# **Dental Wellness Plan Evaluation Interim Report**

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## Background

The Iowa Health and Wellness Plan (IHAWP) was implemented on January 1, 2014 and expands coverage for low income Iowans through two new programs: The Iowa Wellness Plan and Iowa Marketplace Choice. IHAWP provides coverage for adults with incomes from 0 to 133% of the Federal Poverty Level (FPL) who are not otherwise eligible for Medicaid or Medicare. IHAWP replaced the IowaCare program with plans that offer more covered services and broader provider networks, along with expanded coverage to other low income adults in Iowa not previously enrolled in IowaCare. IowaCare did not cover dental services, except for emergency extractions at two locations in the state.

The Wellness Plan covers adults aged 19 to 64 with incomes up to and including 100% of the FPL (\$11,490 for individuals; \$15,510 for a family of two). The Wellness Plan is administered by the Iowa Medicaid Enterprise (IME) and members have the option to enroll in a managed care or a fee-for-service program.

The Marketplace Choice Plan covers adults aged 19 to 64 with incomes from 101 to 133% of the FPL (\$11,491-\$15,282 for individuals; \$15,511-\$20,628 for a family of two). Members can choose from certain commercial health plans available on the health insurance marketplace, with Medicaid paying the member's premiums.

All members of the IHAWP receive dental benefits through the Iowa Dental Wellness Plan.

The Iowa Dental Wellness Plan (DWP) was implemented on May 1, 2014. This plan is operated by Delta Dental of Iowa (DDIA) as a fee-for-service plan, with IME making capitated payments to DDIA for administration of the plan.

## **Earned benefit structure**

The DWP offers an earned benefit structure in which enrollees are rewarded with additional covered services when they demonstrate preventive care-seeking behaviors by returning for regular periodic recall exams. All enrollees are eligible for a "**Core**" set of benefits upon enrollment including emergency and stabilization services (Figure 1). If they return for a periodic recall exam within 6-12 months of the initial exam, members earn the ability to receive "**Enhanced**" services. After receiving a 2<sup>nd</sup> recall exam within 6-12 months of the 1<sup>st</sup> recall, members earn the ability to receive "**Enhanced**" services.



Figure 1. Earned benefits in the Iowa Dental Wellness Plan



**Core benefits**, or tier 1 services, include diagnostic and preventive services, emergency services, and stabilization services. Stabilization services are those that "prevent a condition from deteriorating in an imminent timeframe to a more serious situation".<sup>1</sup>

Enhanced benefits, tier 2, include routine restorative services, root canals, non-emergent tooth extractions, and basic periodontal services.

Enhanced plus benefits, tier 3, include crowns, bridges, and periodontal surgery.

The DWP expects to establish a larger provider network than for adults with regular Medicaid dental coverage by offering higher reimbursement (approximately 50% higher) and reduced administrative burdens as compared with the traditional Medicaid program. Dentists are incentivized to conduct clinical risk assessments of their DWP patients.

## **Member incentives**

**Positive incentive**-Members who return for a recall exam (regular dental check-up) every 6-12 months will earn access to additional services at no out-of-pocket cost to the enrollee.

**Negative incentive**-Members who do not return for a recall exam every 6-12 months do not have access to the Enhanced or Enhanced Plus services.

## **Provider incentives**

The State has developed a Provider Incentive Plan ("Bonus Pool") for dental providers. The Incentive Plan rewards general dentists based on the number of comprehensive and periodic exams performed for DWP members.

Additional incentives to participate include generally higher reimbursement for fee-for-service care than they would normally receive for adult Iowa Medicaid members (about 50% higher) and reimbursement for conducting clinical risk assessments, a service not routinely covered by Medicaid or traditional dental insurance plans.

## **Study populations**

This evaluation includes 3 major comparison groups, in addition to the DWP population, where comparisons are appropriate.

## Medicaid State Plan - Family Medical Assistance Program (FMAP)

The FMAP comparison group includes adult parents of children eligible for Medicaid in families with incomes from 0-77% FPL. As they earn more, they are able to increase the percent FPL allowed for eligibility to encourage employment. Dental benefits for FMAP members are provided by the Iowa Medicaid State Plan, a fee-for-service program administered by Iowa Medicaid Enterprise. Other adults eligible through disability determinations or as a pregnant mother will not be included in this comparison group.

<sup>&</sup>lt;sup>1</sup> Delta Dental. Dental Wellness Plan: Frequently Asked Questions & Answers. Available at: <u>https://www.deltadentalia.com/assets/docs/dwp/dentist\_faq\_dwp.pdf</u>. Last accessed August 25, 2014.



## Delta Dental of Iowa (DDIA)

DDIA is a not-for-profit organization that offers individual or employer-based dental insurance. More than 30% of Iowa dentists participate in the Delta Dental PPO network and 90% participate in the Premier network. Services received within the PPO network are significantly discounted; PPO dentists accept Delta Dental's payment as payment in full. The Premier network is the largest oral health insurance network in Iowa and also offers negotiated discounts to Delta members; however, out-of-pocket expenses and deductibles are higher if services are performed by a Premier dentist instead of a PPO dentist. Premier dentists accept Delta Dental's payment as payment in full. When members receive services from a non-participating dentist, rates are reimbursed at the Premier payment level and members may be billed for the remaining balance of billed charges.

Individuals may purchase benefits through the Preferred Choice or the Preventive Plan. Preferred Choice offers more comprehensive coverage and waives deductibles for preventive care; it provides coverage for major dental services such as root canals, crowns, and dentures. The Preventive Plan focuses on preventive services, with savings on basic services such as fillings.

Delta Dental coverage can be purchased through Iowa's Health Insurance marketplace, where financial assistance through the government's Advanced Premium Tax Credits is available for eligible individuals. Delta Dental has approximately 835,000 subscriber members.

### IowaCare

IowaCare was a limited provider/limited benefit program that operated from 2005-2013. The dental provider network included one public hospital in Des Moines and the only dental school in the state. The plan served adults not otherwise eligible for Medicaid, with incomes up to 200% FPL. IowaCare enrollees were distributed in three places following the elimination of this program: 1) those with incomes 101-133% FPL were enrolled into Marketplace Choice, 2) those with incomes 0-100% FPL were enrolled in Wellness Plan, and 3) those whose income could not be verified or had incomes from 134-200% FPL were not automatically enrolled in any program but might be eligible for purchasing subsidized insurance through the online Health Insurance Marketplace. 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.

### Limitations to comparisons

The IowaCare program provided only limited dental benefits (primarily extractions) at two sites in the state. IowaCare enrollees may have also obtained dental care from other providers, paying for this care on their own. This limits our ability to use the IowaCare data in measures that require data on dental utilization. In addition, it may be difficult to account for the wide variety of coverage options within Delta Dental of Iowa plans.



## Methods

## **Data access**

The Public Policy Center (PPC) has worked closely with the State of Iowa to ensure that the assurances needed to obtain data are firmly in place. The PPC has a data sharing Memorandum of Understanding (MOU) with the State of Iowa to utilize MSP and DWP claims, enrollment, encounter, and provider data for approved research activities. Additionally, the PPC has a data-sharing MOU with Delta Dental of Iowa to utilize administrative data for its commercial dental plans for approved research activities.

## **Data sources**

## Administrative data

The DWP evaluation provides a unique opportunity to optimize several sources of data to assess the effects of the innovative benefit structure and provider incentives. The PPC is home to a Medicaid Data Repository encompassing over 100 million claims, encounter and eligibility records for all Iowa Medicaid enrollees for the period January 2000 through the present. Data are assimilated into the repository on a monthly basis. Ninety-five percent of medical and pharmaceutical claims are completely adjudicated within three months of the first date of service, while the 'run out' for institutional claims is six months.

The PPC also maintains a DDIA repository of claims and eligibility records for commercial enrollees for the period 2005 through the present. Ninety-seven percent of DDIA commercial dental claims are completely adjudicated within three months of the first date of service. In addition, the PPC maintains a repository of DWP claims and eligibility records as required to conduct these evaluations, extending from May 1, 2014 through the present.

The PPC staff has extensive experience with these files as well as extensive experience with CMS adult core measures and Healthcare Effectiveness Data and Information Set (HEDIS) measures. In addition, the database allows members to be followed for long periods of time over both consecutive enrollment months and periods before and after gaps in coverage. When the enrollment database was started in 1965, Iowa made a commitment to retain member identification numbers for at least three years and to never reuse the same Medicaid ID number. This allows long-term linkage of member information including enrollment, cost, and utilization throughout changes in plans.

The evaluation strategy outlined here is designed to maximize the use of outcome measures derived through administrative data manipulation using nationally recognized protocols, including protocols from Consumer Assessment of Healthcare Providers and Systems (CAHPS) surveys, from the National Quality Forum (NQF), the National Committee on Quality Assurance (NCQA) HEDIS, and the Dental Quality Alliance (DQA).

## Data Availability for Comparisons

## Dental Wellness Plan members

- 1) DWP members who shifted from IowaCare contribute pre and post implementation data.
- 2) DWP members who shifted from another Medicaid program due to increased income contribute pre and post implementation data (these members would be ineligible for a Medicaid program in the absence of the IHAWP).
- 3) DWP members who were uninsured and not previously enrolled in a Medicaid program contribute post implementation data only.



### FMAP and DDIA

- 1) Members who had been enrolled in FMAP or a DDIA plan before the implementation of the DWP may contribute pre and post implementation data.
- 2) Members who were not enrolled in FMAP or a DDIA plan before the DWP was started, contribute post implementation data only.

### IowaCare

1) Members who had been enrolled in IowaCare before the implementation of the DWP may contribute pre and post implementation data.

