Healthy Behaviors Incentive Program Evaluation

Natoshia M. Askelson
Assistant Professor,
Community & Behavioral
Health**, Health Policy
Research Program*

Elizabeth Momany
Assistant Director, Health
Policy Research Program,
Associate Research Scientist*

Peter Damiano
Director*, Professor,
Preventative & Community
Dentistry

Brad Wright
Assistant Professor, Health
Management & Policy**, Health Policy Research Program*

Brooke McInroy
Survey Research Manager*, Health Policy Research Program

Suzanne Bentler
Assistant Research Scientist*, Health Policy Research Program

Tessa Heeren
Research Assistant*, Health Policy Research Program

* University of Iowa Public Policy Center
** University of Iowa College of Public Health

We would like to acknowledge the interviewers and coders who contributed to this evaluation: Samantha Budzyn, Patrick Brady, Mayra Martinez, Cris Meier, Chad Norris, Nadia Sabbagh, Blake Smith, and Rosamond Smith.
Contents

List of Measures, Figures, and Tables ......................................................... 3
Background ........................................................................................................ 4
Overview of Iowa’s Healthy Behaviors Incentive (HBI) Program 4
Claims Data ........................................................................................................ 5
  Methodology ..................................................................................................... 5
  Results ............................................................................................................. 9
Clinic Manager Interviews ................................................................................ 17
  Methodology ................................................................................................... 17
  Results .......................................................................................................... 19
Member Interviews ............................................................................................ 25
  Methodology ................................................................................................... 25
  Results .......................................................................................................... 27
Limitations .......................................................................................................... 37
Future Evaluation Activities ............................................................................ 38
Conclusions ....................................................................................................... 39
List of Measures, Figures, and Tables

Measures

Measure 1  Proportion of members who had a preventive care visit ........................................... 9
Measure 2  Proportion of WP/MPC members completing HRA .................................................. 10
Measure 3  Whether a WP/MPC member completed both healthy behaviors .................................... 11
Measure 9  Completion of healthy behavior by demographic characteristics ............................. 12
Measure 10 Health Status by completion of healthy behavior ....................................................... 12
Measure 33 Provider reported use of HRA ............................................................................. 20
Measure 34 Percent of providers reporting encouraging patients to participate .......................... 20
Measure 36 Percent of providers reporting reimbursement ........................................................ 21
Measure 37 Providers reporting using HRA ............................................................................. 21
Measure 38 Providers reported changes in communication with patients due to HRA .............. 21
Measure 39 Provider reported changes in treatment plans due to HRA ....................................... 22
Measure 40 Provider reported barriers to using the HRA information ....................................... 22
Measure 50 Members’ knowledge of requirements of program .................................................. 27
Measure 51 Members’ knowledge of payment process ............................................................... 28
Measure 52 Members’ knowledge of purpose of HBI program .................................................... 29
Measure 53 Members’ understanding of how the program influences behavior ....................... 30
Measure 54 Members’ experience with premium payment mechanism ........................................ 30

Figures

Figure 1. Percent of Members Who Churn in 2014 ................................................................. 7
Figure 2. Members Who Move From One County to Another in 2014 ........................................ 8
Figure 3. Members Who Completed a Wellness Exam as Identified by Claims Data, 2012 – 2014 ...................................................................................................................... 10
Figure 4. Members Who Completed a Health Risk Assessment as Identified by Each of Three Data Sources, 2014 ............................................................... 11
Figure 5. Percent of Members Who Completed Both a Wellness Exam and Health Risk Assessment as Identified by DHS Data ................................................................. 12

Tables

Table 1. Descriptive Statistics of Population of Interest ................................................................. 9
Table 2. Demographics of Members in Iowa Wellness Plan Who Did Not vs. Did Complete Activities in 2014 ........................................................................................................... 13
Table 3. Demographics of Members in Marketplace Choice Plan Who Did Not vs. Did Complete Activities in 2014 ........................................................................................................... 13
Table 4. Odds of Completing HRA Based on Insurance Plan ...................................................... 15
Table 5. Odds of Completing Wellness Exam Based on Insurance Plan ..................................... 16
Table 6. Odds of Completing Wellness Exam and HRA Based on Insurance Plan .................... 17
Table 7. Clinic Characteristics ........................................................................................................ 19
Table 8. Sample Disposition .......................................................................................................... 26
Background


The **Wellness Plan** provides coverage for adults aged 19-64 years with income up to and including 100 percent of the Federal Poverty Level (FPL). It is administered by the Iowa Medicaid Enterprise (IME). Members will have access to the Medicaid provider network established for this program.

The **Marketplace Choice Plan** provides coverage for adults aged 19-64 years with income from 101-133 percent of the Federal Poverty Level (FPL). The Marketplace Choice Plan allows members to choose certain commercial health plans available on the health insurance marketplace, with Medicaid paying the member’s commercial health plan premiums.

IHAWP replaces the IowaCare program with plans that cover more services, offer a broader provider network, and expand coverage to other low income adults in Iowa who were not previously enrolled in IowaCare.

**Overview of Iowa’s Healthy Behaviors Incentive (HBI) Program**

As a part of both the **Wellness Plan** and the **Marketplace Choice Plan**, enrollees are 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.

Starting in 2015, a small monthly contribution by the member may be required depending on family income, although there are no copayments for health care services and prescriptions under the plan. Some Wellness Plan members will contribute $5 per month, while Iowa Marketplace Choice Plan members will contribute $10 per month. Wellness Plan members with individual earnings less than 50 percent of the Federal Poverty Level ($5,835 per year for an individual, or $7,865 for a family of 2) will not have monthly contributions. IHAWP members who complete the wellness exam and the HRA will not be responsible for a monthly contribution.

Early survey results of IowaCare members who transitioned into IHAWP found that the vast majority (90%) were not aware that completing a wellness exam would be part of the program to have their contributions waived.

Members earning over 49% of the FPL are given a 30-day grace period after the enrollment year to complete the healthy behaviors in order to have the contribution waived. If members do not complete the behaviors after the grace period has ended, members will receive a billing statement and a request for a hardship exemption form. For members of the Wellness Plan, all unpaid contributions will be considered a debt owed to the State of Iowa but will not, however, result in termination from the Wellness Plan. If, at the time of reenrollment, the member does not reapply for or is no longer eligible for Medicaid coverage and has no claims for services after the last premium payment, the member’s debt will be forgiven. For members in Marketplace Choice, unpaid contributions after 90 days result in the termination of the member’s enrollment status. The member’s outstanding contributions will be considered a collectable debt and subject to recovery. A member whose Marketplace Choice Plan benefits are terminated for nonpayment of monthly contributions must reapply for Medicaid coverage. The IME will permit the member to reapply at any time; however, the member’s outstanding contribution payments will remain subject to recovery.
Wellness Exam

The wellness exam is an annual preventive wellness exam (New Patient CPT Codes: 99385 18-39 years of age, 99386 40-64 years of age; Established Patient CPT Codes: 99395 18-39 years of age, 99396 40-64 years of age) from any plan-enrolled physician, Rural Health Clinic (RHC), Federally Qualified Health Center (FQHC) or Advanced Registered Nurse Practitioner (ARNP). The exams are part of the preventive services covered by the plans and therefore do not cost the member anything out-of-pocket. A ‘sick visit’ can count towards the requirement of the preventive exam, if wellness visit components are included and the billing code modifier 25 is used.

Health Risk Assessment

A health risk assessment (HRA) is a survey tool that can be used by members and providers to evaluate a member’s health. IME has identified Assess My Health as one such tool, although providers can select their own tool if it asks similar questions. Assess My Health is an online form that takes members between 15 and 40 minutes to complete on the computer. Wellness Plan members who complete the assessment receive a one-page report and their provider is able to receive a report automatically. Members of the Marketplace Choice Plan also receive the report, but their provider does not automatically receive the report; Marketplace Choice Plan enrollees must share the report with their provider. HRA information can be used by providers to develop plans addressing member needs related to health risk determinants. The HRA could be completed online at any location, including the health care provider’s office. Some clinics may have contacted patients to fill out the HRA over the phone, with the clinic inputting the data into the online system.

Provider Incentives

Providers also have incentives available to them, so that they encourage and support their patients in completing the wellness exam and HRA. Providers should be assisting members with the HRA before or during their wellness exam. For every Wellness Plan member who completes the HRA with the assistance of the provider, the provider will receive $25.00. The only HRA which qualifies for this incentive is the Assess My Health tool.

Further Behavior Incentives

Based on research indicating incentives can be used to change behavior, a program of incentives will be developed to encourage behavior change among enrollees. To participate in this part of the program, the member must have completed the wellness exam and the HRA, unless they are below 50% of the FPL or are Medically Exempt status. Plans for this part of the program are evolving.

Claims Data

Methodology

Data Sources

Data for the current quantitative analysis of the Healthy Behaviors Evaluation were derived from three sources: Medicaid enrollment and claims data from January 2012 to December 2014, Department of Human Services records on completion of wellness exams and health risk assessments in CY 2014, and 3M/TREO Solutions records on completion of health risk assessments in CY 2014. Data for 2012 and 2013 include members enrolled in the Medicaid State Plan on the basis of income or disability, and IowaCare members. As of January 1, 2014, the IowaCare program was discontinued, so there are no IowaCare members in the 2014 data. However, there are now Wellness Plan and Marketplace Choice members present in that year of the data.

Study Population and Comparison Groups

As discussed in the evaluation proposal, the focus of this evaluation is the examination of differences in outcomes between Iowa Wellness and Marketplace Choice Plan members and other comparison groups outlined below. Because there may be differences between the members in the Wellness Plan and the Marketplace Choice Plan, the evaluation documents and compares program outcomes for these groups as well.

The Wellness Plan provides coverage for adults aged 19-64 years with income up to and including 100 percent of the Federal Poverty Level (FPL). It is administered by the Iowa Medicaid Enterprise
(IME). Members will have access to the Medicaid provider network established for this program. Depending on their county of residence, Wellness Plan members may be enrolled in one of three programs: fee-for-service, HMO, or Wellness Plan PCP.

The Marketplace Choice Plan provides coverage for adults aged 19-64 years and members enrolled via three methods: 1) approximately 6,700 people previously enrolled in IowaCare who had incomes from 101 to 133% FPL, 2) people who have been enrolled in Medicaid but due to increased income are now eligible for the Marketplace Choice Plan, and 3) those who have never been in a public insurance program but meet the income eligibility for Marketplace Choice (101-133% FPL).

Comparison Group 1: Medicaid State Plan (Income Eligible)

Comparison Group 1 is composed of Medicaid State Plan members enrolled due to FPL between 0 and 66%. There are approximately 300,000 adults who will have at least one month of data in the study period. These individuals may be enrolled in one of three programs: fee-for-service, HMO or MediPASS PCCM.

Comparison Group 2: Medicaid State Plan (Disability Determination)

Comparison Group 2 is composed of Medicaid State Plan members enrolled due to disability determination. The FPL for these members may range from 0 to 200%. There are approximately 25,000 adults in this group who will have at least one month of data in the study period. The only payment structure for these members is fee-for-service as they are not eligible for a managed care option.

Comparison Group 3: IowaCare

Comparison group 3 consists of former IowaCare enrollees. IowaCare was a limited provider/limited benefit program that operated from 2005-2013. The provider network included one public hospital in Des Moines, a large teaching hospital in Iowa City and 6 federally qualified health centers. It was for 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 were not enrolled in any program.

Assigning Medicaid Plan Members to Programs

Before proceeding with analyses, we assigned Medicaid plan members to 1 of the 5 groups described above. For the expansion population, we assigned plan members to either the Iowa Wellness Plan or the Marketplace Choice Plan. We assigned other individuals to 1 of the 3 comparison groups which included income-eligible Medicaid State Plan members, disability-eligible Medicaid State Plan members, and IowaCare members.

We attributed individuals to a program if they were enrolled in that program for at least 6 months during the year. Because individuals can move into and out of Medicaid programs for various reasons, we created a churn variable to identify instances when a member changed programs from one month to the next or experienced a gap in coverage. We then aggregated the monthly data to the annual level and counted the number of these transitions in enrollment, as shown in Figure 1.

To ensure that program assignment resulted in mutually exclusive groups, we required that members never enrolled in another program or experienced a gap in coverage during the year (in addition to the minimum 6 month enrollment criterion). We were not comfortable assigning individuals who moved between programs or experienced gaps in coverage to any particular program. However, we also wanted to avoid simply dropping these data from our analyses. Therefore, we examine the group of individuals experiencing churn separately.
Figure 1. Percent of Members Who Churn in 2014

<table>
<thead>
<tr>
<th>Number of Churn Events</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>69.2%</td>
</tr>
<tr>
<td>1</td>
<td>21.7%</td>
</tr>
<tr>
<td>2</td>
<td>6.5%</td>
</tr>
<tr>
<td>3+</td>
<td>2.7%</td>
</tr>
</tbody>
</table>

Univariate Analyses

First, we examined the annual completion rate for wellness exams among the Wellness Plan and Marketplace Choice plan members and the IowaCare and Medicaid State Plan comparison groups. We also included a group of individuals from any of these programs who experienced any churn or gaps in coverage as a distinct group. This measure (completion of wellness exam) was derived using Medicaid claims data, as these were the only data available for all programs (Department of Human Services is only tracking completion of wellness exams among the Wellness Plan and Marketplace Choice Plan members). As baselines for comparison, these analyses uses data from 2012 and 2013 in addition to the 2014 data. T-tests were used to compare the means between program pairs, and all differences were statistically significant at p<0.001.

Second, we examined the completion rate for health risk assessments among the Wellness Plan and Marketplace Choice Plan members in 2014. We also included a group of individuals who were enrolled for 6 months in the Wellness Plan and/or 6 months in the Marketplace Choice plan, but who experienced any churn or gaps in coverage. Because three different data sources were available, we report the completion rates using each measure available to us. These included data collected by 3M/TREO Solutions (under contract to the state), records maintained by the Iowa Department of Human Services (DHS), and Medicaid claims.

Third, we examined the rate of completing both activities (wellness exam AND health risk assessment) among the Wellness Plan and Marketplace Choice plan members in 2014. We also included a group of individuals who were enrolled for 6 months in the Wellness Plan and/or 6 months in the Marketplace Choice plan, but who experienced any churn or gaps in coverage. This outcome is important as completion of both activities is required to avoid being charged a monthly premium. Because the state will be using DHS records to make premium and disenrollment determinations, we rely on these DHS records for wellness exam and health risk assessment completion in constructing this outcome.

