

**Public Policy Center** 

**RESEARCH REPORT** 

# **IOWA'S MARKETPLACE CHOICE SUMMATIVE REPORT**

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## **EXECUTIVE SUMMARY**

The Marketplace Choice Plan was implemented but did not have a stable set of Qualified Health Plans. Beginning with two QHPs in January 2014, there was one remaining QHP in December 2014 and no QHPs by December 2015. There most members enrolled in a month was 73% in October 2014. With only 9 months in which the percent of MPC members enrolled in a QHP was at least 50%, there is little reason to expect consistent and lasting results from this plan structure.

Below we indicate, generally, the answers to seven questions that formed the basis of the MPC evaluation. This evidence is taken from the current report and a number of other reports that have been completed relating to Iowa Health and Wellness Plan (IHAWP).

- 1. What are the effects of the Marketplace Choice Plan on member access to care? Access to care improved with the advent of Marketplace Choice for those members who were able to remain covered due to expanded provider networks and additional covered service, such as dental care and prescription medications. 7,700 people covered through the IowaCare program were not enrolled in MPC because their incomes were too high. We do not know whether they were able to access coverage through the Health Insurance Marketplace.
- 2. What are the effects of the Marketplace Choice Plan on member insurance coverage gaps and insurance service when their eligibility status changes (churning)? Members leaving traditional Medicaid coverage were able to enroll in Wellness Plan or Marketplace Choice to retain coverage. The addition of this coverage provided for movement between levels beyond what had been available previously. There is significant movement out of coverage that we are unable to follow to determine whether members received additional coverage.
- 3. What are the effects of the Marketplace Choice Plan on member quality of care? The effects of any plan on the quality of care often hinges on long term results which we are unable to measure with the shortened time frame of this program. Some measure indicate that members received high quality of care both through their reported experiences and claims. There was increased access to well person visits and improved satisfaction with health care. There are also some indicators that the quality of care was not as high as we see for members in the FMAP program. In particular, the rate of hospitalizations and readmissions in higher in MPC than in FMAP.
- 4. What are the effects of the Marketplace Choice Plan on the costs of providing care? Both the premiums that the state paid and the costs of encounters as reported by the QHPs were higher than for comparable groups in the traditional Medicaid program or Wellness Plan. Most of this increased cost seems to derive from enhanced fee schedules which pushed cost up even when utilization was similar. These increased reimbursement rates to enhance access to care and services may have paid off in the longer term, however, the QHPs did not operate long enough to test the validity of this investment.
- 5. What are the effects of the premium incentive and copayment disincentive programs on Marketplace Choice enrollees?

There is little evidence that the premium incentive or the copayment disincentive programs affected MPC members in any way. The majority were not aware of the premium payment requirements, nor were they aware of copayments for ED care utilized for non-emergent conditions. There is no clear evidence that the ED disincentive was put into place as the responsibility for determining the need for the copayment and for collecting the copayment rested upon providers. Additionally, disenrollment due to lack of completing a health behavior and not paying the premium that resulted from this did not begin until 10 months after the first members neglected to pay. Members were confused as to why they were being disenrolled.

- 6. What is the adequacy of the provider network for Marketplace Choice members? The adequacy of the provider network for MPC enrollees is comparable to that for Wellness Plan and FMAP members with most living within minutes and a few miles of a provider who is contracted in the network and very few living more than 30 miles from their provider.
- 7. What are the effects of the new Dental Wellness Plan on enrollee access to and utilization of services?

The DWP provided access to dental care for all MPC members. The tiered benefit structure de-

signed to enhance personal responsibility through rewarding the utilization of recall visits, did not seem to work. This option was eliminated in CY 2016 in response to a previous report.

## **INTRODUCTION**

This summative report on the Marketplace Choice Plan (MPC) provides the final analyses due to CMS on December 31, 2017. As we explain below, MPC underwent many unique challenges during the implementation and first 2 years of operation, leading to its dormancy effective December 31, 2015. These challenges, and the ultimate dormancy of the program, preclude the use of many of the originally proposed measures and analytical approaches.

## THE IOWA HEALTH AND WELLNESS PLAN

On January 1, 2014 IowaCare, a limited coverage program for adults age 19-64 with incomes from 0-185% Federal Poverty Level (FPL) who were not categorically eligible for Medicaid, was replaced with the Iowa Health and Wellness Plan (IHAWP) which expanded health care service coverage while reducing the upper end of the eligibility spectrum from 185% FPL to 133%. There were two components to IHAWP: the Iowa Wellness Plan (WP), a program operated by the Iowa Department of Human Services (IDHS) providing health coverage for uninsured Iowans from 0-100% of the FPL and the Marketplace Choice Plan (MPC), a premium support plan for Iowans from 101-133% of FPL. More information regarding the formulation and implementation of the Iowa Health and Wellness Plan can be found online at <a href="http://dhs.iowa.gov/ime/about/initiatives/iowa-health-and-wellness-plan">http://dhs.iowa.gov/ime/about/initiatives/iowa-health-and-wellness-plan</a>.

## **MARKETPLACE CHOICE**

MPC originally provided coverage for adults 19-64 with incomes from 101-133% of the Federal Poverty Level (FPL) through Qualified Health Plans (QHP) available on the health insurance marketplace, with Medicaid paying the member's QHP premiums. Marketplace Choice members originally could choose from the two health plans listed below.

## **CoOportunity Health**

CoOportunity was a non-profit health co-op available on the Health Insurance Marketplace through the federal government portal. It was established with start-up funds provided through the ACA and operated statewide in Iowa and Nebraska, in alliance with HealthPartners of Minnesota and the Midlands Choice provider network.

## **Coventry Health Care of Iowa**

Coventry is a national managed care company based in Bethesda, MD. They operate statewide and were available on the Health Insurance Marketplace through the federal portal.

MPC was modified in significant ways in its first 2 years. The first major change occurred when CoOportunity Health withdrew as an option at the end of November 2014.<sup>1</sup> Approximately 9,700 CoOportunity Health members were automatically transitioned to WP providers on December 1, 2014, however; they retained their designation as MPC members within the program. IHAWP members who were not in CoOportunity Health remained in Coventry, the other QHP available to MPC members. On May 1, 2014 MPC members were enrolled into the Dental Wellness Plan, a tiered dental benefit and on July 1, 2014 they were enrolled into the Healthy Behaviors Incentive program, a program to encourage wellness through preventive health care, Health Risk Assessment, and preventive self-management such as tobacco cessation or exercise.

During calendar year 2015 the state decided to place the majority of Medicaid members, including all MPC members, into one of three managed care plans beginning January 1, 2016. This resulted in newly eligible MPC members being placed in the traditional Fee-for-service program beginning July 2015, while MPC members previously enrolled with Coventry were placed into the traditional Medicaid Fee-For-Service program effective December 31, 2016. The Medicaid Managed Care Organizations (MCOs) were able to begin accepting members on April 1, 2016. MPC members not in Coventry remained in the traditional Medicaid program until April 1, 2016 (See Table 1).

Effective January 1, 2017 the MPC program was not renewed so all MPC members were rolled into Wellness Plan (WP). WP now covers Iowans not categorically eligible for Medicaid with income from 0-133% of FPL. Members were enrolled with one of three MCOs-United Health Care, AmeriHealth Caritas, or AmeriGroup.

<sup>1</sup> lowa Marketplace Choice Plan Changes. lowa Department of Human Services. November 2014. Available at: <u>https://dhs.iowa.gov/sites/default/files/</u> <u>CoOpTransition\_FAQ\_11052014.pdf</u>. Accessed July 2, 2015.

#### Table 1. MPC timeline

January 2014	First MPC members enrolled
May 2014	MPC members enrolled in Dental Wellness Plan with Delta Dental of Iowa
July 2014	MPC members enrolled in the Healthy Behaviors Incentive Program
November 2014	MPC members in CoOportunity were moved to MediPASS (PCCM program), Meridian (HMO), or Coventry (QHP)
November 2015	MPC members in Coventry were moved to MediPASS or Fee-for-service (MPC component dormant)
April 2016	MPC members were moved to one of three MCOs- United Health Care, AmeriGroup or AmeriHealth Caritas

## **OTHER ACTIVITIES IN IOWA**

There were other activities occurring in Iowa's health care system during the implementation and first two years of MPC which could have affected some of the outcomes in this report (Figure 1). For example, Iowa completed the first two years of a four year State Innovation Model project implementing statewide system changes designed to increase the proportion of providers in value-based purchasing (VBP) contracts, increase members covered by VBP contracts, enhance health information technology (HIT) to provide alerts regarding emergency department use, and improve population health through targeted model projects and statewide health strategies. These activities, that were being implemented statewide, along with the MCO contracting for Medicaid, makes it more difficult to identify changes in utilization, cost or health that are uniquely associated with IHAWP.





## **METHODS**

The original evaluation proposal included 7 research questions encompassing 19 hypotheses operationalized by 74 measures. General descriptions of the methods used to analyze these questions are listed below. Technical descriptions of the methods used to date may be found in individual reports at <u>http://ppc.uiowa.</u> <u>edu/health/study/evaluation-iowas-medicaid-expansion-iowa-health-and-wellness-plan</u>.

## **ANALYTICAL APPROACHES**

## **PROCESS MEASURES**

Process measures include qualitative assessments of plan documents and provider panels. Process measures are designed to describe the state of the program or some aspect of the program, but do not lend themselves to testing.

## **MEANS TESTING**

Means testing of administrative and survey outcomes for the study groups before and/or after implementation will provide us with an understanding of the programmatic effects.

#### **MULTIVARIATE MODELING**

Administrative outcomes Measures from NCQA HEDIS are modeled using difference-in-difference (DID) and regression discontinuity design (RDD) models. Some population based measures will also be measured as individual outcomes most often through a dichotomous variable indicating whether or not the member had a service (e.g., person with type 1 or type 2 diabetes receiving a Hemoglobin A1c) or experienced an outcome (e.g., asthma exacerbation).

RDD is particularly useful for estimates of effects for members who are very close to a program qualification threshold. The selection of members from comparison groups around the financial threshold strengthens the analyses by pinpointing program effects for a limited range of members assumed to have similar traits.

## **INCREMENTAL COST EFFECTIVENESS**

Cost effectiveness analyses combine the costs of care with quality and access to determine whether changes in cost, even if positive, resulted in better quality and/or access providing either cost-savings or at least a better value for each additional dollar spent. A difficulty with cost effectiveness analyses is handling the time lag of effects. For example, though dollars are shifted to preventive care allowing people with diabetes to access primary care to include foot exams, eye exams, cholesterol testing and Hemoglobin A1c testing in an effort to control the disease and mitigate long term effects, changes in health may not appear in the form of reduced hospitalizations or avoidable emergency room visits for some time. Therefore, analyses related to cost effectiveness will tend to highlight initial preventive care costs in the first year for outcomes that may improve with lagged effects in year 2 or year 3 of the demonstration. The incremental cost effectiveness ratio (ICER) is established by taking the difference in costs between the study group and the control groups over the difference in outcomes between the study group and the control groups. ICERs are not utilized in this report. Due to the small numbers of members who were in MPC for an extended period of time and the low rates of uptake for the QHP portion of MPC, ICERs do not provide any conclusive evidence about the relationship of utilization and cost over time.

## GIS

The provider network for the MPC is anticipated to be different than that for either the WP or the Medicaid State Plan (MSP). To establish that MPC members have equal access to providers as MSP members, we had originally proposed the use of small area analytic methods, such as those developed and refined in previous hospital utilization and primary medical care studies (most notably by the Dartmouth Atlas of Healthcare). We have substituted network analyses for small area analysis as this presents an opportunity to look at distance to and time to the nearest provider and the treating provider. This information seems far more relevant to member access. Maps are generated to examine geographic variation in provider availability both for MPC, WP and MSP. Two types of providers will be separately mapped: primary care and safety net providers.

## **QUALITATIVE ANALYSES**

Qualitative data will be digitally recorded and transcribed. The transcripts will be coded using Grounded Theory as a framework. Nvivo 10 will be used for coding and analysis. Three trained coders will code the transcripts. The analysis will focus on identifying salient themes and the relationships between the themes.

## **STUDY POPULATIONS**

Within the MPC evaluation there are 6 distinct groups. Two of these are the expansion groups, Wellness Plan and Marketplace Choice, as described above. There are four additional comparison groups used for various parts of the evaluation, where such a comparison is appropriate. Analyses involving administrative data utilize adult members in the Family Medical Assistance Program (FMAP) and adult members of Io-waCare as comparisons. Analyses involving survey data utilize adult members of the Medicaid State Plan who were eligible due to income (MSP-IE), adult members of the Medicaid State Plan eligible due to disability (MSP-SSI), and IowaCare members when questions from that program's evaluation were comparable.

## FAMILY MEDICAL ASSISTANCE PROGRAM (FMAP)

The FMAP comparison group is composed of adult parents of children eligible for Medicaid. Non-employed and employed parents of children in Medicaid in families with incomes from 0-77% FPL are eligible for Medicaid coverage. As they earn more they are able to increase the percent FPL allowed for eligibility to encourage employment. They may be covered through a Health Maintenance Organization (HMO), Primary Care Case Management (PCCM), or Fee for Service (FFS) structure.

## IOWACARE (IC)

IowaCare was a limited provider/limited benefit program that operated from 2005-2013. The provider network included one public hospital in Des Moines, the largest teaching hospital in the state, and 6 federally qualified health centers (FQHCs). The plan served adults not otherwise eligible for Medicaid, with incomes up to 200% FPL. The Iowa Health and Wellness Plan replaced the IowaCare program, providing the opportunity to utilize previously collected and assimilated administrative and survey data (pre-implementation data) for enrollees from this program. IowaCare enrollees were distributed in three places following the elimination of this program.

- 1. People with incomes 101-133% FPL were enrolled into Marketplace Choice
- 2. People with incomes 0-100% FPL were enrolled in Wellness Plan
- 3. People whose income could not be verified were not enrolled in any program
- 4. People whose income was above 133% FPL who were expected to obtain subsidized insurance through the private marketplace

## MEDICAID STATE PLAN INCOME ELIGIBLE (MSP-IE)

MSP-IE consists of members enrolled due to FPL between 0 and 66%. They may be covered through one of the managed care options (HMO or Primary Care Case Management [PCCM]) or the traditional Fee-For-Service (FFS) option.

## MEDICAID STATE PLAN DISABILITY ELIGIBLE (MSP-SSI)

MSP-SSI is composed of members enrolled due to disability determination. The FPL for these members may range from 0 to 200%. The only coverage option for these members is traditional FFS. They are not eligible for the HMO or PCCM components.

## LIMITATIONS

As with all evaluations, there are limitations to the interpretation of these results and possible biases if comparison groups are not similar to the treatment groups. Survey data, for example, are based on self-reported information and the recall of the enrollee. Response bias is also a potential factor. Non-response bias tests were conducted to determine if the characteristics of respondents differ significantly from non-respondents. Administrative data are collected for billing and tracking purposes and may not always reflect the service provided accurately.

There may be a propensity for enrollees who have the most to gain from insurance coverage to have ac-

cessed services earlier through the IowaCare program than those with less to gain. This has the potential to bias all the estimates of program effects on quality measures and costs. Essentially, those who are sicker may use services earlier and the reduction in costs accounted for these enrollees by the Marketplace Choice may be greater than for later enrollees. Risk adjustments attempt to correct for this potential bias. Some methods, such as RDD, may result in estimates that are more valid but only pertain to a segment of the population (e.g., the beneficiaries around the income threshold between plans).

## **STUDY CAUTION**

Evaluation research is noted for its need to adapt to changes within programs, leading to evolving approaches and analytics during the study period. Rarely, can an evaluation actually proceed as originally defined. This evaluation is particularly impacted by the changes that were made to Marketplace Choice (MPC) over the 2 years that it was operating (see Figure 1). This caution comes from recognition that the program was not fully implemented due to the voluntary removal of one Qualified Health Plan (QHP) before the end of Year 1 and the second QHP before the end of Year 2. The highest proportion of MPC members enrolled in a QHP was 73% during October, 2014. Enrollment of 50% or more members in a QHP occurred for only 9 out of 24 months (Figure 2). Members not enrolled in a QHP were enrolled in traditional FFS Medicaid. Though results are provided for the 2 years of MPC existence, these results cannot be interpreted as the result of a privatized system utilizing Qualified Health Plans.





## **MEASURES REMOVED FOR CAUSE**

A number of the measures originally proposed have been removed either due to the inability to meet the protocol requirements with the existing data or due to small numbers of members in the denominator or numerator leading to unacceptable variation in rates over time. These measures are listed below.

- Measure 2 Follow-up after hospitalization for mental illness
- Removed from the evaluation due to extremely small numbers. Across the four comparison groups we were able to identify 198 hospitalizations for mental illness over the 3 years 2013-2015. This may be due to most members with mental illness severe enough to warrant hospitalization being moved into the medically frail group or the existing Integrated Health Home program, both of which remove them from our analyses as these programs provide additional access for members with mental illness.
- Measure 11 Flu shots in past year
- Removed because data for these measures are not available due to the various sources for flu shots. Though flu shots are covered under the Medicaid program, we are unable to capture flu shots provided at retail outlets or public health sources that do not bill Medicaid.

- Measure 12 Chlamydia screening in past year
- Removed due to the difficulty of reliably determining whether members were 'sexually active'.
- Measure 17 Anti-depressant medication management
- Removed because most members with mental illness were programmatically moved into the medically frail group or the existing Integrated Health Home program. These programs provide additional access for members with mental illness and would result in their removal from our analyses.
- Measure 18 Mental health utilization
- Removed due to missing data on the specialty and place of service fields in the QHP data.
- Measure 28 Proportion who had to change primary care physician when joining MPC
- Removed as we are unable to determine what provider new members saw prior to joining MPC in the administrative data. The survey data provides a far better measure for this construct.
- Measure 31 Avoidance of antibiotic treatment in adults with acute bronchitis
- · Removed due to low numbers of adults identified with acute bronchitis
- Measure 32 Use of appropriate medications for people with asthma
- Removed due to recent evidence that this measure is not related to resource use
- Measure 33 Medication management for people with asthma
- Removed due to recent evidence that this measure is not related to resource use
- Measure 34 Pharmacotherapy management of COPD exacerbation
- Removed due to an inability to determine whether hospitalization was for exacerbation of COPD.
- Measure 35 Cholesterol management for patients with cardiovascular conditions
- Removed due to the extremely low numbers of members who have cardiovascular conditions severe enough to be included in the measures.
- Measure 38 Admission rate for COPD, diabetes short-term complications, CHF, and asthma
- Removed due to lack of admissions for diabetes short-term complications.
- Rating of personal doctor
- Removed due to the changes in personal doctor that occurred for those who moved from IowaCare to MPC. The time frame for rating the personal doctor or nurse was too short.
- Measure 40 Admission rate for diabetes short-term complications
- Removed due to lack of admissions for diabetes short-term complications.
- Measure 61 Completion of healthy behaviors only after paying a monthly premium
- The premium incentive was not applied until 10 months after the completion of the first year of the program, therefore, there is no data available regarding member activities in the period after paying the premium.
- <u>Measure 69</u> Analysis of rules and procedures for determining the adequacy of the provider network
- Removed as we were never provided with plan documents related to provider network adequacy assessment.
- Measure 73 Comparison of network overlap between plans
- Removed because CoOportunity ceased operations 11 months into the first MPC year, making plan comparisons unnecessary.