## Limitations to the study populations

The IowaCare program did not provide prescription drug coverage; however, members may have obtained medications from IowaCare providers. Anecdotal evidence indicates the IowaCare enrollees with University of Iowa Hospitals and Clinics as their medical home were provided medications as part of their care, while those with a FQHC were not able to obtain medications on a regular basis through the medical home. This limits our ability to use the IowaCare data in measures that require data on medication use. In addition, members who are or become dually enrolled in Medicaid and Medicare are removed from the analysis, since accurate claims data are not available.

## **Enrollment**

The measures and analytics included in this report utilize a variety of study population subsets. For example, outcomes measures (i.e., Annual dental visit - Measures 1A and 1B) are routinely calculated using only those members who were enrolled for at least 11 months of the study year, however, there are also measures that require enrollment of at least 11 months in the study year and the year before (People with diabetes: dental exam - Measures 12A), require only one month of enrollment in the study year (Use of ED for non-traumatic dental related treatment - Measures 9A) or require that all members be newly enrolled during the first year of the program (Annual dental visit - Measures 1A and 1B).

Table 1 provides comparisons by age and sex for the three primary study populations for members enrolled in the program for at least 1 month during the year prior to implementation of DWP and the first year of DWP. Comparisons of race are not provided for DDIA members as this information was not available in the enrollment files. DWP began 4 months after the beginning of the IHAWP; therefore, the pre-implementation year individuals enrolled in DWP includes those who were in IowaCare and those in IHAWP.

IowaCare and DWP members are more similar to DDIA members in age and gender, being older and more likely to be male than those in FMAP. However, IowaCare and DWP members are similar to FMAP members regarding race.



	May 1, 2013 – April 30, 2014			May 1, 2014 – April 30, 2015		
	Pre-implem	entation		Year 1		
Characteristic	IowaCare/ IHAWP	FMAP	DDIA	DWP	FMAP	DDIA
Age (in years)						
19-20	3%	5%	7%	10%	7%	5%
21-24	11%	16%	10%	12%	16%	10%
25-34	26%	44%	22%	27%	43%	23%
35-44	20%	26%	20%	19%	25%	20%
45-54	23%	8%	22%	19%	8%	22%
55-64	17%	1%	20%	12% 1% 21%		21%
Sex						
Female	53%	75%	53%	53%	76%	53%
Male	48%	26%	47%	47%	24%	47%
Unidentified	0%	0%	0.2%	0%	0%	1%
Race						
White	63%	64%		62%	65%	
Black	11%	11%		7%	8%	
Native American	1%	2%		1%	1%	
Asian	2%	2%		2%	2%	
Hispanic	4%	5%		3%	4%	
Pacific Islander	1%	1%		0%	1%	
Multi-racial Hispanic	1%	2%		1%	1%	
Multi-racial Other	1%	1%		1%	1%	
Unknown	16%			22%	18%	

### Table 1. Member demographics by year and program

## **Primary data collection**

### **Member Surveys**

This report includes data from surveys of DWP and FMAP members, fielded post-implementation of the DWP in spring 2015. The FMAP comparison group includes members ages 19-64 who were newly enrolled in the Medicaid program. This comparison group excludes individuals who were categorically eligible due to a pregnancy or a disability determination.

Detailed survey methodology, including the survey instruments, responses to each item in the surveys, and summarized results can be found at the following website: <a href="http://pc.uiowa.edu/publications/evaluation-dental-wellness-plan-member-experiences-first-year">http://pc.uiowa.edu/publications/evaluation-dental-wellness-plan-member-experiences-first-year</a>

General methods used to develop, field, and compile the data from these surveys follows.



## Survey Instruments

The CAHPS® Dental Plan Survey served as the foundation of the survey instrument; additional items were included to capture the following domains:<sup>2</sup>

- Prior dental insurance coverage (Original items)
- Need and unmet need for dental care prior to and after joining the plan (Modified from previous Medicaid<sup>3</sup> and IowaCare<sup>4</sup> surveys conducted by the University of Iowa Public Policy Center [UIPPC])
- Services covered by plan and out of pocket costs (Original items)
- Emergency room dental care (Original items, items modified from previous IHAWP surveys conducted by UIPPC<sup>5</sup>)
- Access to emergency dental care in a dental office (Items modified from previous IHAWP surveys conducted by UIPPC)
- Specialty dental care (Original item)
- Experience changing dentists (Original item, item modified from previous IHAWP surveys conducted by UIPPC)
- Regular dentist practice setting (Original item)
- Knowledge about DWP (Original items)
- Transportation to dental visits (Items modified from previous IHAWP surveys conducted by UIPPC)
- Change in oral health status since joining plan (Items modified from a 1997 dental plan survey from the RAND corporation<sup>6</sup>)
- Oral health effect on daily activities and self-esteem (Items from the NHANES 2013-14 Oral Health Questionnaire<sup>7</sup>)
- Number of teeth extracted (Modified item from the Behavioral Risk Factor Surveillance System [BRFSS]<sup>8</sup>)

<sup>&</sup>lt;sup>2</sup> Agency for Healthcare Research and Quality (AHRQ). CAHPS® Dental Plan Survey, Adult Questionnaire. February 2009. Available at https://cahps.ahrq.gov/surveys-guidance/dental/instructions/index.html

<sup>&</sup>lt;sup>3</sup> Damiano PC, Willard JC, Momany ET, Park K. Evaluation of the Iowa Medicaid Managed Care Program: The Consumer Perspective. University of Iowa Public Policy Center. October 2011. Available at http://ir.uiowa.edu/cgi/viewcontent.cgi?article=1075&context=npc\_health

http://ir.uiowa.edu/cgi/viewcontent.cgi?article=1075&context=ppc\_health

<sup>&</sup>lt;sup>4</sup>Damiano PC, Momany ET, Willard JC, et al.. First evaluation of the IowaCare program. University of Iowa Public Policy Center. December 2008. Available at http://ir.uiowa.edu/cgi/viewcontent.cgi?article=1017&context=ppc\_health

<sup>&</sup>lt;sup>5</sup> Bentler SE, Damiano PC, Momany ET, McInroy B, Robinson E, Pooley MJ. Evaluation of the Iowa Health and Wellness Plan: Member Experiences in the First Year. University of Iowa Public Policy Center. 2015. Available at http://ppc.uiowa.edu/sites/default/files/ihawp\_survey\_interactive.pdf

<sup>&</sup>lt;sup>6</sup> Coulter I, Marcus M, Freed J, et al. Self-reported behavior and attitudes of enrollees in capitated and fee-for-service dental benefit plans. RAND Health, prepared for the American Dental Association. 2001.

<sup>&</sup>lt;sup>7</sup> Centers for Disease Control and Prevention. National Health and Nutrition Examination Survey: Oral Health Questionnaire. January 2013. Available at http://www.cdc.gov/nchs/data/nhanes/nhanes\_13\_14/OHQ\_H.pdf



## Survey Field Methods

A mixed-mode mail survey was administered 10 months after implementation of DWP (i.e., Spring 2015) to a random sample new DWP members and new adult Medicaid members who were income eligible through FMAP. Members were eligible if they had been enrolled continuously for 7-10 months with up to one month of ineligibility. Individuals were not included in the sampling frame if they were eligible for Medicaid due to pregnancy or a disability determination, or lived outside of Iowa. Only one person per household could be selected. Populations eligible for the sample included 125,122 DWP members and 4991 Medicaid members.

Of those members meeting the above criteria, random samples of 4800 DWP and 1350 Medicaid enrollees were selected to receive the survey. Samples were drawn from IHAWP and Medicaid enrollment data from January 25, 2015. The Medicaid sample size was based on guidance from the Consumer Assessment of Healthcare Providers and Systems (CAHPS®) for Medicaid consumer surveys. DWP members were over-sampled in order to have adequately sized groups of individuals who had utilized dental care.

Surveys were sent by mail during March-April 2015, and respondents were given the option to complete the paper survey or a web-based survey. A reminder postcard was sent two weeks after the initial mailing, and a second mailed survey was sent two weeks later. Respondents received a \$2 bill as compensation for their time, and respondents who returned their surveys within the first two weeks were entered into a drawing for one of ten \$25 gift cards to Wal-Mart.

#### Response Rates

In total, 1260 DWP members and 191 Medicaid members responded to the survey, for overall response rates of 30% and 16%, respectively, after adjusting for those who were ineligible (Table 2). Of those who completed a survey, over 90% of the respondents in each group completed the survey on paper.

	Total Sampled Adjusted Total*		Completed	Adjusted Response Rate*
DWP	4800	4270	1260	30%
FMAP	1350	1165	191	16%
Total	6150	5435	1451	27%

\*Adjusted for ineligibles, including undeliverable addresses and those living out of the state.

<sup>&</sup>lt;sup>8</sup> CDC. 2014 Behavioral Risk Factor Surveillance System Questionnaire. Available at http://www.cdc.gov/brfss/questionnaires/pdf-ques/2014\_brfss.pdf



## Respondent Characteristics

Table 3 presents the demographic characteristics of the DWP and Medicaid survey respondents.