Bivariate Analyses

Fourth, we separately explored the demographics of Wellness Plan and Marketplace Choice plan members in 2014, stratifying them on the basis of whether or not they had completed their HRA, wellness exam, or both. Specifically, we included analyses of age, gender, race/ethnicity, metropolitan area of residence, number of emergency department visits, number of prescription drugs, and number of chronic conditions. We used rural-urban continuum codes (RUCCs) to categorize members’ county of residence as either metropolitan, non-metropolitan urban, or non-metropolitan rural.
**Multivariate Analyses**

Finally, we ran a series of logistic regression models to predict the likelihood of Wellness Plan and Marketplace Choice plan members completing an HRA, wellness exam, or both during CY 2014. Specifically, we modeled each of these outcomes as a function of age, gender, race/ethnicity, metropolitan area of residence, number of moves during the year, number of emergency department visits, number of prescriptions, number of chronic conditions, and number of months with full Medicaid coverage (which could range from 6 to 12 months).

Depending on the year, between 7% and 10.5% of our sample moved during the year as shown in Figure 2. When individuals relocate for any reason, it is likely to be a disruptive event. Therefore, we include a variable in our models that indicates the number of times a member moved to a different county in Iowa during the year.

*Figure 2. Members Who Move From One County to Another in 2014*

![Bar chart showing number of moves from 0 to 2+ with percentages](chart)

**Deviations from Proposed Methods**

Originally, we proposed to determine the proportion of WP/MPC members who completed at least 1 additional behavior incentive, hypothesizing that it would exceed 50%. However, to date, no additional healthy behaviors or incentives have been identified beyond the completion of the wellness exam and the health risk assessment. Since completion of both activities is required to avoid being charged premiums, we modified this part of the evaluation to instead determine the proportion of WP/MPC members who completed both activities (wellness exam and HRA).
Results

Table 1. Descriptive Statistics of Population of Interest

<table>
<thead>
<tr>
<th></th>
<th>Wellness Plan</th>
<th>Marketplace Choice</th>
<th>Wellness Plan</th>
<th>Marketplace Choice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Age</td>
<td>64686</td>
<td>39.8 12.95</td>
<td>17830</td>
<td>39.7 12.80</td>
</tr>
<tr>
<td>% Male</td>
<td>64686</td>
<td>54.7 0.50</td>
<td>17830</td>
<td>43.4 0.50</td>
</tr>
<tr>
<td>% White</td>
<td>64686</td>
<td>61.5 0.49</td>
<td>17830</td>
<td>64.7 0.48</td>
</tr>
<tr>
<td>% Black</td>
<td>64686</td>
<td>8.3 0.28</td>
<td>17830</td>
<td>5.2 0.22</td>
</tr>
<tr>
<td>% Hispanic</td>
<td>64686</td>
<td>3.7 0.19</td>
<td>17830</td>
<td>5.2 0.22</td>
</tr>
<tr>
<td>% Other Race</td>
<td>64686</td>
<td>4.0 0.20</td>
<td>17830</td>
<td>4.7 0.21</td>
</tr>
<tr>
<td>% Unknown Race</td>
<td>64686</td>
<td>22.3 0.42</td>
<td>17830</td>
<td>20.1 0.40</td>
</tr>
<tr>
<td>% Metropolitan</td>
<td>64686</td>
<td>59.0 0.49</td>
<td>17830</td>
<td>57.3 0.49</td>
</tr>
<tr>
<td>% Nonmetropolitan Urban</td>
<td>64686</td>
<td>37.7 0.48</td>
<td>17830</td>
<td>38.5 0.49</td>
</tr>
<tr>
<td>% Nonmetropolitan Rural</td>
<td>64686</td>
<td>4.0 0.19</td>
<td>17830</td>
<td>4.8 0.21</td>
</tr>
<tr>
<td>Number of Moves</td>
<td>64686</td>
<td>0.1 0.37</td>
<td>17830</td>
<td>0.1 0.33</td>
</tr>
<tr>
<td>Number of ER Visits</td>
<td>64686</td>
<td>0.6 1.60</td>
<td>17830</td>
<td>0.4 1.00</td>
</tr>
<tr>
<td>Number of Rx Drugs</td>
<td>64686</td>
<td>1.2 2.00</td>
<td>17830</td>
<td>0.9 1.62</td>
</tr>
<tr>
<td>Number of Chronic Conditions</td>
<td>64686</td>
<td>1.5 1.98</td>
<td>17830</td>
<td>1.2 1.76</td>
</tr>
<tr>
<td>Months of Coverage (6 - 12)</td>
<td>64686</td>
<td>10.1 2.02</td>
<td>17830</td>
<td>10.0 2.00</td>
</tr>
</tbody>
</table>

*Note: Values for average age, number of moves, ER visits, Rx drugs, chronic conditions, and months of coverage are means within the Wellness Plan and Marketplace Choice Plan, respectively. Values for all other variables are proportions of the member population in that plan with a given characteristic. For example, in the above table, 61.5% of Wellness Plan members are white, 8.3% are black, and so forth, such that the race proportions sum to 100% within the Wellness Plan column (with differences due to rounding).

The following results are organized by the questions and hypotheses as outlined in the original evaluation proposal. Descriptive statistics for our populations of interest who had either 6 months of exclusive enrollment in either the Iowa Wellness Plan or the Marketplace Choice Plan are shown in Table 1.

**Question 1 Which activities do members complete?**

**Hypothesis 1.1**

The proportion of Wellness Plan (WP) and Marketplace Choice (MPC) members who complete a wellness exam is greater than the proportion of Medicaid State Plan (MSP) or IowaCare members.

**Measure 1 Proportion of members who had a preventive care visit**

*Protocol-NCQA HEDIS AAP*

*Data source-Administrative*

*Analyses-Means tests between WP/MPC members and three comparison groups before and after implementation*

We were able to document the proportion of members completing a wellness exam both pre and post using Medicaid claims data. This allows us to compare trends among the 3 comparison groups with the first year of data available for Wellness Plan and Marketplace Choice Plan members. As Figure 3 shows, our hypothesis 1.1 is partially supported. The proportion of Wellness Plan members completing a wellness exam in 2014 was nearly 26%, which is the highest documented rate among all groups and all years of data analyzed. The corresponding figure among Marketplace Choice plan members was just 18.5%. Among the income-eligible Medicaid State Plan members, there is a declining trend over time, going from approximately 22% to 19%. This is the highest rate among the 3 comparison groups. By contrast, roughly 14% of the disability-eligible Medicaid State Plan members and 9 – 11% of IowaCare members completed a wellness exam. The “multiple” group (those who
experienced churn) reflects rates of completion comparable to averages of the comparison groups in 2012 and 2013 and comparable to averages of the Wellness Plan and Marketplace Choice Plan with the two Medicaid State Plan comparison groups in 2014. However, in every case, an overwhelming majority of members failed to complete an annual wellness exam.

**Figure 3. Members Who Completed a Wellness Exam as Identified by Claims Data, 2012 – 2014**

<table>
<thead>
<tr>
<th>Plan Type</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicaid State Plan, Income Eligible</td>
<td>21.6</td>
<td>19.2</td>
<td>18.6</td>
</tr>
<tr>
<td>Medicaid State Plan, Disability Eligible</td>
<td>14.3</td>
<td>13.6</td>
<td>14.7</td>
</tr>
<tr>
<td>IowaCare Wellness Plan</td>
<td>10.7</td>
<td>8.9</td>
<td>0.0</td>
</tr>
<tr>
<td>Wellness Plan</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Marketplace Choice Plan</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Multiple</td>
<td>16.2</td>
<td>13.8</td>
<td>22.4</td>
</tr>
</tbody>
</table>

**Hypothesis 1.2**
The proportion of WP/MPC members who complete a Health Risk Assessment is greater than 50%.

**Measure 2 Proportion of WP/MPC members completing HRA**

- Protocol-Original
- Data source-Administrative
- Analyses- Descriptives regarding the rate of completion for WP/MPC members

As Figure 4 shows, our hypothesis 1.2 is not supported. While there is significant variation in the results depending on the data source used to identify completion of a Health Risk Assessment, no result exceeds 25%. Regardless of which data source is used, Wellness Plan members complete their Health Risk Assessment at a significantly greater rate (between 2.1 and 5.1 times as high) than their counterparts in the Marketplace Choice Plan. Individuals who have at least 6 months enrollment in the Wellness Plan and/or the Marketplace Choice Plan but experience churn manage to complete their HRA at a similar rate to the Wellness Plan group. It is notable that Medicaid claims appear to identify only a small proportion of Health Risk Assessments being completed, while the group contracted by the state to collect these data (3M/TREO Solutions) identifies significantly more HRA completion, and Iowa DHS records, which include individuals calling in to report having completed their HRA yield the highest completion percentage.
Hypothesis 1.3
The proportion of WP/MPC members who are eligible to participate and complete at least one behavior incentive is greater than 50%.

Measure 3 Whether a WP/MPC member completed both healthy behaviors

Protocol-Original
Data source-Administrative
Analyses-Descriptives regarding the rate of completion for WP/MPC members

Using the data collected by Iowa DHS, we determined the proportion of individuals in the Wellness Plan and the Marketplace Choice Plan who completed both a wellness exam and a health risk assessment in 2014. As expected, these figures are lower than the figures for completion of each activity when considered independently. As shown in Figure 5, we find that approximately 17% of Wellness Plan members completed both activities, compared to approximately 8% of Marketplace Choice Plan members and approximately 16% of the churn group (i.e., individuals who have at least 6 months enrollment in the Wellness Plan and/or the Marketplace Choice Plan but experience churn.) These figures are especially important as they indicate the proportion of individuals who have completed the activities required to avoid being charged a monthly premium in the following year. Clearly, based on these results, the overwhelming majority of members will have been subject to a monthly premium in 2015.
Question 2 What personal characteristics are predictive of completing at least one behavior incentive, and the number (or extent) of behavior incentives completed?

Hypothesis 2.2
Members (WP/MPC) who are young, white, female, and/or live in metro areas are more likely to complete at least 1 behavior.

Measure 9 Completion of healthy behavior by demographic characteristics

Protocol-Original
Data source-Administrative
Analyses- Logistic regression modeling of HBI participation

Hypothesis 2.3
Members (WP/MPC) with poorer health status are less likely to complete the behaviors when compared to members with better health status.

Measure 10 Health Status by completion of healthy behavior

Protocol-Original
Data source-Administrative
Analyses- Logistic regression modeling of HBI participation

Tables 2 and 3 provide descriptive statistics for the Wellness Plan and Marketplace Choice Plan members broken out by whether or not they completed an HRA, Wellness Exam, or Both. These data indicate that those completing activities tended to be older, white, female, have more health conditions, and more months enrolled in Medicaid coverage during the year.
Table 2. Demographics of Members in Iowa Wellness Plan Who Did Not vs. Did Complete Activities in 2014

<table>
<thead>
<tr>
<th></th>
<th>Completed HRA</th>
<th>Completed Wellness Exam</th>
<th>Completed Both</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td><strong>Average Age</strong></td>
<td>38.3</td>
<td>44.3</td>
<td>38.6</td>
</tr>
<tr>
<td><strong>% Male</strong></td>
<td>57.5</td>
<td>46.2</td>
<td>60.7</td>
</tr>
<tr>
<td><strong>% White</strong></td>
<td>60.4</td>
<td>65.1</td>
<td>60.5</td>
</tr>
<tr>
<td><strong>% Black</strong></td>
<td>8.8</td>
<td>7.0</td>
<td>8.7</td>
</tr>
<tr>
<td><strong>% Hispanic</strong></td>
<td>3.9</td>
<td>3.3</td>
<td>3.7</td>
</tr>
<tr>
<td><strong>% Other Race</strong></td>
<td>4.2</td>
<td>3.5</td>
<td>3.9</td>
</tr>
<tr>
<td><strong>% Unknown Race</strong></td>
<td>22.7</td>
<td>21.2</td>
<td>23.2</td>
</tr>
<tr>
<td><strong>% Metropolitan</strong></td>
<td>57.1</td>
<td>64.8</td>
<td>58.1</td>
</tr>
<tr>
<td><strong>% Nonmetropolitan Urban</strong></td>
<td>39.6</td>
<td>31.7</td>
<td>38.6</td>
</tr>
<tr>
<td><strong>% Nonmetropolitan Rural</strong></td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>Number of ER Visits</strong></td>
<td>0.6</td>
<td>0.7</td>
<td>0.6</td>
</tr>
<tr>
<td><strong>Number of RX Drugs</strong></td>
<td>0.9</td>
<td>2.0</td>
<td>0.9</td>
</tr>
<tr>
<td><strong>Number of Chronic Conditions</strong></td>
<td>1.3</td>
<td>2.2</td>
<td>1.3</td>
</tr>
<tr>
<td><strong>Months of Coverage (6-12)</strong></td>
<td>9.9</td>
<td>10.9</td>
<td>9.9</td>
</tr>
</tbody>
</table>

Note: Values for average age, number of moves, ER visits, Rx drugs, chronic conditions, and months of coverage are means within the Wellness Plan stratified by completion of the activities, respectively. Values for all other variables are proportions of the member population in that plan by activity completion. For example, in the above table, 57.5% of Wellness Plan members who did not complete an HRA in 2014 were male, while 46.2% of Wellness Plan members who did complete an HRA in 2014 were male. Therefore, row percentages will not sum to 1, but column percentages (e.g., for race) will (with differences due to rounding).