## **SURVEY OUTCOMES**

The original proposal incorporated RDD analyses for the survey outcomes listed below. However, we were unable to obtain sufficient sample sizes to complete these analyses. Analyses of all member survey related measures, except those incorporated in the special NEMT study, rely on means testing between groups.

Measure 3 – Access to and unmet need for urgent care

<u>Measure 5</u> – Getting Timely Appointments, Care, and Information

Measure 6 – After-hours care

Measure 7 – Specialist care

Measure 8 – Prescription medication

Measure 11 – Whether a member 21-64 received an influenza vaccination

<u>Measure 16</u> – Preventive care

Measure 19 - Behavioral/emotional care

<u>Measure 30</u> - Continuity of care and satisfaction if they need to change to a new primary care physician when enrolled with a new plan

Measure 45 - Rate of hospital admissions in past 6 months

Measure 46 - Rate of 30 day hospital readmissions

Measure 49 – Attention to mental/emotional health

Measure 50 - Shared decision-making regarding medications

Measure 51 – Care coordination

Measure 57 – Member perception of ease of obtaining a yearly physical exam

## **ADMINISTRATIVE OUTCOMES**

The original proposal incorporated RDD and DID analyses for the many of the administrative outcomes. For the MPC population in particular, administrative outcomes do not occur in sufficient numbers to allow these analytical techniques. For outcomes with sufficient numbers, we concentrated our efforts on modeling those we considered of the most interest to other states or research communities or those with the highest impacts on cost. The administrative outcomes listed below originally had an RDD and/or DID component proposed that will not be completed.

- Measure 9 Breast cancer screening
- Measure 10 Cervical cancer screening
- Measure 14 Comprehensive diabetes care: LDL-C screening
- Measure 15 Annual monitoring for patients on persistent medication
- Measure 24 EPSDT utilization
- Measure 25 Gaps in coverage in past 12 months
- Measure 26 Consecutive months covered by an insurance plan
- Measure 27 Number of times member changes plans and/or loses eligibility during the year
- Measure 71 Provider willingness to accept new patients
- Measure 72 Provider satisfaction with plan key components such as fee schedules and documentation
- Measure 74 Dental care access

## RESULTS

## DEMOGRAPHICS

On January 1, 2014, individuals enrolled in IowaCare with 101-133% FPL were automatically enrolled in Marketplace Choice. Below we include results and findings from our first year report and additional analyses for the second year of the program.

## AUTO-ENROLLMENT: IOWACARE TO IHAWP

IHAWP replaced an 1115 waiver program (IowaCare) that provided limited health care coverage for uninsured adults with incomes up to 200% FPL. IowaCare did not provide routine dental coverage or prescription medications. In addition, primary care providers (Medical Homes) were limited to 8 sites for outpatient care, 6 Federally Qualified Health Centers, the University of Iowa Health Care (UIHC), and Broadlawns Medical Center (BMC), and UIHC or BMC for emergency or inpatient care. The map below shows the provider locations and counties in which IowaCare members were assigned to each Medical Home while in IowaCare. IHAWP only covers uninsured adults up to 133% FPL, but provides prescription drug coverage, dental care and a much broader provider network than was available for members in IowaCare. Members who were eligible for IHAWP and enrolled in the IowaCare program as of December 31, 2013 were automatically enrolled into IHAWP as of January 1, 2014 if they met the eligibility criteria. Since IowaCare provided coverage for adults up to 200% FPL and IHAWP provides coverage to only 133% FPL, IowaCare members with incomes between 134% and 200% FPL were not auto-enrolled into IHAWP.

Table 2 compares the demographic characteristics of those who were eligible for IowaCare as of December 31, 2013 and auto-enrolled in IHAWP to those eligible for IowaCare and not auto-enrolled. Men and women were equally likely to be enrolled in WP, while women were more likely to be enrolled in MPC or not be enrolled. There were slight differences by race with whites more likely to be enrolled in WP or MPC. Interestingly, those with undeclared race were much less likely to be enrolled. Additionally, older members were less likely to be enrolled in either program, while residential rurality did not appear to have any effect.



#### Medical Homes:



Participating Indian Health Centers:

•Meskwaki Tribal Health Center – Tama, IA •W innebago IHS Hospital – Winnebago, NE •Fred LeRoy Health and Wellness Center – Omaha, NE

	Enrolled in Wellness Plan	Enrolled in Marketplace Choice	Not enrolled	Percent NOT auto-enrolled	
	N (%)	N (%)	N (%)		
Gender					
Female	20,673 (49%)	5,290 (60%)	5,570 (55%)	18%	
Male	21,211 (51%)	3,528 (40%)	4,472 (45%)	15%	
Race					
White	21,866 (52%)	4,587 (52%)	4,692 (48%)	15%	
Black	3,183 (8%)	465 (5%)	420 (4%)	10%	
American Indian	329 (1%)	52 (1%)	34 (<1%)	8%	
Asian	553 (1%)	138 (2%)	176 (2%)	20%	
Hispanic	788 (2%)	224 (3%)	243 (2%)	19%	
Pacific Islander	35 (<1%)	12 (<1%)	8 (<1%)	15%	
Multiple-Hispanic	270 (1%)	60 (1%)	65 (1%)	17%	
Multiple-Other	116 (<1%)	27 (<1%)	20 (<1%)	12%	
Undeclared	14,744 (35%)	3,253 (37%)	4,384 (44%)	20%	
Age					
18-21 years	1,355 (3%)	272 (3%)	339 (3%)	17%	
22-30 years	9,699 (23%)	1,732 (20%)	1,803 (18%)	14%	
31-40 years	8,627 (21%)	1,773 (20%)	1,745 (17%)	14%	
41-50 years	10,378 (25%)	1,976 (22%)	2,386 (24%)	16%	
51 and over	11,825 (28%)	3,065 (35%)	3,769 (38%)	20%	
County rural/urban status					
Metropolitan	26,530 (63%)	5,451 (62%)	6,289 (63%)	16%	
Non-metropolitan, urban	1,667 (4%)	420 (5%)	408 (4%)	16%	
Non-metropolitan, rural	13,687 (33%)	2,947 (33%)	3,345 (33%)	17%	

#### Table 2. Demographic characteristics of IowaCare members by auto-enrollment status, CY 2014

## **NEW ENROLLMENT INTO IHAWP**

**Total members** 

Table 3 provides the demographics of new enrollees in MPC during the first year of the program, those not auto-enrolled from the IowaCare program. These members entered through the Health Care Marketplace or were directed to these plans through Medicaid or a navigator. People who enrolled in MPC were more likely to be female and ages 22-40 years.

8,818

10,042

17%

41,884

Table 3. Demographic characteristics of IHAWP members not auto-enrolled from low	aCare,
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	Enrolled in Wellness Plan	Enrolled in Marketplace Choice		
	N (%)	N (%)		
Gender				
Female	39,860 (52%)	16,539 (62%)		
Male	37,586 (48%)	10,241 (38%)		
Race				
White	52,386 (68%)	18,399 (69%)		
Black	6,310 (8%)	1,529 (6%)		
American Indian	1,130 (2%)	272 (1%)		
Asian	1,567 (2%)	683 (3%)		
Hispanic	2,950 (4%)	1,350 (5%)		
Pacific Islander	396 (1%)	293 (1%)		
Multiple-Hispanic	739 (1%)	264 (1%)		
Multiple-Other	622 (1%)	220 (1%)		
Undeclared	11,346 (15%)	3,770 (14%)		
Δαρ				
18-21 years	7 314 (9%)	1 781 (7%)		
22-30 years	22 228 (29%)	8 305 (31%)		
31-40 years	17624 (23%)	7.310 (27%)		
41-50 years	14.018 (18%)	4,592 (17%)		
51 and over	16,262 (21%)	4,792 (18%)		
County rural/urban status				
Metropolitan	46,293 (60%)	15,466 (58%)		
Non-metropolitan, urban	3,448 (5%)	1,408 (5%)		
Non-metropolitan, rural	27,705 (36%)	9,906 (37%)		
Total	77,446	26,780		

## **ENROLLMENT PATTERNS**

After initially rapid growth due to auto-enrollment of IowaCare members, MPC enrollment climbed more slowly and steadily through December 2015 with enrollments rising 143% during this time, from nearly 15,000 to over 37,000 in MPC (Figure 3). From this figure, we see that each month a significant group of MPC members is not in a QHP and this group grows substantially after CoOportunity leaves the market in November 2014. This change eliminated one of the groups we had originally intended to use for our analyses – CoOportunity members.

MPC members with chronic conditions that limit their function are able to appeal for Medical Exemption (see <u>http://dhs.iowa.gov/sites/default/files/Medically%20Exempt%20Toolkit.pdf</u>), which allows them access to traditional Medicaid coverage options such as waivers services. By the end of CY 2015, less than 5,000 individuals had been granted Medically Exempt status.





#### CHURN

Churning, the process whereby people move between Medicaid programs and QHPs as their eligibility changes has been identified as a major area of concern. Generally, the movement from one coverage option to another may bring with it changes in access to care through differing provider networks, benefit structures, and service provider locations. Researchers estimating the amount of churn within Medicaid indicate that up to 50% of members may move across plans. Within the MPC evaluation proposal, question 2 asked: 'What are the effects of MPC on member insurance coverage gaps and insurance service when their eligibility status changes (churning)?' We assessed churn through surveys and administrative data. The survey assessed the number of months in the previous year for which the member did not have insurance (Measure 25). From the administrative data we were able to determine the gaps in coverage, both number and length, for members of MPC (Measure 26 and Measure 27). In addition, we were able to add information regarding the 'switches' that occurred between programs with comparisons to IowaCare, WP and FMAP.

#### Gaps in coverage in past 12 months (Measure 25)

We asked IHAWP members how many months of the past year (2013) they had health insurance coverage. Figure 4 provides a comparison of insurance coverage between MPC and WP members. Around 30% of IHAWP members reported that they did not have any health insurance coverage in the year prior to the IHAWP. There were no significant differences in past insurance coverage between MPC and WP members.



Figure 4. Insurance Coverage in the Year before IHAWP

#### Consecutive months covered by an insurance plan (Measure 26)

We calculated months of continuous eligibility per member episode (members may have more than episode of eligibility within the 24 month window) for MPC and WP members (Figure 5). MPC members (33%) were more likely to be enrolled for less than 6 months than WP members (25%) (p<=0.001). Sixty-seven percent of MPC members were enrolled for less than 12 months, while only 55% of WP members were enrolled for less than 12 months indicate that the MPC members were more likely to leave MPC in a shorter time frame than WP members were likely to leave WP.



Figure 5. Percent of member episodes by program and by months of enrollment for the 24 months of MPC, CY 2014 and CY 2015

#### Number of times member changes plans and/or loses eligibility during the year (Measure 27)

## **MOVEMENT FROM IOWACARE TO IHAWP**

We compared the Medicaid population including IowaCare in CY 2013 (the year prior to the start of the IHAWP) to the Medicaid population and IHAWP in CY 2014 to assess first year effects. There were **10,042** IowaCare members who were not auto-enrolled into IHAWP, **2,299** were subsequently covered through the Medicaid State Plan (MSP) or IHAWP leaving **7,743** not receiving coverage through MSP or IHAWP during CY 2014. Those covered through MSP were enrolled through income eligibility (N=501), disability eligibility (N=31), the Family Planning Waiver (a program providing access only to family planning services, N=108), and Medicaid for Employed People with Disabilities (N=2). 1,000 people were subsequently enrolled in WP and 651 were enrolled in Marketplace Choice. The gap between IowaCare coverage and coverage through another program varied from no gap (N=711) to 11 months (N=89) as shown in Figure 6.



Figure 6. Gap in coverage for those not auto-enrolled to IHAWP from IC but later enrolled (n=2,299), CY 2014

## **CHURN DURING MPC**

Table 4 provides the number of switches by member episode and program for the first two years of the program (CY 2014 and CY 2015). Three groups are used in these comparisons: 1) Family Medical Assistance Program (FMAP), 2) Wellness Plan (WP), and 3) Marketplace Choice (MPC). Though members may have moved between programs, they are categorized according to the first program of enrollment. A switch is indicated whenever there is a change in program during the year. Members in WP were generally the least likely to experience a switch, while FMAP members were most likely to have a switch (Figure 7) (p<=0.01).

For FMAP members 91% of switches resulted in no gap, while for both WP and MPC 85% of switches did not result in a gap, indicating there was a change in program commensurate with a change in circumstances. Though changes in program are not always simple or easy for members, those that do not result in gaps of coverage may be considered 'positive' churn as coverage is maintained. Of the 9-15% of switches that resulted in a gap, there was virtually no difference in the gap length between the three programs. Approximately 62% resulted in a 1-5 month gap, 27% resulted in a 6-11 month gap, 9% resulted in a 12-17 month gap and 2% resulted in a gap of 18 or more months (Figure 8).

	FMAP CY 2014	FMAP CY 2015	WP CY 2014	WP CY 2014	MPC CY 2014	MPC CY 2015
No switch	45,244	37,928	98,726	113,855	26,340	30,475
1 switch	15,765	19,337	11,756	23,305	5,004	13,244
2-3 switches	3,062	5,996	1,643	5,208	795	3,034
4 or more switches	67	229	35	200	20	113



#### Figure 7. Percent of members by number of switches, program and year, CY 2014 and CY 2015



Gap length	FMAP	WP	MPC	
0 months	49,992	43,254	22,621	
1-5 months	3,353	4,028	2,491	
6-11 months	1,177	2,166	1,369	
12-17 months	358	1,009	489	
>=18 months	62	219	77	
% with gap	9%	15%	16%	

Figure 8. Length of gap by member episode and program for the two years of the program for switches that resulted in a gap, CY 2014 and CY 2015



It is crucial to determine what proportion of members who left FMAP were able to obtain coverage either in WP or MPC and what proportion of members who left WP were able to obtain coverage in MPC. 15,839 FMAP members, 47,195 WP members and 19,660 MPC members left these programs and did not obtain any additional months of coverage through Medicaid or IHAWP. Additionally, there were 107,198 times when members switched from one program to another. Of these, 17,835 switches involved moving from FMAP to either WP or MPC and 21,974 switches involved moving from WP to MPC, **retaining** coverage when it would not have been possible without IHAWP. Additionally, 19,835 times members moved from WP or MPC to FMAP and 16,864 times members moved from MPC to WP. Table 6 provides the number and proportion of members and the program they switched out of and the program they moved into. The proportion of members moving from program to program is shown in Figure 9. Some members moved into Medicaid income eligible programs other than FMAP (Other IE) or into other types of categorical eligibility such as the HCBS waiver (Other Medicaid).

Dragrow womber entered	Program member left					
Program member entered	FMAP		WP		MPC	
	Members	Percent	Members	Percent	Members	Percent
FMAP			14,535	15%	5,300	11%
WP	17,858	26%			16,864	36%
MPC	5,632	8%	21,974	23%		
Other IE	24,708	35%	4,908	5%	2,387	5%
Other Medicaid	5,862	8%	7,388	8%	2,708	6%
Left Medicaid	15,839	23%	47,195	49%	19,660	42%
Total	69,899		96,000		46,919	

Table 6. Member switches between programs for the two years of the program, CY 2014 and CY 2015

Figure 9. Program switches for FMAP, WP and MPC members over the two years of the program, CY 2014 and CY 2015



'Positive churn', movement into another program as income increases or decreases, represents a success for programs aiming to help individuals maintain coverage, while the complete loss of coverage may represent a failure of the system. Though members may leave the system for many reasons such as moving out of the state or obtaining employer-based health insurance, elopement may also indicate a loss of the physical, cognitive or emotional resources to maintain coverage. Table 7 compares those who never switched programs to those who switched programs to those who left IHAWP or Medicaid and never returned during the study period. The three groups are significantly different with those who switched coverage being more likely to be female, white, younger and less likely to be living in an urban area. Those who left coverage were equally likely to be male or female, more likely to have an undeclared race, more likely to be older and more likely to be in an urban location.

Table 7. Demographic characteristics of members by switch experience for the two years of the program, CY 2014	4 and CY
2015	

	Never switched programs	Switched programs N (%)	Left IHAWP or Medicaid
	N (%)		N (%)
Program			
Income eligible	12,327 (10%)	23,685 (22%)	10,467 (12%)
WP	77,668 (66%)	40,711 (37%)	47,336 (54%)
MPC	15,815 (13%)	19,970 (18%)	19,440 (22%)
All other programs	12,369 (10%)	25,522 (23%)	11,042 (13%)
Gender			
Female	60,579 (51%)	78,992 (72%)	45,106 (51%)
Male	57,600 (49%)	30,896 (28%)	43,179 (49%)
Race	76.070 (65%)	72 761 (67%)	E0.000 (E0%)
Plack	10,005 (05%)	/3,/01 (0/%)	50,808 (58%)
	1715 (9%)	9,877 (9%)	7,816 (9%)
American Indian	1,715(2%)	1,618 (2%)	1,143 (1%)
	2,359 (2%)	2,693 (3%)	1,688 (2%)
Hispanic	4,266 (4%)	4,906 (5%)	5,113 (5%)
Pacific Islander	640 (<1%)	8/1 (1%)	529 (1%)
Multiple-Hispanic	1,282 (1%)	1,750 (2%)	1,076 (1%)
Multiple-Other	947 (1%)	1,437 (1%)	655 (1%)
Undeclared	19,997 (17%)	12,975 (12%)	19,457 (22%)
Age			
19-21 years	5,401 (5%)	17,245 (16%)	7,096 (8%)
22-30 years	30,924 (26%)	36,398 (33%)	27,012 (31%)
31-40 years	30,059 (25%)	28,506 (26%)	22,437 (25%)
41-50 years	23,610 (20%)	14,584 (13%)	14,905 (17%)
51-64 years	28,185 (24%)	13,155 (12%)	16,835 (19%)
County rural/urban status			
Metropolitan	71,118 (60%)	65,129 (59%)	54,405 (62%)
Non-metropolitan, urban	41,545 (35%)	39,398 (36%)	30,130 (34%)
Non-metropolitan, rural	5,607 (5%)	5,361 (5%)	3,750 (4%)
Total	118,179	109,888	88,285

Figure 10 presents a visualization of the churn occurring in Medicaid programs from the 1st quarter 2013 through the 4th quarter 2015. This figure includes any member enrolled for at least 1 month in any Medicaid program. Lines are moving left to right in the figure with the thickness of the line related to the number of members making a move. A thicker line indicates more people are moving. For example, the line portray-ing movement from IC to WP is thicker than the line portraying movement from IC to MPC because more members moved to WP than MPC.