Table 3. Demographic characteristics of DWP and Medicaid respondents

Characteristic	DWP	FMAP
	N=1260	N=191
Age (in years)		
19-34	24%	45%
35-54	48%	51%
55-65	28%	4%
Female	59%	71%
Race/Ethnicity†		
White	89%	84%
Black	8%	13%
Hispanic	4%	8%
Other	6%	13%
Education: > high school degree	48%	57%

+ Race/Ethnicity categories are not mutually exclusive

### Analytic Methods

Univariate and bivariate analyses were conducted to compare characteristics and responses between the DWP and Medicaid groups. We note the large difference in respondent group size between DWP and Medicaid and that our statistical comparisons are therefore conservative estimates. Bivariate analyses were primarily Chi-square and t-tests for group differences. The following survey items were analyzed using the SAS CAHPS® macro, which adjusts for age and oral health status to ensure that the rating of the plan is not influenced by differences in respondent characteristics:

- 1. Global 0-10 ratings of regular dentist, all dental care, ease of finding a dentist, and dental plan
- 2. Recommendation of plan to others
- 3. Timeliness of regular visits
- 4. Composite of provider communication items

We followed reporting guidance from CAHPS® and collapsed global ratings into three categories: 0-6, 7-8, and 9-10. All results are presented unweighted; analyses were conducted using SPSS Version 21 and SAS 9.4. P-values are reported only for comparisons that were statistically significant.

Limitations for findings from this survey relate to the respondent group size, response bias, and recall bias. First, the response rates for both DWP and Medicaid groups were considerably lower than desirable, and are slightly lower than in other recent surveys conducted by the PPC on a similar population.<sup>9</sup> In particular, the low response rate for Medicaid members resulted in a small sample (N=191). When broken into subcategories, this results in unstable reported percentages and insufficient power to detect differences. Second, as is common in survey research, the respondents to our survey were significantly older and, for DWP only, included significantly higher proportions of females and whites compared to

<sup>&</sup>lt;sup>9</sup> Bentler S, Damiano P, Momany E, McInroy B, Robinson E, Pooley M. Evaluation of the Iowa Health and Wellness Plan Member Experiences in the First Year. April 2015.

http://ppc.uiowa.edu/sites/default/files/ihawp\_survey\_interactive.pdf Accessed 30 Jun 2015.



non-respondents. Third, CAHPS questions were analyzed using the SAS CAHPS® macro, which adjusts for age and oral health status to ensure that the rating of the plan is not influenced by differences in respondent characteristics. These adjustments were not available for original items so we are unable to determine whether they are affected by age or oral health status. Finally, we inquired about issues that took place up to two years prior, so our results are likely impacted by recall bias to some extent.

## **Provider Surveys**

This report also includes data from two surveys of dental providers, fielded post implementation of the DWP in May 2005:

- 1) Survey of Iowa Private Practice Dentists
- 2) Survey of Iowa Community Health Center Dental Clinics

Detailed survey methodology, including the survey instruments, responses to each item in the surveys, and summarized results will be posted to the PPC website when they are available.

General methods used to develop, field, and compile the data from these surveys follows.

## Survey Instruments

## Survey of Iowa Private Practice Dentists

Survey questions were either original or adapted from other sources which include: the Public Policy Center survey to Iowa dentists about the Medicaid program<sup>10</sup>, a 2011 survey to mental health providers in Maryland<sup>11</sup>, and a 2011 survey of primary care providers in Washington State<sup>12</sup>. The survey instrument was approved by the Iowa Medicaid Enterprise (IME) prior to distribution.

### Survey of Iowa Community Health Center (CHC) Dental Clinics

Survey questions were either original or adapted from other sources which include: the 2013 Public Policy Center survey to Iowa CHC dental directors about the capacity of the public dental safety net<sup>13</sup>, as well as a 2015 Public Policy Center survey to private practice dentists in Iowa about their experiences with the Dental Wellness Plan. The survey instrument was approved by Iowa Medicaid prior to distribution.

## Survey Field Methods

### Survey of Iowa Private Practice Dentists

In March 2015, regardless of DWP participation, surveys were administered to all licensed Iowa general dentists and dental specialists in private practice (n=1383) identified through the Iowa Dentist Tracking

http://depts.washington.edu/uwrhrc/uploads/OFM\_Report\_Skillman.pdf

<sup>&</sup>lt;sup>10</sup> McKernan SC, Reynolds JC, Kuthy RA, Kateeb ET, Adrianse NB, Damiano PC. Factors affecting Iowa dentist participation in Medicaid. University of Iowa Public Policy Center. 2013. Available at

http://ppc.uiowa.edu/sites/default/files/evaluation\_of\_medicaid\_final.pdf

<sup>&</sup>lt;sup>11</sup> Department of Health and Mental Hygiene, Mental Hygiene Administration. Maryland's public mental health system: 2011 provider survey. Available at

http://bha.dhmh.maryland.gov/RESOURCES/Documents/Data/2011%20Provider%20Survey%20Executive%20Su mary%20With%20Appendices%20Final%20%20112911.pdf

<sup>&</sup>lt;sup>12</sup> Skillman SM, Fordyce MA, Yen W, Mounts T. Washington State Primary Care Provider Survey, 2011----2012: Summary of findings. August 2012. Available at

<sup>&</sup>lt;sup>13</sup> McKernan, op. cit., p. 13.



System (IDTS).<sup>14</sup> Dentists received a paper survey by mail in May 2015 and were given the option to complete the survey online. A reminder postcard was sent two weeks after the initial mailing, and a second survey was sent two weeks later to those who had not yet completed the survey. Surveys were pre-tested by two Iowa dentists in private practice who were not included in the final sample.

## Survey of Iowa Community Health Center Dental Clinics

In May 2015, online surveys were administered to directors of all CHC dental clinics in Iowa (n=14) whose email addresses were provided by the Iowa Primary Care Association. An introductory email was sent prior to the survey distribution, and two reminder emails were sent (two and four weeks after the first). Results from this survey are compared with a previous survey of Iowa CHC dental directors conducted in 2013 when appropriate.

### Response Rates

### Survey of Iowa Private Practice Dentists

In total, 558 Iowa private practice dentists responded to the survey, for an overall response rate of 43% (after adjusting for those who were ineligible) (Table 4). 12% of respondents completed the survey online.

Total Population	Adjusted Total*	Completed	Adjusted Response Rate*
1383	1291	558	43%

#### Table 4. Dentist Survey Response Rates

\*Adjusted for ineligibles, including undeliverable addresses and, and dentists who had retired.

### Survey of Iowa Community Health Center Dental Clinics

In total, 11 out of 14 CHC dental directors responded to the survey for an overall response rate of 79%.

### Respondent Characteristics

#### **Survey of Iowa Private Practice Dentists**

Table 5 presents demographic characteristics of respondent dentists. Overall, majority of the survey respondents were White males aged between 55-64 years. Majority of them were also general dentists, and employed in a group practice.

<sup>&</sup>lt;sup>14</sup> Kuthy RA, McKernan SC, Hand JS, Johnsen DC. Dentist workforce trends in a primarily rural state: Iowa: 1997 -2007. J Am Dent Assoc. 2009;140(12):1527-1534.

Characteristic	Respondents N=551
Age (in years)	
<35	19%
35-44	18%
45-54	20%
55-64	34%
65 or older	10%
Female	27%
Race/Ethnicity	
White	85%
Black	<1%
Hispanic	1%
Asian	1%
Unknown	13%
Specialty	
General dentistry	89%
Orthodontics	2%
Oral surgery	3%
Pediatric dentistry	2%
Endodontics	2%
Periodontics	1%
Prosthodontics	1%
Solo or Group practice	
Solo practice	48%
Group practice	52%

Table 5. Demographic and practice characteristics of survey respondents<sup>+</sup> - General dentists and<br/>dental specialists

+Calculated using IDTS data

## Analytic Methods

### Survey of Iowa Private Practice Dentists

Univariate and bivariate analyses were conducted to compare characteristics of dentists who were currently accepting new DWP patients ("DWP participants") and those who were not accepting new DWP patients ("non-participants"). Dental specialists were analyzed separately from general practitioners; orthodontists were excluded from analysis due to the lack of orthodontic benefits in the DWP. Survey data were merged with data from the Iowa Dentist Tracking System (IDTS) on individual and practice information.

All results are presented unweighted, and all analyses were conducted using IBM SPSS Version 21. Statistical significance was set at p<0.05 level.

Limitations for this study relate to recall bias, or the potential bias inherent in respondents' attempts to remember past events, and the potential for social desirability bias. In this survey, we inquire about issues that took place up to 12 months prior, which may affect the validity of some results.



### Survey of Iowa Community Health Center Dental Clinics

Descriptive analyses were conducted for all survey questions. Due to the small respondent group size, no comparative analyses were conducted. All results are presented unweighted; analyses were conducted using IBM SPSS Version 21.

There are several limitations to this study. First, there are few CHCs in the state of Iowa, limiting our ability to perform analyses beyond descriptive statistics. Second is the potential for recall bias, which may have impacted respondents' ability to provide accurate information about events that occurred up to two years prior. Finally, although questions were asked about the overall clinics' experiences with the DWP, respondents' own personal experiences may have influenced their responses.

## **Distance Calculations**

Travel distance to the nearest participating general dentist in private practice was calculated for DWP and Medicaid members. A network dataset was created using the "North American Detailed Streets" dataset. Non road pathways (e.g., bicycle trails) were removed from the dataset. Travel time for each section of roadway was calculated using the posted speed limit and section length. A small subset of roads had no data for speed limit; these were edited to have a 15 mph speed limit in order to avoid inflated travel times when creating an origin-destination (OD) cost matrix for nearest provider determination.

The OD cost matrix was used to determine the closest provider to each member, which calculated travel time (in minutes) and distance (miles) for each member to the closest provider along the fastest travel route on the network using Manhattan distance (e.g., distance based on a grid). This method optimized travel time in order to reflect actual route choice, but may not always result in the shortest travel distance.

The study populations for distance calculations (Measure 28) included the following program members:

- 1. DWP members all individuals enrolled in DWP as of February 1, 2015 with any length of eligibility. DWP providers were identified using the list of contracted dentists, as of January 2015, obtained from Delta Dental of Iowa.
- 2. FMAP members all adults aged 19-64 years enrolled in Medicaid through FMAP as of February 1, 2015 with any length of eligibility. Dentists were identified as FMAP providers if they had submitted at least one claim to IME on behalf of a member of the study population from January through June 2014. This represented the most recent claims data available at the time of the analysis.