Table 3. Demographics of Members in Marketplace Choice Plan Who Did Not vs. Did Complete Activities in 2014

<table>
<thead>
<tr>
<th></th>
<th>Completed HRA</th>
<th>Completed Wellness Exam</th>
<th>Completed Both</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td><strong>Average Age</strong></td>
<td>38.9</td>
<td>45.6</td>
<td>39.0</td>
</tr>
<tr>
<td><strong>% Male</strong></td>
<td>44.7</td>
<td>33.4</td>
<td>48.0</td>
</tr>
<tr>
<td><strong>% White</strong></td>
<td>64.2</td>
<td>68.3</td>
<td>63.7</td>
</tr>
<tr>
<td><strong>% Black</strong></td>
<td>5.4</td>
<td>3.9</td>
<td>5.4</td>
</tr>
<tr>
<td><strong>% Hispanic</strong></td>
<td>5.3</td>
<td>4.0</td>
<td>5.3</td>
</tr>
<tr>
<td><strong>% Other Race</strong></td>
<td>4.8</td>
<td>4.1</td>
<td>4.8</td>
</tr>
<tr>
<td><strong>% Unknown Race</strong></td>
<td>20.2</td>
<td>19.6</td>
<td>20.9</td>
</tr>
<tr>
<td><strong>% Metropolitan</strong></td>
<td>57.1</td>
<td>58.5</td>
<td>57.3</td>
</tr>
<tr>
<td><strong>% Nonmetropolitan Urban</strong></td>
<td>38.8</td>
<td>36.9</td>
<td>38.6</td>
</tr>
<tr>
<td><strong>% Nonmetropolitan Rural</strong></td>
<td>4.8</td>
<td>5.1</td>
<td>4.8</td>
</tr>
<tr>
<td><strong>Number of ER Visits</strong></td>
<td>0.4</td>
<td>0.4</td>
<td>0.3</td>
</tr>
<tr>
<td><strong>Number of RX Drugs</strong></td>
<td>0.8</td>
<td>1.7</td>
<td>0.8</td>
</tr>
<tr>
<td><strong>Number of Chronic Conditions</strong></td>
<td>1.1</td>
<td>2.0</td>
<td>1.1</td>
</tr>
<tr>
<td><strong>Months of Coverage (6-12)</strong></td>
<td>9.9</td>
<td>10.8</td>
<td>9.8</td>
</tr>
</tbody>
</table>

Note: Values for average age, number of moves, ER visits, Rx drugs, chronic conditions, and months of coverage are means within the Marketplace Choice Plan stratified by completion of the activities, respectively. Values for all other variables are proportions of the member population in that plan by activity completion. For example, in the above table, 48% of Marketplace Choice Plan members who did not complete a wellness exam in 2014 were male, while 26.7% of Marketplace Choice Plan members who did complete a wellness exam in 2014 were male. Therefore, row percentages will not sum to 1, but column percentages (e.g., for race) will (with differences due to rounding).
Using multivariate logistic regression models, we are able to predict the likelihood of individuals completing their HRA, Wellness Exam, or Both activities as a function of age, gender, race/ethnicity, metropolitan area of residence, number of moves during the year, number of emergency department visits, number of prescriptions, number of chronic conditions, and number of months with full Medicaid coverage (which could range from 6 to 12 months). For the sake of comparison, we present the results for the Wellness Plan and Marketplace Choice Plan in the same table for each outcome measure.

Table 4 presents the results of the logistic regression models predicting completion of the Health Risk Assessment. Overall, the results are fairly consistent between Wellness Plan members and Marketplace Choice Plan members. In both plans, each additional year of age was associated with 3% greater odds of completing an HRA, while men had approximately 25% lower odds of completing an HRA than women. Among Wellness Plan members, non-white race was associated with significantly reduced odds of completing an HRA, ranging from 15% lower odds to 21% lower odds depending on the racial group. While the odds ratios for non-white races were also less than 1 among Marketplace Choice Plan members, these figures were not statistically significant. This may be driven by the smaller sample size in this group.

Compared to individuals living in non-metropolitan urban areas, individuals in metropolitan areas and non-metropolitan rural areas had higher odds of completing an HRA, and the effects were larger among Wellness Plan members than Marketplace Choice members. In the Wellness Plan, residents of metropolitan areas had 67% higher odds of completing their HRA, while those in non-metropolitan rural areas had 14% higher odds of completing their HRA, compared to those in non-metropolitan urban areas. In the Marketplace Choice Plan, residents of metropolitan areas had 21% higher odds of completing their HRA compared to those in non-metropolitan urban areas. The number of times an individual moved from one county to another was not a significant predictor of HRA completion among Marketplace Choice Plan members, but each move was associated with a 13% reduction in the odds of completing an HRA among Wellness Plan members, suggesting that relocation may be especially disruptive among those with extremely low incomes.

The proxy variables for health status include the number of annual emergency room visits, the average number of monthly prescription drugs taken, and the number of chronic health conditions. We find that each additional emergency room visit is associated with 6% lower odds of completing an HRA for Wellness Plan members and 9% lower odds for Marketplace Choice Plan members. By contrast, each additional prescription drug is associated with a 12% increase in the odds of completing an HRA among both Wellness Plan and Marketplace Choice Plan members, and each additional chronic condition is associated with a 7% increase in the odds of completing an HRA among Wellness Plan members and a 10% increase in the odds among Marketplace Choice Plan members. Taken together, this suggests that individuals who have more frequent interactions with the healthcare system (as evidenced by having more chronic conditions and more prescriptions) will have more opportunities to be prompted to complete their HRA, while those who are more reliant on the emergency room for their care are not getting their HRA as often because they are more likely to be receiving fragmented care as opposed to patient-centered care.

Finally, we find that each additional month of coverage (beyond the 6 month minimum required for inclusion in our sample) is associated with 29% higher odds of completing an HRA for Wellness Plan members and 27% higher odds of completing an HRA for Marketplace Choice Plan members. This is as expected, given that the more time a person has to complete the activity, the more likely they are to complete it.
Table 4. Odds of Completing HRA Based on Insurance Plan

<table>
<thead>
<tr>
<th></th>
<th>Wellness Plan</th>
<th></th>
<th>Marketplace Choice</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OR 95% CI</td>
<td>OR 95% CI</td>
<td>OR 95% CI</td>
<td>OR 95% CI</td>
</tr>
<tr>
<td>Age</td>
<td>1.03*** 1.02, 1.03</td>
<td>1.03*** 1.03, 1.03</td>
<td>1.03*** 1.03, 1.03</td>
<td>1.03*** 1.03, 1.03</td>
</tr>
<tr>
<td>Male</td>
<td>0.74*** 0.71, 0.77</td>
<td>0.75*** 0.67, 0.82</td>
<td>0.74*** 0.71, 0.77</td>
<td>0.75*** 0.67, 0.82</td>
</tr>
<tr>
<td>Black</td>
<td>0.79*** 0.73, 0.85</td>
<td>0.83 0.65, 1.06</td>
<td>0.79*** 0.73, 0.85</td>
<td>0.83 0.65, 1.06</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0.84*** 0.75, 0.93</td>
<td>0.83 0.66, 1.06</td>
<td>0.84*** 0.75, 0.93</td>
<td>0.83 0.66, 1.06</td>
</tr>
<tr>
<td>Other Race</td>
<td>0.82*** 0.74, 0.91</td>
<td>0.99 0.78, 1.25</td>
<td>0.82*** 0.74, 0.91</td>
<td>0.99 0.78, 1.25</td>
</tr>
<tr>
<td>Unknown Race</td>
<td>0.85*** 0.81, 0.89</td>
<td>0.96 0.85, 1.09</td>
<td>0.85*** 0.81, 0.89</td>
<td>0.96 0.85, 1.09</td>
</tr>
<tr>
<td>Metropolitan</td>
<td>1.67*** 1.61, 1.75</td>
<td>1.21*** 1.10, 1.34</td>
<td>1.67*** 1.61, 1.75</td>
<td>1.21*** 1.10, 1.34</td>
</tr>
<tr>
<td>Nonmetropolitan Rural</td>
<td>1.14* 1.03, 1.26</td>
<td>1.14 0.91, 1.43</td>
<td>1.14* 1.03, 1.26</td>
<td>1.14 0.91, 1.43</td>
</tr>
<tr>
<td>Number of Moves</td>
<td>0.87*** 0.83, 0.92</td>
<td>0.99 0.86, 1.15</td>
<td>0.87*** 0.83, 0.92</td>
<td>0.99 0.86, 1.15</td>
</tr>
<tr>
<td>Number of ER Visits</td>
<td>0.94*** 0.92, 0.95</td>
<td>0.91*** 0.86, 0.96</td>
<td>0.94*** 0.92, 0.95</td>
<td>0.91*** 0.86, 0.96</td>
</tr>
<tr>
<td>Number of Rx Drugs</td>
<td>1.12*** 1.11, 1.14</td>
<td>1.12*** 1.09, 1.16</td>
<td>1.12*** 1.11, 1.14</td>
<td>1.12*** 1.09, 1.16</td>
</tr>
<tr>
<td>Number of Chronic Conditions</td>
<td>1.07*** 1.06, 1.08</td>
<td>1.10*** 1.06, 1.13</td>
<td>1.07*** 1.06, 1.08</td>
<td>1.10*** 1.06, 1.13</td>
</tr>
<tr>
<td>Months of Coverage (6 - 12)</td>
<td>1.29*** 1.27, 1.30</td>
<td>1.27*** 1.23, 1.30</td>
<td>1.29*** 1.27, 1.30</td>
<td>1.27*** 1.23, 1.30</td>
</tr>
<tr>
<td>Constant</td>
<td>0.01*** 0.01, 0.01</td>
<td>0.00*** 0.00, 0.00</td>
<td>0.01*** 0.01, 0.01</td>
<td>0.00*** 0.00, 0.00</td>
</tr>
</tbody>
</table>

Table 5 presents the results of the logistic regression models predicting completion of the Wellness Exam. Overall, the results are fairly consistent between Wellness Plan members and Marketplace Choice Plan members. In both plans, each additional year of age was associated with 1% greater odds of completing a Wellness Exam, while men had approximately 55% lower odds of completing a Wellness Exam than women. Among both Wellness Plan and Marketplace Choice Plan members, there was no difference in the odds of completing a Wellness Exam between whites, blacks, and Hispanics. However, in the Wellness Plan, those of other races had 23% greater odds of completing a Wellness Exam relative to whites, while in both plans those of unknown race had between 11 and 13% lower odds of completing a Wellness Exam relative to whites.

Compared to individuals living in non-metropolitan urban areas, individuals in metropolitan areas had higher odds of completing a Wellness Exam, and the effects were larger among Wellness Plan members than Marketplace Choice members. In the Wellness Plan, residents of metropolitan areas had 31% higher odds of completing their Wellness Exam, compared to those in non-metropolitan urban areas. In the Marketplace Choice Plan, residents of metropolitan areas had 10% higher odds of completing their Wellness Exam compared to those in non-metropolitan urban areas. There was no difference between individuals living in urban versus rural non-metropolitan areas. The number of times an individual moved from one county to another was not a significant predictor of Wellness Exam completion among Marketplace Choice Plan members, but each move was associated with a 7% reduction in the odds of completing a Wellness Exam among Wellness Plan members, suggesting that just as was observed for the HRA, relocation may be especially disruptive among those with extremely low incomes.

The proxy variables for health status include the number of annual emergency room visits, the average number of monthly prescription drugs taken, and the number of chronic health conditions. We find that each additional emergency room visit is associated with 7% lower odds of completing a Wellness Exam for Wellness Plan members and 8% lower odds for Marketplace Choice Plan members. By contrast, each additional prescription drug is associated with a 12% and 11% increase in the odds of completing a Wellness Exam among Wellness Plan and Marketplace Choice Plan members respectively, and each additional chronic condition is associated with a 10% increase in the odds of completing a Wellness Exam among members of both plans. These results are very similar to those for the HRA model, and again suggest that individuals who have more frequent interactions with the healthcare system (as evidenced by having more chronic conditions and more prescriptions) will have more opportunities to be prompted to complete their Wellness Exam, while those who are more reliant on the emergency room for their care are not getting their Wellness Exam because they are more likely to be receiving fragmented care as opposed to patient-centered care.

Finally, we find that each additional month of coverage (beyond the 6 month minimum required
for inclusion in our sample) is associated with 27% higher odds of completing a Wellness Exam for Wellness Plan members and 29% higher odds of completing a Wellness Exam for Marketplace Choice Plan members. This is as expected, given that the more time a person has to complete the activity, the more likely they are to complete it.

Table 5. Odds of Completing Wellness Exam Based on Insurance Plan

<table>
<thead>
<tr>
<th></th>
<th>Wellness Plan</th>
<th></th>
<th>Marketplace Choice</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OR</td>
<td>95% CI</td>
<td>OR</td>
<td>95% CI</td>
</tr>
<tr>
<td>Age</td>
<td>1.01***</td>
<td>1.01, 1.02</td>
<td>1.01***</td>
<td>1.00, 1.01</td>
</tr>
<tr>
<td>Male</td>
<td>0.45***</td>
<td>0.44, 0.47</td>
<td>0.44***</td>
<td>0.41, 0.48</td>
</tr>
<tr>
<td>Black</td>
<td>0.93</td>
<td>0.87, 1.00</td>
<td>1.01</td>
<td>0.85, 1.21</td>
</tr>
<tr>
<td>Hispanic</td>
<td>1.06</td>
<td>0.96, 1.16</td>
<td>1.02</td>
<td>0.86, 1.22</td>
</tr>
<tr>
<td>Other Race</td>
<td>1.23***</td>
<td>1.13, 1.35</td>
<td>1.03</td>
<td>0.86, 1.24</td>
</tr>
<tr>
<td>Unknown Race</td>
<td>0.87***</td>
<td>0.83, 0.91</td>
<td>0.89*</td>
<td>0.81, 0.99</td>
</tr>
<tr>
<td>Metropolitan</td>
<td>1.31***</td>
<td>1.26, 1.36</td>
<td>1.10*</td>
<td>1.01, 1.19</td>
</tr>
<tr>
<td>Nonmetropolitan Rural</td>
<td>0.99</td>
<td>0.90, 1.09</td>
<td>1.05</td>
<td>0.87, 1.25</td>
</tr>
<tr>
<td>Number of Moves</td>
<td>0.93**</td>
<td>0.88, 0.98</td>
<td>1.03</td>
<td>0.92, 1.16</td>
</tr>
<tr>
<td>Number of ER Visits</td>
<td>0.93***</td>
<td>0.92, 0.94</td>
<td>0.92***</td>
<td>0.88, 0.96</td>
</tr>
<tr>
<td>Number of Rx Drugs</td>
<td>1.12***</td>
<td>1.10, 1.13</td>
<td>1.11***</td>
<td>1.08, 1.14</td>
</tr>
<tr>
<td>Number of Chronic Conditions</td>
<td>1.10***</td>
<td>1.09, 1.12</td>
<td>1.10***</td>
<td>1.08, 1.13</td>
</tr>
<tr>
<td>Months of Coverage (6-12)</td>
<td>1.27***</td>
<td>1.26, 1.29</td>
<td>1.29***</td>
<td>1.26, 1.32</td>
</tr>
<tr>
<td>Constant</td>
<td>0.02***</td>
<td>0.02, 0.02</td>
<td>1.29***</td>
<td>0.01, 0.02</td>
</tr>
</tbody>
</table>

Table 6 presents the results of the logistic regression models predicting completion of both the Wellness Exam and the Health Risk Assessment. Overall, with the exception of a major difference by gender, the results are fairly consistent between Wellness Plan members and Marketplace Choice Plan members. In both plans, each additional year of age was associated with 3% greater odds of completing both activities. Interestingly, although men were less likely to complete their HRA or their Wellness Exam when modeled separately, we find here that men in the Wellness Plan have 3% greater odds of completing both activities compared to women, while men in the Marketplace Choice Plan have 32% lower odds of completing both activities compared to women. Among Wellness Plan members, non-white race was associated with between 13 and 20% lower odds of completing both activities relative to whites. In the Marketplace Choice Plan, the only significant racial difference was seen among Hispanics, who had 29% lower odds of completing both activities compared to whites.