Within the figure FMAP member numbers remain stable, as does the number of members in other Medicaid programs including SSI, and the shift in number of members between IowaCare and IHAWP. After the first quarter of IHAWP the movement between programs seems to have stabilized, as would be expected, the

first quarter lines show the bulk of IowaCare members moving to Wellness Plan, a smaller number moving to Marketplace choice and a nearly identical number losing coverage within the Medicaid and expansion programs. After the first two quarters of the expansion, the movement between programs seems to stabilize with members moving between programs and in and out of Medicaid at consistent rates.



#### Figure 10. Churn in Medicaid programs, 1<sup>st</sup> Quarter 2013 through 4<sup>th</sup> Quarter 2015

IC=IowaCare

Other=Other Medicaid programs, including SSI

IE=Income Eligible

WP=Wellness Plan MPC=Marketplace Choice



## **ROUTINE CARE**

Insurance coverage is expected to increase access to care and thereby, improve the quality and outcomes of care. Our evaluation activities provide results related to routine care that encompass primary care, specialists, and prescriptions. We include survey and administrative data to provide a broad set of evidence for the evaluation.

## **PRIMARY CARE**

Primary care providers within the MPC evaluation are defined as physicians (MD or DO), advanced practice nurses, nurse midwives, and physician assistants with a specialty of family practice, general internal medicine, general medicine, pediatrics, and obstetrics/gynecology. We looked at the utilization of preventive care and primary acute care. provided a broad spectrum of questions related to the general primary care experience including: regular source of care (Measure 29), continuity of care and satisfaction if they need to change to a new primary care physician when enrolled with a new plan (Measure 30), access to and unmet need for routine care (Measure 4), the ability to get timely appointments, care and information (Measure 5), provider communication (Measure 47), evidence of patient-centered care (Measures 48-51) and ratings of personal doctor (Measure 52), ratings of health plan (Measure 54), and rating of all care received (Measure 53). All of these measures were included in the survey by a focus on Patient-Centered Medical Home model components. Administrative data for both years reflecting utilization of primary care is available for adults' access to primary care (Measure 1) and EPSDT utilization (Measure 24).

## PATIENT-CENTERED MEDICAL HOME

The Patient-Centered Medical Home (PCMH) is a model of healthcare delivery that focuses on the core functions of primary care that should promote high quality in the provision of health care services.<sup>2</sup> In this evaluation, we focus on several aspects of the PCMH that are attributes of quality primary care. The attributes assessed were organized around three patient experiences with primary care: 1) identification of and continuity with a personal doctor, 2) experiences with the doctor's office [timely access to care and care coordination], and 3) experiences during office/provider visits [communication, comprehensive care, shared decision-making, and self-management support]. These attributes are outlined below with full descriptions provided within each section.

- 1. Personal Doctor
  - ° Identification Of
  - ° Continuity With
- 2. Experiences with the Doctor's Office
  - ° Timely Access to Care
  - ° Care Coordination: Care Reminders
  - ° Care Coordination: Follow Up with Results of Testing
  - ° Care Coordination: Informed about Care with Specialists
- 3. Experiences During Office Visits
  - ° Communication with Personal Doctor
  - ° Comprehensive Care: Mental Health Care
  - ° Comprehensive Care: Preventive Care Receipt of Flu Shot
  - ° Shared Decision-Making regarding Prescription Medications
  - ° Self-Management Support

<sup>2</sup> AHRQ. Patient-Centered Medical Home Resource Center. Available at <u>http://pcmh.ahrq.gov/</u>

#### Personal Doctor (Measure 29)

All respondents were asked "Do you have a personal doctor [A personal doctor is the person you would see if you need a check-up, want advice about a health problem, or get sick or hurt.]?" 81% of Medicaid members, 81% of WP members and 74% of MPC members could identify a personal doctor. The difference between WP and MPC was significant at the p=.005 level.

With regard to continuity with a personal doctor (i.e., remaining with the same personal doctor after enrollment in the IHAWP), several questions were asked only of IHAWP members. For those with a personal doctor, members were asked "Is your personal doctor the same person who was your personal doctor before you enrolled in your new health plan?" Response options included: Yes, I have the same personal doctor, No, I have a different personal doctor, and I did not have a personal doctor before enrolling in [the IHAWP]. Significantly more MPC members (64%) than WP members (43%) reported having the same personal doctor as before enrolling in the IHAWP (p<.0001). However, significantly more WP members (20%) compared to MPC members (13%) reported having a personal doctor after IHAWP enrollment when they did not have one before (p=.002).

#### Switching on enrollment (Measure 30)

As part of the IHAWP enrollment process, members may have been automatically assigned to a primary care provider (PCP) and were given the option to change to a different provider from the one to which they were assigned. Significantly more WP members (57%) than MPC members (30%) reported being automatically assigned to a PCP (p<.0001). And, of those who were auto-assigned to a PCP, significantly more WP members (41%) than MPC members (28%) decided to change to a different PCP (p=.01) with around two-thirds of the members reporting that it was 'very easy' to change from their assigned PCP to a different one (67% WP, 67% MPC).

#### Experiences with the doctor's office (Measures 4 and 5)

To assess Timely Access to Care, we used a five-item composite measure comprised of the following questions:

- 1. When you needed care right away, how often did you get care as soon as you needed?
- 2. How often did you get an appointment for a check-up or routine care at a doctor's office or clinic as soon as you needed?
- 3. When you phoned a doctor's office during regular office hours, how often did you get an answer to your medical question that same day?
- 4. When you phoned a doctor's office after regular office hours, how often did you get an answer to your medical question as soon as you needed?
- 5. How often did you see a doctor within 15 minutes of your appointment time?

Care Coordination was assessed using three items related to different aspects of providing care coordination:

- 1. Did you get any reminders from a doctor's office between visits?
- 2. When your doctor's office ordered a blood test, x-ray, or other test for you, how often did someone from the doctor's office follow up to give you those results?
- 3. How often did your personal doctor's office seem informed and up-to-date about the care you got from specialists?

Figure 11 provides a summary of the findings with regard to members' experiences with their doctor's office. IHAWP and Medicaid members' experiences with timely access to care, visit reminders, and having an informed provider were similar with around 70% reporting timely access to care and having an informed provider and, 62% receiving visit reminders. Significantly more IHAWP members (84%) than Medicaid members (78%) reported that their doctor's office followed up with them to give them results of testing (p=.006).



Figure 11. Member Experiences with their Doctor's Office by Program

Figure 12 provides a summary of the findings with regard to MPC and WP members' experiences with their doctor's offices. Significantly less MPC members (52%) than WP members (64%) received reminders from their doctor's office about upcoming visits (p<.001).



Figure 12. Member Experiences with their Doctor's Office by Plan

## Experiences during office visits (Measures 47-51)

Communication between providers and patients was assessed using a six-item composite measure comprised of the following questions:

- 1. How often did your personal doctor explain things in a way that was easy to understand?
- 2. How often did your personal doctor listen carefully to you?
- 3. How often did your personal doctor give you easy to understand information about your health questions or concerns?
- 4. How often did your personal doctor seem to know the important information about your medical history?
- 5. How often did your personal doctor show respect for what you had to say?
- 6. How often did your personal doctor spend enough time with you?

Comprehensiveness of Care was assessed using a question about whether or not the respondent received a flu shot in the past year (received recommended preventive care) and a three-item composite measure

comprised of the following questions about discussions of mental/emotional health:

- 1. Did anyone in a doctor's office ask you if there was a period of time when you felt sad, empty, or depressed?
- 2. Did you and anyone in a doctor's office talk about things in your life that worry you or cause you stress?
- 3. Did you and anyone in a doctor's office talk about a personal problem, family problem, alcohol use, drug use, or a mental or emotional illness?

Shared Decision-making was assessed using a three-item composite measure comprised of three questions starting with 'When you talked about starting or stopping a prescription medicine...'.

- 1. how much did the doctor or other health provider talk about the reasons you might want to take a medicine?
- 2. how much did the doctor or other health provider talk about the reasons you might not want to take a medicine?
- 3. did the doctor or other provider ask you what you thought was best for you?

Self-Management Support was assessed using a two-item composite measure comprised of the following questions:

- 1. Did anyone in a doctor's office talk with you about specific goals for your health?
- 2. Did anyone in a doctor's office ask you if there are things that make it hard for you to take care of your health?

Figure 13 provides a summary of the findings for IHAWP and Medicaid member experiences during their office visits. IHAWP and Medicaid member experiences with communication, discussion of mental health, shared decision-making, and self-management support were similar. The vast majority experienced good communication with their provider (88%) while overall, less than half experienced discussion of their mental health (45%), shared decision-making (51%), and self-management support (43%). Significantly more IHAWP members (36%) compared to Medicaid members (30%) received a flu shot in 2013 (p=.009).

Figure 13. Member Experiences during Office Visits by Program



Figure 14 provides a summary of the findings for MPC and WP member experiences during their office visits. The vast majority (90%) reported good communication during visits with no significant difference between MPC and WP members. Significantly more MPC members (56%) then WP members (49%) reported experiencing shared decision-making (p=.04) while significantly fewer MPC members (43%) than WP members (51%) experienced support for self-management of their health conditions (p=.002).





## RATINGS OF PERSONAL DOCTOR, HEALTH PLAN AND ALL CARE (MEASURES 51-53)

Respondents were asked to rate various aspects of the health care they received and also their health plan on a 0 to 10 scale, where 0 was defined as the worst possible and 10 as the best possible. Ratings were obtained for the following:

- Personal Doctor
- Most Often Seen Specialist
- Mental Health Treatment or Counseling
- All Health Care Received
- Health Plan

Figure 15 provides a summary of the percentage of respondents who rated each of these areas as a '9' or '10' which indicates the highest possible ratings. The highest ratings were for the personal doctor or nurse as compared to other areas. Around 60% of respondents rated their personal doctor as a '9' or '10' and there was no significant difference between IHAWP and Medicaid. Significantly more IHAWP members than Medicaid members (p<.05) rated their specialist and all health care highly (specialist-59% IHAWP, 49% Medicaid; All health care-45% IHAWP, 38% Medicaid). Less than half of these members rated their health plan as a '9' or '10' (IHAWP 42%, Medicaid 44%). The CAHPS online reporting system contains National Comparative Data<sup>3</sup> (NCD) for each of these rating measures with the exception of mental health care. For each area, IHAWP and Medicaid members' ratings are lower than reported in the NCD: Personal doctor (64%), Specialist seen most often (64%), All health care (51%), and Health plan (57%).

<sup>3</sup> Formerly known as National CAHPS Benchmarking Database (NCBD). More information available at <u>https://</u> <u>cahpsdatabase.ahrq.gov/cahpsidb/</u>





Figure 16 provides a summary of the percentage of MPC and WP respondents who rated each of these areas as a '9' or '10' which indicates the highest possible ratings. There were no significant differences between MPC and WP members for any of these ratings. Ratings of a '9' or '10' ranged from around 60% for personal doctor and specialist to around 40% for mental health care, all health care, and health plan.



#### Figure 16. High Ratings of Care and Health Plan Quality by Plan

## Access to primary care (Measure 1)

This measure indicates the proportion of adults who have accessed preventive or ambulatory services within the measurement year. We utilize the Adults' Access to Preventive/Ambulatory Heath Services (AAP) measure protocol from HEDIS 2016.

Table 8 and Table 9 provide the rates for Adults' Access to Preventive/Ambulatory Health Services. The members included in the tables are as follows:

- A. Calendar year 2015 includes members who were eligible for either FMAP, WP or MPC for at least 11 months in calendar year 2015
- B. Calendar year 2014 includes members who were eligible for either FMAP, WP or MPC for at least 11 months in calendar year 2014
- C. Calendar year 2013 includes members who were eligible for either FMAP for at least 11 months in calendar year 2013, IowaCare (IC) for at least 11 months in 2013 and in WP or MPC in calendar year 2014.

The data in indicate that members in IC were the least likely to have had a preventive/ambulatory care visit. These same members when in WP or MPC were more likely to have had a preventive/ambulatory care visit. Of note, those in WP were more likely to have had a visit than those in MPC during CY 2014, however, these rates were more comparable in CY 2015 with MPC members more likely to have a visit than in CY 2014. None of the three groups (IC, WP or MPC) were as likely to have had a visit as the FMAP group. We suspected that this may be due to the larger proportion of women in the FMAP group, however, on further analyses we found that both women and men in FMAP were more likely to have a visit.

 Table 8. Adults' access to preventive/ambulatory health services by program and age for WP members eligible for at least

 11 months in the measurement year and 11 months in the year before the measurement year

Age		FMAP 2013	IC->WP 2013	FMAP 2014	WP 2014	FMAP 2015	WP 2015
20-44 years	Number	14,706	7,407	16,556	13,099	17,065	21,765
	%	86%	51%	87%	76%	87%	76%
45-64 years	Number	1,494	7,553	2,049	12,083	2,386	16,438
	%	85%	65%	86%	84%	88%	84%
Total	Number	16,200	14,960	18,606	25,182	19,451	38,203
	%	86%	58%	87%	80%	87%	79%

Table 9. Adults' access to preventive/ambulatory health services by program and age for MPC members eligible for at least 11 months in the measurement year and 11 months in the year before the measurement year

Age		FMAP 2013	IC->MPC 2013	FMAP 2014	MPC 2014	FMAP 2015	MPC 2015
20-44 years	Number	14,706	1,469	16,556	3,534	17,065	5,864
	%	86%	59%	87%	68%	87%	74%
45-64 years	Number	1,494	1,4,63	2,049	2,345	2,386	3,849
	%	85%	71%	86%	77%	88%	83%
Total	Number	16,200	3,932	18,606	5,879	19,451	9,713
	%	86%	64%	87%	71%	87%	77%

## Access to EPSDT services (Measure 24)

The gateway to EPSDT services is the well adult exam with its focus on assessment and screening. It is difficult to define the full spectrum of services that may be accessed through EPSDT wrap around services, however, a start is provided in the proportion of adults 19-20 years of age who are able to access well adult care. Young adults in MPC accessed well adult services at a lower rate than those in MSP during the first year of the program, (74% vs 81%). The rates were nearly identical in CY 2015 with 81% of MSP young adults and 79% of MPC adults accessing well adult care.

## PREVENTIVE

Two measures are used to assess general access to preventive care services: well adult visit (<u>Measure 66</u>) and access to and unmet need for preventive care (<u>Measure 16</u>). A number of outcomes are included relating to both general and disease specific preventive care services. We include flu shots in the past year as measured through the survey since the administrative data is not reliable (<u>Measure 36</u>), breast cancer screening (<u>Measure 10</u>), comprehensive diabetes care (<u>Measure 13</u> and <u>Measure 14</u>), annual monitoring for patients on persistent medication (<u>Measure 15</u>) and medical assistance with smoking and tobacco use (<u>Measure 67</u>) as outcome measures reflecting utilization of preventive care.

## Well adult visit (Measure 66)

The Well adult visit measure calculates the percent of members with a well adult visit as defined by a preventive exam CPT code (99385-99387, 99395-99397, 99401-99404, 99411, 99412, 99420, 99429) or any visit code (99201-99205) AND a preventive visit diagnosis code (V70.0, V70.3, V70.5, V70.6, V70.8, V70.9). A 'Well visit' within IHAWP may include a dental visit, however, we have limited the definition for the current measure to medical visits.

Rates of well adult care are highest for WP members regardless of age, with rates for MPC members slightly-moderately lower. For members ages 20-44 the rate for MPC members is 5 percentage points below the rate for WP members, however; for those ages 45-64 years the rate for MPC members is 11 percentage points below WP members. The rate for well adult care for MPC members ages 20-44 is nearly the same as that for FMAP members in both CY 2013 and CY 2014, but the rate is higher than FMAP in both years for MPC members ages 45-64. The rate of adult well care for IowaCare members is significantly lower than any other groups. These results indicate that the IHAWP members are more likely to get preventive care than FMAP members (Table 10, Figure 17).

Table 10. Adults' access to preventive health services by program and age, for WP and MPC members eligible for at least
11 in the measurement year and the year prior
to the measurement year

Age		FMAP 2013	IC->WP 2013	IC->MPC 2013	FMAP 2014	WP 2014	MPC 2014	FMAP 2015	WP 2015	MPC 2015
20-44	Number	3,754	1,358	337	4,110	4,972	1,192	4,340	6,709	1,878
years	%	22%	10%	13%	22%	29%	23%	22%	23%	24%
45-64	Number	249	754	206	413	5,716	860	515	5,965	1,435
years	%	14%	7%	10%	17%	40%	28%	19%	30%	31%
Total	Number	4,003	2,112	543	4,523	10,688	3,052	4,855	12,674	3,313
	%	21%	8%	12%	21%	34%	25%	22%	26%	26%

Figure 17. Adults' access to preventive health services by program, age and year



## WHETHER MEMBER HAD WELL ADULT VISIT

The DID framework is combined with multiple modeling frameworks to assess the robustness of the parameter estimation. Normal and logistic generalized estimating equation (GEE) models which account for within-individual correlation are fit. Additionally, a normal regression with individual random effects, a conditional logistic regression matching on individual is fit to further assess robustness. Equation (1) below expresses the normal GEE DID model and equation (2) the logistic GEE DID model:

$$Y_{it} = \mu + \gamma_{FMAP} + \gamma_{SSI} + \gamma_{WP} + \gamma_{MPC} + T_t + \gamma T_{MPC^*post} + \gamma T_{WP^*post} + \mathbf{X'}_{it} \boldsymbol{\beta} + \varepsilon_{it} \quad (1)$$



$$logit(Y_{it}) = \mu + \gamma_{FMAP} + S_{SI} + \gamma_{WP} + \gamma_{MPC} + T_t + \gamma T_{MPC^*post} + \gamma T_{WP^*post} + X'_{it} \beta$$
(2)

where  $Y_{it}$  is an indicator for member *i* receiving a wellness visit in time period t, the  $\gamma$  terms are the program effects,  $T_t$  indicates the time period,  $\gamma T_{MPC^*post}$  is the MPC specific DID estimate,  $\gamma T_{WP^*post}$  the WP specific DID estimate,  $X'_{it}\beta$  captures all other predictors controlled for, and  $\varepsilon_{it}$  the random error. The additional predictors controlled for include sex, race, UIC, age indicators, FPL indicators, months in a MHH indicators, months in a IHH indicators, had delivery, and chronic illnesses. Variations of all models were fit using only a subset of additional predictors, excluding having a delivery and chronic illnesses. Additionally, variations of all models are fit with the DID estimate for MPC and WP pooled into a single DID estimate; this is achieved by replacing  $\gamma T_{MPC^*post} + \gamma T_{WP^*post}$  with  $\gamma T_{(MPC \text{ or } WP)^*post}$  in equations (1) and (2).

