider for any reason? *Include visits to dental specialists, such as orthodontists.*

- ◯ Less than 12 months ago
- ◯ Between 1 and 5 years ago
- ◯ More than 5 years ago
- ◯ I have never visited a dentist or dental care provider
- ◯ Not sure

16. In the *last 12 months*, how many times did you visit a doctor's office, an urgent care or walk-in clinic, or other health care provider to get care for yourself? *Do not include hospital and emergency room visits or dental care. Please give your best guess.*

- ◯ 0 times
- ◯ 1 time
- ◯ 2 times
- ◯ 3 or 4 times
- ◯ 5 or more times

17. In the *last 12 months*, how many times did you go to an emergency room to get care for yourself? *Please give your best guess.*

- ◯ 0 times → **Go to Question 19**
- ◯ 1 time
- ◯ 2 times
- ◯ 3 or 4 times
- ◯ 5 or more times

18. Think about the *most recent time* you went to the emergency room in the last 12 months. What were the main reasons you went to the emergency room instead of somewhere else for health care at that time? Select *all* that apply.

	Yes	No
a. I needed emergency care	◯	◯
b. I didn't have health insurance	◯	◯
c. The doctors' office/clinic was closed	◯	◯
d. I couldn't get an appointment to see a regular doctor soon enough	◯	◯
e. I didn't have a personal doctor	◯	◯
f. I couldn't afford the copay to see a doctor	◯	◯
g. I needed a prescription drug	◯	◯
h. I didn't know where else to go	◯	◯
i. Some other reason. Please specify: _____	◯	◯

19. In the *last 12 months*, how many different times were you a patient in a hospital for at least one overnight? *Do not include hospital stays to deliver a baby.*

☐ times

20. Overall, how would you rate the quality of the medical care you have received in the *last 12 months*?

◯ Excellent
◯ Very good
◯ Good
◯ Fair
◯ Poor

◯ I did not receive medical care in the last 12 months

21. How satisfied or dissatisfied are you with the following aspects of your current health care?

	Very Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Very Dissatisfied
a. The range of health care services available	◯	◯	◯	◯
b. The choice of doctors and other providers	◯	◯	◯	◯

Your Health Care Costs

22. In the past 12 months, did you have problems paying any medical bills, including bills for doctors, dentists, hospitals, therapists, medical equipment, nursing home, or home care?

◯ Yes
◯ No

23. In the past 12 months, did you need any of the following at any time but not get it because of how much it cost? Select *all* that apply.

	Yes	No
a. Prescription drugs	◯	◯
b. Medical care	◯	◯
c. To see a general doctor	◯	◯
d. To see a specialist	◯	◯
e. To get medical tests, treatment, or follow-up care	◯	◯
f. Dental care	◯	◯
g. Mental health care or counseling	◯	◯
h. Eyeglasses or vision care	◯	◯

24. Do you *currently* owe money to a health care provider, credit card company, or anyone else for medical expenses?

- ◯ Yes
- ◯ No → **Go to Question 26**

25. About how much do you owe?

$ .00 amount owed

26. In the *last 12 months*, have you had to borrow money, skip paying other bills, or pay other bills late in order to pay health insurance bills?

- ◯ Yes
- ◯ No

27. In the *last 12 months*, has a doctor, clinic, or medical service refused to treat you because you owed money to them for past treatment?

- ◯ Yes
- ◯ No
- ◯ I don't know

Your Health

28. In general, would you say your health is:

- ◯ Excellent
- ◯ Very good
- ◯ Good
- ◯ Fair
- ◯ Poor

29. How has your health changed in the *last 12 months*?

- ◯ My health has gotten better
- ◯ My health is about the same
- ◯ My health has gotten worse

30. Have you ever been told by a doctor or other health care provider that you have any of the health conditions listed below? Select *all* that apply.

	Yes	No
a. Diabetes or sugar diabetes	○	○
b. Asthma	○	○
c. High blood pressure	○	○
d. Emphysema or chronic bronchitis (COPD)	○	○
e. Heart disease, angina, or heart attack	○	○
f. Congestive heart failure	○	○
g. Depression or anxiety	○	○
h. High cholesterol	○	○
i. Kidney problems, kidney disease, or dialysis	○	○
j. A stroke	○	○
k. Alcoholism or drug addition	○	○
l. Cancer, except for skin cancer	○	○

31. In the past 12 months, have you done any of the following things specifically for any of those health conditions you were told that you have? Select *all* that apply.