Compared to individuals living in non-metropolitan urban areas, individuals in metropolitan areas had higher odds of completing both activities, and the effects were larger among Wellness Plan members than Marketplace Choice members. In the Wellness Plan, residents of metropolitan areas had 53% higher odds of completing both activities compared to those in non-metropolitan urban areas. In the Marketplace Choice Plan, residents of metropolitan areas had 18% higher odds of completing both activities compared to those in non-metropolitan urban areas. In the Wellness Plan only, individuals living in rural non-metropolitan areas had 19% greater odds of completing both activities compared to those living in urban non-metropolitan areas. The number of times an individual moved from one county to another was not a significant predictor of completing both activities among Marketplace Choice Plan members, but each move was associated with a 16% reduction in the odds of completing both activities among Wellness Plan members. This figure is more than double the figures for completing either one of the activities separately, suggesting that the disruption of relocation makes it especially difficult to complete both activities in a year.

The proxy variables for health status include the number of annual emergency room visits, the average number of monthly prescription drugs taken, and the number of chronic health conditions. We find that each additional emergency room visit is associated with 9% lower odds of completing both activities for Wellness Plan members and 11% lower odds for Marketplace Choice Plan members. By contrast, each additional prescription drug is associated with a 10% and 11% increase in the odds of completing both activities among Wellness Plan and Marketplace Choice Plan members respectively, and each additional chronic condition is associated with a 9% increase in the odds of
completing both activities among members of both plans. These results are very similar to those for the other two models, further indicating that individuals who have more frequent interactions with the healthcare system (as evidenced by having more chronic conditions and more prescriptions) will have more opportunities to be prompted to complete both their Wellness Exam and HRA, while those who are more reliant on the emergency room for their care are not completing these activities because they are more likely to be receiving fragmented care as opposed to patient-centered care.

Finally, we find that each additional month of coverage (beyond the 6 month minimum required for inclusion in our sample) is associated with 37% higher odds of completing both activities for Wellness Plan members and 42% higher odds of completing both activities for Marketplace Choice Plan members. Given findings from the prior two models that more time enrolled translates to a greater likelihood of completing each of the activities, it is to be expected that completing both activities will benefit from a greater length of enrollment in the program.

Table 6. Odds of Completing Wellness Exam and HRA Based on Insurance Plan

<table>
<thead>
<tr>
<th></th>
<th>Wellness Plan</th>
<th></th>
<th>Marketplace Choice</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OR</td>
<td>95% CI</td>
<td>OR</td>
<td>95% CI</td>
</tr>
<tr>
<td>Age</td>
<td>1.03***</td>
<td>1.02, 1.03</td>
<td>1.03***</td>
<td>1.03, 1.04</td>
</tr>
<tr>
<td>Male</td>
<td>1.03***</td>
<td>0.59, 0.65</td>
<td>0.68***</td>
<td>0.60, 0.77</td>
</tr>
<tr>
<td>Black</td>
<td>0.80***</td>
<td>0.73, 0.88</td>
<td>0.96</td>
<td>0.72, 1.27</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0.86*</td>
<td>0.76, 0.97</td>
<td>0.71*</td>
<td>0.52, 0.97</td>
</tr>
<tr>
<td>Other Race</td>
<td>0.82***</td>
<td>0.73, 0.93</td>
<td>0.93</td>
<td>0.69, 1.25</td>
</tr>
<tr>
<td>Unknown Race</td>
<td>0.87***</td>
<td>0.82, 0.92</td>
<td>0.89</td>
<td>0.76, 1.03</td>
</tr>
<tr>
<td>Metropolitan</td>
<td>1.53***</td>
<td>1.46, 1.61</td>
<td>1.18***</td>
<td>1.04, 1.33</td>
</tr>
<tr>
<td>Nonmetropolitan Rural</td>
<td>1.19**</td>
<td>1.06, 1.33</td>
<td>1.20</td>
<td>0.92, 1.57</td>
</tr>
<tr>
<td>Number of Moves</td>
<td>0.84***</td>
<td>0.79, 0.90</td>
<td>1.06</td>
<td>0.89, 1.26</td>
</tr>
<tr>
<td>Number of ER Visits</td>
<td>0.91***</td>
<td>0.89, 0.92</td>
<td>0.89***</td>
<td>0.83, 0.95</td>
</tr>
<tr>
<td>Number of Rx Drugs</td>
<td>1.10***</td>
<td>1.09, 1.12</td>
<td>1.11***</td>
<td>1.08, 1.15</td>
</tr>
<tr>
<td>Number of Chronic Conditions</td>
<td>1.09***</td>
<td>1.07, 1.10</td>
<td>1.09***</td>
<td>1.05, 1.13</td>
</tr>
<tr>
<td>Months of Coverage (6-12)</td>
<td>1.37***</td>
<td>1.35, 1.39</td>
<td>1.42***</td>
<td>1.36, 1.48</td>
</tr>
<tr>
<td>Constant</td>
<td>0.00***</td>
<td>0.00, 0.00</td>
<td>0.00***</td>
<td>0.00, 0.00</td>
</tr>
</tbody>
</table>

Conclusion

Overall, we find that the proportion of Wellness Plan and Marketplace Choice Plan members who are completing their Health Risk Assessment or Wellness Exam is much lower than expected. Moreover, the proportion of members who complete both activities, which is required to avoid paying a monthly premium in the following year is very low. According to our findings, approximately 83% of Wellness Plan members and 92% of Marketplace Choice Plan members failed to complete required Healthy Behaviors in 2014, and with the exception of certain low-income Wellness Plan members, should have been subject to paying premiums in 2015 based on their rates of compliance. Individuals who are younger, non-white, live in non-metropolitan areas, and visit the emergency room more often are especially at-risk of failing to complete the required activities. Future reports with data from 2015 should clarify whether these findings persist.

Clinic Manager Interviews

Methodology

*Proposed methods and variations from the methods*

In the original evaluation proposal, we had outlined interviewing health care providers in order to understand how much clinics know about the program, to understand how clinics might be encouraging the completion of healthy behaviors, and to understand how the healthy behaviors might be changing practices in the clinic. After informal discussions with health care providers, we determined that health care providers are often removed from the billing and logistic practices of clinics. Frequently providers are not aware of type of insurance a patient has. Clinic managers
were identified as the people who most likely understand the programs and insurance of patients. Managers are often responsible for clinic processes as well. Through research we have conducted on clinic systems to encourage immunizations, we knew that clinic managers are very easy to access and willing to participate in surveys and interviews. The final change in this evaluation activity was related to the analysis. In the proposal, we had indicated that we would be using Grounded Theory for the analysis. Because so few clinic managers had detailed information and experience with the program, it was not appropriate to use Grounded Theory. The coding was closed, based on the interview protocol, the research questions and the hypotheses.

Sample draw

The sample of clinic managers was drawn based on the number of completed wellness exams and HRAs at a primary care clinic (family medicine and internal medicine). This information came from the Medicaid claims. We only included clinics which had at least 5 completed wellness exams, because we wanted to have clinics in the sample who had experience with the program. We also only included primary care clinics (family medicine and internal medicine). There were a total of 131 primary care clinics with 5 or more completed wellness exams for enrollees.

Interviews

The current study uses interviewing to collect qualitative information about the HBI program from clinic managers. The preliminary hypotheses provided an outline for the interview script. Some questions in the interview were designed to measure knowledge or awareness, for example: Specifically thinking about the wellness exam- are you aware of what counts as a wellness exam? Some questions were designed to measure the clinic's exposure to and experience with the HBI program; for example: Can you tell me about the communication you have had with the Iowa Health and Wellness Plan? The interview script included all elements of consent in the introduction, and offered a $10 gift card as an incentive to participate.

Before making contact with clinics over the telephone, all clinics in the sample were mailed an invitation to participate in the study. This letter notified clinics about the purpose of the research and upcoming telephone contact. Microsoft Access software was used to track and document calls.

A team of six interviewers completed a required training to ensure adequate familiarity with the HBI program and informed consent procedures. Interviewers were trained to use neutral language and prepared prompts when interacting with interviewees. To promote consistent interviewing styles across members of the team, interviewers were required to practice and record a mock interview. Interviewers were evaluated and given feedback about their performance from the project manager. This process was repeated as needed until the project manager approved each interviewer to make telephone calls to clinics. The telephone interviews were audio recorded and then transcribed.

Coding

To interpret information collected from the clinic manager interviews, the responses were categorized and labeled, or coded. Coding the transcripts assists in the systematic identification and analysis of recurring themes across interviews. The coding process began with thorough readings of all the transcripts. Following the reading, codes were developed based on the interview protocol, research questions, and hypotheses. A codebook was developed with code definitions to describe relevant inclusion criteria for the transcribed narratives. For example, to document the interviewee’s level of familiarity with the HBI program, the following criteria was used: Respondent describes their understanding of HBI program--This includes the information itself, the source of information (IME, DHS, ACO, patients, supervisor) and mode of delivery (in-person, website, e-mails, ACO, seminar, conference, etc.) Any information volunteered by the respondent that fit this criteria was coded as “Familiar with HBI.”

The codebook also contained examples of interview text for each code. To ensure the code definitions were applied consistently, all members of the coding team interpreted the same set of transcripts. Coders read the transcripts and categorized content to the corresponding definition in a spreadsheet. Coded content was then compared across individual coders to ensure a common understanding of the parameters outlined in the code definitions. The PI of the current study reviewed the practice set of transcripts, then approved each individual member of the team to continue coding new transcripts with the same method. This method of cross-checking contributes to the reliability of qualitative coding with multiple coders.
Results

Of the 131 clinics in the sample, 52 clinics were interviewed. After removing ineligible clinics, the American Association for Public Opinion Research (AAPOR; https://www.aapor.org/) response rate was 49%, with a 71% cooperation rate. AAPOR sets the industry and academic standards for calculating response rates for surveys and polls.

Clinic characteristics

Table 7. Clinic Characteristics

<table>
<thead>
<tr>
<th>Clinic Location</th>
<th>Respondents</th>
<th>Non-respondents</th>
<th>Sample Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N (%)</td>
<td>N (%)</td>
<td>N (%)</td>
</tr>
<tr>
<td>Rural</td>
<td>39 (75%)</td>
<td>65 (82%)</td>
<td>104 (79%)</td>
</tr>
<tr>
<td>Micropolitan*</td>
<td>4 (8%)</td>
<td>3 (4%)</td>
<td>7 (5%)</td>
</tr>
<tr>
<td>Metropolitan*</td>
<td>9 (17%)</td>
<td>11 (14%)</td>
<td>20 (15%)</td>
</tr>
<tr>
<td>Total</td>
<td>52</td>
<td>79</td>
<td>131</td>
</tr>
</tbody>
</table>

*Metropolitan and micropolitan areas defined by population standards set by the United States Census Bureau

Table 7 illustrates responding and non-responding locations. No statistically significant differences were found in the number of well visits or HRA completed between those clinics that completed the interview and those that did not. The completion of HRA by clinics ranged from zero to 54. Of the 131 clinics sampled, 109 clinics completed zero Health Risk Assessments, accounting for an average of less than one (0.9) completed HRA per clinic. Of the 22 clinics that completed at least one HRA, the average was 5.5. The clinic sample excluded clinics who had four or fewer completed wellness exams, so the number of completed wellness exams at each clinic ranged from five to 221, accounting for a 21.5 average across the 131 clinic sample. A total of 52 interviews were completed and sorted into three groups based on the completeness and accuracy of clinic manager responses. One interview was excluded from analysis, since the clinic only provided obstetrics services. The remaining 51 interviews were categorized based on the content of the respondent’s narratives.

Group 1 (19 respondents) Clinic managers who exhibited high levels of knowledge and familiarity with HBI program.

- Reported high patient participation
- *Active enrollee recruitment and outreach*
- Answers to questions that measured knowledge were consistently accurate

Group 2 (22 respondents) Clinic managers who exhibited moderate or inconsistent levels of knowledge and familiarity with HBI program.

- Demonstrated basic knowledge of the program, not familiar with details
- *Recalled accurate information for some components, and inaccurate information for others*

Group 3 (10 respondents) Clinic managers who exhibited marginal levels of knowledge and familiarity with HBI program.

- Responses related to Medicaid initiatives other than HBI. (IHH, SCHIP, IowaCare)
- *Inaccurate or partial responses to questions that measured knowledge*
- Unaware of clinic participation
- Little to no experience with components of HBI program

1 http://www.census.gov/population/metro/about/
For the research questions and hypotheses that require clinic managers to have awareness of the program, we only used the interviews from Group 1. Using interviews from the other groups would have provided inaccurate information. It is important to note that of the 19 interviews in Group 1, four of the clinic managers did not recognize the name of the program.

**Question 4** What are the effects of the program on health care providers?

**Hypothesis 4.1**

Providers use the information from the Health Risk Assessment.

**Measure 33 Provider reported use of HRA**

33A Percent of providers who report using HRA

Protocol-Original
Data source-Provider survey, Provider in-depth interviews
Analyses-Qualitative

33B How providers use HRA

Protocol-Original
Data source- Provider survey, Provider in-depth interviews
Analyses-Qualitative

To assess measure 33A and 33B, clinic managers were asked Can you tell me how, if at all, the information in the health risk assessment is used by your clinic? Can you provide a specific example? Of the nineteen most knowledgeable clinic managers, six of them were not able to provide answers regarding the clinic’s use information collected in the HRA. Eleven respondents reported using information collected by the HRA to guide conversation in individual patient appointments, or storing the results with the patient’s history file, although their descriptions lacked detail and it was hard to assess how much was actually happening. Three respondents reported using the information from the HRA to recognize patterns in the general health care needs of the IHAWP patient population of the clinic. For example, one respondent said, “It’s useful in that we can take this information, we see this person needs a physical…it helps us catch people that have maybe fallen through our cracks.” [128] Two clinic managers mentioned referring patients who reported smoking cigarettes in the HRA to smoking cessation tools, specifically Quitline Iowa.

**Hypothesis 4.2**

Providers are encouraging patients to participate in behavior incentive programs.