## Results

Results are presented in the order found in the original evaluation plan, which allows the reader to easily find specific hypotheses and measures. For some, complete results are presented, including any variation that was required in the type of analysis from what was originally proposed. For others, there is an indication of the type of analysis that will be completed for the final report for June 2017. There are some other measures for which, after a more thorough assessment of the available data, are not appropriate and this is indicated with the measure.

## Access to care

Research Question 1 – What are the effects of DWP on member access to care?

## **Hypothesis 1.1**

DWP members will have equal or greater access to dental care.

## Measure 1 Annual dental visit (Measures 1A and 1B)

Definition	NCQA HEDIS ADV <sup>15</sup> ; NQF 1388 <sup>16</sup> adapted for adults
Proposed Analytic Method	1) Means tests between DWP members and 3 comparison groups before and after implementation
	2) Incremental Cost-Effectiveness Ratio (ICER) utilizing DWP and MSP members and DWP and DDIA members before and after implementation
Variations from the Proposed Analytic Method	<ol> <li>IowaCare not included as a comparison group</li> <li>Protocol is being developed for final report</li> </ol>
Specifications	<u>Numerator</u> : One or more dental visits with a dental practitioner during the measurement year. A member had a dental visit if they had a submitted claim/encounter for any dental service.
	<u>Denominator</u> : Unduplicated number of all enrolled adults <u>CDT codes</u> : Any

## 1A Percent of members who had an annual dental visit

<sup>&</sup>lt;sup>15</sup> National Committee for Quality Assurance (NCQA). Healthcare Effectiveness Data and Information Set (HEDIS®) Measures. Available at http://www.ncqa.org/HEDISQualityMeasurement/HEDISMeasures.aspx

<sup>&</sup>lt;sup>16</sup> National Quality Forum (NQF), National Voluntary Consensus Standards for Child Health Quality Measures: A Consensus Report, Washington, DC: NQF; 2011. Available at

file:///C:/Users/aingleshwar/Downloads/Final%20Report%20Child%20Health%202010.pdf.



### Results

Table 6 provides rates for members who had an annual dental visit, defined by NCQA to include any dental visit during the specified year. Rates are included for members with at least 1 month of enrollment and for those with at least 11 months of enrollment during the specified year (e.g., pre-implementation or year 1 of DWP). All rates are limited to members who met the age criterion (19-64 years) and were newly enrolled in each program.

The data in Table 6 indicate that members in FMAP were the least likely to have had an annual dental visit, both before and after implementation of the DWP. In year 1 of the program, DWP members had slightly higher rates of annual dental visits than FMAP members. DDIA members were more likely to have had a dental visit than FMAP members in either year and DWP members in year 1 of implementation. These trends were consistent when we considered either members with at least 1 month of eligibility or at least 11 months of eligibility during each year.

				<b>-</b> .		
		May 1, 2013 – April 30, 2014		May 1, 2014 – April 30, 2015		
		Pre-implementation		Year 1		
Eligibility per		FMAP	DDIA	FMAP	DDIA	DWP
year						
≥1 month	Number	2931	30261	2273	33432	29589
	%	19%	36%	19%	36%	23%
≥11 months	Number	358	4348	464	3701	17752
	%	39%	57%	33%	55%	36%

#### Table 6. Annual dental visits for members during specified years

### 1B Whether member received an annual dental visit

Definition	NCQA HEDIS ADV; NQF 1388 adapted for adults and individuals				
Proposed Analytic Method	1) Regression Discontinuity Design (RDD) comparing DWP members and MSP members at the threshold				
	2) Difference in Differences (DID) for DWP members and three comparison groups before and after implementation				
Variations from the Proposed Analytic Method	<ol> <li>Protocol for RDD is being developed for the final report</li> <li>Protocol for DID is being developed for the final report</li> </ol>				

### Results

No results available as protocols are under development.



## Measure 2 Access to emergency dental care

Percent of members who needed emergency dental care and received it as soon as it was wanted

Definition	CAHPS Dental Plan Survey <sup>17</sup>
Proposed Analytic Method	Means tests between DWP members and MSP members
Variations from the Proposed Analytic Method	Due to low response rates to the survey question, means test could not be calculated.

### Results

Among respondents who reported that they had utilized any dental care since joining their current plan (57% DWP and 60% Medicaid), 45% of DWP and 44% of Medicaid members reported needing emergency dental care in a dental office (not an ED) since joining their current plan. Of those, 76% (n=187 DWP, N=26 Medicaid) said 'definitely yes' or 'somewhat yes' in response to whether they got to see a dentist for emergency care as soon as they wanted.

## Measure 3 Utilization of dental care

## Whether member had a dental visit since enrolling in DWP

Definition	CAHPS Dental Plan Survey
Proposed Analytic Method	DID for DWP and MSP members
Variations from the Proposed Analytic Method	<ol> <li>IowaCare not included as a comparison group</li> <li>Protocol for DID is being developed for final report.</li> </ol>

### Results

Among survey respondents, 57% of DWP and 60% of Medicaid members had utilized dental care from a source other than the emergency department (ED) at least once since joining the plan (Figure 2) (p>.05).

<sup>&</sup>lt;sup>17</sup> Agency for Healthcare Research and Quality (AHRQ). Patient Experience Measures for the CAHPS® Dental Plan Survey. Document No. 709. September 2011. Available at https://cahps.ahrq.gov/surveysguidance/dental/instructions/index.html.







tMeasured by asking the following question: "Since joining the DWP/Medicaid, not counting any times you went to an emergency room, how many times have you gone to a dentist's office or clinic to get dental care for yourself?"

## Measure 4 Timely appointments and care

Composite of three questions: 1) getting appointments for routine dental care in a timely manner, 2) saw dental provider within 15 minutes of appointment time, and 3) received communication about scheduling delays in the waiting room

Definition	CAHPS Dental Plan Survey
Proposed Analytic Method	Means tests between DWP members and MSP members
Variations from the Proposed Analytic Method	Survey did not include questions 2) saw dental provider within 15 minutes of appointment time, and 3) received communication about scheduling delays in the waiting room

### Results

Among respondents who reported utilizing any dental care since joining their current plan (57% DWP and 60% Medicaid), 69% of DWP and 64% of Medicaid members were 'usually' or 'always' able to obtain appointments as soon as they wanted (p>.05). Regarding waiting time for non-emergency dental care appointments, 65% of DWP and 60% of Medicaid members said they usually had to wait 1-2 weeks or less (p>.05).

## Measure 5 Care from a dental specialist

Definition	CAHPS Dental Plan Survey
Proposed Analytic Method	Means tests between DWP members and MSP members
Variations from the Proposed Analytic Method	Survey did not ask about unmet need for specialty care, only access to specialty care. Due to low response rates to the survey question, means test could not be calculated.

## Access to and unmet need for care from a dental specialist

## Results

Among respondents who reported utilizing specialist care since joining their dental plan, 55% (n=102) of DWP and 35% (n=13) of Medicaid members said they 'usually' or 'always' got an appointment with a specialist as soon as they wanted.

## **Hypothesis 1.2**

## DWP members will be more likely to receive preventive dental care.

## Measure 6 First preventive dental exam (Measures 6A and 6B)

# 6A Percent of members who have a dental exam within their first 6-12 months in the program

Definition	Original measure					
Proposed Analytic Method	Means tests between DWP members and three comparison groups before and after implementation					
Variations from the Proposed Analytic Method	IowaCare not included as a comparison group					
Specifications	<ul> <li>Dental exam defined using Dental Quality Alliance (DQA) technical specifications and DWP exam requirements.</li> <li><u>Numerator:</u> Unduplicated number of all enrolled adults with ≥ 6 months enrollment who received a comprehensive or periodic oral evaluation.</li> <li><u>Denominator:</u> Unduplicated number of all enrolled adults with ≥ 6 months enrollment.</li> <li><u>CDT Codes:</u> D0120 (periodic oral evaluation), 0150 (comprehensive oral evaluation), 0180 (comprehensive periodontal evaluation)</li> <li><i>Note:</i> DQA Proposed Adult Measures only specify CDT codes for periodontal maintenance and fluoride application.</li> </ul>					



### Results

Table 7 displays rates at which newly enrolled members received a preventive dental exam during their first 6-12 months in each program. Preventive dental exams were identified according to DWP exam requirements. Once DWP members receive a second preventive dental exam within 6-12 months of the first exam, they become eligible for Enhanced (Tier 2) Benefits.

For members with 6-12 months of enrollment, 25% of DWP members had received a preventive dental exam. This is slightly higher than preventive dental exam among FMAP members, but substantially lower than rates among DDIA commercially-insured members. FMAP and DDIA rates of preventive dental exams within the first 6-12 months remained fairly constant during the year prior to implementation and year 1 of the DWP, although rates among FMAP members decreased slightly.

Table 7. First preventive dental exams within first 6-12 months of enrollment by program

	May 1, 2013 – April 30, 2014		May 1, 2014 – April 30, 2015		
	Pre-implementation		Year 1		
	FMAP DDIA		FMAP	DDIA	DWP
Number %	1270 21%	15832 43%	1152 19%	18444 43%	22155 25%

### 6B Whether member received a dental exam within their first 6-12 months in the program

Definition	Original measure
Proposed Analytic Method	DID for DWP members and three comparison groups before and after implementation
Variations from the Proposed Analytic Method	1) Protocol for DID is being developed for final report

### Results

No results available as protocols are under development.