Due to the nature of the models the GEE approach can estimate effects that are unchanging over time, such as sex and chronic illness status. Both the normal regression with individual random effects and conditional logistic regression matching on individual cannot estimate these. The robustness check solely focused on the DID parameter estimation.

Four different types of Models were fit as a robustness check.

- 1. Linear: OLS with person effects and robust standard errors
- 2. Linear: Generalized Estimating Equations (GEE)
- 3. Logistic: Conditional logistic regression with robust standard errors
- 4. Logistic: Generalized Estimating Equations (GEE)

Each model was fit using the full set and a reduced set of predictors.

- 1. Subset of predictors: sex, race, UIC, age, FPL, MHH, IHH, program, post indicator, DID estimates
- 2. All predictors: Subset of predictors + pregnancy, illness indicators

Each combination of the 4 model types and 2 sets of predictors were first fit with a separate DID estimator for WP/MPC and then fit with a pooled DID estimator for WP/MPC.

Regardless of the model, DID estimator(s) always indicated that the likelihood of getting a wellness visit increased for those in WP or MPC over time, with a larger increase for WP than MPC (Figure 18). Regardless of model type and predictors used regression estimates are nearly identical across linear models and very similar across logistic models (Table 11 and Table 12).




## Table 11. Regression estimates for the full model across all model types

Response	Linear	Linear	Linear	Linear	Logistic	Logistic	Logistic	Logistic
Predictors	Subset	Subset	All	All	Subset	Subset	All	All
DID Estimate	Separated	Pooled	Separated	Pooled	Separated	Pooled	Separated	Pooled
Parameter	Beta							
Intercept	0.0544***	0.0554***	0.0176***	0.0186***	-2.5889***	-2.5807***	-2.9796***	-2.9704***
Had delivery	-	-	-0.0465***	-0.0467***	-	-	-0.5487***	-0.5508***
Chronic Illnesses								
Attention Deficit Disorder	-	-	0.0115	0.0115	-	-	0.1168*	0.1172*
Acute Myocardial Infarction	-	-	-0.0329**	-0.0329**	-	-	-0.3203**	-0.3217**
Anxiety	-	-	-0.0049	-0.0049	-	-	-0.0352	-0.0358
Asthma	-	-	-0.0007	-0.0007	-	-	0.0025	0.0024
Coronary Artery Disease	-	-	-0.0079*	-0.0079*	-	-	-0.0622	-0.0618
COPD Emphysema	-	-	-0.0148***	-0.0149***	-	-	-0.1188**	-0.1192**
Cerebrovascular Event	-	-	-0.0146*	-0.0145*	-	-	-0.1209*	-01203*
Developmental Disorder	-	-	0.0485**	0.0483*	-	-	0.4053**	0.404**
Dementia	-	-	-0.0358	-0.0358	-	-	-0.3706	-0.3695
Depression	-	-	-0.0036	-0.0036	-	-	-0.0341	-0.0339
Diabetes	-	-	-0.0344***	-0.0344***	-	-	-0.2754***	-0.275***
Hypertension	-	-	0.0031	0.0031	-	-	0.0287	0.0291
Hypercholesterol- emia	-	-	0.0499***	0.0499***	-	-	0.4032***	0.4021***
Liver Disease	-	-	-0.0022	-0.0022	-	-	-0.0145	-0.0155
Mental Health Problem	-	-	0.0332***	0.0332***	-	-	0.2979***	0.2975***
Mood Disorder	-	-	-0.0023	-0.0024	-	-	-0.0061	-0.0054
Mental Retardation	-	-	0.1100***	0.1101***	-	-	0.8398***	0.8405***
Obesity	-	-	0.0337***	0.0337***	-	-	0.2853***	0.2487***
Parkinson's MS	-		0.0086	0.0087	-		0.0870	0.0877
Pervasive Develop- mental Disorder	-	-	0.087***	0.087***	-	-	0.7075***	0.7058***
Persistent Mental Health Disorder	-	-	-0.0074	-0.0074	-	-	-0.0644	-0.0622
Renal Failure	-	-	-0.0234***	-0.0233***	-	-	-0.2141***	-0.214***
Substance Abuse Problem	-	-	-0.0018	-0.0019	-	-	-0.0113	-0.0122
Schizophrenia	-	-	0.0585***	0.0585***	-	-	0.5209***	0.5204***
FPL					i			
FPL equal 0	-	-	-	-	-	-	-	-
FPL between 1-37	0.0277***	0.0224***	0.0221***	0.0218***	0.1739	0.1712	0.1698***	0.1671***
FPL between 38-75	0.0187***	0.0177***	0.0165***	0.0156***	0.1547	0.1479	0.1399***	0.1331***
FPL between 76-100	0.0265***	0.0246***	0.026***	0.0242***	0.2112	0.1984	0.2115***	0.1988***
FPL between 101- 133	0.0268***	0.0147*	0.0269***	0.0149*	0.2141	0.1428	0.2148***	0.1427**
FPL greater than 134	0.0208*	0.0204*	0.0200*	0.0197*	0.1820	0.1803	0.1793**	0.1776*
Female Indicator	0.047***	0.0472***	0.0429***	0.0431***	0.3967	0.3968	0.3672***	0.3673***
In an IHH ≥ 6 months	0.0549***	0.055***	0.0274***	0.0274***	0.4866	0.4870	0.2537***	0.2541***
In an MHH ≥ 6 months	-0.0213***	-0.0213***	-0.0372***	-0.0372***	-0.2198	-0.2200	-0.3639***	-0.3638***
UIC	0.0182***	0.0183***	0.0212***	0.0212***	0.1753	0.1754	0.2012***	0.2012***

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Response	Linear	Linear	Linear	Linear	Logistic	Logistic	Logistic	Logistic
Predictors	Subset	Subset	All	All	Subset	Subset	All	All
DID Estimate	Separated	Pooled	Separated	Pooled	Separated	Pooled	Separated	Pooled
Parameter	Beta	Beta	Beta	Beta	Beta	Beta	Beta	Beta
Time period (Post)	-0.0337***	-0.0336***	-0.0348***	-0.0348***	-0.3715	-0.3714	-0.3897***	-0.3897***
Age Indicators								
Age between 19-21	0.0073	0.0074	0.0158**	0.0159**	0.0581	0.0586	0.1388*	0.1391*
Age between 22-30	-0.0136***	-0.0135***	-0.006*	-0.0059	-0.1372	-0.1357	-0.0677*	-0.0653*
Age between 31-44	-	-	-	-	-	-	-	-
Age between 45-64	0.0183***	0.0182***	0.0179***	0.0178***	0.1587	0.1575	0.1517***	0.1505***
Race								
American Indian	-0.0162	-0.0165	-0.0101	-0.0104	-0.1583	-0.1592	-0.1099	-0.1111
Asian	0.0403***	0.0406***	0.0542***	0.0544***	0.2928	0.2928	0.4322***	0.4321***
Black	0.0014	0.0011	0.0095*	0.0093*	0.0131	0.0119	0.0810*	0.0796*
Hispanic	0.0047	0.0048	0.0058	0.0059	0.0394	0.0397	0.0518	0.0521
Multiple-Hispanic	-0.0126	-0.0125	-0.0117	-0.0116	-0.1134	-0.1113	-0.1058	-0.1038
Multiple-other	0.0106	0.0108	0.0169	0.0170	0.1103	0.1136	0.1752	0.1785
Pacific Islander	-0.0031	-0.0027	0.0000	0.0004	-0.0167	-0.0220	0.0181	0.0140
Unknown	0.0214***	0.0209***	0.0235***	0.023***	0.1750	0.1710	0.1956***	0.1916***
White	-	-	-	-	-	-	-	-
Program Indicators								
FMAP	0.0008	0.0001	0.0175***	0.0168***	0.0369	0.0322	0.2231***	0.2182***
SSI	-	-	-	-	-	-	-	-
IC -> MPC	-0.0091**	-0.0596***	0.0018	-0.0487***	-0.0751	-0.5877	0.0537	-0.4615***
IC -> WP	-0.0331***	-0.0229***	-0.0218***	-0.0116***	-0.3847	-0.2755	-0.2563***	-0.147***
DID Estimates								
MPC DID Estimator	0.156***	-	0.1576***	-	1.2362***	-	1.2689***	-
WP DID Estimator	0.2815***	-	0.283***	-	2.0869***	-	2.1302***	-
MPC/WP DID Estimator	-	0.2609***	-	0.2625***	-	1.9457***	-	1.9872***

Response	Linear	Linear	Linear	Linear	Logistic	Logistic	Logistic	Logistic
Predictors	Separated	Separated	Pooled	Pooled	Separated	Separated	Pooled	Pooled
DID Estimate	Subset	All	Subset	All	Subset	All	Subset	All
Parameter	Beta							
Intercept	0.1206***	0.1223***	0.1253***	0.1269***	-	-	-	-
Had delivery	-	-0.0421***	-	-0.0424***	-	-0.5465***	-	-0.5480***
UIC	-0.0323*	-0.0330*	-0.0319*	-0.0319*	-0.1937	-0.1856	-0.1826	-0.1745
Age Indicators								
Age between 19-21	-0.0379	-0.0368	-0.0386	-0.0374	-0.4076**	-0.3656**	-0.4017**	-0.3595**
Age between 22-30	-0.0259	-0.0251	-0.0254	-0.0245	-0.2831*	-0.2635	-0.2775*	-0.2580
Age between 31-44	-	-	-	-	-	-	-	-
Age between 45-64	-0.0090	-0.0084	-0.0071	-0.0066	-0.0984	-0.0965	-0.1088	-0.0990
FPL Indicators								
FPL equal to zero	-	-	-	-	-	-	-	-
FPL between 1-37	0.0346***	0.0346***	0.0323***	0.0323***	0.1648**	0.1630**	0.1475*	0.1460*
FPL between 38-75	0.024*	0.0246*	0.0176	0.0173	0.0796	0.0723	0.0192	0.0119
FPL between 76-100	0.0344*	0.0343*	0.0138	0.0137	0.1249	0.1251	-0.0488	-0.0491
FPL between 101-133	0.0234	0.0231	-0.0300	-0.0302	0.0997	0.0989	-0.3442*	-0.3457*
FPL ≥ 134	0.0081	0.0076	-0.0183	-0.0188	0.1203	0.1182	-0.0822	-0.0849
In an MHH ≥ 6 months	0.0202	0.0200	0.0202	0.0200	0.1318	0.1312	0.1299	0.1294
In an IHH ≥ 6 months	-0.0006	-0.0004	-0.0007	-0.0005	0.0136	0.0167	0.0159	0.0191
Time period (Post)	-0.0342***	-0.0357***	-0.0343***	-0.0358***	-0.4641***	-0.4844***	-0.4643***	-0.4848***
DID Estimates								
WP DID Estimator	0.2803***	0.2817***	-	-	2.3793***	2.4004***	-	-
MPC DID Estimator	0.1555***	0.1570***	-	-	1.4589***	1.4806***	-	-
MPC/WP DID Estimator	-	-	0.2615***	0.2629***	-	-	2.2312***	2.2524***

#### Table 12. Regression estimates for the reduced model across all model types

#### Access to and unmet need for primary care/preventive care services (Measure 16)

Need for primary care services was assessed by asking if respondents:

- made any appointments for a check-up or routine care
- needed care for yourself from a doctor's office during evenings, weekends, or holidays (after-hours care)
- got any preventive care
- thought (or a health professional thought) there was a time when they needed prescription medicine for any reason.

Figure 19 provides the need for primary care services for IHAWP and Medicaid members. Around 70% of members reported a need for routine care with no difference between IHAWP and Medicaid. More Medicaid members (26%) reported a need for after-hours care compared to IHAWP members (21%), p=.02. However, significantly more IHAWP members (57%) compared to Medicaid members (48%) were able to receive preventive care (p<.0001). And, while there was no significant difference between IHAWP and Medicaid with regard to the need for prescription medications, more IHAWP members (87%) than Medicaid members (78%) reported that it was usually or always easy to get prescriptions (p<.0001).



Figure 19. Need for Primary Care-Related Services by Program

Figure 20 provides the need for primary care services for MPC and WP members. MPC members generally reported less of a need for primary care services when compared to WP members. Fewer MPC members than WP members reported a need for routine care (p=.0002), after-hours care (p=.02), preventive care (p=.005), and prescription medications (p=.002). When asked how easy it was to get prescription meds through their health plan, 84% of MPC members reported it was 'usually' or 'always' easy to get prescriptions compared to 87% of WP members and this difference was not statistically significant.



Figure 20. Need for Primary Care-Related Services by Plan

The survey included the following questions about unmet need for primary care services in the six months prior to the survey:

- Was there any time when you needed a check-up or routine care but could not get it for any reason?
- How often were you able to get the care you needed from a doctor's office during evenings, weekends, or holidays? [A response of 'never' defined an unmet need]
- Was there any time when you needed preventive care but could not get it for any reason?
- Was there any time when you needed prescription medicine but could not get it for any reason?

Figure 21 provides a comparison of IHAWP and Medicaid with regard to unmet need for primary care services. Overall, around 30% of members reported 'never' receiving needed after-hours care, 25% reported an unmet need for prescription medications, and 9% an unmet need for preventive care with no statistically significant differences between IHAWP and Medicaid members. Significantly more Medicaid members (12%) than IHAWP members (9%) reported an unmet need for routine care (p=.02).



Figure 21. Unmet Need for Primary Care-Related Services by Program

Figure 22 provides a comparison of MPC and WP members with regard to unmet need for primary care services. Overall, around 9% of members reported an unmet need for routine care and 31% reported 'never' receiving needed after-hours care with no statistically significant differences between IHAWP and Medicaid members. Significantly fewer MPC members (6%) than WP members (10%) reported an unmet need for preventive care (p=.02) and fewer MPC members (18%) than WP members (26%) reported an unmet need for prescription medications (p=.02).





Received a flu shot (Measure 26)

Figure 13 and Figure 14 provide information regarding receipt of the flu shot. The figures indicate that IHAWP members are more likely to report having received a flu shot than Medicaid members. MPC members were less likely to reported receiving a flu shot than MPC members, however the difference was not statistically significant.

## Breast cancer screening (Measure 9)

The percent of women 50–64 who had a mammogram to screen for breast cancer is presented in this measure. This measure includes only those women eligible for at least 11 months in the measurement year and the two years prior to the measurement year. The HEDIS Breast Cancer Screening (BCS) protocol is used for this measure (NQF 0031 and CMS' Adult core measure #3).

Table 13 and Figure 23 provide the proportion of women ages 50-64 who had a mammogram in the four

study groups. Rates were the highest among women in MPC and WP. Women in IC had the lowest rate. This provides one indication that women in MPC are more likely to engage in preventive behaviors.

Age		FMAP 2013	IC->WP 2013	IC->MPC 2013	FMAP 2014	WP 2014	MPC 2014	FMAP 2015	WP 2014	MPC 2014
50-64 years	Number	122	904	221	144	1,529	298	149	1,461	394
	%	40%	34%	36%	42%	52%	50%	47%	59%	66%

Table 13. Percent of women ages 50-64 who had a mammogram, CY 2013-CY2015

Figure 23. Percent of women ages 50-64 with a mammogram by program and year



## Cervical cancer screening (Measure 10)

The percent of women 21-64 who were screened for cervical cancer is provided in this measure using HE-DIS Cervical Cancer Screening (CCS) (NQF 0032 and CMS' Adult core measure #4). Women included in the cervical cancer screening rate had to be eligible for at least 11 months in the measurement year and in each of the two years preceding the measurement year.

The percent of women ages 21-64 who were screened for cervical cancer includes more women than the breast cancer screening measure due to the expanded age range. Rates for cervical cancer screening (Table 14, Figure 24) were highest for women in FMAP across all years and lowest in IC. Women in MPC had screening rates of 20% across both years. These rates are very low, however; women may be obtaining this care in places that do not bill Medicaid such as free medical clinics.

Age		FMAP 2013	IC->WP 2013	IC->MPC 2013	FMAP 2014	WP 2014	MPC 2014	FMAP 2015	WP 2015	MPC 2015
21-64	Number	4,385	1,490	376	4,204	3,876	985	4,263	4,345	1,477
years	%	30%	12%	14%	26%	25%	20%	25%	19%	20%



#### Figure 24. Percent of women ages 21-64 with cervical cancer screening by year and program

### Comprehensive diabetes care: Hemoglobin A1c (Measure 13)

There are seven components of comprehensive diabetes care.

- 1. Hemoglobin A1c (HbA1c) testing
- 2. HbA1c poor control (>9.0%)
- 3. HbA1c control (<8.0%)
- 1. Eye exam (retinal) performed
- 2. Medical attention for nephropathy
- 3. BP control (<140/90 mm Hg)
- HbA1c control (<7.0%) for a selected population\* 4.

Most of these measure protocols require more than administrative data. One component of Comprehensive Diabetes Care that can be calculated using administrative data is the percent of members with type 1 or type 2 diabetes who had Hemoglobin A1c testing during the year. Hemoglobin A1c testing provides evidence that the glucose levels for members with diabetes are being monitored. The HEDIS Comprehensive Diabetes Care – Hemoglobin A1c is used for this measure (NQF 0057 and as CMS' Adult core measure #19). For this measure members with diabetes had to be eligible for 11 months in both the measurement year and the year prior to the measurement year.

MPC and WP consistently have a higher proportion of members diagnosed with diabetes than FMAP, as might be expected as many of these adults were originally in the IC program in which 9% of members were identified as having diabetes (Table 15, Figure 25).

The rate of Hemoglobin A1c in IC members with diabetes was 82% in 2013 leading us to expect a similar rate in MPC. Though rates of Hemoglobin A1c for MPC members with diabetes were relatively high, the rates never reached the level of Hemoglobin A1c testing in IC members who were eligible for MPC. Members with diabetes in WP and MPC were more likely to have a Hemoglobin A1c than those in FMAP (Figure 26).