**Measure 34 Percent of providers reporting encouraging patients to participate**

Protocol-Original
Data source-Survey, In-depth interviews
Analyses-qualitative

To assess measure 34, clinic managers were asked Has your clinic done anything to promote this program to enrollees? Of the nineteen most knowledgeable clinic managers, six reported no efforts to promote the HBI program to IHAWP enrollees. The remaining 13 clinic managers reported promoting enrollee participation in the HBI program through one of three methods: phone calls, mailings, and in-person prompts. Clinic managers often provided information explaining their reasoning behind their chosen strategies. For example, one clinic manager reported using only mailings, saying, “We did not call this year. Just because a lot of them have numbers that are disconnected. And they won’t call you back. And it’s kind of hard to explain all that in a voice mail.” [121]
Clinic managers explained that promotion efforts were intended to inform enrollees about the program, prompt enrollees to schedule a wellness visit, encourage completion of the HRA outside the office, or to simply suggest contacting the clinic for more information. One clinic manager described the promotion efforts of the clinic’s health coach, saying,

She’ll have a list of people who are on the Iowa Health and Wellness Plan and she’ll go through and she’ll look to see if they’ve had a, a wellness exam during the year. And if they haven’t, she’ll try calling them to schedule that. I think we are allowed to try two calls and then a letter, um, during each quarter of the year...She also tries to call ‘em to say, hey, there’s this health risk assessment you can fill out, um, you know, which will be helpful to do before your appointment. And she even goes as far as, you know, let’s say they have a physical scheduled at 10 a.m. that morning...She’ll say, why don’t you come into my office at 9:00 and I can help you do it, you know, if the patient doesn’t have a computer.[194]

Hypothesis 4.3
Providers are receiving their additional reimbursement.

Measure 36 Percent of providers reporting reimbursement

Protocol-Original
Data source-Provider survey
Analyses-Process

To assess measure 36, clinic managers were asked Has your clinic received incentives based on the percent of members that have completed the exam? Of the 19 most knowledgeable clinic managers, 13 were not aware of any receipt of incentives through the HBI program. One clinic manager in this group said, “Do they go to the ACO? Or do they go to the clinic, we don’t know that.”[128] Three clinic managers reported some familiarity with the incentives, and described a lack of clarity concerning who receives the incentive money. For example, “I would guess any incentives we would have gotten would have come back through the [NAMED ACO], and I don’t necessarily see what all shakes out through that”[123] and “I think so. Um, that’s kind of handled at the corporate level... I don’t know where we stand, um, as far as receiving ‘em.” [177]The remaining three clinic managers reported some certainty of their clinic receiving incentives for achieving a percentage of completed wellness exams. For example, one clinic manager said, “I think that we’ve received one. Um, and I think it’s, like, um, 50 dollars or something like that.”[195]

Hypothesis 4.4
Providers are more likely to use the HRA with Wellness Plan members compared to Marketplace Choice Plan members

Measure 37 Providers reporting using HRA

37B Providers reporting on using HRA
Protocol-Original
Data source-In-depth interview
Analyses-Qualitative analysis

There was not enough use of the HRA, nor understanding of the difference between Wellness Plan members and Marketplace Choice Plan members to provide evidence for this hypothesis.

Hypothesis 4.5
The HRA changes communication between the provider and patient.

Measure 38 Providers reported changes in communication with patients due to HRA

Changes in communication due to use of HRA
Protocol-Original

Data source-Provider in-depth interviews

Analyses-Qualitative

To assess measure 38, clinic managers were asked, "Have there been any changes in patient-provider communication in using the health risk assessment?" Of the 19 most knowledgeable clinic managers, eight reported no change in communication, and three said they did not know. One clinic manager attributed the lack of communication change to collecting redundant information, saying, “Probably not...No. ‘Cuz it’s stuff that would be covered anyway if they came in just for a, a wellness visit.” [219]

Eight clinic managers reported a positive change in patient-provider communication with the addition of the HRA. One clinic manager describes improvements in relationships, saying, “People are just more willing to talk about things, it gets them to come back in more and, you know, then they’re thankful that they were able to come in. I think once they know, like, they’ve done it and then we discuss it with ‘em, they know that somebody cares.” [121]

Another clinic manager describes the communication benefit of completing the HRA in a personal setting, saying, “Maybe they were in the privacy of their own home taking the Healthy Behaviors, um, there might have been a chance to be more honest. Answers were down on paper, and they didn’t necessarily have to say some of those things.” [195]

Hypothesis 4.6
The HRA changes provider treatment plans.

Measure 39 Provider reported changes in treatment plans due to HRA

Protocol-Original

Data source-Provider in-depth interviews

Analyses-Qualitative

To assess measure 39, clinic managers were asked, "Have health risk assessments been used to inform treatment decisions?" Of the nineteen most knowledgeable clinic managers, nine reported that only providers would know information related to treatment decisions. Ten clinic managers affirmed that the HRA was used to inform treatment decisions. Some examples of the HRA being used to inform treatment decisions included high blood pressure and cholesterol treatment, pre-diabetic monitoring, smoking cessation options, sexual health, and referral to specialists. One clinic manager summed up the application of HRA information, saying, “Yes. If they see that there’s a part of the assessment that the patient is needing help with, then we can reach out to services to help.” [133]

Hypothesis 4.7
There are barriers to providers using the HRA information.

Measure 40 Provider reported barriers to using the HRA information

Protocol-Original

Data source-Provider in-depth interviews

Analyses-Qualitative

To assess measure 40, clinic managers were asked, "What are the barriers for members to completing the health risk assessment?" In response to this question, four of the 19 most knowledgeable clinic managers reported no barriers. Eight clinic managers reported being unable to collect information from IHAWP members who lacked material resources like transportation, computers, internet access, or phones, resulting in low participation rates.

Clinic managers reported several factors that discouraged patients from completing the HRA, such as low health literacy, time commitment, lack of awareness, and low interest. One clinic manager reported, “they are often, um, not informed...They aren’t aware, you know, they haven’t even heard of it, um, I know we have an employee here that never received information on it. Um. And many of them don’t have their own, um, computer...We haven’t had that many participate, unfortunately.” [143] Another clinic manager said, “I do think the risk assessment is way too long...When they start doin’ it themselves they get sick of it and stop.” [123]
Three clinic managers reported complications in tracking and linking HRA information, one said, “We were having troubles getting logged on to the system. And therefore the patients were not actually getting attached to our clinic, they were having to use that MBR11. Um, which was the code that they were to apply to use on the health risk assessment. Which means none of our patients initially were ever attached to our clinic. So it doesn't look like we did a lot.” [195]

Protocol-Original
Data source-Provider in-depth interviews
Analyses-Qualitative

Findings from Groups 2 and 3

The majority of clinic manager interviews were categorized in Group 2 or 3 (n = 32). These groups represent clinic managers who did not demonstrate enough awareness or knowledge about the program to convince coders that the clinic managers actually knew about the program or the clinic managers indicated that they did not know anything about the program. These interviews were not used to answer the research questions and hypotheses proposed in the evaluation plan, but do provide us with some valuable information about program implementation. We collapsed Groups 2 and 3 and identified the following themes.

General lack of awareness and confusion about the program

This group of 32 clinic managers either had a vague idea about the Healthy Behaviors Incentive program or knew nothing about the program. Most managers reported that they did not hear about this program from anyone. Some clinic managers indicated that they remembered having read something about it or having heard about it during a meeting or conference. A few mentioned that they remembered something about the program that was covered at a rural health conference. One manager indicated that the clinic might have received information about the program. She stated, “I mean, I'm not saying that we didn't already have some information...We just hadn't had time to go through it.” [113]

It was also very common for the clinic managers to confuse the HBI program with other insurance and Medicaid programs. Some respondents believed they were aware of the HBI program, but their description of the program indicated that they actually were referring to another Medicaid program, such as the Integrated Health Home or Medicaid Health Home. For instance, one clinic manager said, “The Healthy Behaviors, um, are we talking about, like, they have a chronic disease? Or are we talking about the psychiatry part of it.” [113]. Another manager said, “You know, I'm not really sure if I have. I think I, I mean, I think it sounds familiar, yeah. It that...does that involve like, like weight loss? Um, that sort of thing?” [132]

These respondents were not aware of the expanded definitions for well visits. A few of the respondents indicated that their billing staff might be more knowledgeable about these issues. One manager stated, “Like I said, I'm not sure if our insurance would know that either. But I, after I do get off the phone with you. I'm gonna ask them. (laughing)” [222]

Most of the clinic managers had no awareness of incentives for providers to encourage the completion of the healthy behaviors. Some indicated that billing staff might be aware of this kind of information.

There were clinic managers who indicated that they were either new to the position or that program such as HBI were previously handled by staff that no longer worked at the clinic. They said that it might have been possible that someone else had known about this program and that information had not been conveyed to them. When asked how she might have learned about the program, a clinic manager stated,

Um, just kind of from my, the office manager that was here before I was had, kind of mentioned it before she left. Um I'll be honest, I don't know if I have any formal, um, letter or anything that really stated the whole thing. I just remember her mentioning it and we do have a, we have a health coach that's here at our office and I know she has gotten some,
Of the clinic managers that were able to recall pieces of information or a vague awareness of a program like this, but not the name, those managers had often heard about the program from a patient asking a question or bringing their HBI information to the provider’s office. When asked if the clinic manager was aware of HBI, the person said that had not received any information, but their patients told them about it. When asked if she had received any information she said, “Yeah, not that I’m aware of, that they were doin’ this, um, but just patients callin’ and sayin’ that, oh I have a wellness exam, blah, blah, blah.” [216]. Another manager indicated, “cuz I think, if anything, we were, who were we talking to? We just had a meeting and I remember that coming up. Because somebody mentioned something. Um. Maybe it was a patient.” [111]

Some clinic managers mentioned that they had very few patients who were insured through IHAWP; therefore they did not know much about the program. A few clinic managers indicated that they did not believe any of their IHAWP patients paid contributions, so they did not believe this program applied to them. When the interview explained the HBI program and asked if the program sounded familiar one clinic manager said no and explained “But let me tell you the reason why, to us, it probably doesn’t apply too much. We, they, don’t pay a premium, our patient population… they don’t pay any type of premium… they don’t pay copays or anything like that.” [169] One clinic manager insisted they had not signed up to participate in the HBI and would not sign up in the future. She said, “…if they [patients] have any questions as far as wanting to get in, and I’m not going to discourage them from applying for it because we are not partaking in it.” [124]

Changing Medicaid programs
Some managers indicated that it was difficult to keep up with Medicaid changes. One manager pointed to the perception that programs were constantly changing at Medicaid. The manager stated, “But as things change, I mean, I mean, you guys are change-or whatever Iowa Medicaid is changing over, Magellan, all that kind of stuff is changing, so. I mean things are always changing.” [161]. Another manager said, “I personally think it’s, um, can be confusing with the switching from month-to-month.” [127].

One individual said that the current changes in Medicaid might mean that this program would be discontinued, so they were unmotivated to find out more information. After a manager indicated that he/she did not know about the HBI, the interviewer provided a brief description, and the managers response was “Does this one stay around or is that one wiped off the map too when Medicaid has, you know, has it, it’s already selected four, um insurances to, er managed care organizations or whatever.” [127]

Outreach to patients about program
Although these managers did not understand enough about the HBI to be included in the findings above, there were still outreach efforts done by clinics that might lead to the completion of a wellness exam. These respondents did indicate some efforts to do outreach to their patients about well-exams but these efforts were not because they were conscious of the program and wanted to encourage participation, but because it was standard practice to do some type of reminder (call, letter, and postcard) for all patients.

Communication with Medicaid/IME/DHS
The majority of these clinic managers reported that their communication with Medicaid/IME/DHS was positive. Telephone calls to Medicaid resulted in satisfactory answers. Often members used the website as their first option for finding answers to their questions. None of the clinic managers indicated that their communication with the state was specifically about the HBI. Most of their communication was related to claims.

Interest in learning more about the program
After hearing the interviewer describe the HBI program some clinic managers were interested in more information. A few clinic managers were going to check with other clinic staff to see if they had awareness of the program. Others indicated they would look at the website or call Medicaid to find out more information. One manager said, “But, I feel like I need to read up on this more now,
after talking to you!(laughing)” [113] One clinic manager indicate that there might be better ways for Medicaid to communicate with clinics. The manager said,

…maybe having a representative come out and explain to you either the additional benefits now that these patients will have these are the that you could give them, offer them services that are covered benefits for’em, that type of thing. …I think they get so much paperwork and stuff, it probably gets set aside. Whereas if you had an actual representative here, it might be more useful. [158]

Most of the clinic managers did not indicate that they would follow up with any sources to find out more information.

**Member Interviews**

**Methodology**

Adjustments were made to the study design in the original evaluation proposal to account for the smaller than expected rates of completed wellness exams and HRAs. In addition, results from the clinic manager interviews suggested that there was a general lack of awareness about the program, so we believed that it was important to talk to more members to find those who are very aware of the program. Note: There were no expanded healthy behaviors in the program, so we could not ask about completion of these.

The sample was drawn from IHWAP enrollees whose ages were 19-64 as of August 14, 2015 with a valid telephone number and mailing address, who had been in the program at least 6 months. The sample was pulled in four groups: those who had completed only the HRA, those who had completed only the wellness exam, those who had completed both, and those who had not completed either. Each group was drawn to have an equal number of enrollees who identified as being black, Hispanic and white. Each group also contained roughly equal numbers of men and women. We oversampled for enrollees who identified as black or Hispanic in order to ensure that we had completed interviews from the most diverse sample possible.

A team of nine interviewers completed a training session to ensure adequate familiarity with the HBI program, the IHAWP, informed consent procedures, and the interview script. HIPPA training was also completed by all interviewers. Interviewers were trained to use neutral, non-leading language and prepared prompts when interacting with interviewees. To promote consistent interviewing styles across members of the team, interviewers were required to practice and record mock interviews. Interviewers were evaluated and given feedback about their performance from the project manager. This process was repeated as needed until the project manager approved each interviewer to make telephone calls to enrollees.

A total of 468 IHWAP enrollees were sent a letter explaining the study and inviting the enrollee to participate. The letter included the telephone number on record for the enrollee and a tear-off form for enrollees to send back to provide us their current/preferred phone number where they could be reached. A business reply envelope was also included for the enrollee to return the form at no cost. Trained interviewers called the sample in a random order. No more than 10 attempts were made to each enrollee. The attempts were made on rotating times and days between the hours of 9 a.m. and 8 p.m. on weekdays, 10 a.m. to 6 p.m. on Saturday and 12 to 5 p.m. on Sunday. The interviews ranged between 5 and 51 minutes. Microsoft Access software was used to track and document call disposition (see Table 8).

The interview script included all elements of consent in the introduction. Enrollees were offered a $25 gift card to their choice of Wal-Mart, Target, or Casey’s for completing the interview. A language interpreting service, CyraCom, specializing in interpretation and translation of healthcare related contexts was used for non-English speaking enrollees. Additionally, one of the interviewers, a native Spanish speaker, conducted 5 interviews in Spanish. All interviews were recorded and transcribed.

A total of 152 interviews were completed for a response rate of 46%. Of the 152 interviews, 85 were women and 76 were men. Their ages ranged from 19 to 64 based on ages calculated from birth dates available in the Medicaid claims data (M= 41.84, SD = 13.51). Thirty-six percent of the respondents
were categorized at 0% FPL, 8.6% at 1-50% FPL, 51%-100% was 30.3%, 21.1% were in 101%-133%, and 3.9% were over 134% FPL. According to Medicaid claims data 36.8% identified as white, 32.9% as African American/Black, and 30.3% as Hispanic.