## Measure 7 Second preventive dental exam (recall) (Measures 7A and 7B)

## 7A Percent of members who have a recall within 6-12 months of their first dental exam

Definition	Original measure
Proposed Analytic Method	Means tests between DWP members and three comparison groups before and after implementation
Variations from the Proposed Analytic Method	Protocol is being developed for final report.

## Results

Data for this measure are not available due to insufficient time passing since the beginning of the DWP.

## 7B Whether member received a recall within 6-12 months of their first dental exam

Definition	Original measure
Proposed Analytic Method	<ol> <li>RDD comparing DWP members and MSP members at the threshold</li> <li>DID for DWP members and three comparison groups before and after implementation</li> </ol>
Variations from the Proposed Analytic Method	Protocol is being developed for final report.

## Results

Data for this measure are not available due to insufficient time passing since the beginning of the DWP.

## Measure 8 Any diagnostic or preventive dental care

### Percent of members who receive any diagnostic or preventive dental care

Definition	Original measure						
Proposed Analytic Method	Means tests between DWP members and three comparison groups before and after implementation						
Variations from the Proposed Analytic Method	IowaCare not included as a comparison group						
Specifications	Preventive and diagnostic services defined based on CMS 416 (Lines 12B and 12E) <a href="https://www.new.org">Numerator:</a> Unduplicated number of all enrolled adults who received a diagnostic or preventive dental service <a href="https://www.new.org">Denominator:</a> Unduplicated number of all enrolled adults. <a href="https://www.new.org">CDT Codes:</a> Preventive (D1000-1999)   Diagnostic (D0100-0999)						

#### Results

In year 1 of the DWP, 36% of members with ≥11 months of eligibility received any diagnostic or preventive dental care (

Table 8). This rate is similar to the rate in the FMAP population in the year pre-implementation (35%) and substantially lower than rates for DDIA members pre-implementation and during year 1.

		May 1, 2013 – April 30, 2014		May 1, 2014 – April 30, 2015		
		Pre-implementation		Year 1		
Eligibility per year		FMAP DDIA		FMAP	DDIA	DWP
≥1 month	Number %	2816 18%	28731 34%	2193 18%	31833 34%	29188 23%
≥11 months	Number %	345 35%	4232 56%	450 32%	3609 54%	17585 36%



## Hypothesis 1.3

DWP members will have equal or greater access to care, resulting in equal or lower use of emergency department (ED) services for non-traumatic dental care within each earned benefit tier.

# Measure 9 Use of ED for non-traumatic dental related treatment (Measures 9A and 9B)

## 9A Percent of members who were seen for non-traumatic dental reasons in an ED for 1, 2, 3 or more visits per year while controlling for the earned benefit tier

Definition	Dental Quality Alliance (DQA) Proposed Adult Measures <sup>18</sup>
Proposed Analytic Method	<ol> <li>Means tests between DWP members and three comparison groups before and after implementation</li> <li>ICER utilizing DWP and MSP members and DWP and DDIA members before and after implementation</li> </ol>
Variations from the Proposed Analytic Method	<ol> <li>First year report will disregard tier</li> <li>ED will be calculated as visits per 1,000 months</li> <li>DQA protocol is being developed for final report</li> </ol>
Specifications	Non-traumatic dental diagnoses: Primary diagnosis code (ICD-9) 521.00-529.9. <u>Numerator:</u> Unduplicated number of adults who were seen in an ER for 1, 2, 3 or more visits for non-traumatic dental reasons. <u>Denominator:</u> Unduplicated number of all enrolled adults seen in an ER at least once for any reason

## Results

Table 9 provides the rates of ED utilization for oral health related primary diagnoses. The IowaCare group includes DWP members who were transferred into IHAWP from the IowaCare program in January 2014. IowaCare members had no access to dental care through the program and access to ED services through only two hospitals in the state. ED visit rates were 76% higher for those 19-44 years of age in DWP than the same age group in IowaCare and 54% higher those 45-64 years of age in DWP than the same age group in IowaCare and 54% higher those 45-64 years of age in DWP than the same age group in IowaCare. For newly eligible FMAP members, the rates remained stable over time. Rates of ED use for DWP members ages 19-44 years of age are similar to those of FMAP members.

<sup>&</sup>lt;sup>18</sup> Dental Quality Alliance (DQA). Proposed Adult Measures. Available at

http://www.ada.org/~/media/ADA/Science%20and%20Research/Files/Adult\_Measures\_under\_considerat\_ion.pdf?la=en.



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	May 1, 2013 – April 30, 2014		May 1, 2014 – April 30, 2015	
	Pre-impleme	entation	Year 1	
Eligibility	FMAP	IowaCare	FMAP	DWP
19-44 years of age				
Eligible months	69,543	236,880	62,134	597,068
Number of visits	293	554	263	2,462
Visits/1000 months	4.21	2.34	4.23	4.12
% change			0%	76%
45-64 years of age	FMAP*	IowaCare	FMAP*	DWP
Eligible months		201,986		438,497
Number of visits		194		647
Visits/1000 months		0.96		1.48
% change				54%

Table 9	Percent	of members	who	were seen	for non	-traumatic	dental	reasons in an ED	
Table 3.	reitent	of members	WIIU	were seen		- u aumatic	uentai		

\*Not reported due to small number of members in each cell

Of particular interest are the reported ED diagnoses for the four member groups. Table 10 provides the top five oral health related diagnoses by group and year. Note that there is almost no variation in diagnosis for the four groups, with Unspecified disorder of teeth and supporting structures, Dental caries-unspecified, and Periapical abscess without sinus as the three primary non-traumatic diagnoses codes for oral health-related ED visits accounting for over 75% of visits in all four groups.

	May 1, 20 April 30, 2				May 1, 201 April 30, 20		
	Pre-imple	ementation			Year 1		
		IowaCare	FM	AP	DWP	FMA	AP
Description	CDT code	Number %	Number %	Rank	Number %	Number %	Rank
Unspecified disorder of teeth and supporting structures	525.9	346 46%	158 52%	1	1,573 51%	133 49%	1
Dental caries, unspecified	521.00	120 16%	48 16%	2	537 17%	54 20%	2
Periapical abscess without sinus	522.5	111 15%	37 12%	3	457 15%	32 12%	3
Other and unspecified diseases of oral soft tissues	528.9	43 6%	9 3%	5	122 4%	10 4%	5
Acute apical periodontitis of pulpal origin	522.4	21 3%	12 4%	4	103 3%	11 4%	4

Table 10. Top 5 primary	diagnosis codes for	oral-health related ED	visits by group and year
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## 9B Percent of members who were seen in the ED for non-traumatic dental related reasons within the reporting year and visited a dentist for treatment services within 60 days following the ED visit while controlling for the earned benefit tier

Definition	DQA Proposed Adult Measures
Proposed Analytic Method	Means tests between DWP members and the three comparison groups
Variations from the Proposed Analytic Method	IowaCare not included as a comparison group
Specifications	Numerator: Unduplicated number of adults who were seen in the ED for non- traumatic dental related reasons in the reporting year and visited a dentist for treatment services within 60 days following the ED visit. Denominator: Unduplicated number of all enrolled adults seen in an ED for non- traumatic dental related reasons.

## Results

Data for this measure are not available due to insufficient time passing since the beginning of the DWP.

## Hypothesis 1.4 DWP members will have equal or greater access to dental EPSDT services.

## Measure 10 Dental EPSDT utilization (Measures 10A and 10B)

10A	Percent of members age 19-20 with at least one EPSDT-related dental visit as defined
by EP	SDT procedure code modifiers

Definition	Original measure
Proposed Analytic Method	<ol> <li>Means testing between DWP members and MSP members before and after implementation</li> <li>ICER utilizing DWP and MSP members and DWP and DDIA members before</li> </ol>
	and after implementation
Variations from	These analyses may be removed in the future due to low member numbers for this
the Proposed	measure.
Analytic Method	

## Results

Member numbers for this measure are low; we are therefore unable to calculate Measure 10A at this time.



Definition	Original measure
Proposed Analytic Method	DID comparing DWP members and MSP members before and after implementation
Variations from the Proposed Analytic Method	Models for DID may be removed in the future due to low member numbers for this measure.

### 10B Whether member had an EPSDT dental visit

## Results

Member numbers for this measure are low; we are therefore unable to calculate Measure 10B at this time.

## Hypothesis 1.5

High risk populations in the Dental Wellness Plan will be more likely to receive preventive dental care.

## Measure 11 People who are smokers: dental exam (Measures 11A and 11B)

# 11A Percent of DWP members who are smokers who have a dental exam within the reporting year

Definition	DQA Proposed Adult Measures
Proposed Analytic Method	<ol> <li>Descriptives and comparisons for DWP members over time</li> <li>ICER utilizing DWP and MSP members and DWP and DDIA members before and after implementation</li> </ol>
Variations from the Proposed Analytic Method	N/A

## Results

Data from clinical risk assessments that identifies smokers are not available for evaluation. At this time, it is unknown if we will be able to obtain appropriate data from clinical risk assessments necessary to evaluate this measure.

11B	Whether a member identified as being a smoker had a dental exam within the
report	ting year

Definition	DQA Proposed Adult Measures
Proposed Analytic Method	Descriptives and comparisons for DWP members over time
Variations from the Proposed Analytic Method	N/A

## Results

Data from clinical risk assessments that identifies smokers are not available for evaluation. At this time, it is unknown if we will be able to obtain appropriate data from clinical risk assessments necessary to evaluate this measure.