		FMAP 2013	IC->WP 2013	IC- >MPC 2013	FMAP 2014	WP 2014	MPC 2014	FMAP 2015	WP 2015	MPC 2015
Proportion	Number	602	1,088	241	674	1,239	246	789	2,348	504
with diabetes	%	4%	9%	10%	5%	10%	12%	5%	10%	9%
Hemoglobin	Number	519	972	221	567	1,109	210	654	2,122	445
A1c rate	%	86%	89%	92%	84%	90%	85%	83%	90%	88%

Table 15. Proportion of population age 19-64 identified as having diabetes CY 2013 - CY 2015



Figure 25. Proportion of members diagnosed with diabetes by program and year

Figure 26. Proportion of population age 19-64 identified as having diabetes with a Hemoglobin A1c



### Comprehensive diabetes care: LDL-C screening (Measure 14)

A second component of Comprehensive Diabetes Care that is easily computed using administrative data is the percent of members with type 1 or type 2 diabetes who had LDL-C screening. The HEDIS Comprehensive Diabetes Care – LDL-C protocol is used for this measure. LDL-C screening provides evidence that members with Diabetes are being screened for cholesterolemia, a frequent comorbidity with Diabetes (NQF 0063 and as CMS' Adult core measure #18). For this measure members with diabetes had to be eligible for 11 months in both the measurement year and the year prior to the measurement year.

The rate of LDL-C screening for members with diabetes is much lower than that for Hemoglobin A1c with a different pattern between the programs and years (Table 16, Figure 27). The IC rate is quite low, perhaps indicating an inability to detect the testing when performed in Federally Qualified Health Centers (FQHCs). Global reimbursement for services provided during a visit may mask the provision of this test. Rates of LDL-C screening in MPC members with diabetes were higher than the rates for FMAP members with diabetes for both years.

 Table 16. Proportion of population age 19-64 identified as having diabetes with LDL-C screening, CY 2013 through CY 2015

		FMAP 2013	IC->WP 2013	IC- >MPC 2013	FMAP 2014	WP 2014	MPC 2014	FMAP 2015	WP 2015	MPC 2015
Proportion with diabetes	Number	602	1,088	241	674	1,239	246	789	2,348	504
	%	4%	9%	10%	5%	10%	12%	5%	10%	9%
LDL-C rate	Number	382	435	92	436	830	169	501	1,718	348
	%	63%	40%	38%	65%	67%	69%	63%	73%	69%

Figure 27. Proportion of population age 19-64 identified as having diabetes with



## Annual monitoring for members on persistent medication (Measure 15)

For this measure the percent of members on a persistent medication (ACE/ARB, digoxin, diuretic, anti-convulsant) who were monitored is calculated. Due to the small numbers of members on persistent medications, this measure is limited to monitoring for members on diuretics. The protocol for this measure is found in HEDIS Annual Monitoring for Members on Persistent Medication (MPM) (NQF 2371). To be considered on a persistent medication a member must have had at least 180 days of the prescription medication supplied within the year. This measure does not include IC members, as the program did not provide prescription drug coverage.

Table 17 and Figure 28 illustrate the proportion of members on a diuretic for at least 180 days during the year who have received monitoring through a Serum Potassium or Serum Creatinine level. Rates of screening for MPC members were initially lower than screening rates for FMAP members, however; screening rates rose to comparable levels by CY 2015.

Table 17. Proportion of population on Diuretic medications screened for Potassium and Creatinine, CY 2013 through CY2015

		FMAP 2013	IC -> WP 2013	IC -> MPC 2013	FMAP 2014	WP 2014	MPC 2014	FMAP 2015	WP 2015	MPC 2014
Propor- tion on Diuretic	Number %	396 2%	N/A	N/A	435 2%	1558 5%	366 4%	546 2%	2449 5%	628 5%
Moni- toring Rate	Number %	321 81%	N/A	N/A	354 81%	1370 88%	253 69%	460 84%	2106 86%	505 80%



Figure 28. Proportion of population on Diuretic medications screened for

## MEDICAL ASSISTANCE WITH SMOKING AND TOBACCO USE (MEASURE 67)

We asked several smoking cessation questions to members who reported being smokers that could be informative for future incentive designs.

In the last six months,

- How often were you advised to quit smoking or using tobacco by a doctor or other health provider in your plan?
- How often was medication (such as nicotine gum, patch, nasal spray, inhaler, or prescription medicine) recommended or discussed by a doctor or health provider to assist you with quitting smoking or using tobacco?
- How often did your doctor or health provider discuss or provide methods and strategies other than medication (such as a telephone hotline, individual or group counseling, or a cessation program) to assist you with quitting smoking or using tobacco?

Figure 29 summarizes the percentage of IHAWP and Medicaid members who responded 'usually' or 'always' to these questions. Almost one-half of IHAWP and Medicaid members who smoked reported that a health provider advised them to quit smoking or using tobacco (49% IHAWP, 46% Medicaid). Significantly more IHAWP members (20%) than Medicaid members (13%) reported that that their provider recommended medication to quit smoking (p=.01) while 18% of IHAWP and 16% of Medicaid members reported their health provider recommended strategies other than medications to quit smoking with no significant difference between the two.





Figure 30 summarizes the percentage of MPC and WP members who responded 'usually' or 'always' to these questions. There were no significant differences between MPC and WP. Around half (49%) were advised to quit smoking with around 20% reporting that medications were recommended and 18% reporting that strategies other than medications were recommended to help them quit smoking.



#### Figure 30. Smoking Cessation Advice Reported by Plan

# **ACUTE CARE**

The MPC evaluation focuses on unnecessary use of the emergency department (ED), rather than use of acute care. However, ambulatory care (<u>Measure 22</u>) provides a measure of the balance between outpatient care and ED use in the hospital, while after hours care (<u>Measure 6</u>) provides information about whether members were able to access after-hours care.

## **AMBULATORY CARE (MEASURE 22)**

This measure summarizes utilization of outpatient visits and emergency department visits as a rate per 1,000 member months for those ages 19-64 years enrolled for at least 1 month during the year. The protocol for HEDIS Ambulatory Care (AMB) is used for this measure.

ED visits are very low in the IowaCare (IC) population during the year prior to implementation of IHAWP. These rates are most likely the result of stringent limits allowing IC members to access ED care at the University of Iowa Hospitals and Clinics (Iowa City) or Broadlawns Medical Center (Des Moines). ED visits at other locations were not recorded in the claims or encounter data. Figure 31 shows the change in rate for ED visits and ambulatory care visits. Members in all three programs were more likely to have an ambulatory care visit in CY 2015 than CY 2014, while the rate of ED visits remained stable for FMAP and WP members but increased for MPC members over this same time period.

Table 18. Number of ED visits and number of ambulatory care visits per 1,000 member months for members 19-64 years of age, CY 2013-CY 2015

	FMAP 2013	IC-> WP 2013	IC-> MPC 2013	FMAP 2014	WP 2014	MPC 2014	FMAP 2015	WP 2015	MPC 2015
ED visits/1,000 member months	106.4	35.0	32.9	104.1	71.6	47.3	103.5	73.8	53.0
Ambulatory care vis- its/1,000 member months	398.9	193.6	215.7	422.3	334.0	256.5	452.4	353.0	327.6



Figure 31. Visits per 1,000 member months by program and year, CY 2014 and CY 2015

## **AFTER-HOURS CARE (MEASURE 6)**

Figure 20 and Figure 22 above indicate the proportion of WP and MPC members who needed after-hours care and the proportion that had an unmet need for that care. WP members were significantly more likely to need after-hours care (22% vs 17%, p=.02). However, there were no significant differences between the two groups in the proportion that had an unmet need for after-hours care (31% for both groups).

# NETWORK

One concern with plans is the adequacy of the provider network. In an effort to recruit providers who will subscribe to plan fee schedules and rules, the network may be limited in some areas, especially in a rural state such as Iowa where providers may already be scarce. We utilized a number of mechanisms, including GIS network analysis to determine the adequacy of the MPC networks. We provide information for Coventry only, as CoOportunity ceased operations after only 11 months. Our primary care network measures include: average travel distance and average time to access primary care provider in local service delivery area (Measure 68) and provider inclusion of safety net providers (Measure 70). The previously completed network report also includes information about specialists, mental health providers and hospitals. The additional results can be found at <a href="http://ppc.uiowa.edu/publications/evaluation-provider-adequacy-io-wa-health-and-wellness-plan-during-first-year">http://ppc.uiowa.edu/publications/evaluation-provider-adequacy-io-wa-health-and-wellness-plan-during-first-year</a>.

## **PRIMARY CARE PROVIDERS (MEASURE 68)**

Primary care providers (PCPs) were defined as physicians, physician assistants or nurse practitioners specializing in General Practice, Family Practice, or Internal Medicine. OB/GYNs were also included as PCPs for women. Internal Medicine specialists with a secondary specialty (e.g., cardiology or endocrinology) and clinics or providers with no specialty information were excluded. Providers working in Rural Health Clinics and Federally Qualified Health Centers were included in this evaluation. Supply counts of unique PCPs were identified by National Provider Identifier (NPI).

In addition to evaluating the supply of PCPs contracted with each program, we also evaluated the supply of PCPs who had submitted at least one claim to programs they were contracted with during CY 2014 ("treating providers"). To identify treating MSP providers, we examined claims submitted for care provided to the adult FMAP population, ages 19-64 years, since this population is the most comparable to the WP population.

In 2014, there were 3,057 PCPs contracted with MSP (Table 19). Active providers include all providers who submitted at least one claim for care provided to a member during 2014. Approximately 8% of these contracted PCPs (n=249) had submitted a claim to MSP for care provided to an FMAP member during 2014. Nine percent of MSP-contracted PCPs (n=274) had submitted a claim for care provided to a WP member.

In 2014, there were 2,445 PCPs contracted with Coventry. Approximately 37% of these (n=899) had submitted a claim for care provided to a Marketplace Choice member.

Note that it is not possible to directly compare the supply of specific primary care provider types between MSP/WP and Coventry. Medicaid categorizes nurse practitioners and physician assistants by their special-ty, while Coventry does not indicate specialty for these providers.

Approximately 48% (n=1,456) of PCPs contracted with MSP/WP were also contracted with Coventry.

Table 19	. Primary c	are providers	in Iowa b	oy program	(CY 2014)
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		MSP/WP		Cove	entry
	Contracted	Submitted ≥ 1 claim MSP	Submitted ≥ 1 claim WP	Contracted	Submitted ≥ 1 claim
Family Practice	1,740	149	166	1,594	713
General Practice	444	37	39	22	9
Internal Medicine	536	4	12	321	83
OB/GYN	332	55	52	3	0
Nurse Practitioners**	NA	NA	NA	12	3
Physician Assistants**	NA	NA	NA	249	82
Other	5	5	5	13	2
TOTAL	3,057	249	274	2,445	899

\*\* Medicaid includes a specialty for nurse practitioners and physician assistants, so these providers are counted by their respective specialties. Coventry does not designate a specialty for nurse practitioners or physician assistants; they have all been counted in this report as PCPs.

# GEOCODING

Address data were cleaned prior to geocoding removing incomplete addresses and post office boxes from the dataset. Geocoding was carried out in multiple steps. Locations were initially geocoded using an address locator created in ESRI ArcMap using the "North American Detailed Streets" dataset maintained by ESRI. Addresses incorrectly located or not located after this process were located using a combination of ESRI geocoding API and Google Maps geocoding API. Only members and providers with successfully geocoded addresses were included in this evaluation.

## **DISTANCE CALCULATIONS**

Two distance outcomes were evaluated for the study populations: distance to the nearest PCP among all members and distance to the treating PCP among members with a qualifying visit to a PCP. The first outcome is one of potential access within the network; the second outcome reflects realized, or actual, access to primary care services.

## **DISTANCE TO NEAREST PCP**

Distance to the nearest PCP was calculated for all members of the study population (Figure 32). To determine the nearest provider for each member, a network dataset was created using the North American Detailed Streets dataset maintained by ESRI. Non road pathways (i.e. bike trails) were omitted and a travel time for each section of roadway was calculated using the posted speed limit and section length. A small subset of roads lacking speed limit data were edited to have a 15 mph speed limit in order to avoid inflated travel times. The ESRI Network Analyst OD Cost Matrix tool was used to determine the closest provider to each enrollee and calculated the travel time and distance for each enrollee to the closest provider along the fastest travel route on the network (Manhattan distance).

## Figure 32. Distance to the nearest PCP



# **DISTANCE TO THE TREATING PCP**

Network distance and travel time to the treating provider was calculated for members with a qualifying ambulatory or preventive visit to a PCP, defined in accordance with the HEDIS 2014 measure of adults' access to preventive/ambulatory health services.<sup>4</sup> Members with a claim for preventive care, as defined by the V70.X diagnosis codes or 99385 or 99386 CPT codes, were mapped to the PCP who provided this care. For members with a PCP visit but no claims for preventive care, we calculated distance to the PCP who submitted the most claims on behalf of each member (Figure 33). In cases of ties, members were assigned to the closest PCP.

<sup>4</sup> HEDIS 2014 Summary Table of Measures, Product Lines and Changes. 2015. NCQA. At: <u>http://www.ncqa.org/HEDISQualityMeasurement/HEDISMeasures/ HEDIS2014.aspx</u>. Accessed July 2, 2015.

#### Figure 33. Distance to the treating PCP



## TRAVEL DISTANCE AND TIME TO THE NEAREST PCP

Members were mapped to their nearest PCP. MSP members had the shortest mean travel time (3.8 minutes) and mean distance (2.2 miles) to the nearest PCP, followed closely by WP members (Table 20). Coventry members, on average, have to travel almost twice the distance (4.2 miles) as that of Medicaid members to access the nearest PCP.

#### Table 20. Travel distance and time to nearest PCP (CY 2014)

	Distance	(miles)	Time (minutes)		
	Mean	Mean Maximum		Maximum	
MSP	2.2	30.7	3.8	46.0	
WP	2.4	33.4	4.1	45.6	
Coventry	4.2	40.7	6.7	57.6	

Overall, the majority of the members in MSP, WP, and Coventry reside within 5 miles of the nearest PCP (Figure 34).

Figure 34. Distance in miles to the nearest PCP by program (CY 2014)



The Health Resources and Services Administration (HRSA) guidelines for primary medical care health professional shortage area (HPSA) designation consider travel times greater than 30 minutes to be "excessively distant" – one of the three basic criteria for a geographic area HPSA designation request.<sup>5</sup> Approximately 2% of the MSP members lives more than 30 minutes from the nearest PCP (Figure 35); 2% of WP and 5% of Coventry members lived more than 30 minutes from the nearest PCP.





# TRAVEL DISTANCE AND TIME TO THE TREATING PCP

Among MSP members (N=60,631), 33% had a qualifying visit to a PCP for ambulatory/preventive health services (Table 21). A similar proportion of WP members had a qualifying PCP visit (32%), while only 18% of Coventry members had a qualifying visit.

Table 21. Members with a qualifying ambu	latory/preventive PCP visit (CY 2014)
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Program	Number	Percent		
Medicaid State Plan	20,132	33%		
Wellness Plan	35,106	32%		
Coventry	2,192	18%		

Coventry members have the shortest mean travel time (11.3 miles) and mean travel distance (15.3 minutes) to their treating PCP compared to MSP and WP members (Table 22).

Table 22. Travel distance and time to treating PCP (CY 2014)

	Distance	(miles)	Time (minutes)		
	Mean	Maximum Mean Max		Maximum	
MSP	11.6	392.7	15.8	385.2	
WP	12.0	425.1	18.6	452.5	
Coventry	11.3	346.9	15.3	360.9	

<sup>5</sup> Guidelines for Primary Medical Care/Dental HPSA Designation. HRSA, US HHS. At: <u>http://bhpr.hrsa.gov/shortage/hpsas/designationcriteria/</u> medicaldentalhpsaguidelines.html. Accessed July 2, 2015.

Overall, a majority of members in the 3 programs resided within 5 miles/10 minutes of their treating PCP (Figure 36 and Figure 37).



Figure 36. Distance in miles to treating PCP by program (CY 2014)





### Safety net providers (Measure 70)

All Federally Qualified Health Centers (FQHC) and Rural Health Centers (RHC) were included in this evaluation.

There are 58 FQHCs (Figure 38) and 308 RHCs (Figure 39) in Iowa. Additional FQHCs in Illinois (n=8), Nebraska (n=8), and South Dakota (n=8) are also contracted with Iowa Medicaid.









# **SPECIALISTS**

Access to specialists is important for adult MPC members who have a chronic condition but are not functionally limited enough to be categorized as Medically Frail. Iowa has two metropolitan centers with concentrations of specialists: Des Moines and Iowa City/Cedar Rapids corridor, and at least one concentration outside the state in Omaha, Nebraska, however, access to specialists outside these areas can be quite limited. We build an understanding of access and satisfaction with specialists by asking members about their experiences. These outcomes include: access to and unmet need for specialist care (<u>Measure 7</u>) and network inclusion of specialists (added analyses).

Access to and unmet need for specialist care (Measure 7)

Specialty service use in the six months prior to the survey included any appointments with a specialist (defined as doctors like surgeons, heart doctors, allergy doctors, skin doctors, and others who specialize in one area of health care), treatment or counseling for a mental or emotional health problem, and urgent care (defined as an illness, injury, or condition that needed care right away).

Figure 40 provides the results of the comparison of specialty service utilization between IHAWP and Medicaid members. Overall, the vast majority (88%) of members who reported needing care from a specialist made an appointment to see a specialist with 45% reporting having seen 2 or more specialists during the six month period. There were no differences between IHAWP and Medicaid members with regard to specialist use. A majority of members (71%) reported receiving treatment or counseling for a mental or emotional health problem with no significant difference between IHAWP and Medicaid members. Medicaid members reported higher need for urgent care (50%) when compared to IHAWP members (43%), p<.01.



Figure 40. Specialty Care-Related Services Used by Program

The only significant differences in use of specialty services between MPC and WP members was in the reported need for urgent care (Figure 41). MPC members were significantly (p=.004) less likely to have had a need for urgent care (36%) when compared to WP members (45%).



Figure 41. Specialty Care-Related Services Used by Plan

Need for specialty care services was assessed by asking:

- if there was a time when they or a doctor thought they needed care from a specialist
- if they or a health care provider believed they needed any treatment or counseling for a mental or emotional health problem
- if they had an illness, injury or condition that needed care right away (need for urgent care)

Figure 42 provides the need for specialty care services for IHAWP and Medicaid members. Significantly more IHAWP members (43%) compared to Medicaid members (35%) reported a need for specialty care (p=.0005). However, more Medicaid members (24%) compared to IHAWP members (18%) reported a need for mental or emotional health care (p=.001). The same was true for urgent care with more Medicaid members (50%) than IHAWP members (43%) reporting a need (p=.002).