The interview protocol consisted of open-ended questions related to enrollees experience with IHWAP and their awareness and experience with the Healthy Behaviors Program. The preliminary hypotheses about the program provided an outline for the interview script. Some questions in the interview were designed to capture the general importance of health insurance and preventive care. For example, *How important is it for you to have health insurance coverage and How important is getting regular check-ups to you?* Certain questions in the interview were designed to measure knowledge and awareness of the HBI program and its components, for example, *Have you gotten a checkup/wellness exam since you have been on this new insurance? Tell me a little bit about what happened during this exam? And did you know about the health risk assessment?* Other questions were designed to measure where and how enrollees are obtaining information about the program, *Have you received any information about getting a wellness exam- who was it from and what do you remember it saying?* Additional questions attempted to gather data about the enrollee’s experience with the HBI program as well as barriers/facilitators to completion of the components. For example, *Was there something that made it [health risk assessment/Assess My Health] easy to complete? What?*

We looked for differences between those that responded and those that did not. There were no statistically significant differences between the respondent and non-respondents related to percent federal poverty level, number of well visits completed as determined by Medicaid claims data, no difference between the groups in whether the enrollees were from Marketplace Choice or Iowa Wellness Plan. There were also no differences in race/ethnicity between the respondents and non-respondents. Respondents were more likely to have completed an HRA as measured by the HBI dataset from 3M. The mean age of respondents (M = 41.84, SD = 13.51) was slightly older than the mean age of non-respondents (M = 37.72 years, SD= 13.41). Non-respondents were more likely to be male.

**Table 8. Sample Disposition**

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answering Machine/Voice-mail</td>
<td>58</td>
</tr>
<tr>
<td>Busy Signal</td>
<td>5</td>
</tr>
<tr>
<td>Callback</td>
<td>63</td>
</tr>
<tr>
<td>Completed Interview</td>
<td>152</td>
</tr>
<tr>
<td>Disconnected Number</td>
<td>66</td>
</tr>
<tr>
<td>Incarcerated</td>
<td>2</td>
</tr>
<tr>
<td>Ineligible</td>
<td>3</td>
</tr>
<tr>
<td>No Answer</td>
<td>10</td>
</tr>
<tr>
<td>Other Problem Number</td>
<td>1</td>
</tr>
<tr>
<td>Out of State</td>
<td>3</td>
</tr>
<tr>
<td>Refused</td>
<td>39</td>
</tr>
<tr>
<td>Unreachable</td>
<td>6</td>
</tr>
<tr>
<td>Wrong Number/No Such Person</td>
<td>60</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>468</strong></td>
</tr>
</tbody>
</table>

**Coding**

To interpret data collected from the in-depth enrollee interviews, the responses were categorized and labeled, or coded. Coding the transcripts assists in the systematic identification and analysis of recurring themes across interviews. The coding process began with thorough readings of all transcripts by the PI and a member of the research team. Following the reading, codes were developed based on the interview protocol, research questions, and hypotheses. A preliminary codebook was developed based on information gathered from the interview transcripts. Code definitions and examples were developed to describe relevant inclusion criteria for the transcribed
narratives. For instance, to document the respondent’s understanding of the importance of having health insurance (HI), the following criteria was used: Apply this code when the respondent identifies that having health insurance is important because of cost, because it helps them manage a current health concern (chronic or acute) or because the respondent received education or knowledge that benefits their health. Importance was further defined as capturing more conceptual ideas provided by the enrollee versus benefits which includes more tangible things. Any information provided by the respondent that fit this criteria was coded as “Importance of having HI.”

To ensure the code definitions were applied consistently, all members of the coding team met to review, discuss and amend this codebook. Eight coders participated in this initial meeting. Inter coder reliability was established by having each member of the coding team interpret and code the same three interview transcripts. To code, coders read the transcripts and categorized applicable content to the corresponding definition into a standardized spreadsheet that was provided to all coders. Coded content from these three interviews were then compared across individual coders to ensure a common understanding of the parameters outlined in the code definitions. The codebook was further refined and additional training of coders was completed before each individual member of the coding team was approved to continue coding new transcripts. Ultimately, seven trained coders participated in the final coding process. This method of cross-checking further contributes to the reliability of qualitative coding with multiple coders.

A total of 146 interviews were coded. The uncoded interviews were the interviews conducted in Spanish. The transcription and translation of these interviews is currently being finished and have not been included in the current report.

Results

According the Medicaid administrative data, 61.8% had completed an HRA at some time during their enrollment and 56.6% had completed a well visit at some time during their enrollment. We wanted to ensure that we were interviewing enrollees who had completed the healthy behaviors and those that had not. From the respondents 26.3% had only completed the HRA, 21.1% had only completed a well visit, 35.5% had completed both the well visit and the HRA, and 17.1% had completed neither healthy behavior. Based on the Medicaid administrative data, 76.3% of the interviewed enrollees were in the Iowa Wellness Plan (IWP) and 23.7% were in Marketplace Choice (MPC).

Note for the results below, the study ID is included after the respondents’ quotes.

Hypothesis 7.4

Members (WP/MPC) understand the logistics (for example- payment, payment options, requirements of the program, …) of the HBI program.

Measure 50 Members’ knowledge of requirements of program

Protocol-Original measure

Data source-In-depth Interviews and Consumer survey

Analyses-Qualitative analysis and Frequencies

To assess measure 50, The HBI program requirements of receiving a wellness exam and completing a health risk assessment were described and interviewees were asked if they knew anything about the program. Seven out of thirty-five interviewees enrolled in Marketplace Choice appeared to be aware of the HBI’s requirements when described while twenty-seven stated they were not familiar with the HBI’s requirements and one did not provide an answer. One Marketplace Choice member stated that they were aware of the program through a letter from DHS “Interviewer: Ok. And do you remember what the information on the letter said from DHS? Interviewee: Just to, if, to get those two things done so you don’t have to get the fees every month or whatever” [1021], while another reported that their clinic informed them of the program “Yes. I have, yes. I've gotta look for that at home, ‘Cuz when I made my appointment the doctor told me to, his nurse told me to bring that in, that information so they could submit it” [3064].

Thirty-four out of one hundred eleven interviewees enrolled in the Iowa Wellness Plan appeared to be aware of the HBI’s requirements. One interviewee recalled receiving information regarding
the requirements of HBI when he was enrolled stating, “Yeah I knew that part… it actually came in the, when I first got the insurance and it came with a welcome packet and all the information. That was actually in there” [3051]. Interviewees from both plans who identified they were aware of the program requirements stated this information came through introductory materials from when they enrolled in the program, mailings, or being told by their clinician or other clinic staff.

**Quotes from Marketplace Choice members:**

- Yes. And I’ve done those…I haven’t heard really anything. I did both the assessment and the physical, that’s all I heard. [3001]

**Quotes from Iowa Wellness Plan members:**

- Yeah, I got the letter in the mail last year. And it’s my fault I didn’t get it done. But I did get the information that you have to have it done, the questionnaire and the wellness exam by January 12. So that you won’t get charged. Yeah I got all the information, I just didn’t do it. Which was my fault. [1085]
- Yep. It does. So 2014 and then this year, I’ve filled out the health assessment. I made a checkup last year, but I have not had a checkup this year yet. I know that’s one of the requirements to maintain the insurance (inaudible). [3061]
- I think they told me that when I first got it, in the pamphlet. [3091]
- They actually, they helped me filled somethin’ out online. It was somethin’ new, I think, and they wanted everybody that had that insurance to sign up for it ‘cuz, I guess it’s, go in for a checkup every… year or somethin’, you know, havin’ to come in and do a checkup so you can stay on, stay with the insurance and they can keep up with your information.[3072]
- I believe I have heard of it, yes…I don’t remember where I heard it or from where it was or the time. All I know is that I have this program and I don’t pay anything. I’d rather keep it like this, and I wouldn’t change it for anything else, you know. [1066]

**Measure 51 Members’ knowledge of payment process**

Protocol-Original measure

Data source-In-depth Interviews and Consumer survey

Analyses-Qualitative analysis and Frequencies

To assess measure 51, Interviewees were asked *Have you ever received an invoice or bill for monthly premiums or contributions?* Nineteen MPC members and 86 IWP reported never receiving an invoice for monthly premiums/contributions or did not believe they had. Thirty of these interviewees stated that they did not know why they did not received an invoice or bill for monthly premiums or contributions, nineteen stated it was due to their low income, and sixteen stated it was because of the insurance plan they were covered by. Thirty interviewees who had received an invoice or bill for premiums simply acknowledged the receipt of an invoice and reported that payment was made without issue, or that the invoice or bill had been received in error. Eighteen interviewees enrolled in the Marketplace Choice and 76 interviewees enrolled in the Iowa Wellness Plan responded that it was important or beneficial to have a way to avoid paying monthly premiums with many stating their belief was due to financial constraints. Enrollees did not report problems with paying premiums but some did acknowledge confusion with the receipt of bills for services that were not covered by their insurance plan.

**Quotes from Marketplace Choice members:**

- Correct. I pay it monthly. And my understanding is, it gets taken off of my taxes. I will find that out this year when I file my taxes. [4023]
- Yes I have and I pay that, 10 dollars a month. Sometimes I let it go for two months and then I send ’em two months at a time. But yeah, I get a bill every month and I send the 10 dollars in. [1016]
- I did and yeah they sent me something for like, 5 dollar thing. But it is. Lately they haven’t been sending me any. But normally they do. Maybe once a month [3077]
- I just recently got one, and it’s for only, like, 10 dollars. So I’m not quite for sure how it works.
• No, like would that, I would have to pay?...well yes. Right now I’m paying 10 dollars a month. To be honest with you I don’t think that’s that much, you know as a matter of fact I think that’s pretty free. [2049]

Quotes from Iowa Wellness Plan members:

• Yes ma’am I just get a bill once a month for 5 dollars, just send it in to ‘em. [1061]
• I started to receive these actually. And it was just last month, it was a 5-dollar... membership due, if you will, that’s, kind of, what they were calling it. And then you could always opt, if you were financially not able to pay that amount. [1004]
• I would like to do those [healthy behaviors] and not pay. Because I don’t have money and I’m not working. [1096]
• Yeah I think that’s good, yeah. I can pay it, I can pay it or I can do the assessment, it, it works either way, you know, I could pay it or I can do the assessment. [2017]
• It is. Yes it is. ‘Cuz like you know, like I said, I don’t have, I barely make it, let me put it that way. So yeah I am glad there was ways to avoid [paying a contribution] yeah. Not because I’m stingy, I just simply don’t have the money. [3062]
• Yes. It is. Very beneficial. Because it, it saves a LOT of money at the end of the day. And it’s also, it forces me to check, before a checkup, to make sure I’m doing fine. So it, it works for me on both ends. [3071]

Hypothesis 7.5
Members (WP/MPC) understand the purpose of HBI and how it is supposed to influence their behavior.

Measure 52 Members’ knowledge of purpose of HBI program

Protocol-Original measure

Data source-In-depth Interviews and Consumer survey

Analyses-Qualitative analysis and Frequencies

To assess measure 52, interviewees were probed Why do you think your health plan is encouraging people to get check-ups/annual exams? What about health risk assessments? Interviewees enrolled in both Marketplace Choice plans and the Iowa Wellness plan identified preventive care, identifying current and future healthcare issues, general health promotion, encouraging annual checkups, and lowering healthcare costs in the long term as reasons health plans are encouraging individuals to participate the HBI program. Preventative care and lowering healthcare costs were the most common responses among all interviewees.

Quotes from Marketplace Choice members:

• I think it’s important to get annual exams. I mean, there’s underlying health issues that a lot of people don’t realize they have. That need to be addressed. And. So. I think that’s very important to have an annual exam. I think it makes ‘em think more in depthly about their health. And, you know, why they should or shouldn’t have health insurance. And, ‘cuz they ask, it asks good questions about you and makes ya think about it. [3001]

Quotes from Iowa Wellness Plan members:

• Well, maybe they, it’s to head off any problems, you know. Catching things early. And, you know, for your own betterment and. [1079]
• Well I imagine it’s because of the increase in illnesses like diabetes and cancer. Now, I don’t know if we’re seeing it more often or if before people just didn’t notice. So I’m guessing that now they want people to be able to detect all of that sooner and to be able to get treatment sooner, to be able to fight it off. [2002]
• Well I think if we stay on top of things, then that keeps health costs down. [3101]
• Just to make sure they’re healthy, and that they’re not covering things that could be prevented. [4103]
• One, because preventative care, you know, is one, life-saving. It’s money-saving. And, you know, people need to be aware and, you know, take (very) care for themselves. [3010]
• To avoid any major problems like, for example the mammogram that prevents your or they do an early (detention) of cancer, so. [3066]

**Measure 53 Members’ understanding of how the program influences behavior**

Protocol-Original measure

Data source-In-depth Interviews and Consumer survey

Analyses-Qualitative analysis and Frequencies

To assess measure 53, Interviewees were asked What do you think the benefits are to getting regular check-ups? and What do you think are the benefits from completing this assessment? Interviewees enrolled in Marketplace Choice stated that participating in the program made them consider health and lifestyle decisions that they may not have previously. Interviewees enrolled in the Wellness Plan also mentioned that participation lead them to consider health and lifestyle decision with some specifically mentioning diet and exercise as examples of area that could be improved. A common sentiment among the responses was that participation raised awareness and stimulated action towards healthier decision and lifestyle. Many interviewees from both the Marketplace Choice and Iowa Wellness Plan did not comment on any changed in their behavior or how enrollment in the program influenced did or could influence their behavior.

**Quotes from Marketplace Choice members:**

• Just to be healthy and stay healthy...You know, and if they, and then if there’s, something is wrong, you know, they’re gonna let me know I’m sure and I could rectify the situation. [1016]
• Well, that way I know what’s going on with my health. And I can get help from my doctor, you know, if something is wrong...I wanna stay healthy. I don’t like being sick, it’s just not like me to be sick. I haven’t been sick in seven or eight years. [1016]
• Where there’s stuff that sometimes you don’t think of as a daily basic of your health and stuff so sometimes I think it would be good to learn. Or, to understand other stuff, so. I think it’s a benefit and plus if they’re willing to pay the premium for the year, that’s even better too! [4002]

**Quotes from Iowa Wellness Plan members:**

• You could use whatever you said was like a way to improve your opinion on your own health and actually take action on that. And actually improve your health (laughing) instead of just thinking about it. [3053]
• Well, some of the benefits is that you really have to get on top of your health. Like if you have a problem with your heart or high blood pressure, it could be your weight, you know. If you have any diabetes and then your, they look for it, you know, the blood glucose. And stuff like that. It’s pretty important. [1106]
• Basically, you know, you go in and you talk to your doctors. They tell you what you should and shouldn’t be doin’, what you should and shouldn’t be eatin’...You know, things like that.
• It has. I don’t know, it made me stop and think about my lifestyles. (laughing). [1007]

**Hypothesis 7.6**

Members (WP/MPC) do not report difficulties paying premiums related to payment form accepted by IME.