## Measure 12 People with diabetes: dental exam (Measures 12A and 12B)

# 12A Percent of DWP members identified as people with diabetes who have a dental exam within the reporting year

Definition	DQA Proposed Adult Measures
Proposed Analytic Method	<ol> <li>Descriptives and comparisons for DWP members over time</li> <li>Means tests between DWP members and MSP members over time</li> </ol>
	3) ICER utilizing DWP and MSP members and DWP and DDIA members before and after implementation
Variations from the Proposed Analytic Method	1) Year 1 data only
Specifications	Diabetes: At least one emergency visit defined by one of the procedure codes:         99281-99288 or one of the revenue codes: 450-459, 981 and with a principal         diagnosis of diabetes (ICD-9-CM 250.00-250.99, 357.2, 362.0, 366.41, 648.0) or one         hospital discharge defined by one of the procedure codes: 99221-99223, 99231-         99233, 99238, 99239, 99251-99255, 99261-99263, or 99291 or one of the revenue         codes (100-149, 119, 120-124, 129, 150-154, 159, 160-169, 200-229, 720-729, or 987)         with a principal diagnosis of diabetes (ICD-9-CM 250.00-250.99, 357.2, 362.0,         366.41, 648.0 or DRG 205 or 294).         At least two outpatient/physician/non-acute inpatient visits defined by one of the         procedure codes: 92002-92014, 99201-99205, 99211-99215, 99217-99220, 99241-         99245, 99271-99275, 99289, 99290, 99301-99303, 99311-99313, 99321-99323, 99331-         99333, 99341-99355, 99384-99387, 99394-99397, 99410-99404, 99411, 99412, 99420,
	99429, 99499 or one of the revenue codes: 118, 128, 138, 148, 158, 190-199, 510-529, 550-559, 570-599, 660-669, 770-779, 820-859, 880-889, 982 or 983 and with a



	diagnosis of diabetes (ICD-9-CM 250.00-250.99, 357.2, 362.0, 366.41, 648.0).
	<u>Numerator</u> : Unduplicated number of all enrolled adults (enrolled at least 11 months in the study year and the year before) identified as people with diabetes who received a comprehensive or periodic oral evaluation OR comprehensive periodontal examination at least once.
	<u>Denominator</u> : Unduplicated number of all enrolled adults (enrolled at least 11 months in the study year and the year before) identified as people with diabetes.
	<u>CDT Codes:</u> D0120 (recall), 0150 (comprehensive), or 0180 (comprehensive periodontal exam)

#### Results

Members with diabetes in DWP were more likely to have had a dental exam in the first year of the program than were members with diabetes in the FMAP program (Figure 3). This mirrored the results for members who did not have diabetes, indicating that the increase may not stem from increased awareness of the needs of members with diabetes, but a general increase across all members in the likelihood of having a visit.



Figure 3. Percent of members with diabetes who had a dental exam



# 12B Whether a member identified as having diabetes had a dental exam within the reporting year

Definition	DQA Proposed Adult Measures
Proposed Analytic Method	DID for DWP members and MSP members before and after implementation
Variations from the Proposed Analytic Method	Protocol is being developed for final report

## Results

No results available as protocols are under development.



## **Quality of care**

Research Question 2 – What are the effects of the DWP on member quality of care?

## **Hypothesis 2.1**

DWP members will have equal or better quality of care.

## Measure 13 Emergency department (ED) use

Percent of respondents who reported that the care they received at their most recent visit to the ED could have been provided in a dentist's office if one was available at the time

Definition	Original item
Proposed Analytic Method	Means tests between DWP members and MSP members
Variations from the Proposed Analytic Method	Due to low respondent numbers to these survey items, means test could not be calculated.

## Results

Among DWP and Medicaid respondents who reported that they had gone to a hospital emergency department for a dental problem since joining their dental plan (4% for both, p>.05), 84% (n=37) of DWP members and 100% (n=7) of Medicaid members said that the dental care they received in the emergency room could have been provided in a dental office or clinic if one was available at the time.

## **Hypothesis 2.2**

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

## Measure 14 Care from dentists and staff

Composite measure including: 1) provider explanations are easy to understand, 2) listens carefully, 3) treats with courtesy and respect, 4) spends enough time with patient, 5) does everything they could to help patient feel as comfortable as possible during dental work, and 6) explains what they were doing while treating the patient.

Definition	CAHPS Dental Plan Survey
Proposed Analytic Method	Means tests between DWP members and MSP members
Variations from the Proposed Analytic Method	None



## Results

Following CAHPS® protocol, the items measuring care from dentists and staff were combined into a single score to measure provider communication. Ninety-three percent of respondents in both groups (DWP and Medicaid) thought the communication was usually or always positive. After adjusting for age and oral health status, there was no significant difference regarding provider communication between the two groups (p>.05) (Figure 4).





## Measure 15 Rating of regular dentist

### Rating of regular dentist on 0-10 scale

Definition	CAHPS Dental Plan Survey
Proposed Analytic Method	Means tests between DWP members and MSP members
Variations from the Proposed Analytic Method	None

### Results

Those who had a regular dentist who accepted their dental plan were asked to rate this dentist on a scale of 0-10. Both DWP and Medicaid respondents were much more likely to rate their regular dentist highly (rating of 9-10) than all the dental care they had received (Figure 5). There was not a statistically significant difference between the two groups in regular dentist ratings (p>.05).



#### Figure 5. Ratings (0-10, 10 = best) of regular dentist, DWP and Medicaid members



## Measure 16 Rating of all dental care received

## Rating of all dental care received on 0-10 scale

Definition	CAHPS Dental Plan Survey
Proposed Analytic Method	Means tests between DWP members and MSP members
Variations from the Proposed Analytic Method	None

#### Results

Respondents who had utilized dental care since joining their plan were asked to rate all the dental care they had received on a scale of 0-10 (10 = best). Fifty-one percent of DWP and forty-five percent of Medicaid members rated their dental care highly (rating of 9-10). After adjusting for age and oral health status, Medicaid members rated their dental care significantly lower than DWP members (p=.04) (Figure 6).






\*Statistically significant difference at p<.05

## Measure 17 Rating of DWP

A composite measure including: 1) the quality of information provided to DWP members regarding how the plan works and how to find a provider, 2) the quality of information and provided by the DWP customer service, 3) a global rating of their new dental plan on a scale from 0 (worst possible) to 10 (best possible), and 4) whether they would recommend the plan to others.

Definition	CAHPS Dental Plan Survey
Proposed Analytic Method	Descriptives and comparisons for DWP members over time
Variations from the Proposed Analytic Method	Results of the individual components are reported separately rather than as a composite measure; survey did not ask question about quality of information provided by the DWP customer service

#### Results

28% of DWP and 31% of Medicaid respondents reported that they had tried to find out how the Dental Wellness Plan/Medicaid works by calling their 800 number, visiting their website, or reading printed materials (p>.05). Of these, 62% of DWP and 52% of Medicaid members said it 'usually' or 'always' provided the information they wanted (p>.05).

On a scale of 0-10 (10=best), just over one-third (38%) of DWP and Medicaid respondents rated their plans poorly (Figure 7). After adjusting for age and oral health status, there was not a significant difference between the two groups in how they rated their plans (p>.05).







When asked whether they would recommend their dental plan to others, significantly more DWP members said they would definitely or probably recommend their plan (p<.001) after adjusting for age and oral health status. Nine percent of DWP members said they 'probably' or 'definitely' would not recommend their plan compared to 16% of Medicaid members (Figure 8).



Figure 8. DWP and Medicaid members' recommendation of the plan to others

<sup>\*</sup>Statistically significant difference at p<.05



## Hypothesis 2.3 DWP members will maintain continuous access to a regular source of care.

## Measure 18 Proportion who had to change regular dentist when joining the DWP

## Percent of members who switched regular dentists at entry to plan

Definition	Original measure
Proposed Analytic Method	Descriptives and comparisons for DWP members over time
Variations from the Proposed Analytic Method	None

### Results

Of the DWP and Medicaid members who had a regular dentist at the time of the survey, 51% of DWP and 72% of Medicaid members also had a regular dentist before joining their current plan. Of these respondents, 42% (n=144 DWP, n=31 Medicaid) of both DWP and Medicaid members switched dentists after joining their current dental plan.

## Measure 19 Regular source of dental care

### Percent of members who respond that they currently have a regular dentist

Definition	CAHPS Dental Plan Survey
Proposed Analytic Method	Means tests between DWP members and MSP members
Variations from the Proposed Analytic Method	None

### Results

To measure regular source of care, respondents were asked whether they had a regular dentist before joining their current plan and whether they currently had a regular dentist at the time of the survey who accepted their dental plan. A significantly lower proportion of DWP members reported having a regular dentist before newly enrolling compared to Medicaid members (35% vs. 50%, p<.05) (Figure 9). However, just over half of the respondents in both groups currently report having a regular dentist who accepts their dental plan (p>.05).







\*Statistically significant difference at p<.05

## Measure 20 Experience changing dentists

#### Member experiences with changing to a new regular dentist

Definition	Original item
Proposed Analytic Method	Descriptives and comparisons for DWP members over time
Variations from the Proposed Analytic Method	None

#### Results

Among the DWP respondents (n=144) and Medicaid respondents (n=31) who had switched dentists after joining, 90% of DWP and 74% of Medicaid respondents said it was 'very easy' or 'somewhat easy' to change providers (Figure 10). While the proportion of Medicaid members reporting that it was 'very difficult' was considerably higher compared to DWP members, the low number of respondents to this question is likely influencing the lack of statistical significance.









## Cost

<u>Research Question 3 – What are the effects of the DWP on costs of dental care as</u> <u>compared to traditional Medicaid dental coverage?</u>

## **Hypothesis 3.1**

The cost for providing dental care to DWP members will be comparable to the predicted costs for providing dental care to DWP members had they been enrolled in Medicaid State Plan.