Figure 43 provides the need for specialty care services and, for each service area, there were significant differences between MPC and WP members. Significantly fewer MPC members compared to WP members reported a need for each type of service (Specialist care, p=.01, Mental or emotional health care, p=.04, and Urgent care, p=.004).



Figure 43. Need for Specialty Care-Related Services by Plan

The survey included the following questions about unmet need for specialty services in the six months prior to the survey:

- For those who reported a need for seeing a specialist: Was there any time when you needed care from a specialist but could not get it for any reason?
- For those who reported a need for mental or emotional health care: Was there any time when you needed treatment or counseling for a mental or emotional health problem but could not get it for any reason?
- For those who reported a need for care right away (urgent care): Was there any time when you needed care right away but could not get it for any reason?

Figure 44 provides a comparison of IHAWP and Medicaid with regard to unmet need for specialty care services. There were no significant differences in unmet need for these services between IHAWP and Medicaid members but it is important to note that the sample sizes for comparison were quite small because the

unmet need questions were only asked of those who responded that they had a need for each type of service. Overall for IHAWP and Medicaid members, around 18% reported an unmet need for a specialist, 25% reported an unmet need for mental health care, and 20% an unmet need for urgent care.





Figure 45 provides the need for specialty care services and, for specialist and mental health care, there were no significant differences between MPC and WP members. Significantly fewer MPC members (11%) compared to WP members (20%) reported an unmet need for urgent care (p=.02).



Figure 45. Unmet Need for Specialty Care-Related Services by Plan

## PRESCRIPTIONS

Prior to implementation of MPC, low income adults who were not categorically eligible for Medicaid were enrolled in IowaCare, a limited coverage option that did not cover prescription medications. Moving to MPC from IowaCare provided adults with access to prescription medications that they had not previously had. We asked members about their access to and unmet need for prescription medications (<u>Measure 8</u>) and assessed how well prescription medications were being monitored (<u>Measure 15</u>).

## Unmet need for prescription medications (Measure 8)

Diagnostic or treatment service use in the six months prior to the survey included a doctor's office ordering a blood test, x-ray, or other test, any experience receiving health care 3 or more times for a condition or problem that had lasted for at least 3 months, and reported use of prescription medication (excluding birth control). Figure 46 provides the results of the comparison of diagnostic or treatment service utilization between IHAWP and Medicaid members. Significantly more IHAWP members (82%) reported that that a doctor's office ordered tests for them than Medicaid members (72%), p<.0001. Also, significantly more IHAWP members received health care for a chronic condition (33%) than Medicaid members (27%), p=.004. Many IHAWP (68%) and Medicaid (63%) members reported having used a prescription medication in the previous six months.



#### Figure 46. Diagnostic or Treatment Services Used by Program

There were significant differences in use of diagnostic and treatment services between MPC and WP members (Figure 47). MPC members were significantly (p<.05) less likely to have had tests ordered (76%), care for a chronic condition (23%), and prescription medications (62%) compared to WP members (83%, 36%, and 69% respectively).



Figure 47. Diagnostic or Treatment Services by Plan

## Annual monitoring for patients on persistent medications (Measure 15)

See discussion under Primary Care.

# COST

There are two components to the cost analyses for MPC. First, we need to determine whether the state saved money through the QHP plan premiums as compared to what they would have spent on members had

they received care within the traditional Medicaid system (<u>Measure 55</u>). DID analyses to date have been challenging to complete due to the differential fee schedules and formularies between QHPs and between the QHPs and Medicaid. Simply adding up the premiums and comparing them to what the QHPs spent provides an understanding of whether or not the QHPs were provided reasonable capitation rates, however, it does not answer the question of how the premiums compare to what the state would have paid had they utilized existing providers and managed care options.

## **DATA SOURCES**

The costs values utilized for these analyses are derived from Medicaid claims and encounter data. Claims data is submitted directly to Medicaid resulting in payment to providers and includes a provider charge, an amount approved as reasonable for submission and an amount reimbursed which reflects the Medicaid fee schedule and any adjustments that may be made. For our purposes we use the reimbursed amount as it reflects the actual payment by Medicaid.

Claims can be adjusted over time due to retroactive changes in the Medicaid fee schedule, a dispute as to the payment level of a claim, or clarification of the procedures and diagnoses provided on the original claim. These adjustments are reflected in the claims data as a negative claim to zero out the first claim followed by a new claim that accurately records the information. For the purpose of costs analyses, we use all claims, aggregating cost across a given time period (most often a month) thereby allowing the claims and adjustments to sum to the final amount reimbursed.

Encounters are provided to Medicaid by the QHPs and are intended to reflect what the QHPs paid to providers in a manner that mirrors the claims process above. Encounters are assumed to provide all the costs that the QHPs experienced for direct, billable care. Each QHP uses a separate fee schedule to determine the reimbursed amount on a claim. We are cautious with this data because we are unclear that all of the QHP data has been submitted to the state for the MPC study period. Data transfer was delayed during the first months of MPC and the QHPs had no incentive to provide final data as they exited MPC. Therefore, though we use the costs of care as reflected in the claims, we are concerned that they may not reflect all of the care that was provided.

### Compare costs of care (Measure 55)

### **PMPM cost comparisons**

Per member per month (PMPM) costs were calculated for member months in FMAP, WP and MPC. MPC costs were divided into MPC without QHP coverage, MPC with CoOportunity coverage and MPC with Coventry coverage. In addition to the PMPM costs, we also provide the PMPM average premium paid during each month. Table 23 and Figure 48 provide the PMPM costs by program and month for the two year study period. PMPM costs were high for CoOportunity averaging more than twice the PMPM for WP, and 85% higher than the average monthly premium for CoOportunity members. This cost/program pattern persisted for all cost categories to varying degrees, see Figure 49, Figure 50 and Figure 51 below. Most of this cost differential seems to be related to higher fee schedule rates and prescription reimbursement rates.

	WP	FMAP	MPC FFS	MPC COOP	MPC COOP Premium	MPC Coventry	MPC Coven- try Premium
Jan-14	\$369.49	\$259.85	\$257.84	\$898.19	\$528.28	\$194.11	\$417.74
Feb-14	\$361.22	\$219.22	\$277.41	\$912.50	\$531.04	\$261.02	\$417.72
Mar-14	\$386.61	\$239.32	\$235.13	\$1,087.86	\$528.67	\$281.73	\$418.19
Apr-14	\$403.87	\$255.95	\$236.82	\$1,051.84	\$525.50	\$301.21	\$413.88
May-14	\$392.38	\$238.27	\$280.11	\$967.72	\$516.30	\$348.25	\$405.56
Jun-14	\$380.58	\$217.38	\$299.55	\$998.16	\$511.21	\$349.12	\$400.92
Jul-14	\$416.98	\$240.59	\$365.09	\$1,074.90	\$506.36	\$344.71	\$398.12
Aug-14	\$412.06	\$246.13	\$371.87	\$966.52	\$501.15	\$322.71	\$393.03

Table 23, PMPM costs and	premiums by program	and month CY 20	14 and CY 2015
	premiunis by program	anu montii, 01 20	

	WP	FMAP	MPC FFS	MPC COOP	MPC COOP Premium	MPC Coventry	MPC Coven- try Premium
Sep-14	\$415.63	\$248.39	\$378.38	\$940.23	\$494.86	\$233.17	\$388.35
Oct-14	\$439.05	\$264.59	\$389.75	\$873.47	\$490.94	\$206.81	\$387.59
Nov-14	\$379.30	\$230.09	\$338.16	\$642.79	\$490.56	\$252.17	\$385.52
Dec-14	\$405.30	\$244.99	\$328.38			\$289.31	\$381.87
Jan-15	\$399.67	\$249.73	\$346.27			\$310.20	\$539.40
Feb-15	\$371.30	\$231.06	\$304.38			\$299.87	\$537.06
Mar-15	\$429.81	\$259.88	\$372.12			\$292.33	\$531.74
Apr-15	\$422.81	\$253.04	\$383.97			\$299.76	\$535.39
May-15	\$411.80	\$239.27	\$388.64			\$263.59	\$540.84
Jun-15	\$419.25	\$228.90	\$404.42			\$301.51	\$544.93
Jul-15	\$428.21	\$224.36	\$379.43			\$303.82	\$548.75
Aug-15	\$414.58	\$228.04	\$361.18			\$305.05	\$553.49
Sep-15	\$419.17	\$243.84	\$360.67			\$300.65	\$557.67
Oct-15	\$419.05	\$250.11	\$350.65			\$321.26	\$552.48
Nov-15	\$387.35	\$229.13	\$330.27			\$288.69	\$565.52
Dec-15	\$403.72	\$243.32	\$324.28				

Figure 48. PMPM total costs and average monthly premiums by program and month CY 201







Figure 50. PMPM Inpatient care costs, including those resulting from ED visit by program and month





Figure 51. PMPM Inpatient care costs, including those resulting from ED visit by program and month

## **RDD ANALYSES**

RDD analyses were completed predicting PMPM total costs using a fuzzy RDD approach that allows the analytic to choose the most efficient spread around the income threshold between WP and MPC (100% FPL). WE chose a fuzzy RDD approach due to the inability of the income threshold to consistently predict which program someone is enrolled in. Members were included in the analysis if they were in WP or MPC for at least 1 month during the study period (January2014-December 2015). Only those months in the programs were included in the analyses. Initial FPL was utilized to categorize individuals into groups for the analysis. Table 24 provides the results for a variety of cost and utilization types. The treatment group consists of MPC members, while the control consists of WP members including those who are designated MPC but receive FFS care.

Three analytics were completed for each cost and utilization. First we completed the analytics for the entire study period and then we broke the analyses out by year. Separating the analyses demonstrates that the results were very different based on the year of study, with the CY 2014 results showing significantly higher estimated PMPM total costs and medical care costs for MPC members while the CY 2015 results show significantly higher estimated PMPM costs in for outpatient care and outpatient ER than in the comparison.

Costs	2014-2015	2014	2015
Tatal as at	123.2	188.5*	131.2
Total cost	(102.1)	(111.5)	(263.5)
	40.8*	76.8**	23.5
Medical cost (No ED)	(24.1)	(32.0)	(59.6)
	48.8	22.2	-25.6
Inpatient cost	(80.1)	(47.3)	(78.9)
Prescription cost	22.7	-4.80	13.1
Prescription cost	(38.4)	(29.4)	(77.9)
Outpetient east	95.3	30.4	179.0**
	(67.1)	(49.5)	(89.4)

Table 24. RDD results predicting cos	t and utilization around	the income threshold
--------------------------------------	--------------------------	----------------------

Costs	2014-2015	2014	2015
Outpatient FD cost	38.6**	28.2	58.6**
	(16.6)	(17.8)	(25.4)
Utilization	2014-2015	2014	2015
# of properintians	0.30	-0.50**	1.22**
# of prescriptions	(0.44)	(0.24)	(0.60)
# of ED visito	0.034	-0.0035	0.024
# OF ER VISIUS	(0.025)	(0.019)	(0.028)
# of nillo ounnlind	26.2	-12.8	57.5
# of phils supplied	(27.5)	(18.1)	(35.8)

<sup>#</sup> These bias-corrected estimates are based on data-driven (i.e., fully automatic) robust inference procedures for fuzzy RDD design discussed in Calonico, Sebastian, Matias D. Cattaneo, and Rocio Titiunik. 2014. "Robust Nonparametric Confidence Intervals for Regression-Discontinuity Designs." *Econometrica* 82 (6):2295–232.

Standard errors adjusted for clustering at the individual level are in parentheses.

\* p<0.10, \*\* p<0.05, \*\*\* p<0.01

# NON-EMERGENCY MEDICAL TRANSPORTATION

Within the MPC 1115 demonstration request, Iowa asked to waive the non-emergency medical transportation (NEMT) requirement. This waiver was granted, however, throughout the program, the Centers for Medicare and Medicaid Services (CMS) demonstrated concern regarding the effect of not providing this service. In response to this concern, the evaluation team provided a separate survey, analyses, and report which can be found at <u>http://ppc.uiowa.edu/publications/non-emergency-medical-transportation-and-io-</u> <u>wa-health-and-wellness-plan</u>.

# **URGENT CARE AND ED USE**

Within MPC there were two major efforts that could affect ED use: 1) members were assessed a \$8 copay for unnecessary ED services and 2) it is expected that ED use will decrease as access to primary and specialty care increases.

## ED co-payment (Measures 63-65)

It is not clear that the ED copayment was implemented as planned during the period of the MCP program. The implementation of the copayment was logistically difficult. For example, it was unclear how EDs would know who owed the copayment and who did not. In addition, it has been suggested anecdotally that the collection of an \$8 copayment was not worth the trouble so there may have been little or no effort expended to collect the copayment at some of the visits. Due to this, survey results with regard to this issue should be interpreted cautiously. However, MPC members were still asked in the initial survey whether they were aware of the copayment (Measure 63), their awareness of a non-emergent condition (Measure 64), and whether an \$8 per visit copay would keep them from going to the emergency room (Measure 65).

IHAWP members were given the following information about the fee for non-emergent use of the ED:

"As part of your new health plan coverage, you may have to pay \$8.00 each time you use an emergency room for a non-emergency condition, beginning next year (i.e. 2015). An emergency is considered to be any condition that could endanger your life or cause permanent disability if not treated immediately."

They were then asked the following:

- Did you know that you may have to pay an \$8 fee anytime you use the emergency room when your health condition is not an emergency, beginning one year after you started in this program? [Awareness of initiative]
- How easy do you think it would be to know when your health condition would be considered an emergency? [Ease of complying]
- Do you think an added \$8 fee would keep you from going to the emergency room when you have a

health condition that could be treated in your doctor's office instead? [Effectiveness of fee]

Figure 52 provides a summary of the findings related to the non-emergent ED use co-payment. Just around 10% of IHAWP members (8% MPC, 10% WP) reported knowledge of the potential ED use co-payment with a little over 40% (44% MPC, 41% WP) reporting that it would be 'very easy' to know when a health condition would be considered an emergency. And, also around 40% reported that an \$8 co-payment would keep them from going to the ED for a health condition that could have been treated in a doctor's office instead with significantly more WP members (44%) than MPC members (37%) reporting this intention (p=.02).



Figure 52. Non-Emergent ED Use Disincentive Results by Plan

## QUALITY

Whenever primary and specialty care is provided we anticipate ED use to be reduced which is an indication of improved quality of care within the broad system. We utilize a number of outcomes to assess ED utilization including: access to and unmet need for urgent care (<u>Measure 3</u>) and emergency department use (<u>Measure 37</u>) as reported by members, along with non-emergent ED use (<u>Measure 20</u>), and follow-up ED visits (<u>Measure 21</u>) as population-based utilization measures.

### Access to and unmet need for urgent care (Measure 3 and Measure 37)

See discussion under Specialists.

### Non-emergent ED use (Measure 20)

The number of non-emergent ED visits per 1,000 member months is calculated using all members in the program. The NYU ED algorithm is used to determine the degree to which the ED visits in a given year for a given program were non-emergent.

The number of non-emergent ED visits per 1,000 members in FMAP is much higher than either IC group in 2013. This is due, in part, to the IC program policy of reimbursing only ED visits that occurred at the University of Iowa Health Care in Iowa City or Broadlawns Medical Center in Des Moines, leaving many ED visits out of the Medicaid claims data. Members in WP and MPC did not have these restrictions leading to an increase in the number of non-emergent ED visits we could identify, however; the numbers were still well below those for FMAP members.

### Table 25. Number of non-emergent visits per 1,000 member months CY 2013 – CY 2015

	FMAP	IC->WP	IC->MPC	FMAP	WP	MPC	FMAP	WP	MPC
	2013	2013	2013	2014	2014	2014	2015	2015	2015
Number of Non-emer- gent visits/1,000 member months	23.2	7.7	7.9	23.0	13.4	8.6	22.2	13.8	10.4

### Follow-up ED visits (Measure 21)

The percent of members with an ED visit within the first 30 days after index ED visit may indicate lack of access to primary care for ED follow-up and ongoing management of an acute problem originally treated in the ED. We developed a measure for ED follow-up based on the HEDIS follow-up for mental health care.

Rates of ED visits and follow-up ED visits were highest for FMAP members in all years, while they were the lowest for IC members. This measure is challenging. Because IC members were only allowed to obtain *covered* ED care through the University of Iowa Health Care (Iowa City, Iowa) or Broadlawns Medical Center (Des Moines, Iowa), causing some ED visits to be missed with the claims data used for these analyses. Other analyses using the Iowa Hospital Association (IHA) outpatient visit data which includes all ED visits provided by hospitals located in Iowa has shown that IC members received additional care at non-covered EDs while in IC, a rare occurrence in the other programs. This deflates the IC ED rate artificially.

Without the IC population, the rates of ED and follow-up ED visits are lowest for MPC members and WP members, which are both lower than FMAP members in CY 2014 or CY 2015.

Table 26. Proportion of population age 19-64 identified as having an index ED visit with at least one readmission within 30 days, CY 2013 through CY 2015

		FMAP 2013	IC- >WP 2013	IC- >MPC 2013	FMAP 2014	WP 2014	MPC 2014	FMAP 2015	WP 2015	MPC 2015
Proportion with index ED visit	Number	9,466	4,962	884	10,117	10,362	1,736	10,291	15,813	2,961
	%	68%	41%	52%	67%	67%	61%	71%	70%	66%
Proportion with	Number	2,744	986	137	2,827	2,528	328	2,878	3,696	529
follow-up ED visits	%	29%	20%	16%	30%	24%	19%	28%	23%	18%

# HOSPITALIZATION

Iowa is a state with many hospitals, evidence by the fact that only 6 counties do not have a hospital and many of these hospitals are designated as critical access. There are three primary outcomes of interest when assessing the effects of health care coverage on hospital utilization: utilization rates, avoidable admissions, and readmissions. We provide a number of measures to assess these outcomes including both survey and administrative outcomes. We assess hospital utilization by first providing a network map of hospital locations (bonus measure) in addition to computing the inpatient utilization rate for general hospital and acute care (Measure 43) and asking members their rate of hospitalization in the past 6 months (Measure 45). Avoidable admissions are measured through administrative outcomes only including: admission rate for COPD and Asthma (Measure 39 and Measure 42 combined), admission rate for CHF (Measure 41), while readmissions are measured by both survey and administrative data including: Plan 'all cause' hospital readmissions (Measure 44) and rate of 30 day hospital admissions in past 6 months as reported by members (Measure 46).

# HOSPITALS

WP members can access hospital services through the MSP/WP network.<sup>6</sup> In Iowa, MSP and WP members have access to 159 contracted hospitals; 116 hospitals in Iowa are contracted with Coventry (Figure 53).