**Measure 54 Members’ experience with premium payment mechanism**

Protocol-Original measure

Data source-In-depth Interviews and Consumer survey

Analyses-Qualitative analysis and Frequencies

To assess measure 54, the thirteen and sixteen interviewees enrolled in the Marketplace Choice and
Iowa Wellness Plan respectively who had reported receiving an invoice or bill for monthly premiums or contributions were asked *How does this work? Can you tell me a little about this?* The majority of interviewees who reported paying premiums did not state any difficulties with submitting payment for the premiums. One interviewee enrolled in a Marketplace Choice plan stated that there were issues with not paying his premium and losing his coverage saying “Yes, yes and I did. …did everything they said that’s supposed to be done, so they’re still sayin’ I didn’t do it, pay this, the monthly 10 dollars... And so, ok we’ll, it’s we get in contact with you and I don’t think they never contacted me. Next thing I know, I had a dentist appointment yesterday. He was tellin’ me that, not yesterday, the day before yesterday on the (first), they was tellin’ me that I’m cut off. Like they don’t have me.” [3022].

**Quotes from Marketplace Choice members:**

- Correct. I pay it monthly. And my understanding is, it gets taken off of my taxes. I will find that out this year when I file my taxes [4023]
- Yes I have and I pay that, 10 dollars a month. Sometimes I let it go for two months and then I send ‘em two months at a time. But yeah, I get a bill every month and I send the 10 dollars in. [1016]
- Oh yes. I pay, actually, 10 dollars every month. [1088]
- No, like, would, would that, that I would have to pay?... Well yes. Right now I’m paying 10 dollars a month. To be honest with you I, I don’t think that’s that much, you know as a matter of fact I think that’s pretty free. [2049]

**Quotes from Iowa Wellness Plan members:**

- Yes ma’am I have. I just, I get a bill once a month for 5 dollars, just send it in to ‘em. [1061]
- I started to receive these actually. And it was just last month, it was a 5-dollar... membership due, if you will, that’s what they were calling it. And then you could always opt, if you were financially not able to pay that amount. [1004]
- I did. But they were not expensive. I think I paid, like, six months of ‘em right upfront. It was like, really? That’s all it’s gonna be? Ok well here’s a check. (laughing) [4054]
- I believe they ask you for 5 dollars a month to contribute but if you can’t for financial hardships then you elect that also. Which I actually have tried to do and sent that back to them two times but they keep sending me the same invoice, you know, saying that I owe 5 dollars and that I can’t do it for previous months that I was billed for I guess, I don’t know. [2117]

**Other analysis based on coding**

This qualitative data collection also provided in-depth information about other aspects of the HBI program such as barriers to completing the HBI requirements. We have included descriptive analysis and outlined basic themes we have found to provide more context for understanding this population and the program implementation.

**Barriers to Completing HBI Requirements**

To assess the barriers to completing the wellness exam, interviewees were asked *How easy or difficult was it to get in for a check-up?, Did you have any challenges? [PROBE: scheduling, finding doctor, other things], and what about challenges with transportation? Did you have any trouble getting transportation to or from a wellness exam?* To assess the barriers to completing the health risk assessment, interviewees were asked *Were there challenges to completing this? [PROBE: no internet access, no time, did not understand, other things].*

These responses represent those enrollees who knew about the HRA and wellness exam. Enrollees who did not know about the HBI could not answer questions about barriers to completing the HBI requirements. Overall the majority of interviewees responding to these questions did not experience challenges to completing either of the HBI program’s requirements, but that did not correspond to high completion rates for wellness exams and/or the HRA.

Challenges to completing a wellness exam include lack of appointment availability, scheduling issues, lack of time to complete appointments, current providers not accepting their insurance,
and lack of transportation. Challenges to completing the health risk assessment include, lack of Internet access or a computer, poor communication regarding the assessment and how to access it with their personal identification number, issues with submitting the assessment to the clinic, poor communication regarding the assessment and the length of the assessment

Quotes from Marketplace Choice and Iowa Wellness Plan members:

- Yes I didn't have a license so it was hard for me to get a ride but I took the bus. [3059]
- I've just been busy with all my other doctors (laughing) that, it's hard to schedule right now. [2033]
- The local doctors are pretty busy. So it was, you know, a couple weeks, probably, to get an appointment. Other than that, no. [3090]
- I don't have internet access besides my phone and doin' stuff on the phone takes forever [2013]
- Actually I did try once to do it on the internet but they were asking for some code and so I called them back to get the code to put in to do the assessment test. And I just never went back to do it [4002]
- Well I had to call a few numbers to get my PIN number or something...I had no idea what that was. Yeah. [1015]
- It [the HRA] was LONG. (laughing) I do remember that. [2050]

Facilitators to Completing HBI Requirements

To assess the facilitators to completing the wellness exam, interviewees were asked How easy or difficult was it to get in for a check-up? To assess the facilitators to completing the health risk assessment, interviewees were asked Was there something that made it easy to complete? What? Only enrollees who reported having a wellness exam and/or completing an HRA were asked about the factors that facilitated them meeting these requirements.

Interviewees listed the clinic being accommodating with scheduling an appointment, having quick appointments, and having a referral as factors that facilitated competing the wellness exam. Interviewees reported having an online version of the HRA, clear instructions, clear and easy to comprehend questions, having clinicians assist with the assessment, having a computer and internet access, being able to complete the HRA on their own time, and having a room at the clinic set up to complete the HRA as facilitators to competing the HRA.

Quotes from Marketplace Choice and Iowa Wellness Plan members:

- No it [getting an appointment for a wellness exam] was easy. I mean she's usually busy but she got me in the next week. So it was, I didn't have to wait long. [2086]
- Like I said I mean they’re great, their times, I mean, it fits my schedule. If not they’ll work for you. [4027]
- Nope. They [clinic staff] explained it [the HRA] well. Yeah, ‘cuz they read the questions to me and all I had to do was give an answer. [3039]
- It [the HRA] was very, I wanna say it was well worded, it was easy to read, easy to comprehend. There wasn’t anything that, you know, you had to go find a form or anything, it was all readily available information that you could produce easily. [3052]
- It [the HRA] was just pretty much straightforward questions, I mean. There wasn’t nothin’, no complicated questions or anything to it. [1061]
- The help from the doctor was awesome. And actually doing it [the HRA] online was a lot quicker. ‘Cuz sometimes through the phone, stuff doesn’t go right, so. Having the chance to do it online made it a LOT easier. [3051]

Benefits of Completing HBI Requirements

To assess the perceived benefits of completing the requirements of the HBI program, interviewees were asked What do you think the benefits are to getting regular check-ups? And What do you think are the benefits from completing this assessment?
For interviewees identifying unknown health issues and beginning treatment, maintaining a healthy lifestyle, maintaining treatment for chronic diseases, and peace of mind regarding health were stated as being benefits of completing a wellness exam. Providing a more complete picture of your life and health to your health care providers was stated as the main benefit of completing a health risk assessment, as well as identifying risk factors and areas to improve, and reducing premium costs.

Quotes from Marketplace Choice and Iowa Wellness Plan members:

- I think it’s good that, you know, to get a checkup because, like I said, there’s things that you might not realize that you have health-wise. Health problems. And the doctor can discover those and address those and treat ‘em. You know. [3001]
- It [HRA] informs your health care provider. Everything there is to know about you. [2038]
- It’s better to get checkups and you know what’s wrong than wait until you can’t do anything about it. You know, get the medicine that you need and be aware of what you’re dealing with is (inaudible) and stuff so that you can stay healthy. [3070]

Sources and Quality of Information Regarding HBI

To assess the sources of information interviewees were asked Have you received any information about getting a wellness exam/check-up? and Have you received any information about doing a health risk assessment or something called Assess My Health? If the interviewee answered yes, they were further probed Who was it from?, What do you remember that it said?, and Did the information you received make you think about completing a wellness exam/health risk assessment?

Fourteen interviewees enrolled in Marketplace Choice reported receiving some form of communication regarding completing the HBI requirements while twenty did not. Sources of information include the interviewee’s clinic, the Department of Human Services, and the Iowa Health and Wellness Plan. Communications were through mailings, phone calls, and in-person conversations from clinicians. Sixty-one interviewees enrolled in the Iowa Wellness Plan reported some form of communication regarding completing the HBI requirements while fifty did not. Sources of information include the interviewee’s clinic, the Department of Human Services, the Iowa Health and Wellness Plan. Communications were through mailings, emails, phone calls, introductory materials given when enrolled, and in-person conversations from clinicians.

The most commonly stated sources of information for interviewees were from their insurance plans and from their clinicians and the most common form of communication was mailings, whether from a clinic or their insurance. Despite this communication, there were still large amounts of confusion regarding the insurance plan. Only 42% of interviewees enrolled in either plan expressed that they understood how their insurance works and only 40% expressed familiarity with the healthy behaviors incentive program.

Quotes from Marketplace Choice members:

- You know. I do remember when I first got Coventry, they said if you complete an assessment online. That, I think, it would reduce my insurance premium. And so I, the first thing I did was complete that assessment and I think it did help lower those rates. [1088]
- I didn’t. They [doctor’s office] just said they had to have, they had to do it for my insurance. [3039]
- I believe through the Iowa Wellness Plan. Just basically that they wanted you to fill it out for risk factors and stuff like that...They sent it in with our annual renewal. [3104]

Quotes from Iowa Wellness Plan members:

- Well, I think it was through the Iowa Wellness. I don't remember it word-for-word. But I know it said that I needed to go in and get a physical exam and then have my doctor fill out the papers that came with it. [1013]
- Because I received it in the mail saying that I needed to go online and do this questionnaire thing. And then it said afterwards, it said that I needed to fill out the form or somethin’ and take it to my assigned physical for the wellness exam. Which I, that part I never did do. [1061]
- Just talkin’ to my primary care physician and he said it would be a good idea so. I had time and he had time so I did it. [1072]
**Previous Unmet Needs**

To assess previous unmet needs, responses in the interview relating previous issues with health care coverage or the lack of coverage were coded together under Past history of insurance/lack of. **Three interviewees enrolled in the Marketplace Choice and sixteen interviewees enrolled in the Iowa Wellness Plan reported experiences in the past dealing with inadequate, expensive or no coverage.** Financial burden due to paying for services or medication out of pocket was a common theme among responses and included not utilizing medical services because of a lack of insurance coverage.

**Quotes from Marketplace Choice members:**

- I lost my job at Blue Cross Blue Shield after 27 years and. Yeah, it was really devastating. And they did, you know, provide insurance for a short time. And then I was fortunate enough to get on to Medicaid. Eventually. Yeah, it’s so vital for me. Although I consider myself healthy. And you know, I, you just never know what might come up. [1088]

- You know it’s way easier than. ‘Cuz I remember one time, through the time I didn’t have Medicaid, and I actually had to pay the full amount and, I mean, it was over a hundred dollars. Pretty expensive. I mean, I couldn’t pay that, I had to have my parents help me, so But. I mean it helps. You know, ‘cuz I can pay, like, 20, 30 dollars. [2086]

**Quotes from Iowa Wellness Plan members:**

- I have had, in the past, where I have insurance but my deductibles and my copays were so high, I just couldn’t go. To the doctor. Or I was scared that, with different tests that were going on, and saw, I had a huge doctor bill once, even when I did have insurance. And so, just in my financial situation right now, having that peace of mind that I can go to the doctor and I’m ok and I’ll be able to afford it. [1004]

- Interviewer: Ok. And do you regularly get checkups? Like, every year or how often? Interviewee: No because I’ve never had the insurance so, like, I really don’t go. (laughing) ‘Cuz I don’t have the money to pay for it. [1065]

- Well it’s been hard for me, it was, for the longest time I was not able to see a doctor or get medicine because I have no insurance and whatever, I didn’t qualify for it but. [3106]

- Like, I used to have medicine that was very expensive and now I pay, like, 15 dollars a month for that. And I don’t mind that. [3108]

- Interviewer: Ok. So is that, sort, is getting checkups important to you at all? Female Interviewee: Yeah. Since all sort of things run in my family...But I just never have before, ‘cuz I never had insurance before and it’s been expensive. [1015]

- I just went in, once I got the insurance I just called and, well I was told before I got insurance they couldn’t help me ‘til I got insurance...So. I just let everything lax. Blood pressure and everything and she said, once you get insurance we’ll be able to help you. And once I got on insurance, they would help me! [3026]

- It’s actually been. You know for a long time it was havin’ to pay money out of pocket to go to the doctor...And it was like, I wouldn’t go to the doctor because I didn’t have the money. Or, you know, I could wait ‘til something was seriously wrong, then I ended up in the emergency room...And then I’d have a huge bill that I’d have to pay off little by little. And then I couldn’t afford my meds anyway. [3043]

**Current Unmet Needs**

To assess current unmet needs, interviewees were asked *Tell me a little bit about your experience with this health plan* and negative experiences and other problems encountered with the insurance were coded together. **Six interviewees enrolled in the Marketplace Choice plans and thirty-four interviewees enrolled in the Iowa Wellness plan reported negative experience while enrolled in their current insurance plan.** Interviewees listed costs, lack of choice in providers, receiving generic medication instead of preferred brands, and limited coverage for certain medical needs such a dental or vision services as unmet or unsatisfactory experience with their insurance coverage.