Measure 21 Compare DWP member per member per month (PMPM) dental costs to those of MSP members (Measures 21A and 21B)

21A	PMPM dental costs calculated for direct	provision of care	per member per month
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Definition	DQA Proposed Adult Measures
Proposed Analytic Method	<ol> <li>RDD comparing DWP members and MSP members at the threshold</li> <li>DID for DWP members and MSP members before and after implementation</li> </ol>
Variations from the Proposed Analytic Method	Protocol is being developed for final report

#### Results

No results available as protocols are under development.

# 21B PMPM dental costs calculated for direct provision of care per member per month for all enrolled adults who received at least one dental service during the reporting year

Definition	DQA Proposed Adult Measures
Proposed Analytic Method	DID for DWP members and MSP members before and after implementation
Variations from the Proposed Analytic Method	Protocol is being developed for final report

### Results

No results available as protocols are under development.

## Measure 22 Out-of-pocket dental costs

# Percent of members who report paying out-of-pocket for any dental service since joining DWP and how much they paid

Definition	Original item
Proposed Analytic Method	Means tests between DWP members and MSP members over time
Variations from the Proposed Analytic Method	Due to low respondent numbers to these survey items, means test could not be calculated.

#### Results

The 49% (n=455) DWP respondents and 51% (n=70) Medicaid respondents who indicated that the plans did not always cover the services they needed (i.e., those who responded 'somewhat yes,' 'somewhat no,' or 'definitely no,' or 'don't know/not sure' regarding coverage for their needed dental care) were asked whether they paid for any dental care out-of-pocket and, if so, for what types of dental services. Nineteen percent of DWP and 23% of Medicaid members had paid for dental services out-of-pocket (p>.05), and, of that group, the types of services most frequently cited were 'other treatment, such as fillings' (41% DWP [n=29], 25% Medicaid [n=3]), 'checkup and cleaning' (36% DWP [n=25], 33% Medicaid [n=4]), and 'extraction' (33% DWP [n=23], 33% Medicaid [n=4]).

Respondents who had paid for dental services out of pocket (n=61 DWP, n=9 Medicaid) were asked approximately how much they had spent. DWP and Medicaid members spent a median (range) of \$245 (\$5-6300) and \$300 (\$53-800), respectively.



## **Earned benefit structure**

<u>Research Question 4 – What are the effects of the earned benefit structure on DWP</u> <u>members?</u>

## **Hypothesis 4.1**

The earned benefit structure for DWP members will increase regular use of routine dental exams.

## Measure 23 Routine dental exams (Measures 23A and 23B)

## 23A Percent of members who received a comprehensive or periodic oral evaluation within the reporting year

Definition	DQA Proposed Adult Measures
Proposed Analytic Method	Means tests between DWP members and three comparison groups before and after implementation
Variations from the Proposed Analytic Method	IowaCare not included as a comparison group D0180 also included as a qualifying oral evaluation for this measure.
Specifications	Dental exam defined using DQA technical specifications and DWP exam requirements. <u>Numerator:</u> Unduplicated number of all enrolled adults who received a comprehensive or periodic oral evaluation. <u>Denominator:</u> Unduplicated number of all enrolled adults. <u>CDT Codes:</u> D0120 (periodic oral evaluation), 0150 (comprehensive evaluation), or 0180 (comprehensive periodontal evaluation)

#### Results

Routine dental exams are required for DWP members to earn additional dental benefits. Approximately 31% of DWP members with ≥11 months of eligibility received at least one routine dental exam during year 1 of the program (Table 11). This represents a higher rate of exams than the FMAP population during year 1 of the DWP (23%); however, 49% of DDIA members received at least one of these exams during the same time period.

The proportion of FMAP members receiving a routine dental exam decreased slightly over the two years, from 27% to 23%.



		May 1, 2013 – April 30, 2014		May 1, 2014 – April 30, 2015		
		Pre-implementation		Year 1		
Eligibility per year		FMAP	DDIA	FMAP	DDIA	DWP
≥1 month	Number %	2097 13%	25530 31%	1523 12%	28324 30%	24879 19%
≥11 months	Number %	270 27%	3879 51%	332 23%	3298 49%	15269 31%

#### Table 11. Percent of members who received a routine dental exam

# 23B Percent of members who accessed dental care (received at least one service) who received a comprehensive or periodic oral evaluation within the reporting year

Definition	DQA Proposed Adult Measures
Proposed Analytic Method	Means tests between DWP members and three comparison groups before and after implementation
Variations from the Proposed Analytic Method	IowaCare not included as a comparison group
Specifications	Numerator: Unduplicated number of all enrolled adults who received a comprehensive or periodic oral evaluation. <a href="https://www.commonstor.com">Denominator:</a> Unduplicated number of all enrolled adults who received at least one dental service. <a href="https://www.commonstor.com">CDT Codes: D0120, 0150, 180</a>

#### Results

DWP members were more likely than FMAP members and approximately as likely as DDIA members to receive a routine dental exam if they had a dental visit during year 1 of the DWP (



Table 12). 86% of DWP members had a routine dental exam if they had a dental visit compared to 89% of DDIA and 72% of FMAP members.

Among members with a dental visit, the proportion of FMAP members receiving a routine dental exam decreased slightly over the two years, from 75% to 72%.



		May 1, 2013 – April 30, 2014		May 1, 2014 – April 30, 2015		
		Pre-implementation		Year 1		
Eligibility per year		FMAP	DDIA	FMAP	DDIA	DWP
≥1 month	Number %	2097 72%	25530 84%	1523 67%	28324 85%	24879 84%
≥11 months	Number %	270 75%	3879 89%	332 72%	3298 89%	15269 86%

Table 12. Among members who accessed dental care, percent who received a routine dental exam

## **Hypothesis 4.2**

## Over 50% of members will earn access to Enhanced Benefits.

## Measure 24 Timing of 1st recall visit

## Percent of members who receive their 1st recall exam within 6-12 months of initial oral evaluation

Definition	Original measure
Proposed Analytic Method	Descriptives and comparisons for DWP over time
Variations from the Proposed Analytic Method	None

#### Results

Data for this measure are not available due to insufficient time passing since the beginning of the DWP.



## Hypothesis 4.3 Over 50% of members will earn access to Enhanced Plus Benefits

## Measure 25 Timing of 2nd recall visit

#### Percent of members who receive their 2nd recall visit within 6-12 months of 1st recall

Definition	Original measure
Proposed Analytic Method	Descriptives and comparisons for DWP over time
Variations from the Proposed Analytic Method	None

#### Results

Data for this measure are not available due to insufficient time passing since the beginning of the DWP.

## **Hypothesis 4.4**

# In the second year of enrollment and beyond, the regular use of recall exams will be higher than in the first year of enrollment in the program.

### Measure 26 Recall exams after year one of enrollment

Percent of members who receive their 2nd recall visit within 6-12 months of 1st recall in each year of enrollment

Definition	Original measure
Proposed Analytic Method	Means tests between DWP members and three comparison groups before and after implementation
Variations from the Proposed Analytic Method	None

### Results

Data for this measure are not available due to insufficient time passing since the beginning of the DWP.



## **Hypothesis 4.5** The earned benefit structure will not be perceived as a barrier to care.

## Measure 27 Member experience with covered benefits

#### Whether needed services were covered

Definition	CAHPS Dental Plan Survey
Proposed Analytic Method	Descriptives and comparisons for DWP members over time
Variations from the Proposed Analytic Method	None

#### Results

All respondents were asked the question, "Thinking about all of the care that you or a dentist thought you needed since joining the DWP/Medicaid, did the DWP/Medicaid cover what you or a dentist thought you needed to get done?" Excluding those who reported not needing care since they joined (24% DWP, 28% Medicaid), there was not a statistically significant difference between the two groups regarding coverage for needed care. Thirteen percent of DWP and 17% of Medicaid members said 'somewhat no' or 'definitely no' (Figure 11) (p>.05).







## **Provider network adequacy**

<u>Research Question 5 – What is the adequacy of the provider network for DWP</u> <u>members?</u>

## **Hypothesis 5.1**

DWP members will have better access to an adequate provider network than those in the Medicaid State Plan as reflected by travel distance and time, access to safety net providers, and provider acceptance of new patients.

## Measure 28 Travel distance and travel time to regular dentist

Average travel distance and average time to access regular dentist within local service delivery area

Definition	Original measure
Proposed Analytic Method	GIS analyses
Variations from the Proposed Analytic Method	None

### Results

As of January 2015, mean distance to the nearest general dentist for DWP members was 4.0 miles and ranged from 0 to almost 50 miles (Table 13). By comparison, mean distance among Medicaid members was 2.8 miles with a maximum of 30.7 miles. Travel time showed a similar pattern: mean travel time to the nearest dentist was slightly longer for DWP members compared to Medicaid members (6.3 minutes vs. 4.7 minutes, respectively).

Table 13. Distance to the nearest general dentist for DWP and Medicaid members (January 2015)

	DWP		Medicaid	
	Travel Distance (miles)	Travel Time (minutes)	Travel Distance (miles)	Travel Time (minutes)
Mean	4.0	6.3	2.8	4.7
Median	1.3	2.5	1.1	2.0
Std. Dev.	6.2	9.0	4.4	6.7
Range	0 - 49.7	0 – 76.1	0 – 30.7	0-49.4

Note: these figures will be updated for the DWP Year 1 provider adequacy assessment (March 31, 2016)



# Measure 29 Provider network inclusion of safety net dental providers, particularly FQHCs

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

Definition	Original measure
Proposed Analytic Method	Process measure
Variations from the Proposed Analytic Method	None

#### Results

Public safety net providers serving DWP members as of January 2015 included Federally Qualified Health Centers (FQHCs), other Community Health Centers (CHCs) and non-profit clinics, academic institutions, and Indian Health Services clinics.