<sup>6</sup> Iowa Health and Wellness Plan Implementation: Frequently Asked Questions. January 23, 2014. Iowa Department of Human Services. Available at: http://dhs.iowa.gov/sites/default/files/IHAWP\_Implementation\_FAQ\_012314\_Final.pdf.

Figure 53. Number of contracted network hospitals by county



## Inpatient utilization (Measure 43)

Inpatient hospitalization and acute care is a non-risk adjusted measure of hospital utilization. Three categories of hospitalization are utilized-Maternity, Surgery and Medicine. Hospitalizations due to mental health or behavioral related diagnoses are not included. Hospitalizations with diagnoses that do not allow classification according to the three areas are also not included. To constitute a hospitalization there must be at least 1 day of stay.

Figure 54 shows the number of discharges per 1,000 member months by program and year. As would be expected, the maternity discharges are highest for FMAP members. MPC member discharges rose between CY 2014 and CY 2015 for both surgery and medicine related hospitalizations while WP member discharges remained stable. This same pattern is repeated for number of days per 1,000 member months as seen in Figure 55



Figure 54. Number of discharges per 1,000 member months by program and year

Figure 55. Number of days per 1,000 member months by program and year



In Figure 56 we see that the average length of stay (LOS) for MPC members is lower than WP members for both years across all types. However, it is consistently higher than for FMAP members.





### Reported hospitalization rate and hospital readmission rate (Measures 44 and 45)

Two questions were asked about hospital stays and the results are summarized in Figure 57. The survey first asked how many nights the respondent spent in the hospital for any reason in the six months prior to the survey. The second was used to get a sense of potentially "avoidable" readmissions to the hospital and asked respondents who had reported a hospitalization if they ever had to go back into the hospital soon after being allowed to go home because they were still sick or had a problem.

Significantly more Medicaid members (16%) than IHAWP members (10%) reported any hospital stays in the six months period (p<.001). However, there were no significant differences between Medicaid and IHAWP members with regard to recent readmissions.



Figure 57. Hospitalization and Readmission by Program

Figure 58 summarizes hospitalization and readmission for MPC and WP members of the IHAWP. Around 10% of MPC and WP members reported a hospitalization and around 16% reported a readmission with no significant differences between the plans.





### Admission rate for COPD (Measure 39)

The Prevention Quality Indicators (PQI) include the number of discharges for COPD and asthma per 100,000 Medicaid members. We utilized the AHRQ WinQI calculator to identify the hospitalizations reflecting COPD/asthma admission. The number of admissions was then calculated in three ways.

- 1. As number of admissions per 100,000 members regardless of number of months of enrollment.
- 2. As number of admissions per 100,000 members who were enrolled for at least 11months of the year
- 3. As number of admissions per 100,000 full-time equivalent members, with FTE calculated at total numbers of months of enrollment for all members regardless of number of months enrolled divided by 12.

Rates of admission for COPD/asthma were much higher for MPC and WP than for FMAP or IC across the two years of the program. The rates decrease for both MPC and WP in the second year of the program, suggesting that the admissions in the first year may include first time diagnoses of the chronic conditions during an acute phase. Numbers of admissions are relatively small causing the rates to fluctuate more widely over time.

Age	FMAP 2013	IC->WP 2013	IC->MPC 2013	FMAP 2014	WP 2014	MPC 2014	FMAP 2015	WP 2015	MPC 2015		
Members regardless of enrollment period											
Number of admissions	6	7	1	5	58	11	5	58	15		
Admission rate/100,000	10.8	19.0	15.0	8.8	62.7	38.1	8.8	48.9	35.3		
Members with at least 11 months of enrollment in year											
Number of admissions	6	7	1		25	3	1	3	9		
Admission rate/100,000	29.3	27.2	21.8	9.1	78.6	36.4	4.5	80.9	71.4		
FTE members											
Number of admissions	6	7	1	5	58	11	5	58	15		
Admission rate/100,000	14.1	21.3	17.0	10.9	85.4	53.7	10.8	67.1	49.4		



#### Figure 59. Number of admissions for COPD/asthma per 100,000 members by program and year

### Admission rate for CHF (Measure 41)

The Prevention Quality Indicators (PQI) include the number of discharges for CHF per 100,000 Medicaid members. We utilized the AHRQ WinQI calculator to identify the hospitalizations reflecting COPD/asthma admission. The number of admissions was then calculated in three ways.

- 1. As number of admissions per 100,000 members regardless of number of months of enrollment.
- 2. As number of admissions per 100,000 members who were enrolled for at least 11months of the year
- 3. As number of admissions per 100,000 full-time equivalent members, with FTE calculated at total numbers of months of enrollment for all members regardless of number of months enrolled divided by 12.

The rate of admission for CHF rises in the FMAP for CY 2015, a finding that is somewhat disconcerting as it may indicate a change in coding or payment rather than an actual change in member chronic disease. WP and MPC members are admitted for CHF at rates comparable to the FMAP rate in CY 15. However, we caution that these results are based on a very small number of admissions making the rates fluctuate widely over time.

Age	FMAP 2013	IC->WP 2013	IC->MPC 2013	FMAP 2014	WP 2014	MPC 2014	FMAP 2015	WP 2015	MPC 2015			
Members regardless of enrollment period												
Number of admissions	3	8	0	3	20	4	11	30	10			
Admission rate/100,000	5.4	21.7	0	5.3	21.6	13.9	19.4	25.3	23.5			
Members with at least 11 months of enrollment in year												
Number of admissions	2	4	0	1	9	0	5	13	2			
Admission rate/100,000	9.8	15.5	0	4.5	28.3	0	22.5	27.0	15.9			
FTE members												
Number of admissions	3	8	0	3	20	4	11	30	10			
Admission rate/100,000	7.0	24.4	0	6.5	29.4	19.5	.7	34.7	32.9			

#### Table 28. Number of admissions for CHF per 100,000 members, CY 2013-CY 2015


Figure 60. Number of admissions for CHF per 100,000 members by program and year

#### Plan all-cause readmissions (Measure 44)

We use the HEDIS Plan All-Cause Readmissions (PCR) protocols to determine readmission rates. Readmission rates are very similar across plans and years, hovering around 10%. The only notable exception is the dip to 8% for MPC members in CY 2015.





## **BEHAVIORAL/MENTAL HEALTH**

Access to and utilization of behavioral/mental health care is assessed using both survey and administrative outcomes. Members were asked about access to and unmet need for behavioral/emotional care (<u>Measure</u> <u>19</u>). Quality of behavioral/mental health care was measured by asking how well the provider paid attention to their mental or emotional health (<u>Measure 49</u>).

#### Access to and unmet need for behavioral/mental health care (Measure 19)

See discussion under Specialists.

## Quality of mental or emotional health (Measure 49)

See discussion under Primary Care.

## HEALTHY BEHAVIORS INCENTIVE (HBI) PROGRAM

As a part of both the **Wellness Plan** and the **Marketplace Choice Plan**, enrollees were encouraged to participate in an HBI program involving three components: 1) a wellness exam and health risk assessment (HRA), 2) provider incentives, and 3) healthy behaviors. This program is designed to:

- Empower members to make healthy behavior changes.
- Establish future members' healthy behaviors and rewards.
- Begin to integrate HRA data with providers for clinical decisions at or near the point of care.
- Encourage members to take specific proactive steps in managing their own health and provide educational support.
- Encourage providers to engage members in completion of the healthy behaviors by offering incentive payments.

Though the original MPC evaluation had specific questions related to the HBI program, a separate HBI evaluation contract was awarded that made this section of the MPC evaluation redundant. Reports with these results can be found at <a href="http://pc.uiowa.edu/health/study/healthy-behaviors-incentive-program">http://pc.uiowa.edu/health/study/healthy-behaviors-incentive-program</a>.

## **DENTAL WELLNESS PLAN**

Beginning May 1, 2014 adults in MPC were offered a tiered benefit dental plan through Delta Dental of Iowa. This tiered benefit plan required members to see the dentist at least twice within a year period to obtain access to more complex dental procedures. There is a separate contract for DWP evaluation which encompasses the questions posed in the MPC evaluation. Results of the DWP evaluation can be found at <a href="http://ppc.uiowa.edu/health/study/iowa-dental-wellness-plan-evaluation">http://ppc.uiowa.edu/health/study/iowa-dental-wellness-plan-evaluation</a>.

## **MEDICALLY EXEMPT**

Enrollees who meet the income requirements for MPC with 'disabling mental disorders (including adults with serious mental illness), individuals with chronic substance use disorders, individuals with serious and complex medical conditions, individuals with a physical, intellectual or developmental disability that significantly impairs their ability to perform 1 or more activities of daily living, or individuals with a disability determination based on Social Security criteria' may apply for and be deemed Medically Exempt. Enrollees who qualify to as Medically Exempt are enrolled in Medicaid State Plan to allow for a broader set of services.

The study of medically exempt members will be completed in the broader IWP evaluation which is currently ongoing. Most, 75%, of the members who are determined to be medically exempt derive their coverage from the Wellness Plan and NOT from Marketplace Choice. Only 1,000 MPC members were eligible for 11 or more months during CY 2015. We believe that there are no conclusions that can be adequately supported and drawn from this group with respect to Marketplace Choice. APPENDIX A: OPERATIONALIZATION OF RESEARCH QUESTIONS AND HYPOTHESES

## Question 1 What are the effects of the Marketplace Choice Plan on member access to care?

## Hypothesis 1.1

Marketplace Choice members will have equal or greater access to primary care and specialty services.

### Measure 1 Adults access to primary care

1A Percent of members who had an ambulatory care visit

Protocol-NCQA HEDIS AAP Data source-Administrative Analyses-Means tests between MPC members and four comparison groups before and after implementation

1B Whether a member had an ambulatory or preventive care visit

Protocol-NCQA HEDIS AAP adapted as individuals Data source-Administrative Analyses-RDD comparing MPC members and WP members at the threshold DID for MPC members and four comparison groups before and after implementation

## Measure 2 Follow-up after hospitalization for mental illness

2A Percent of discharges for members with a mental illness diagnosis that were followed by a visit with a mental health provider

Protocol-NCQA HEDIS FUH; Adult core measure #3

Data source-Administrative

Analyses-Means tests between MPC members and four comparison groups before and after implementation

2B Whether a member discharged with a mental illness diagnosis had a follow-up visit with a mental health provider

Protocol-NCQA HEDIS AAP; Adult core measure #3 adapted as individuals Data source-Administrative

Analyses-RDD between MPC members and WP members at the threshold. DID for MPC members and four comparison groups before and after implementation

## Measure 3 Access to and unmet need for urgent care

Composite of two questions 1) rating of timely access to urgent care and 2) needed urgent care but could not get it for any reason. Protocol-CAHPS 5.0; NHIS

Data source-Member Survey

Analyses-Means tests between MPC members and four comparison groups after implementation

## Measure 4 Access to and unmet need for routine care

Composite of two questions 1) rating of timely access to routine care and 2) needed routine care but could not get it for any reason.

Protocol-CAHPS 5.0; NHIS

Data source-Member Survey

Analyses-Means tests between MPC members and four comparison groups after implementation

## Measure 5 Getting Timely Appointments, Care, and Information

Composite of 3 questions 1) member experience with getting appointments for care in a timely manner, 2) time spent waiting for their appointment, and 3) receiving timely answers to their questions.

Protocol-CAHPS 5.0 Data source-Member Survey Analyses-RDD between MPC members and WP members at the threshold

## Measure 6 After-hours care

Member experience with knowing what to do to obtain care after regular office hours

Protocol-CAHPS 5.0 Data source-Member Survey Analyses-RDD between MPC members and WP members at the threshold

## Measure 7 Specialist care

Access to and unmet need for care from a specialist

Protocol-CAHPS 4.0; NHIS Data source-Member Survey Analyses-RDD between MPC members and WP members at the threshold

#### Measure 8 Prescription medication

## Access to and unmet need for prescription medication

Protocol-CAHPS 4.0; NHIS Data source-Member Survey Analyses-RDD between MPC members and WP members at the threshold

## Hypothesis 1.2

Marketplace Choice members will have equal or greater access to preventive care services.

## Measure 9 Breast cancer screening

9A Percent of women 50-64 who had a mammogram to screen for breast cancer

Protocol-NCQA HEDIS BCS; NQF 0031; Adult core measure #3 Data source-Administrative Analyses-Means testing between MPC members and four comparison groups before and after implementation

9B Whether a women 50-64 had a mammogram to screen for breast cancer

Protocol-NCQA HEDIS BCS; NQF 0031; Adult core measure #3 adapted for individuals Data source-Administrative Analyses-DID using MPC and the 4 comparison groups before and after implementation

## Measure 10 Cervical cancer screening

10A Percent of women 21-64 who were screened for cervical cancer

Protocol-NCQA HEDIS CCS; NQF 0032; Adult core measure #4 Data source-Administrative Analyses-Means testing between MPC members and four comparison groups before and after implementation

10B Whether a women 21-64 was screened for cervical cancer

Protocol-NCQA HEDIS CCS; NQF 0032; Adult core measure #4 adapted for individuals Data source-Administrative Analyses-DID using MPC and the 4 comparison groups before and after implementation

#### Measure 11 Flu shots in past year

11A Percent of members 21-64 who received an influenza vaccination

Protocol-CAHPS; NQF 0039

Data source-Member Survey; Administrative

- Analyses-Means testing between MPC members and the 4 comparison groups before and after implementation
  - 11B Whether a member 21-64 received an influenza vaccination

Protocol-CAHPS; NQF 0039adapted for individuals Data source-Member Survey; Administrative Analyses-RDD using survey data between MPC members and WP members at the threshold DID using MPC and the 4 comparison groups before and after implementation

## Measure 12 Chlamydia screening in past year

Percent of women 18-24 years of age who were identified as sexually active and had at least one test for Chlamydia

Protocol-NCQA HEDIS CHL; NQF 0033 Data source-Administrative Analyses-Means testing between MPC members and the 4 comparison groups before and after implementation

## Measure 13 Comprehensive diabetes care: Hemoglobin A1c

13A Percent of members with type 1 or type 2 diabetes who had Hemoglobin A1c testing

Protocol-NCQA HEDIS CDC; NQF 0057, Adult core measure #19 Data source-Administrative

Analyses-Means testing between MPC members and the 4 comparison groups before and after

implementation

13B Whether a member with type 1 or type 2 diabetes had Hemoglobin A1c testing

Protocol-NCQA HEDIS CDC; NQF 0057, Adult core measure #19 adapted for individuals Data source-Administrative Analyses-RDD comparing MPC members and WP members at the threshold

DID for MPC members and four comparison groups before and after implementation

## Measure 14 Comprehensive diabetes care: LDL-C screening

14A Percent of members with type 1 or type 2 diabetes who had LDL-C screening

Protocol-NCQA HEDIS CDC; NQF 0063, Adult core measure #18

## Data source-Administrative

# Analyses-Means testing between MPC members and the 4 comparison groups before and after implementation

14B Whether a member with type 1 or type 2 diabetes had LDL-C screening

Protocol-NCQA HEDIS CDC; NQF 0063, Adult core measure #18 adapted for individuals Data source-Administrative Analyses-RDD comparing MPC members and WP members at the threshold DID for MPC members and four comparison groups before and after implementation

## Measure 15 Annual monitoring for patients on persistent medication

Percent of members on a persistent medication (ACE/ARB, digoxin, diuretic, anticonvulsant) who were monitored

Protocol-NCQA HEDIS MPM; Adult core measure #22 Data source-Administrative Analyses-Means testing between MPC members and the 4 comparison groups before and after implementation

## Measure 16 Preventive care

Access to and unmet need for preventive care

Protocol-Original item; NHIS Data source-Member Survey Analyses-RDD comparing MPC members and WP members at the threshold

## Hypothesis 1.3

Marketplace Choice members will have greater or equal access to mental and behavioral health services.

## Measure 17 Anti-depressant medication management

17A Percent of members with major depressive disorder who remained on antidepressant medication

Protocol-NCQA HEDIS AMM; NQF 0105, Adult core measure #20 Data source-Administrative Analyses-Means testing between MPC members and the 4 comparison groups before and after implementation

17B Whether a member with major depressive disorder remained on antidepressant

## medication

Protocol-NCQA HEDIS AMM; NQF 0105, Adult core measure #20 adapted for individuals Data source-Administrative Analyses-RDD comparing MPC members and WP members at the threshold DID for MPC members and four comparison groups before and after implementation

#### Measure 18 Mental health utilization

18A Number and percent of members receiving any mental health services

Protocol-NCQA HEDIS MPT Data source-Administrative Analyses-Means testing between MPC members and the 4 comparison groups before and after implementation

18B Number of mental health services a member received

Protocol-NCQA HEDIS MPT adapted for individuals Data source-Administrative Analyses-RDD comparing MPC members and WP members at the threshold DID for MPC members and four comparison groups before and after implementation

#### Measure 19 Behavioral/emotional care

Access to and unmet need for preventive care

Protocol-CAHPS 4.0; NHIS Data source-Member Survey Analyses-DID for MPC members and four comparison groups before and after implementation

#### Hypothesis 1.4

Marketplace Choice members will have equal or greater access to care, resulting in equal or lower use of emergency department services for non-emergent care.

#### Measure 20 Non-emergent ED use

20A Number of non-emergent ED visits per 1,000 member months

Protocol-Original measure Data source-Administrative Analyses-Means testing between MPC members and the 4 comparison groups before and after implementation 20B Whether member had a non-emergent ED visit

Protocol-Original measure Data source-Administrative Analyses-RDD comparing MPC members and WP members at the threshold DID using MPC and the 4 comparison groups before and after implementation

## Measure 21 Follow-up ED visits

21A Percent of members with ED visit within the first 30days after index ED visit

Protocol-Original measure Data source-Administrative Analyses-Means testing between MPC members and the 4 comparison groups before and after implementation

21B Whether member had an ED visit within the first 30 days after index ED visit

Protocol-Original measure Data source-Administrative Analyses-DID using MPC and the 4 comparison groups before and after implementation

### Measure 22 Ambulatory Care

This measure summarizes utilization of outpatient visits and emergency department visits as a rate per 1,000 member months for members age 19-64 years enrolled for at least 1 month during the measurement year.

Protocol-NCQA HEDIS AMB Data source-Administrative Analyses-Means testing between MPC members and the 4 comparison groups before and after implementation

#### Hypothesis 1.5

Marketplace Choice members without a non-emergency transportation benefit will have equal or lower barriers to care resulting from lack of transportation.

#### Measure 23 Barriers to care due to transportation

Member experiences with transportation issues to and from health care visits

Protocol-Original items Data source-Member Survey Analyses-RDD comparing MPC members and WP members at the threshold

## Hypothesis 1.6

Marketplace Choice members age 19-20 years will have equal or greater access to EPSDT services.