**Quotes from Marketplace Choice members:**

- Didn’t realize I was gonna get a 186 dollar bill. I just got that a couple weeks ago. Uh-uh. I
thought it was 100 percent covered. I don’t even know what it’s for, what, if it was for x-rays or the surgeon or. I don’t know what it was for. I put it in my pile, we’ll try to pay soon. [3013]

• Well you know what, there is some doctors that won’t accept it, and I think they should. [3112]

• I guess the only time was when I had to renew it. But that was because I moved. And I forgot to update them about my new address. But even when I had to re-fill out the sheet to renew, I mean, it still went through fast. So I was pretty surprised. [2086]

Quotes from Iowa Wellness Plan members:

• I really can’t think of anything that I have troubles with except for I have a, a large hernia. And we were trying to get a CT scan scheduled to see if I had incarcerated hernia or, there was like infection. You know, and they had me do a CT scan to see it. Well it took, like, three or four months to get the approval. [1013]

• They only changed a few of my meds ‘cuz they wanted generics instead of names... And I’m a diabetic so they were more into the auto inject pens than they were into the vials of insulin. So that was the only thing that was different from anything else I’ve ever had. [1072]

• The only problem that I really have with the insurance is I live in a small town so a lot of the, like if you need something major done. You cannot find it in this town, you have to travel. Then you come, you get to the point where, well how in the heck am I gonna get two and a half hours away? That’s about the only complaint that I have is because people don’t know that they. That they assist you with that. And if they do assist you with that, it’s like they expect you to pay outta pocket, they reimburse you, I really don’t know how it works, but. [2050]

• I had to find a new doctor...Only downside is how long you have to wait for someone to get back to you. And I was lucky and was able to get an appointment, like, the next week but that’s kind of unheard of. [1004]

• I... just don’t know who to go to and who not to...Yeah they really don’t explain it to ya. They just give you a card and, and then you just pick a doctor. That’s all I know about it. [4043]

• Not really. But. I do, you know, say I would like to switch doctors. And, I don’t know how to do that really...'Cuz, um, I don’t know. I’d rather have a different doctor than what I have now...I’d rather go to a doctor office than go to a community clinic, you know. [2060]

• It would be beneficial to have a coverage like a mailing list or a internet list of what is covered that I don’t have to call and try to find out what is covered or not [3090]

• It’s a lot of red tape...To see my doctor...I had to choose the provider...Because my family doctor that I’ve gone to for years, does not accept that insurance plan. They ac...Medicare, Medicaid but they don’t do Iowa Health and Wellness...So I had to choose a provider. In another office...And so every time I want to go to my doctor, I have to have, they have to call to get that provider’s number...To turn it in to insurance...It’s been a hassle...I have to do that with everybody...That I normally go to for my health care. [3096]

Use of Care Currently and Importance of Health Insurance

To assess how interviewees were using their health care coverage and why, they were asked Have you used the insurance? Seen a health care provider? and How important is it for you to have health insurance coverage? Interviewees reported seeing health care providers for routine checkups as well as during times of sickness or emergency room visits, seeing dental providers, and filling prescription medication. Health insurance coverage was reported to be important for interviewees often due to current medical conditions and the knowledge that if a health problem occurs they would be able to receive treatment without a financial burden.

Quotes from Marketplace Choice members:

• Well I’ve only had to have teeth, pulled and so far it’s been good…I see one (a doctor) monthly for my back pain. [3013]

• Yes I have. I been. I go to Peoples Clinic and I plan to go get me some glasses when I call my doctor, see if he takes this Title 19, the Iowa Health Care. [3112]

• Yeah, just when I desperately need to go to the hospital. Like if I get my migraines that comes
on...I just go up to the ER and they take care of me. [2013]

- Pretty important. Right now I just you know, I'm havin' a lot of, I need some procedures done and a lot of the time I don't know where to go. Or if my general practitioner, which general practitioner I need to go for the Affordable Health Care Act. Plan, whatever it is. Called. [2021]

- It’s important to me! Right now. ‘Cuz I'm on an inhaler, ‘cuz I smoke. And that, so, if I'd had to pay for that, I'd just be havin' do without it. ‘Cuz I can’t afford no 300 dollars for an inhaler. [3039]

- Well. I experienced that when, when I first the psoriasis was at its worst. And I didn’t have health coverage and I, at that time in my life I was between jobs. And finally found a job but there was no health insurance and that’s when my psoriasis was at its worst. I was just devastated with it from, from my head to my toes. It covered my body. And I didn’t have insurance. And I went to a dermatology clinic and, and because I didn’t have insurance they actually didn’t want to help me. They just prescribed a cream that, that did absolutely nothing for me. So I think it’s very important. For everybody to have it. [1088]

- It’s very important. I workin’, tryin’ to get that now with the Wellness Health Care I had it helped me to find out I have a deteriorated hip... I have multiple sclerosis, and I have arthritis in my bones...So it’s very important for me to get this insurance. [1042]

**Quotes from Iowa Wellness Plan members:**

- And I have been going to the doctor, I just, I didn’t get, I didn’t get that done last year but I have been going to the doctor, to the dentist. To the eye doctor regularly and the Medicaid helps me with the dentist. And then with the eye doctor and with the medical doctor. So I’ve been doing all that regularly. [1085]

- I have been going to all, all of my checkups. I am diabetic, so I go every three months...Yes, for the checkups and also for the medicine. And also the dentist. [2002]

- But the good thing about it is I no longer have fees for all my medication. I’m on 25 different meds... No it was to get my medication. [2033]

- Yes. I’m a big believer in preventative care so I’m always getting my annual and actually, unfortunately the last couple months I needed it. I had pancreatitis twice, actually I just got out of the hospital Wednesday. And so it was definitely a blessing to have insurance and go to the doctor when I needed it. [3010]

- It’s very important. If I don’t have my medication I have lupus and a heart failure. If I don’t have them, then I’ll not be here for my children. So it’s very, very important. [2033]

- It just takes a lot of stress off, knowing I don’t have to worry about coughing up a big payment. And then if I do get sick I can take action and I don’t have to fret over whether it’s worth it for me to go in to the doctor. [3108]

- Considering what I’m going through now, VERY important. Like I said, considering what I’m going right, right now, um, any, you know, any help I can get while I was, oh, how long ago? Might’ve been... June? June diagnosed with, first with liver cancer and then now it’s liver cancer slash, melanoma [1017]

- I’m diabetic so I was able to get coverage and to get my medication and to see a physician for regular checkups and things that I have...So it’s very important and because I’m not old enough for Medicaid and I was in the Medicare. I was not eligible for Medicaid or any other kind of state insurance coverage in the other states where I lived. So it’s very important. [3082]

**Self-rated Health and Factors Affecting Health**

To assess the self-rated health of interviewees and to determine what perceived factors that impact their health status, interviewees were asked *How would you rate your health?* and *When you think about your health- what factors impact your health the most?*

Overall, interviewee's self-rated health was often described as average or above average indicating a positive perception of one’s health status. This rating did not correspond with the health concerns and risk factors the interviewees reported on. Many enrollees reported serious and chronic health conditions, despite rating their health as average or above average.
Interviewees enrolled listed age, lifestyle, the presence of chronic diseases, access to medication and healthcare, stress, physical activity, diet and food access, being overweight, family history, mental health, and engaging in risky activities such as tobacco and alcohol consumption as major factors that impact their health.

Quotes from Marketplace Choice and Iowa Wellness Plan members:

- As, as far as impactin’ it? I exercise daily. So that’s very important to me. And I eat right. And now with this insurance I’m able to go every six months to make sure. ‘Cuz, like I said, every one of my family members has had ovarian cancer but me. So we’re just watching over me. [2038]
- Lifestyle. You know, how often do you see a medical provider. I think those are probably the two biggies. [3001]
- Eating habits. The more the good stuff you take in, the healthier you are, and the less you get sick. Not smoking. Not drinking, stuff like that. [1010]
- Like my family history it that really is what worries me the most because there’s a lot of health issues in my family history. Oh, diabetes, heart disease, heart attacks, stuff like that. Cancer. Just, yeah, stuff like that. It concerns me. [4010]
- So being able to have access to my daily medication and then my (inaudible) medication. That’s something that really, I don’t want to say controls my life, but it kind of does! (laughing). I would say access to health care, access to different programs. And I don’t know. Just having that peace of mind. [1004]
- Health care availability. [4016]
- Oh, I think that just going to the doctor and getting prescriptions that would get me better. [3017]

Self-efficacy and Locus of Control Related to Health

To assess the self-efficacy and locus of control regarding the ability manage their health, interviewees were asked Overall, how confident are you about your ability to take good care of your health? and How much control do you feel like you have over your health and how healthy you can be?

The majority of interviewee’s answers scored high on both measures concurrently and many reported having complete control and confidence regarding their health.

Quotes from Marketplace Choice and Iowa Wellness Plan members:

- I’m pretty confident I can take care, good care of my health. [3001]
- 100 percent. Well, other than genetically and (here). Getting older. I mean, I don’t have control on that, but. None of us do. [3013]
- Well, there’s times when I don’t really eat right, like that way I should, but yeah I got control over my health. I don’t exercise as much as I should, but, yeah. My last checkup is, is pretty basic. [1113]
- Somewhat. I can’t really afford, you know, buy my own food at the moment so I kinda have to just eat what my parents get. So it’s, yeah it’s somewhat limited due to monetary reasons. [3033]
- Well as long as I keep goin’ to the doctors and takin’ my medicine I feel like I have a lot of control. [2033]
- I’m fairly confident now that I have health coverage and they have now found medication to control some of my health issues [2016]

Limitations

The quantitative analyses are limited in three ways. First, there is the challenge of identifying and assigning individuals to the correct coverage group. While we used a minimum enrollment period of 6 months as an eligibility criterion, this does mean that we exclude individuals who got enrolled later in the year or who otherwise had less than 6 months in at least one program. As the program continues, this should become less problematic, unless disenrollment causes it to be a
perennial issue. For now, however, it does raise a question about the generalizability of our findings to the programs as a whole. Second, there is the challenge of data sources. We were able to identify wellness exams using DHS records as well as Medicaid claims. However, these data are often in disagreement. At the same time, we were able to identify HRA completion using DHS records, 3M/TREO Solutions records, and Medicaid claims. Again, these data are often in disagreement. To the extent that completion of these activities is a metric of program success, the data source used will yield different results of how successful (or unsuccessful) the program is. Generally, we find that DHS records, which are being used to make determinations around exemption from monthly premiums, and subsequent disenrollment decisions, are the most generous measure. However, it is concerning that these records indicate completion of activities that cannot be confirmed by either Medicaid claims or by the very firm contracted by the state to collect these data (3M/TREO Solutions). Finally, our logistic regression models are limited by the fact that there may be unobserved factors that differ between individuals, for which we are unable to adequately adjust our models. This may bias our results. However, the direction and magnitude of any such bias cannot be well predicted. The qualitative data and analysis also had some limitations. First because few clinic staff or enrollees were aware of the Healthy Behaviors Program, it was difficult to assess awareness and knowledge of the program. Second, because there have been and continue to be many different programs associated with Medicaid, for example IowaCare, Integrated Health Home, the Medicaid Health Home it was clear that clinic managers were confusing other programs with the Healthy Behavior Program. This confusion made it difficult for interviewers to tease out actual knowledge and experience related to the Healthy Behaviors Program separate from other programs. Many enrollees also had experience and knowledge of other programs. It was difficult to ensure that the experiences they were reporting on were experiences related to the Healthy Behaviors Program and not experiences they had under other Medicaid programs.

Future Evaluation Activities

Projecting ahead to the next 12 months, this evaluation will evolve as the Medicaid Modernization happens. We will continue the proposed evaluation, assuming that we will continue to have timely access to data. Below are the evaluation reports for the next year and amendment’s we will be making to the evaluation activities in response to program changes.

Claims based outcomes report June 30 2016 will be completed on time assuming we continue to have timely access to data.

Provider survey report July 31 2016 will be modified. We will not conduct a survey with providers because the findings from the current report indicate that providers will not have enough knowledge to generate accurate data about the program through a survey. Additionally, Medicaid Modernization will be occurring at the same time the survey would be fielded. This transition would likely influence the data gathered and present bias that we could not account for. As an alternative to a provider survey we are proposing in-depth telephone interviews with representative from the Medicaid MCOs. These interviews would document the MCOs plans related to the Healthy Behaviors program and identify how this information is communicated to enrollees and providers. The data gathered will provide a baseline for understanding systems level program components and challenges.

Other healthy behaviors completion report Nov 31, 2016 will not be completed. Because no additional behaviors were selected for the program during the previous program years, we do not have data to complete this report. Interviews with representatives from the MCOs will provide us with information about what other behaviors will be in incorporated and we can plan data collections and analysis based on those MCO specific behaviors.

ACO interviews report Dec 31, 2016 will be completed. We will be interviewing ACO representatives about the program. Based on the clinic manager interviews, ACO were key in decision making about how the program was promoted.

Disenrollment interviews report Jan 31 2017 will be completed and modified from the original proposal. The original proposal assumed disenrollment would begin after the first group of enrollees failed to complete their healthy behaviors and pay their premiums. This process was not in place until late 2015. Assuming we receive disenrollment and bad debt data in early spring 2016, we will begin in-depth interviews in late summer 2016. The interviews will assess knowledge of
disenrollment, the path disenrolled individuals took to become re-enrolled, find other health care coverage or remain uninsured and how health care needs were/are being addressed. Based on initial interview findings we will work with DHS to determine if a disenrollment survey is feasible.

Enrollee survey was scheduled to be developed from the in-depth interviews and fielded early 2016. Because Medicaid Modernization was scheduled to happen January 1, 2016, we had postponed the survey. Fielding a survey during the transition time would have created confusion for enrollees and contributed to unreliable survey data. Following the delayed start of Medicaid Modernization, we will be fielding the survey when enrollees/members have been assigned/selected their MCO. This survey will be a baseline for an MCO- specific Healthy Behaviors Program.

Conclusions

The HBI program is designed to encourage enrollees to take an active part in maintaining their health and to promote accountability among enrollees, but the combination of a general lack of awareness and understanding about the program at the enrollee and provider level have stunted the program’s ability to achieve significant participation in the first phase. The number of members who have completed either the wellness exam or the HRA is suboptimal. More efforts need to be directed at increasing awareness about the program. Clinic managers demonstrated very limited awareness and knowledge of the program. While some larger organizations or ACOs may be encouraging the completion of the behaviors at an organization level, clinic staff needs to be more aware of the program in order to encourage the completion of the behaviors and answer questions members may have. Enrollees and clinic managers pointed to specific instances when the clinic staff assisted the enrollee in completing one of the behaviors. Specific efforts should target member populations that are less likely to complete the behaviors. These populations include younger members, men, non-whites, members with less interactions with the health care system and those that have been enrolled in the program for fewer months. These populations might have limited exposure to the information about HBI through clinics. It is also not clear how much of the lack of awareness about the program is related to general confusion about health insurance coverage, what it is called, and how it works. There was also confusion about what a premium or contribution is compared to a co-pay and a bill from a health care provider. Many members reported little access to health insurance or interaction with the health care community before enrolling in IHWAP, this lack of experience might be related to difficulties understanding the program. In addition to increasing awareness about the program, barriers such as scheduling, health care providers not accepting insurance, access to the internet/computer, and time prevent members who know about the program from actually completing the behaviors. In general enrollees had positive perceptions of getting a wellness exam and completing an HRA. There was a consensus that these activities would improve health. While clinic managers report that the communication with IME is positive, clinics may also require more detailed information about how the HRA can be integrated into patient-provider communication, medical care, and treatment plans. Additionally the incentives for health care providers to encourage their patients to complete the behaviors are not well understood by clinic managers. Clinic managers also indicated that there is confusion about the various Medicaid programs and concern about additional changes in future.