	Yes	No
a. I have been to a doctor or clinic	○	○
b. I have taken medication regularly	○	○
c. I have been to the hospital emergency room because of the condition(s)	○	○
d. I have been admitted to the hospital because of the condition(s)	○	○
e. I have not been treated for the condition(s)	○	○

32. Have you had your blood cholesterol checked?

○ Yes, within the last 12 months
○ Yes, but it's been more than 12 months
○ Never

33. During the past 12 months, have you had either a flu shot or a flu vaccine that was sprayed in your nose?

○ Yes
○ No

34. Do you currently smoke cigarettes every day, some days, or not at all?

- ◯ Every day
- ◯ Some days
- ◯ Not at all → **Go to Question 36**

35. In the *last 12 months*, have you been advised by a doctor or health professional to quit smoking?

- ◯ Yes
- ◯ No
- ◯ I haven't seen a doctor in the last 12 months

36. Does a physical, mental, or emotional condition now limit your ability to work at a job?

- ◯ Yes
- ◯ No

37. Over the past two weeks, how often have you been bothered by having little interest or pleasure in doing things?

- ◯ Not at all
- ◯ A few times
- ◯ More than half the days
- ◯ Nearly every day
- ◯ Don't know

38. Over the past two weeks, how often have you been bothered by feeling down, depressed, or hopeless?

- ◯ Not at all
- ◯ A few times
- ◯ More than half the days
- ◯ Nearly every day
- ◯ Don't know

Your Health Care Coverage Experiences

39. Some people find health care coverage and insurance difficult to understand. For each of the words below, please indicate how confident you are that you understand what the word means.

	Very Confident	Somewhat Confident	Slightly Confident	Not At All Confident
a. Premiums	○	○	○	○
b. Deductibles	○	○	○	○
c. Copayments	○	○	○	○
d. Coinsurance	○	○	○	○

40. Were you enrolled in the BadgerCare program before April 2014?

○ Yes
○ No → **Go to Question 45**
○ Don't know

41. In April 2014, the BadgerCare Plus program changed its program requirements, including how people can become eligible for the program, what services are covered, and what kinds of payments might be required to participate in the program.

To the best of your knowledge were you affected by any new program requirements?

○ Yes
○ No
○ Don't know

42. Did you ever lose eligibility for BadgerCare Plus and were no longer enrolled because of changes made after April 2014?

○ Yes → **Go to Question 45**
○ No

43. Think about changes since April 2014 in the BadgerCare Plus program. Please indicate how each of the items below affected you.

	Increased	Decreased	No Change	Not Sure
a. Monthly premium/payments for health care coverage	○	○	○	○
b. Penalties for not paying a monthly premium	○	○	○	○
c. Copayments to visit a doctor or clinic	○	○	○	○
d. Mental health or substance abuse treatment benefits	○	○	○	○

44. Overall, how satisfied or dissatisfied are you with the changes that have taken place since April 2014? Select one answer only.

- ◯ Very satisfied
- ◯ Somewhat satisfied
- ◯ Neither satisfied nor dissatisfied
- ◯ Somewhat dissatisfied
- ◯ Very dissatisfied

About You

45. Are you male or female?

- ◯ Male
- ◯ Female

46. What is your current age?

- ◯ Younger than age 19
- ◯ Age 19 to 25
- ◯ Age 26 to 34
- ◯ Age 35 to 44
- ◯ Age 45 to 64
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47. Are you currently employed or self-employed?

- ◯ Yes, employed by someone else
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- ◯ Not currently employed
- ◯ Retired

48. About how many hours per week, on average, do you work at your current job(s)?

- ◯ I don't currently work
- ◯ I work less than 20 hours per week
- ◯ I work 20 to 29 hours per week
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49. What was your household's gross income (before taxes and deductions are taken out) for 2015? Include any cash assistance or unemployment benefits you may have received, and include the income of all members of your household. Select *one* answer only. If you do not know, give your best guess.

- ◯ Less than $4,999
- ◯ $5,000 to $9,999
- ◯ $10,000 to $14,999
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50. Would you describe yourself as Spanish, Hispanic, or Latino?

- ◯ Yes
- ◯ No

51. How would you describe your race? Select *all* that apply.

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- ◯ Less than high school
- ◯ High school diploma or General Education Development (GED) certificate
- ◯ Vocational training or 2-year degree
- ◯ Some college but no degree
- ◯ A 4-year college degree or more

53. What is your current living arrangement? *Select all that apply.*

☐ I live alone
☐ I live with my partner or spouse
☐ I live with my parents
☐ I live with other relatives (including children)
☐ I live with friends or roommates
☐ Other, please specify: _____

54. How many family members, <u>including yourself</u>, counting adults and children, are living in your home? (*For example, if you live alone, you should write "1".*)

_____ family member(s) in my home

55. Of the family members living in your home, how many are under age 19?

_____ family member(s) in my home are under age 19

56. Do you have any children under age 19 who you financially support but that do not live in your home?

◯ Yes
◯ No

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R