As of January 2015, 144 dentists at 27 locations actively participated in DWP as public safety net providers. In comparison, 151 dentists participated in Iowa Medicaid as public safety net providers. It is difficult to ascertain how many locations actively provided services to Medicaid members from January through June 2014 since Iowa Medicaid Enterprises assigns a single identifier to an FQHC and all of its satellite dental clinics. If we assume that all satellite dental clinics of each FQHC that participates in Medicaid also accept Medicaid patients, then 34 locations provided dental services to Iowa Medicaid patients during the six-month study period.

In Iowa, 12 FQHCs with 17 clinic locations provided comprehensive dental services to both DWP and Medicaid members (Figure 12). Several public safety net providers in Illinois and Nebraska also participated in DWP and/or Iowa Medicaid, including the University of Nebraska Medical Center, several FQHC and CHC clinics in Illinois, and an IHS clinic in Nebraska. Several non-FQHC safety net providers that participated in Iowa Medicaid were not active DWP providers as of January 2015.



Figure 12. Locations of Public Dental Safety Net Sites by DWP and Medicaid Participation

## Measure 30 Provider willingness to accept new patients

Definition	Original items
Proposed Analytic Method	Means tests of provider acceptance rates across DWP and MSP
Variations from the Proposed Analytic Method	None

#### Percent of regular dentists indicating they will accept new DWP or MSP members

#### Results

Forty-two percent of general practice dentists reported that they were currently accepting new DWP patients (DWP participants). DWP participants were significantly more likely to accept new Medicaid patients than non-participants (p<.05) (Figure 13). Among those currently accepting new Medicaid patients, DWP participants were also significantly more likely to accept all new Medicaid patients rather than limit acceptance (p=.001); 28% (n=39) of DWP participants and 10% (n=10) of non-participants reported accepting all new Medicaid patients.

#### Figure 13. Acceptance of new Medicaid patients (DWP participants and non-participants)\*



\*Chi-square test statistically significant at p<0.05



## Measure 31 Members with a regular dentist

#### Percent of respondents who report that they currently have a regular dentist

Definition	CAHPS Dental Plan Survey; Original item
Proposed Analytic Method	Means tests between DWP members and MSP members
Variations from the Proposed Analytic Method	None

#### Results

To measure regular source of care, respondents were asked whether they had a regular dentist before joining their current plan and whether they currently had a regular dentist at the time of the survey who accepted their dental plan. A significantly lower proportion of DWP members reported having a regular dentist before newly enrolling compared to Medicaid members (35% vs. 50%, p>.05) (Figure 14). However, just over half of the respondents in both groups currently report having a regular dentist who accepts their dental plan (p>.05).

Note: These results are the same as Measure 19 - Regular source of care.

#### Figure 14. DWP and Medicaid members with a regular dentist before and after joining plan



\*Statistically significant difference at p<.05



## Measure 32 Timeliness of getting a routine dental appointment

Percent of respondents who report that they were able to get routine dental care as soon as they wanted

Definition	CAHPS Dental Plan Survey
Proposed Analytic Method	Means tests between DWP members and MSP members
Variations from the Proposed Analytic Method	None

#### Results

Among respondents who reported utilizing any dental care since joining their current plan (57% DWP and 60% Medicaid), 64% of Medicaid and 69% of DWP members were 'usually' or 'always' able to obtain appointments as soon as they wanted (p>.05). Regarding waiting time for non-emergency dental care appointments, 65% of DWP and 60% of Medicaid members said they usually had to wait 1-2 weeks or less (p>.05).

Note: These results are the same as Measure 4 – Timely appointments and care.

## Measure 33 Finding a new dentist

A composite measure including: 1) whether members used any information from the DWP to help them find a new dentist, 2) whether the information was helpful, and 3) how easy it was to find a new dentist.

Definition	CAHPS Dental Plan Survey
Proposed Analytic Method	Descriptives and comparisons for DWP members over time
Variations from the Proposed Analytic Method	Results of the individual components are reported separately rather than as a composite measure



#### Results

We inquired about information that members used to help them find a new dentist by asking the following questions: "Since joining the DWP/Medicaid, did you use any information from the dental plan to help you find a new dentist?" and, of those who said yes, "How helpful was this information in helping you find a new dentist?" 24% of DWP and 19% of Medicaid members used information from the dental plan to find a new dentist (p>.05). Of those who used that information, 77% (n=217) of DWP members and 61% (n=22) of Medicaid members said it was 'somewhat helpful' or 'very helpful' in helping them find a new dentist (p>.05).

Of those who used information from their dental plan to find a new dentist, 94% (n=59) of DWP members and 50% (n=4) of Medicaid members reported that it was 'very easy' or 'somewhat easy' to change to a new dentist in the DWP.



## **Provider attitudes**

Research Question 6 – What are provider attitudes towards the DWP?

## **Hypothesis 6.1**

Providers will not see the earned benefit structure as a barrier to providing care.

## Measure 34 Dentist satisfaction with plan

Dentist satisfaction with plan key components such as fee schedules and earned benefit structure

Definition	Original items
Proposed Analytic Method	Descriptives for providers over time
Variations from the Proposed Analytic Method	None

#### Results

Among DWP participants, 63% said that overall they were either 'very satisfied' (9%) or 'satisfied' (54%) with the DWP (Figure 15).



### Figure 15. Satisfaction with the DWP overall (DWP participants)



## **Hypothesis 6.2** Over 50% of providers will remain in the plan for at least 3 years.

## Measure 35 Proportion of long-term dental providers

Proportion of dentists who submitted a claim in the index year and have submitted at least 1 claim annually in the next two years

Definition	Original measure
Proposed Analytic Method	Means tests between DWP providers and providers in the MSP DID before and after implementation
Variations from the Proposed Analytic Method	Protocol is being developed for final report

#### Results

Complete data for this measure are not available due to insufficient time passing since the beginning of the DWP. Information about number of dentists who submitted a claim in the index year (2014-2015) is included in Table 14. During year 1, 885 dentists in 18 states submitted a claim on behalf of DWP members; 99.9% of services were provided by dentists in Iowa, Nebraska, Illinois, and South Dakota. The number of dentists who provided services to the Medicaid FMAP population decreased from 629 pre-implementation to 561 during year 1 of DWP.

#### Table 14. Number of unique dentists\* who submitted at least 1 claim

	May 1, 2013 – April 30, 2014		May 1, 2014 – April 30, 2015		
	Pre-implementation		Year 1		
	FMAP	DDIA	FMAP	DDIA	DWP
≥1 claim	629	1470+	561	1491+	885

\*Unique FMAP and DWP dentists are identified by NPI (individual); DDIA dentists are identified by license number.

<sup>+</sup>Available data is limited to providers in Iowa only.



## **Member outreach**

<u>Research Question 7 – What are the effects of DWP member outreach and referral</u> <u>services?</u>

## Hypothesis 7.1

Outreach services will address dentists' concerns about missed appointments.

## Measure 36 Dentist perceptions of missed appointments

#### Proportion of dentists who indicate that missed appointments are a problem

Definition	Original measure
Proposed Analytic Method	Comparison of provider responses regarding DWP, MSP and DDIA members
Variations from the Proposed Analytic Method	None

#### Results

We asked dentist respondents the degree to which they thought certain DWP patient-related issues were problematic; comparisons were made between dentists accepting new DWP patients (DWP participants) and those not accepting new DWP patients (DWP non-participants). Broken appointments were rated as a 'major problem' by 46% of DWP participants and 31% of non-participants (Figure 16). Broken appointments was rated as a major problem by the highest percentage of respondents compared to other patient-related issues, which include: complexity of patient dental treatment needs, compliance with recommended treatment, and complexity of patient medical history.



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Figure 16. Rating of 'broken appointments' as problematic (DWP participants and non-participants)<sup>†</sup>

+ No statistical analyses were computed due to the large numbers of 'don't know' respondents in the non-participant group

## Hypothesis 7.2 Referral services will improve access to specialty dental care.

## Measure 37 Specialty dental utilization

Percent of members receiving any specialty dental services

Definition	Original measure
Proposed Analytic Method	Means tests between DWP members and three comparison groups
Variations from the Proposed Analytic Method	IowaCare not included as a comparison group; data available for 2013-2014 and 2014-2015 only
Specifications	Protocol is being developed for final report.

#### Results

Due to differences in how dental specialists are identified, comparisons across programs are problematic. We are currently exploring methods that would allow us to make these comparisons, if possible.



## Measure 38 Timeliness of getting a dental specialist appointment

Percent of respondents who report that they were able to get specialty dental care as soon as they wanted

Definition	CAHPS Dental Plan Survey
Proposed Analytic Method	Means tests between DWP members and three comparison groups
Variations from the Proposed Analytic Method	Due to low respondent numbers to this survey question, means test could not be calculated. IowaCare & DDIA not included as comparison groups since only DWP and MSP members were surveyed.

#### Results

Among respondents who reported utilizing specialist care since joining their dental plan, 55% (n=102) of DWP and 35% (n=13) of Medicaid members said they 'usually' or 'always' got an appointment with a specialist as soon as they wanted.

Note: These results are the same as Measure 15 – Care from a dental specialist.

## Hypothesis 7.34

# Outreach will improve members' compliance with follow-up visits, including recall exams.

### Measure 39 Time to recall exams at 6-12 month intervals

Time to recall exams at 6-12 month intervals when recall visits are defined as any visit that includes a comprehensive or periodic oral evaluation

Definition	Original measure
Proposed Analytic Method	Survival analyses for new members in DWP and MSP
Variations from the Proposed Analytic Method	Protocol is being developed for final report.

#### Results

Data for this measure are not available due to insufficient time passing since the beginning of the DWP.