## Measure 24 EPSDT utilization

24A Percent of members age 19-20 with at least one EPSDT-related visit as defined by EPSDT procedure code modifiers

Protocol-Original measure Data source-Administrative Analyses-Means testing between MPC members and the 4 comparison groups before and after implementation

#### 24B Whether member had an EPSDT visit

Protocol-Original measure Data source-Administrative Analyses-RDD comparing MPC members and WP members at the threshold

## Question 2 What are the effects of the Marketplace Choice Plan on member insurance coverage gaps and insurance service when their eligibility status changes (churning)?

### Hypothesis 2.1

Marketplace Choice members will experience equal or less churning.

#### Measure 25 Gaps in coverage in past 12 months

Number of months in the previous year when the respondent did not have health insurance coverage

Protocol-Original item Data source-Member Survey Analyses-RDD comparing MPC members and WP members at the threshold

#### Measure 26 Consecutive months covered by an insurance plan

Percent of members with 6 months continuous eligibility and 12 months continuous eligibility

Protocol-Measures from literature Data source-Administrative Analyses-RDD comparing MPC members and WP members at the threshold

## Measure 27 Number of times member changes plans and/or loses eligibility during the year

Whether member did not change plans or lose eligibility, changed plans or lost eligibility once, changed plans or lost eligibility 2-3 times or changed plans or lost eligibility 4 or more times

Protocol-Original measure Data source-Administrative Analyses-RDD comparing MPC members and the 4 comparison groups before and after implementation

## Hypothesis 2.2

Marketplace Choice members will maintain continuous access to a regular source of care when their eligibility status changes.

## Measure 28 Proportion who had to change primary care physician when joining the Marketplace Choice Plan

Percent of members who switched who switched primary care physicians at entry to plan

Protocol-Original measure Data source-Administrative Analyses-Means testing between MPC members and the 4 comparison groups before and after implementation

## Measure 29 Regular source of care – Personal Doctor

The percent who respond that they currently have a personal doctor

Protocol-CAHPS 5.0 Data source-Member Survey Analyses-Means testing between MPC members and the 4 comparison groups before and after implementation

# Measure 30 Continuity of care and satisfaction if they need to change to a new primary care physician when enrolled with a new plan

Member experiences with changing personal doctor/primary care provider

Protocol-Original items Data source-Member Survey Analyses-RDD comparing MPC members and the 4 comparison groups before and after implementation

## Question 3 What are the effects of the Marketplace Choice Plan on member quality of care?

### Hypothesis 3.1

Marketplace Choice members will have equal or better quality of care.

### Measure 31 Avoidance of antibiotic treatment in adults with acute bronchitis

The percent of members 19–64 years of age who were enrolled for at least 11 months during the measurement year with a diagnosis of acute bronchitis who were not dispensed an antibiotic prescription

Protocol-NCQA HEDIS AAB; NQF 0058 Data source-Administrative Analyses- Means tests between MPC members and four comparison groups before and after implementation

#### Measure 32 Use of appropriate medications for people with asthma

The percent of members who were identified as having persistent asthma and who were appropriately prescribed medication during the measurement year

Protocol-NCQA HEDIS ASM; NQF 0036 Data source-Administrative Analyses-Means tests between MPC members and four comparison groups before and after implementation

## Measure 33 Medication management for people with asthma

The percent of members identified as having persistent asthma who were dispensed appropriate medications that they remained on during the treatment period

Protocol-NCQA HEDIS MMA; NQF 1799 Data source-Administrative Analyses-Means tests between MPC members and four comparison groups before and after implementation

#### Measure 34 Pharmacotherapy management of COPD exacerbation

34A The percent of COPD exacerbations for members age 40-64 years of age who had an acute inpatient discharge or emergency department visit during the first 11 months of the measurement year and who were enrolled for at least 30 days following the inpatient stay or emergency department visit and who were dispensed appropriate medications

## Protocol-NCQA HEDIS PCE

Data source-Administrative

Analyses-Means tests between MPC members and four comparison groups before and after implementation

34B Whether member meeting above protocol experienced at least one COPD exacerbation

Protocol-NCQA HEDIS PCE adapted for individual Data source-Administrative Analyses-DID using MPC and the 4 comparison groups before and after implementation

## Measure 35 Cholesterol management for patients with cardiovascular conditions

35A Percent of members who were discharged alive for AMI, coronary artery bypass graft (CABG) or percutaneous coronary interventions (PCI) in the year prior to the measurement year, or who had a diagnosis of ischemic vascular disease (IVD) during the measurement year and the year prior to the measurement year, who had LDL-C screening during the measurement year

## Protocol-NCQA HEDIS CMC

Data source-Administrative

Analyses-Means tests between MPC members and four comparison groups before and after implementation

35B Whether member meeting above protocol had LDL-C screening

Protocol-NCQA HEDIS CMC adapted for individual Data source-Administrative Analyses-DID using MPC and the 4 comparison groups before and after implementation

## Measure 36 Self-reported receipt of flu shot

Percent of respondents who reported having a flu shot

Protocol-CMS Health Care Quality Measures for Adults, 2013 Data source-Member Survey Analyses-Means tests between MPC members and four comparison groups before and after implementation

## Measure 37 Emergency department use

Percent of respondents who reported that the care they received at their most recent visit to the emergency room could have been provided in a doctor's office

## if one was available at the time

Protocol-Original items Data source-Member Survey Analyses-Means tests between MPC members and four comparison groups before and after implementation

## Hypothesis 3.2

Marketplace Choice members will have equal or lower rates of hospital admissions.

## Measure 38 Admission rate for COPD, diabetes short-term complications, CHF, and asthma

The number of discharges for COPD, CHF, short-term complications from diabetes or asthma per 100,000 Medicaid members

Protocol-Original measure Data source-Administrative Analyses-Means tests between MPC members and four comparison groups before and after implementation

## Measure 39 Admission rate for COPD

39A Number of discharges for COPD per 100,000 Medicaid members

Protocol-Adult Core Measures #9, PQI 05 Data source-Administrative Analyses-Means tests between MPC members and four comparison groups before and after implementation

39B Whether member had an admission for COPD

Protocol-Adult Core Measures #9, PQI 05 adapted for individual Data source-Administrative Analyses-DID using MPC and the 4 comparison groups before and after implementation

## Measure 40 Admission rate for diabetes short-term complications

40A Number of discharges for diabetes short-term complications per 100,000 Medicaid members

Protocol-Adult Core Measures #8, PQI 01 Data source-Administrative Analyses-Means tests between MPC members and four comparison groups before and after implementation 40B Whether member had an admission for diabetes short-term complications

Protocol-Adult Core Measures #8, PQI 01 adapted for individual Data source-Administrative Analyses-DID using MPC and the 4 comparison groups before and after implementation

## Measure 41 Admission rate for CHF

41A Number of discharges for CHF per 100,000 Medicaid members

Protocol-Adult Core Measures #10, PQI 08 Data source-Administrative Analyses-Means tests between MPC members and four comparison groups before and after implementation

41B Whether member had an admission for CHF

Protocol-Adult Core Measures #10, PQI 08 adapted for individual Data source-Administrative Analyses-DID using MPC and the 4 comparison groups before and after implementation

## Measure 42 Admission rate for asthma

42A Number of discharges for asthma per 100,000 Medicaid members

Protocol-Adult Core Measures #11, PQI 15 Data source-Administrative Analyses-Means tests between MPC members and four comparison groups before and after implementation

42B Whether member had an admission for asthma

Protocol-Adult Core Measures #11, PQI 15 adapted for individual Data source-Administrative Analyses-DID using MPC and the 4 comparison groups before and after implementation

## Measure 43 Inpatient utilization-general hospital/acute care

This measure summarizes utilization of acute inpatient care and services in the following categories: total inpatient, surgery and medicine using number of discharges per 1000 member months, number of days stay per 1000 member months and average length of stay for all members who were enrolled for at least 1 month during the measurement year

## Protocol-NCQA HEDIS IPU

Data source-Administrative

Analyses-Means tests between MPC members and four comparison groups before and after implementation

## Measure 44 Plan "all cause" hospital readmissions

For members age 19-64 years who were enrolled for at least on month during the measurement year, the number of acute inpatient stays during the measurement year that were followed by an acute readmission for any diagnosis within 30 days and the predicted probability of an acute readmission

Protocol-NCQA HEDIS PCR; NQF 1768; Adult Core Measures #7 Data source-Administrative Analyses-Means tests between MPC members and four comparison groups before and after implementation

## Measure 45 Rate of hospital admissions in past 6 months

Hospitalization reported in the previous 6 months

Protocol-Original items Data source-Member Survey Analyses-RDD comparing MPC members and WP members at the threshold DID for MPC members and four comparison groups before and after implementation

## Measure 46 Rate of 30 day hospital readmissions

30 day readmissions reported in last 6 months

Protocol-Original items Data source-Member Survey Analyses-RDD comparing MPC members and WP members at the threshold

#### Hypothesis 3.3

Marketplace Choice members will report equal or greater satisfaction with the care provided.

#### Measure 47 Provider communication

This is a CAHPS composite measure designed to assess respondent perception of how well their personal doctor communicated with them during office visits.

Protocol-CAHPS 5.0 Data source-Member Survey Analyses-Means tests between MPC members and four comparison groups before and after implementation

## Measure 48 Self-management support

This is a CAHPS Patient-Centered Medical Home (PCMH) composite measure designed to assess respondent perception of how well their provider supported them in taking care of their own health.

Protocol-CAHPS PCMH supplemental items Data source-Member Survey Analyses-Means tests between MPC members and four comparison groups before and after implementation

## Measure 49 Attention to mental/emotional health

This is a CAHPS Patient-Centered Medical Home (PCMH) composite measure designed to assess respondent perception of how well their provider paid attention to their mental or emotional health which is the CAHPS way to assess the comprehensive care component of the PCMH.

Protocol-CAHPS PCMH supplemental items Data source-Member Survey Analyses-RDD comparing MPC members and WP members at the threshold DID for MPC members and four comparison groups before and after implementation

#### Measure 50 Shared decision-making regarding medications

This is a CAHPS Patient-Centered Medical Home (PCMH) composite measure designed to assess respondent perception of how well their provider talked with them about their prescription medications which is the CAHPS way to assess the shared decision making component of the PCMH.

Protocol-CAHPS PCMH supplemental items Data source-Member Survey Analyses-RDD comparing MPC members and WP members at the threshold DID for MPC members and four comparison groups before and after implementation

#### Measure 51 Care coordination

There are three individual items from the CAHPS Patient-Centered Medical Home (PCMH) items designed to assess respondent perception of their provider's attention to the care they received from other providers. This is the CAHPS way to assess the care coordination component of the PCMH.

Protocol-CAHPS PCMH supplemental items Data source-Member Survey Analyses-RDD comparing MPC members and WP members at the threshold DID for MPC members and four comparison groups before and after implementation

## Measure 52 Rating of personal doctor

Rating of personal doctor on 0-10 scale

Protocol-CAHPS 5.0 Data source-Member Survey Analyses-Means tests between MPC members and four comparison groups before and after implementation

## Measure 53 Rating of all care received

Rating of all care received on 0-10 scale

Protocol-CAHPS 5.0 Data source-Member Survey Analyses-Means tests between MPC members and four comparison groups before and after implementation

## Measure 54 Rating of health care plan

Rating of health care plan on 0-10 scale

Protocol-CAHPS 5.0 Data source-Member Survey Analyses-Means tests between MPC members and four comparison groups before and after implementation

## Question 4 What are the effects of the Marketplace Choice Plan on the costs of providing care?

## Hypothesis 4.1

The cost for covering Marketplace Choice members will be comparable to the predicted costs for covering the same expansion group in the Wellness Plan and the Medicaid State Plan.

## Measure 55 Compare Marketplace Choice PMPM costs to those in the Medicaid State Plan and the Wellness Plan

Per Member Per Month (PMPM) costs calculated for all care and specific cost categories such as inpatient, emergency room, specialist, behavioral/emotional, and prescription medications

Protocol-Original measure Data source-Administrative Analyses-ICER utilizing MPC and 4 comparison groups before and after implementation RDD comparing MPC members and WP members at the threshold DID for MPC members and four comparison groups before and after implementation

# Question 5 What are the effects of the premium incentive and copayment disincentive programs on Marketplace Choice enrollees?

## Hypothesis 5.1

The premium incentive for the Marketplace Choice enrollees will not impact the ability to receive health care.

## Measure 56 Member awareness of premium incentive

The percent of respondents who are aware of the premiums

Protocol-Original items Data source-Member Survey Analyses-Means tests between MPC members and four comparison groups before and after implementation

## Measure 57 Member perception of ease of obtaining a yearly physical exam

Respondent report of how easy it is for them to obtain a yearly physical exam

Protocol-Original items Data source-Member Survey Analyses-RDD comparing MPC members and WP members at the threshold DID for MPC members and four comparison groups before and after implementation

#### Measure 58 Member perception of hardship of premium levels

The percent who report that they would be 'somewhat' or 'a great deal' worried if they had to pay a \$5 or \$10/month premium

Protocol-Original items Data source-Member Survey Analyses-Means tests between MPC members and four comparison groups before and after implementation

## Measure 59 Ability to receive services for those who are disenrolled due to the lack of a premium payment in year two and three

The percent who report that they had a 'very difficult' or 'somewhat difficult' time receiving care after disenrolled

Protocol-Original items Data source-Disenrollment Survey Analyses-Process measures for MPC members

## Hypothesis 5.2

The majority of Marketplace Choice members will complete the healthy behaviors and therefore not have to pay a premium incentive or be disenrolled.

# Measure 60 Completion of healthy behaviors in the specified time period without a monthly premium

Proportion of members who complete the healthy behaviors prior to the application of the premium payment

Protocol-Original measure Data source-Administrative Analyses-Means tests between MPC members and WP members

## Measure 61 Completion of healthy behaviors only after paying a monthly premium

Proportion of members who complete the healthy behaviors only after the application of the premium payment

Protocol-Original measure Data source-Administrative Analyses-Means tests between MPC members and WP members

# Measure 62 Disenrollment as a result of not completing the healthy behaviors or not paying the monthly premiums

Proportion of members who are disenrolled due to the application of a premium payment as a result of not completing the healthy behaviors

Protocol-Original measure Data source-Administrative Analyses-Process measures for MPC members

## Hypothesis 5.3

The copayment for inappropriate emergency department (ED) use for the Marketplace Choice enrollees will not pose an access to care barrier.

#### Measure 63 Member awareness of the copayment

The percent of respondents who are aware of the \$8 copayment for inappropriate ER use

Proportion of members who are disenrolled due to the application of a premium payment as a result of not completing the healthy behaviors

Protocol-Original measure Data source-Administrative Analyses-Process measures for MPC members

#### Measure 64 Member understanding of a non-emergent condition

The percent of respondents who report that it will be 'somewhat' or 'very' easy for them to determine when their health condition would be considered an emergent

Protocol-Original items Data source-Member Survey Analyses-Means tests between MPC members and four comparison groups before and after implementation

## Measure 65 Perception of effectiveness of copayment on reducing non-emergent use of the ED

The percent who report that an \$8 per visit copayment would keep them from going to the emergency room for a health condition that could be treated in their doctor's office instead

Protocol-Original items Data source-Member Survey Analyses-Means tests between MPC members and four comparison groups before and after implementation

## Hypothesis 5.4

In year two and beyond, the utilization of an annual exam will be higher than in the first year of the program.

## Measure 66 Well adult visit

66A Percent of members with a well adult visit

Protocol-Original measure

## Data source-Administrative

# Analyses-Means tests between MPC members and four comparison groups before and after implementation

## 66B Whether member had well adult visit

Protocol-Original measure Data source-Administrative Analyses-RDD comparing MPC members and WP members at the threshold DID for MPC members and four comparison groups before and after implementation

## Hypothesis 5.5

In year two and beyond, the utilization of smoking cessation services will be higher than in the first year of the program.

## Measure 67 Medical assistance with smoking and tobacco use

The percent of members that were current smokers or tobacco users and who received medical assistance from a health care provider during the measurement year in the following three ways: 1) Advised Smokers and Tobacco Users to Quit, 2) Discussed Cessation Medications, and 3) Discussed Cessation Strategies.

Protocol-CMS Health Care Quality Measures for Adults, 2013 Data source-Member Survey Analyses-Means tests between MPC members and four comparison groups before and after implementation

## Question 6 What is the adequacy of the provider network for Marketplace Choice enrollees?

## Hypothesis 6.1

Iowa Marketplace Choice members will have the same access to an adequate provider network as those in the Wellness Plan and the Medicaid State Plan.

## Measure 68 Geographic distance and time spent travelling to primary care provider

Average travel distance and average time to access primary care provider in local service delivery area

Protocol-Original measure Data source-Administrative Analyses-GIS analyses

## Measure 69 Analysis of rules and procedures for determining the adequacy of the provider network

Subjective assessment of the rules and policies surrounding network adequacy

Protocol-Original measure Data source-Plan documents Analyses- Process measures for MPC members

## Measure 70 Provider network inclusion of safety net providers (Inclusion of safety net providers, particularly FQHCs and Rural Health Clinics as part of the networks for CoOportunity Health and Coventry)

Proportion of safety net providers in the covered counties included in the provider network

Protocol-Original measure Data source-Plan documents Analyses- Process measures for MPC members

## Measure 71 Provider willingness to accept new patients

Percent of primary care providers indicating they will take new patients who are members of the plan

Protocol-Original items Data source-Provider Survey Analyses-RDD comparing MPC members and WP members at the threshold DID for MPC members and four comparison groups before and after implementation

## Measure 72 Provider satisfaction with plan key components such as fee schedules and documentation

Qualitative assessment of provider opinions on aspects of the plan

Protocol-Original items Data source-Provider Survey Analyses-RDD comparing MPC members and WP members at the threshold DID for MPC members and four comparison groups before and after implementation

## Measure 73 Comparison of network overlap between plans

Assessment of provider inclusion and overlap by plan and county

Protocol-Original measure Data source-Plan documents Analyses- Process measures for MPC members

## Question 7 What are the effects of the new Dental Wellness Plan on enrollee access to and utilization of services?

## Hypothesis 7.1

Dental Wellness Plan members will have greater access to dental care than adults in the Medicaid State Plan.

## Measure 74 Dental care access

74A Percent of members who receive any dental care

Protocol-NCQA HEDIS ADV; NQF 1388 adapted for adults Data source-Administrative Analyses-Means tests between MPC members and four comparison groups before and after implementation

74B Whether member received any dental care

Protocol-NCQA HEDIS ADV; NQF 1388 adapted for adults and individuals Data source-Administrative Analyses- RDD comparing MPC members and WP members at the threshold DID for MPC members and four comparison groups before and after implementation